

# ALCORN STATE UNIVERSITY

Lorman, Mississippi

“Serving the People Since 1871”



## GENERAL CATALOG

**2016-2018**

This catalog is not an unchangeable contract but, instead, an announcement of present policies only. Implicit in each student's matriculation with the University is an agreement to comply with University rules and regulations that the University may modify to exercise properly its educational responsibility.

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**DR. ALFRED RANKINS, JR.**  
**President**

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**-NOTES-**





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**Alcorn State University  
2016 ACADEMIC CALENDAR  
SUMMER SCHOOL SESSIONS I & II**

**SUMMER SESSION I**

<b>MAY</b>	16-20	ACT Residual (8:30 a.m.) Placement Test (Over 21 – 8:30 a.m.)
	19	Registration at Vicksburg (3:00 – 6:30 p.m.)
	20	Registration at Natchez (9:30 a.m.)
	23	Registration on Main Campus (9:00 a.m.) Residence Halls Open for Summer Session I
	24	<b>CLASSES BEGIN</b>
	25	Cancellation of Classes Due to Low Enrollment
	27	Last Day to Add a Class Last Day for Summer Session I Registration Last Day for Payment of Fees (5:00 p.m.) Last Day for Submission of Remission of Fee Form (5:00 p.m.)
<b>JUNE</b>	10	Last Day to Drop a Class by Any Means Last Day for Official Withdrawal
	13-17	ACT Residual (8:30 a.m.) Placement Test (Over 21 – 8:30 a.m.)
	30	<b>Final Examinations</b>

**SUMMER SESSION II**

<b>JUNE</b>	30	Registration on Main Campus for Summer Session II
<b>JULY</b>	2	Posting of Grades for Summer I Due in BANNER by 12 Noon
	3	Residence Halls Open for Summer Session II
	4	<b>Fourth of July Holiday (University Closed)</b>
	5	<b>CLASSES BEGIN</b>
	6	Cancellation of Classes Due to Low Enrollment
	8	Last Day to Add a Class Last Day for Summer Session II Registration Last Day for Payment of Fees (5:00 p.m.) Last Day for Submission of Remission of Fee Form (5:00 p.m.)
	22	Last Day to Drop a Class by Any Means Last Day for Official Withdrawal

\*\*\*\*ALL DATES SUBJECT TO CHANGE

## Alcorn State University FALL 2016 ACADEMIC CALENDAR

<b>AUGUST</b>	8-12	ACT Residual and Placement Test (Over 21)
	15-19	
	<b>15</b>	<b>Faculty &amp; Staff Institute</b>
	17	Registration at Vicksburg Office ( <b>3:00 p.m. – 6:30 p.m.</b> )
	18	Registration on Natchez Campus ( <b>9:30 a.m.</b> ) Residence Halls Open to Freshmen
	18-21	Freshmen Orientation
	19	Registration on Main Campus ( <b>9:00 a.m.</b> ) Residence Halls Open to Freshmen
	21	Dormitories Open to All Students
	<b>22</b>	<b>CLASSES BEGIN</b>
<b>SEPTEMBER</b>	<b>5</b>	<b>LABOR DAY HOLIDAY (University Closed)</b>
	6	Last Day to Drop Courses Without Penalty
	9	Last Day for Adding New Courses Last to Register for Classes
	12	Last Day for Remission of Fee Forms
	<b>21</b>	Last Day to Drop a Course Without a Grade <b>Founder's Day Convocation (10:00 a.m.)</b>
<b>OCTOBER</b>	<b>3-7</b>	<b>Mid-Semester Examinations</b>
	10	Posting of Grades Due in the Registrar's Office by <b>12 Noon</b>
	<b>27</b>	<b>Honors Day Convocation (10:00 a.m.)</b>
<b>NOVEMBER</b>	11	University Clearance Begins
	14	Registration for Spring 2017 Semester Begins Last Day for Submitting Application for Degree to Registrar's Office for <b>(Undergraduate Students December 2016 Completion)</b> Last Day for Submitting Application for Degree to the Office of Graduate Studies for <b>(Graduate Students December 2016 Completion)</b>
	<b>TBA</b>	<b>Graduate CORE Examination</b>
	16	Last Day to Drop a Course by Any Means; End WP/WF Last Day to Withdraw from the University
	<b>21-25</b>	<b>FALL BREAK FOR STUDENTS (NO CLASSES)</b>
	<b>24-25</b>	<b>THANKSGIVING HOLIDAY (University Closed)</b>
<b>DECEMBER</b>	1-4	ACT Residual and Placement Test ( <b>Over 21 8:30 a.m.</b> )
	<b>5-8</b>	<b>Final Examinations</b>
	9	Grades Due in Registrar's Office by <b>12 Noon</b> <b>FALL COMMENCEMENT (10:00 a.m.)</b> Semester Ends
	10	Residence Halls Close

\*\*\*ALL DATES SUBJECT TO CHANGE

**Alcorn State University**  
**SPRING 2017 ACADEMIC CALENDAR**

<b>JANUARY</b>	3-9	ACT Residual and Placement Test ( <b>Over 21 8:30 a.m.</b> )
	4	Residence Halls Open
		Registration at Vicksburg Office ( <b>3:00 p.m. – 6:30 p.m.</b> )
	5	Registration on Natchez Campus ( <b>9:30 a.m.</b> )
	6	New Student Orientation
	9	Registration on Main Campus ( <b>9:00 a.m.</b> )
		<b>CLASSES BEGIN</b>
	<b>16</b>	<b>DR. MARTIN LUTHER KING, JR. HOLIDAY (University Closed)</b>
	17	Last Day to Drop/Add Courses Without Penalty
		Remission of Fee Forms Due in the Business Office
	19	Drop/Add Courses With Penalty
	27	Last Day for Submitting Application for Degree to Registrar's Office for ( <b>Undergraduate Students May Graduation</b> )
		Last Day for Submitting Application for Degree to the Office of Graduate Studies for ( <b>Graduate Students May Graduation</b> )
	31	Last Day to Drop a Course Without a Grade
<b>FEBRUARY</b>	1	Grades of WP/WF in Effect
	10	Classes Removed for Non-Payment of Fees
<b>MARCH</b>	<b>6-9</b>	<b>Mid-Semester Examinations</b>
	10	Posting of Mid-Semester Grades due in BANNER by <b>12 Noon</b>
	<b>13-17</b>	<b>SPRING BREAK FOR STUDENTS (NO CLASSES)</b>
	<b>20</b>	<b>CLASSES RESUME</b>
	22	Registration for Summer Session I
	<b>23</b>	<b>Honors Convocation (10:00 a.m.)</b>
	24	Last Day to Drop a Course by Any Means; End WP/WF
	31	Last Day to Officially Withdraw from the University
<b>APRIL</b>	<b>14</b>	<b>GOOD FRIDAY HOLIDAY (University Closed)</b>
	17	Classes Resume
		University Clearance Begins for Graduating Seniors
	18	Registration for Fall Term Begins
	21	Last Day to Officially Withdraw from the University
	24-27	Final Examinations for Graduating Seniors
	28	Posting of Grades for Graduating Seniors Due in BANNER by <b>6:00 p.m.</b>
<b>MAY</b>	<b>1-4</b>	<b>Final Examinations for Undergraduate Students</b>
	5	Posting of Grades Due in BANNER by <b>12 Noon</b>
		Semester Ends
	6	Residence Halls Close
		<b>COMMENCEMENT (8:30 a.m.)</b>

\*\*\*\*ALL DATES SUBJECT TO CHANGE

## 2017 ACADEMIC CALENDAR SUMMER SCHOOL SESSIONS I & II

### SUMMER SESSION I

<b>MAY</b>	15-19	ACT Residual and Placement Test ( <b>Over 21 - 8:30 a.m.</b> )
	18	Registration at Vicksburg Office ( <b>3:00 p.m. – 6:30 p.m.</b> )
	19	Registration on Natchez Campus ( <b>9:30 a.m.</b> )
	22	Registration on Main Campus ( <b>9:00 a.m.</b> )
		Residence Halls Open for Summer Session I
	23	<b>CLASSES BEGIN</b>
	25	Cancellation of Classes Due to Low Enrollment
	26	Last Day to Add a Class
		Last Day for Summer Session I Registration
		Last Day for Payment of Fees ( <b>5:00 p.m.</b> )
		Last Day for Submission of Remission of Fee Form ( <b>5:00 p.m.</b> )
	29	<b>MEMORIAL DAY HOLIDAY (University Closed)</b>
<b>JUNE</b>	9	Last Day to Drop a Course by Any Means
		Last Day to Officially Withdraw from the University
	12-16	ACT Residual and Placement Test ( <b>Over 21 - 8:30 a.m.</b> )
	29	<b>Final Examinations</b>

### SUMMER SESSION II

<b>JUNE</b>	30	Registration on Main Campus for Summer Session II
		<b>CLASSES BEGIN</b>
<b>JULY</b>	3	Posting of Grades for Summer I Due in BANNER by <b>12 Noon</b>
		Cancellation of Classes Due to Low Enrollment
	4	<b>INDEPENDENCE DAY Holiday (University Closed)</b>
	7	Last Day to Add a Class
		Last Day for Summer Session II Registration
		Last Day for Payment of Fees ( <b>5:00 p.m.</b> )
		Last Day for Submission of Remission of Fee Form ( <b>5:00 p.m.</b> )
	21	Last Day to Drop a Course by Any Means
		Last Day to Officially Withdraw from the University
<b>AUGUST</b>	4	<b>Final Examinations</b>
		Residence Halls Close
	7	Posting of Grades for Summer II Due in BANNER by <b>12 Noon</b>

\*\*\*ALL DATES SUBJECT TO CHANGE

**Alcorn State University**  
**FALL 2017 ACADEMIC CALENDAR**

<b>AUGUST</b>	7-11	ACT Residual Placement Test ( <b>Over 21 8:30 a.m.</b> )
	14-18	
	<b>15</b>	<b>Faculty and Staff Institute</b>
	16	Registration at Vicksburg ( <b>3:00 – 6:30 p.m.</b> )
	17	Registration at Natchez ( <b>9:30 a.m.</b> )
	18	Registration on Main Campus ( <b>9:00 a.m.</b> ) Residence Halls Open to Freshmen
	18-20	Freshmen Orientation
	20	Residence Halls Open to all Students
	21	<b>CLASSES BEGIN</b>
<b>SEPTEMBER</b>	<b>4</b>	<b>LABOR DAY HOLIDAY (University Closed)</b>
	8	Last Day to Drop Courses Without Penalty Last Day for Adding New Courses Last Day to Register for Classes
	11	Last Day for Remission of Fee Forms
	22	Last Day to Drop a Course Without a Grade
	<b>TBA</b>	<b>Founder's Day Convocation (10:00 a.m.)</b>
<b>OCTOBER</b>	<b>2-5</b>	<b>Mid-Semester Examinations</b>
	6	Posting of Grades Due in BANNER by <b>12:00 Noon</b>
	<b>25</b>	<b>Honors Day Convocation (10:00 a.m.)</b>
<b>NOVEMBER</b>	<b>10</b>	University Clearance Begins
	<b>13</b>	Registration for Spring 2018 Semester Begins Last Day for Submitting Application for Degree to the Registrar's Office for ( <b>Undergraduate Students December 2017 Completion</b> ) Last Day for Submitting Application for Degree to the Office Graduate Studies for ( <b>Graduate Students December 2017 Completion</b> )
	17	Last Day to Drop a Course by Any Means; End WP/WF Last Day to Withdraw from the University
	<b>20-24</b>	<b>Fall Break for Students (NO CLASSES)</b>
	<b>23-24</b>	<b>THANKSGIVING HOLIDAY (University Closed)</b>
<b>DECEMBER</b>	4-8	ACT Residual Test Placement Test ( <b>Over 21 8:30 a.m.</b> ) <b>Final Examinations</b>
	8	Residence Halls Close
	11	Grades Due in BANNER by <b>12:00 Noon</b>
		Semester Ends

\*\*\*\*ALL DATES SUBJECT TO CHANGE

**Alcorn State University**  
**SPRING 2018 ACADEMIC CALENDAR**

<b>JANUARY</b>	3-5	ACT Residual Placement Test ( <b>Over 21 8:30 a.m.</b> )
	8-9	
	10	Registration at Vicksburg ( <b>3:00 – 6:30 p.m.</b> )
	11	Registration at Natchez ( <b>9:30 a.m.</b> )
	12	New Student Orientation Registration on Main Campus ( <b>9:00 a.m.</b> ) Residence Halls Open
	<b>15</b>	<b>DR. MARTIN LUTHER KING, JR. HOLIDAY (University Closed)</b>
	<b>16</b>	<b>CLASSES BEGIN</b>
	22	Last Day to Drop/Add Courses Without Penalty Remission of Fee Form Due in the Business Office
	23	Drop/Add Courses With Penalty
	31	Last Day for Submitting Application for Degree to the Registrar's Office for ( <b>Undergraduate Students May Graduation</b> ) Last Day for Submitting Application for Degree to the Office of Graduate Studies for ( <b>Graduate Students May Graduation</b> ) Last Day to Drop a Course Without a Grade
<b>FEBRUARY</b>	<b>2</b>	Grades of WP/WF in Effect
	<b>9</b>	Classes Removed for Non-Payment of Fees
<b>MARCH</b>	<b>12-15</b>	<b>Mid-Semester Examinations</b>
	<b>16</b>	Posting of Mid-Semester Grades due in BANNER by <b>12 Noon</b>
	<b>19-23</b>	<b>SPRING BREAK FOR STUDENTS (NO CLASSES)</b>
	<b>26</b>	<b>CLASSES RESUME</b> Registration for Summer Session I
	28	Last Day to Drop a Course by Any Means; End WP/WF
	<b>29</b>	<b>Honors Convocation (10:00 a.m.)</b> <b>Last Day for Placing Cap Gown Orders</b>
	<b>30</b>	<b>GOOD FRIDAY HOLIDAY (University Closed)</b>
<b>APRIL</b>	<b>2</b>	<b>CLASSES RESUME</b>
	16	University Clearance Begins for Graduating Seniors
	17	Registration for Fall Term Begins
	20	Last Day to Officially Withdraw from the University
	<b>23-26</b>	<b>Final Examinations for Graduating Seniors</b>
	27	Posting of Grades for Graduating Seniors Graduate Students in BANNER by <b>6:00 p.m.</b>
<b>MAY</b>	<b>7-10</b>	<b>Final Examinations for Undergraduate Students</b>
	<b>12</b>	<b>COMMENCEMENT</b>
	14	Posting of Grades for Undergraduates Due in BANNER by <b>12 Noon</b> Semester Ends

\*\*\*\*ALL DATES SUBJECT TO CHANGE

## **FACULTY**

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## **GENERAL INFORMATION**

Alcorn State University was created by an act of the Mississippi State Legislature on May 13, 1871. First named Alcorn University of Mississippi in honor of James L. Alcorn, who was then governor of the state of Mississippi, the institution was heralded as a “seminary of learning.”

The institution has a rich and illustrious history. It is located on the site of the former Oakland College, a Presbyterian school for the education of white males. Oakland College closed its doors at the beginning of the Civil War so that its students might answer the “call to arms.” Upon failing to reopen after the war, the state purchased the college for the education of its “Negro citizens.” The Honorable Hiram R. Revels, the first black man to serve in the United States Senate, resigned his seat in the U.S. Senate in 1871 to become the first president of the newly established institution.

The university was given \$50,000 per year for 10 years (the same as the University of Mississippi). Alcorn State University also received three-fifths of the proceeds from the sale of agricultural scrip under the provisions of the First Morrill-Land Grant Act of 1862. According to the *1872 Alcorn University Catalog*, “the fund amounted to \$189,000, three-fifths of which, or \$113,400, became the property of Alcorn University, the income from which is to be devoted to the agricultural and mechanical department of the institution.” Thus, from its beginning, Alcorn State University has been a land-grant institution.

In 1878, the Mississippi State Legislature changed the name of the institution to Alcorn Agricultural and Mechanical College with the enactment of the following legislation:

## **LAWS OF MISSISSIPPI**

Chapter XIX, SECTION 1. Be it enacted by the Legislature of the State of Mississippi, that the institution known as Alcorn University is hereby established as, and declared to be, an agricultural college for the education of the Negro youth of the State and to be hereafter known as the Alcorn Agricultural and Mechanical College of the State of Mississippi.

SECTION 9. Be it further enacted, that each of said Boards of Trustees shall possess all the power necessary and proper for the accomplishment of the trusts reposed in them viz.: The establishment and maintenance of a first class institution at which the youth of the State of Mississippi may acquire a common school education and a scientific and practical knowledge of agriculture, horticulture, and the mechanical arts, also in the proper growth and care of stock, without, however, excluding scientific and classical studies, including military tactics.

Alcorn State University’s land-grant status was re-affirmed in 1890, when the state of Mississippi accepted provisions of the 1890 Morrill Act specifically providing for the establishment of separate land-grant institutions of higher education. Hence, although created under the 1862 Morrill Act, Alcorn State University is often referred to as an 1890 land-grant institution.

Recognizing the tremendous growth and impact of the institution during its more than one century of existence, the Mississippi State Legislature changed the name of the institution to Alcorn State University in 1974.

Today, Alcorn State University is an equal opportunity institution. It admits students without regard to age, race, creed, color, national origin, religion, gender, or physical disabilities. The institution is both international and cosmopolitan. It has attracted students from 82 counties in the state of Mississippi, 42 states, and 18 foreign countries.

## **ASSURANCE OF COMPLIANCE**

On January 23, 1965, the president of the University signed, with the approval of the Board of Trustees of Institutions of Higher Learning of the State of Mississippi the “Assurance of Compliance with the Department of Health, Education, and Welfare Regulation under Title VI of the Civil Rights Act of 1964.”

The following statement indicates the commitment of the University: “Alcorn State University HEREBY AGREES THAT it will comply with Title VI of the Civil Rights Act of 1964 (P.L. 88-352) and all requirements imposed by or pursuant to the Regulation of the Department of Health, Education, and Welfare (45 CFR Part 80) issued pursuant to that title, to the end that, in accordance with Title VI of the Act and the regulations, no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Applicant receives Federal financial assistance from the Department, and HEREBY GIVES ASSURANCE THAT it will immediately take any measures necessary to effectuate this agreement.”

## **DRUG-FREE WORKPLACE POLICY**

It is the policy of Alcorn State University to maintain a drug-free work place, workforce, and campus consistent with federal laws as set forth in the Drug-Free Workplace Act of 1988 and the Department of Defense Drug-Free Workforce Rule of 1988 and the Drug-Free Schools and Communities Act Amendments of 1989. The university acknowledges and supports the laws of the State of Mississippi code of 1972 (1988 supp.) that prohibit the sale, distribution, manufacturing, possession or use of controlled substances in the state.

## **MISSION**

Alcorn State University, an historically Black College and University, is a comprehensive land-grant institution that celebrates a rich heritage with a diverse student and faculty population. The University emphasizes intellectual development and lifelong learning through the integration of diverse pedagogies, applied and basic research, cultural and professional programs, public service and outreach while providing access to globally competitive academic and research programs. Alcorn strives to prepare graduates who will be well-rounded future leaders of high character who will be competitive in the global marketplace of the 21<sup>st</sup> century.

## **VISION**

Alcorn State University will become the premier comprehensive land-grant University that develops diverse students into globally-competitive leaders and applies scientific research through collaborative partnerships, which benefit the surrounding communities, state, nation and world.

## **UNIVERSITY GOALS**

**Student-centered:** Continue to offer students an engaging, transformative learning and living environment, empowering them to become globally competitive, socially and environmentally sensitive, and technologically competent leaders.

**Academic Excellence:** Consistently enhance its academic excellence and become nationally recognized as a premier comprehensive land grant University offering engaging intellectual experiences and collaborative research opportunities.

**Shared Governance and Professionalism:** Assess its processes to ensure that honest and transparent communications, merit-based systems, and accountability prevail.

**Enhancement of Infrastructure and Technology:** Develop and implement a strategy to ensure that the technology and infrastructure exist to achieve the University’s vision and mission.

**Enhancement and Diversification of Resources:** Enhance its resources and diversify the sources of funding through partnerships, creative fundraising strategies, leveraging its intellectual property, and entrepreneurship.

**Diversity:** Engage all stakeholders in developing an environment which embraces diversity of thought and encourages the acceptance of differences.

**Community Outreach and Engagement:** Strengthen its community outreach and engagement efforts by encouraging continuing education, expanding community partnerships, and developing new service and outreach programs.

## **CORE VALUES**

### **Student-Centered**

Our students are our greatest assets. We value every student. We encourage leadership development by mentoring our students and enabling them to participate in our decision-making processes.

### **Academic Excellence**

We uphold the highest, rigorous academic standards. We expect excellent scholarship, preparation, and performance from every student and faculty member.

### **Shared Governance**

The University provides an open and honest environment. Communications are thorough, truthful and present all of the facts. We value transparency in decision-making and communications. We encourage every stakeholder to be aware of our opportunities, challenges, and resources. Policies are merit-based, fair, and broadly communicated.

### **Professionalism**

Everyone accepts full responsibility for personal performance and actions, maintains high moral standards, and complies with effective performance appraisal processes. We expect honesty, objectivity, and fairness in all transactions among our stakeholders. We pride ourselves on our strong commitment to a rigorous work ethic.

### **Diversity**

We value the global nature of our society. Everyone is respected. We promote diversity of thought and encourage the acceptance of cultural diversity. We believe that diversity stimulates a dynamic intellectual environment, creativity, and innovation. We believe that everyone has something to offer.

### **Outreach, Engagement, and Community Service**

We are committed to improving communities, locally and globally. We encourage students, faculty, and staff to apply their knowledge to build stronger, healthier, economically viable communities.

### **Institutional Pride**

We treasure our legacy, our commitment to excellence, our development of leaders, and our service to others. These attributes imbue us with great pride in Alcorn State University.

We respect the assets and resources of our University and use them prudently. We provide our students, faculty, and staff with the necessary infrastructure and technology to succeed while maintaining a safe, secure, and nurturing environment.

## **GEOGRAPHIC REGION SERVED**

Alcorn State University is located in southwest Mississippi. The University, therefore, considers that region as its primary service area; however, it serves students from throughout the state of Mississippi, other states, and foreign countries. In its research and extension land-grant functions, the University seeks to provide programs and services to limited-resource individuals throughout the state of Mississippi.

## **ACCREDITATION AND AFFILIATIONS**

Alcorn State University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the Associate, Bachelor's, Master's, and Specialist in Education degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Alcorn State University.



Alcorn's teacher education program is accredited by the Council for the Accreditation of Educator Preparation (CAEP). The Bachelor of Science in Nutrition and Dietetics is accredited by the Accrediting Council for Education in Nutrition and Dietetics (ACEND). The Associate of Science in Nursing degree, the Bachelor of Science in Nursing degree, and the Master of Science in Nursing degree programs are accredited by the Accreditation Commission for Education in Nursing (ACEN). Alcorn State University is an accredited institutional member of the National Association of Schools of Music (NASM), the Association of Technology, Management, and Applied Engineering (ATMAE), the American Association of Family and Consumer Sciences (AAFCS), the Accreditation Council for Business Schools and Programs (ACBSP) and the Council on Social Work Education (CSWE).

The University also holds membership in the following organizations: National Association of College and University Business Officers (NACUBO); American Association of Colleges for Teacher Education (AACTE); American Council on Education (ACE); Association of State Colleges and Universities (AACU); Family Consumer Sciences Education Association (FCSEA); American Library Association (ALA); College Language Association (CLA); Council for the Advancement and Support of Education (CASE); National Association for Business Teacher Education (NABTE); National Association of State Universities and Land Grant Colleges (NASULGC); National Collegiate Athletic Association (NCAA); National Collegiate Honors Council (NCHC); the Southern Association of Collegiate Registrars and Admission Council (SACRAO); the Association of Departments of English (ADE); Association of Institutional Research (AIR); Mathematical Association of America (MAA); the Association to Advance Collegiate Schools of Business-International (AACSB International); Southern Regional Honors Council (SRHC); and the Southern Association of College and University Business Officers (SACUBO).

## **THE ALUMNI ASSOCIATION**

Organized in 1890 and incorporated in 1952, the Alcorn State University National Alumni Association is dedicated to building a significant program of alumni interest and support aimed at the enrichment of the university's total mission.

Alcorn State University has awarded more than 20,000 degrees since it opened in 1871. Alumni have distinguished themselves in business, industry, government, education, public, and foreign services. Those who have been a part of the campus share a unique common bond of friendship and an unending dedication and respect for all that the University is and represents. It was upon this foundation that the association was founded under the leadership of Dr. A. D. Snodgrass, its first president and member of the first graduating class, 1882.

Through the years the association has operated to promote the ideals of the University, translate its objectives into terms which the public can understand and appreciate, uphold its ideals of scholarship, encourage the best students to seek opportunities for admission through scholarship grants it establishes, and support the programs of the University as the needs of the institution are promulgated by the administration charged with its destiny.

Alumni chapters throughout Mississippi and the nation represent the association. All former students and graduates of the University are eligible for membership in the Alumni Association. Any group of five graduates and/or former students of the University may organize a local chapter and petition the Executive Secretary for a charter, a copy of the constitution, and other necessary information. Presently, annual dues in the association are fifty dollars.

The many alumni-sponsored fund raising projects are indicative of the association's commitment to higher education and to Alcorn State University. Most noteworthy are the Alumni Athletic Supplement Fund, the Revolving Student Loan Fund, alumni departmental scholarships in English and agriculture, and the Alumni Centennial Fund (\$100,000.00 birthday gift from the alumni to the University). In addition, local Alcorn Alumni Chapters provide academic scholarships for students exhibiting talents far beyond the mediocre and commonplace.

Although the many local chapters hold weekly and monthly meetings, the National Association holds but two meetings yearly: the Mid-Winter Business meeting in February and the General Meeting in May, the latter being held on campus. National officers are elected to serve a two-year term.

They are president, executive secretary, first and second vice president, recording secretary, treasurer, corresponding secretary, field representative, chaplain, and parliamentarian. Together, these officers make up the executive board of the association. The Director of Alumni Affairs also serves on this board.

## LOCATION AND MEANS OF ACCESS

The University is situated at Alcorn State in Claiborne County, Mississippi, five miles west of Lorman, twelve miles southwest of Port Gibson, and forty miles south of Vicksburg, Mississippi. State Highway 552 forks off from U.S. Highway 61 one mile north of Lorman, Mississippi, and leads directly to the campus.

Regularly scheduled airlines provide service to the following local airport:

Location of Airport	Distance	Airlines
Jackson, Mississippi	90 miles	American, Delta and U.S. Airways

## UNIVERSITY PRESS OF MISSISSIPPI

The University Press of Mississippi was founded in 1970 to encourage the dissemination of research and study through the publication of scholarly works. Functioning as the scholarly publishing arm of the state-supported universities in Mississippi, the University Press is governed by a Board of Directors made up of two representatives from each of the eight state universities, one representative from the Board of Trustees of State Institutions of Higher Learning, and the Director of the Press. The University Press publishes a limited number of books each year. Primary areas of interest are Mississippi history and literature, but manuscripts in all areas of study are welcomed. Administrative offices of the University Press are located at 3825 Ridgewood Road, Jackson, Mississippi.

## SPECIAL PROGRAMS AND FACILITIES FOR TEACHING, RESEARCH, AND SERVICE

**Institutional Aid Program::** Since 1967, Alcorn State University has received funds under Title III of the Higher Education Act of 1965, as amended, to assist the University in strengthening its academic, administrative, student affairs, and financial management programs. The Title III Program operates under the auspices of the Institutional Aid Programs of the United States Department of Education.

The goal of the Title III Program at Alcorn is to support and enhance the institution's development and progress toward its stated mission and goals through the funding of projects in areas deemed critical and most in need of external financial assistance by University officials. Alcorn has benefited greatly from Title III support in: 1) administrative and fiscal improvement; 2) student services improvement; 3) curriculum development; and 4) faculty development. Through the support of Title III, the University has established three 20-year endowment programs. These programs enhance the long-term fiscal stability of the University.

**Experiment Station:** The Alcorn State University Agricultural Experiment Station conducts a research program designed to discover new knowledge and to provide for better utilization of existing knowledge for the betterment of humanity. Although not limited to this scope, the thrust of the station is to seek answers to the problems of limited-resource rural people of southwest Mississippi.

**Cooperative Education Program:** Cooperative education is a professional development training program that allows students to incorporate classroom activities with practical on-the-job experiences. The program is a joint venture between employers and the University which allows students to alternate periods of off-campus work and on-campus study as part of their academic program. Students obtain financial remuneration during their work periods and may also earn academic credit.

The off-campus employment must be closely related and contribute significantly to the student's career goals. Cooperative Education is inter-departmental, and it is optional to students majoring in all departments. The purposes of the program are:

1. To provide students opportunities to integrate theoretical classroom instruction with practical application on the job so that learning may become more meaningful and relevant to the world of work.
2. To permit students to explore their career interests and test their occupational commitments.
3. To allow the University to extend classroom and laboratory facilities through the utilization of sophisticated facilities, equipment, and expertise in business, industry, and government agencies.
4. To provide students with opportunities to develop human relations skills, especially in the industrial environment.
5. To provide students with a source of income to support their education and to meet other financial obligations.

**Cooperative Extension Program:** The Cooperative Extension Program of Alcorn State University conducts a continuing education program designed to meet the needs of small farms, disadvantaged and limited resource people in the state with its major thrust being in southwest Mississippi. The major program areas include agriculture and natural resources, family and consumer sciences, communities in transition, and 4-H youth development.

The program works closely with a broad spectrum of the research and academic staff and makes use of research findings in order to make the latest and most reliable information available to its clientele.

**Small Farm Development Center:** The Small Farm Development Center was established by an Act of the State Legislature in 1988 and funded in 1993 to provide management and technical assistance to small-scale, limited-resource farmers and agribusinesses utilizing the resources of local, state, and federal government programs, various segments of the private sector, and universities and colleges throughout the state.

The center also conducts applied research, develops business opportunities for small farmers, collects and disseminates agricultural information and data, develops markets and marketing strategies and explores opportunities for international trade. The center collaborates with other relevant units at Alcorn State University in its efforts to implement its mission successfully.

**Student Support Services:** The Student Support Services Program is designed to seek and assist a target population of students who have academic potential but lack adequate secondary school preparation for success in a college or University.

The goal of this program is to increase student achievement, retention, and graduation through special instructional, tutorial, and counseling services. Services offered include developmental reading and instruction in English and mathematics. Other services include academic, personal, social, career, and vocational counseling, as well as tutorial assistance to aid in meeting the academic needs of the student.

**Upward Bound:** The Upward Bound Program is a Community Action Program authorized under Title II-A of the Economic Opportunity Act and funded by the Department of Education. The program is divided into 1) a summer residential session and 2) a follow-up program on Saturdays during the academic year.

The major objectives of the program are: 1) to encourage students to participate in activities that will stimulate their interests in conceptual learning and logical relationships, 2) to make students (and their parents) aware of the availability of new vocational opportunities for the qualified person, and 3) to provide positive models and experiences that will interest students in raising their level of aspirations and appreciation.

The program areas include English, reading, science, foreign language, and mathematics. Counseling and tutorial services are offered on a group or individual basis. Extra-curricular activities include recreational, educational, and group activities. They are, in most instances, designed to serve the purposes of enrichment and recreation.

## **FACILITIES MANAGEMENT**

Alcorn State University is a wholesome educational community comprising, 1,756 acres, of which 300 acres make up the campus and athletic fields, and 1,456 acres are devoted to agriculture and research. Built on a gentle slope, the campus is carefully landscaped, carpeted with green grass, and surrounded by attractive shrubbery. Towering trees, many more than one hundred years old, distinctive with Spanish moss, shade the grounds and enhance the picturesque setting in which quiet study and worthy companionship are fostered. Like many of its buildings, the campus is old and mellowed by a tradition that lives in the hearts of all who come under its spell. Its charm cannot be overlooked. The University has eighty-nine buildings. The physical plant is conservatively valued at approximately \$92 million.

## NOTEWORTHY HISTORICAL EVENTS

- 1830 Oakland Memorial Chapel, famed landmark and oldest building on the campus, was constructed. Here, in 1833, the first degree issued by a Mississippi institution was conferred.
- 1830 Belle Lettres, Dormitory Two, and Dormitory Three, also historical landmarks, were constructed.
- 1830 President's Home erected.
- 1871 Oakland College property purchased by State of Mississippi.
- 1871 Hiram R. Revels elected President.
- 1871 Alcorn University created by an act of the Mississippi State Legislature on May 13 and given three-fifths of the proceeds of the sale of the land scrip.
- 1878 Name changed from Alcorn University to Alcorn Agricultural and Mechanical College.
- 1882 John H. Burrus elected President.
- 1890 Alcorn A. M. College designated as an 1890 Land-grant College by the Mississippi State Legislature.
- 1893 Wilson H. Reynolds elected President. (Professor Andrew J. Howard completed the unfinished year of President Reynolds because of death.)
- 1894 Thomas J. Galloway elected President.
- 1896 E.H. Triplett elected President
- 1899 W.H. Lanier elected President.
- 1903 Alcorn Agricultural and Mechanical College became co-educational.
- 1905 L.J. Rowan elected President. (First Administration)
- 1911 John A. Martin elected President.
- 1915 L.J. Rowan elected President. (Second Administration)
- 1924 College credit summer school started.
- 1926 Alcorn Agricultural and Mechanical College became accredited.
- 1928 Bowles Hall completed. A classroom, laboratory and office building.
- 1929 Rowan Hall constructed.
- 1929 Harmon Hall constructed. Now, an office building.
- 1934 William H. Bell elected President.
- 1939 Lanier Hall (dormitory for women students) erected.
- 1939 Alcorn A. M. College accredited as a "B" college by the Southern Association of Colleges and Schools.
- 1944 P.S. Bowles elected President.
- 1945 William H. Pipes elected President.
- 1948 Alcorn A & M College made an accredited "A" college by the Southern Association of Colleges and Schools.
- 1949 J.R. Otis elected President.
- 1951 The college laundry erected.
- 1955 Eunice Powell Hall constructed. Contains offices, classrooms, and laboratories for the Department of Human Science.
- 1956 Dorothy Gordon Gray Home Management House (Home Management House) erected.
- 1957 J.D. Boyd elected President.
- 1959 E. E. Simmons Gymnasium (Old Gymnasium) erected.
- 1959 Renovation of Oakland Memorial Chapel and the President's home.
- 1960 E. Albert Dumas Hall (Library and Science) completed. This two story structure houses offices, classrooms, and laboratories for the School of Business.
- 1961 Two brick buildings containing ten family apartments and ten three bedroom homes for faculty and staff members were completed.
- 1961 Mechanical Arts Building completed. Now houses Army ROTC Program.
- 1961 Honors Curriculum Program established.
- 1962 Mabel Thomas Hall (New Women's Dormitory) completed.
- 1962 Albert L. Lott Hall (New Men's Dormitory) completed.
- 1963 Felix H. Dunn Infirmary (The Infirmary) erected containing fourteen beds; air-conditioned and equipped to provide emergency as well as routine hospital and medical care for the college community.
- 1964 James L. Bolden Campus Union building completed (a multi-million dollar annex added in 1972). The building contains a grill, bookstore, post office, bowling alley, game room, student publication office, meeting rooms, and guest rooms. Known as the SUB, this building has become the hub of the student social life on the campus.
- 1964 Fine Arts Building completed. The building contains music and language laboratories, a fine arts library with listening rooms, band and choir rehearsal rooms, practice studios for music students, classrooms, offices artwork rooms, computer laboratories, and the Little Theatre.
- 1965 Robinson Hall completed. A modern and spacious dormitory for female students.

- 1965 Six faculty houses were constructed in Johnson Village. (Five houses were added in 1969 and three more in 1971.)
- 1967 Revels Hall constructed. A modern, air-conditioned dormitory for male students.
- 1968 Burrus Hall completed (dormitory for female students.)
- 1969 Walter Washington elected President.
- 1971 The Alcorn State University branch of the Mississippi Agricultural and Forestry Experiment Station established.
- 1971 The Alcorn State University Branch of the Mississippi Cooperative Extension Service established.
- 1971 Army ROTC Unit established.
- 1972 Swine Research Center constructed.
- 1972 David C. Carter Dairy (Dairy Facility) erected.
- 1972 Landing Strip for small aircraft completed.
- 1973 Mat Thomas, Jr. Garden Apartments (Faculty Garden Apartments) completed.
- 1973 University/Industry Cluster Program established.
- 1974 Alcorn A. M. College renamed Alcorn State University.
- 1974 Jesse A. Morris, Sr. /W. C. Boykin Agricultural Science building (Agricultural Science Building) completed.
- 1974 Biological Research Building #1 constructed. United States Department of Agriculture Microbial Conversion Project presently being conducted.
- 1975 Davey L. Whitney Complex (Health, Physical Education and Recreation complex) completed.
- 1975 Division of Graduate Studies established.
- 1975 Addition to Water Plant.
- 1975 Oakland Memorial Chapel entered into the National Register of Historic Places.
- 1977 Nursing program established.
- 1977 Willie Mae Latham Taylor Park (Outdoor Recreation Park) completed.
- 1977 Biological Research Building #2 constructed. United States Department of Agriculture Growth Hormone Project (Cyclic-AMP) completed.
- 1977 Division of Business established.
- 1977 Walter Washington Administration-Classroom Building completed.
- 1980 NCATE Accreditation for Basic Education programs.
- 1981 K.L. Simmons Industrial Technical Building completed.
- 1981 Initial Accreditation of Basic Programs by National Council for the Accreditation of Teacher Education.
- 1981 Johnnie B. Collins Beef Research Facility (Beef Research Facility) completed.
- 1981 Stadium Dressing Facility (Financial Aid Building) completed.
- 1981 National Association of Schools of Music Accreditation (Bachelor of Music Education).
- 1981 National League for Nursing Accreditation (Associate of Science).
- 1982 National League for Nursing Accreditation (Bachelor of Science).
- 1983 American Dietetics Association approval (Food and Nutrition and Institutional Management Programs.)
- 1983 Cora Balmat Nursing Building in Natchez completed.
- 1984 NCATE Accreditation for Graduate programs in Education.
- 1987 WPRL FM began broadcasting to Southwest Mississippi.
- 1989 President George Bush gave commencement address.
- 1990 Kellogg Nursing Center completed.
- 1993 Jack Spinks Stadium/Dwight Fisher Field completed.
- 1993 Academic Divisions elevated to Schools
- 1994 Rudolph E. Waters named Interim President
- 1994 Orchard Building constructed.
- 1995 Clinton Bristow, Jr. named President.
- 1995 Master's Program in Nursing established.
- 1996 Physical Plant Building completed.

1997 Center for Rural Life and Economic Development established.  
 1997 Math and Science Building constructed.  
 1997 Master of Business Administration Program initiated.  
 1998 Nursing School Dormitory constructed in Natchez.  
 1999 Graduate Nursing Program accredited.  
 1999 New President's Home constructed.  
 1999 Extension and Research Building constructed.  
 2000 Safety Center (Police and Fire Station) constructed.  
 2001 Honors Dormitory Constructed.  
 2003 Vicksburg Corporate Office Opened.  
 2006 Malvin A. Williams named Interim President.  
 2007 George Ross named President.  
 2009 Dr. Norris A. Edney named Interim President.  
 2010 Dr. M. Christopher Brown II named President.  
 2010 Medgar Wiley Evers Heritage Village constructed (Women's quarters).  
 2011 Medgar Wiley Evers Heritage Village constructed (Men's quarters).  
 2011 Medgar Wiley Evers Heritage Village Amenities Building constructed.  
 2014 Dr. Alfred L. Rankins, Jr., named 19<sup>th</sup> President.

## COMMUNICATION

**Telecommunications:** Students' living quarters are equipped with a phone jack for a land line connection and two internet jacks to connect to the University network infrastructure.

The University switchboard operates Monday through Friday from 8 a.m. to 5 p.m. Switchboard services are not available on weekends; however, all places of residence, both public and private, are equipped with private home lines and/or pay station phones, giving Alcorn State University twenty-four hours of uninterrupted telephone service.

**Handling of Mail:** Mail is received and dispatched once a day through the United States Post Office in Lorman, Mississippi 39096. All the mail that is addressed to the University is distributed through the local Branch Post Office on campus. Mail arriving to the University should be addressed: Alcorn State University, Post Office Boxes or to the desired dormitories, Alcorn State University, Lorman, Mississippi 39096-7500.

All express mail should be addressed to the correct box or dormitory at Alcorn State University, Mississippi 39096-7500. It is very important that mail with box numbers 1-900 use Alcorn State University after the box number.

**Publications:** In addition to the *ASU General Catalog* (undergraduate) and the *ASU Graduate Catalog*, the following are official publications of Alcorn State University:

**THE ALUMNUS** --- Official publication of the Alumni

**ASU TODAY**—Online Daily Publication

<http://www.alcorn.edu/> --- Alcorn State University Official Web Page





## *Student Life and Services*

## **STUDENT AND LIFE SERVICES**

### **REGULATIONS REGARDING MARRIED STUDENTS**

Married students who reside in residence halls are subject to the same standards of conduct and living that govern the life and activity of other resident students.

### **RESIDENCE LIFE**

The mission of the Alcorn State University Department of Residence Life/Housing is to provide “a home away from home” where students can be safe and comfortable on campus. Part of the residence hall experience is learning to live, fellowship, socialize and interact with other people from different racial, ethnic and economic backgrounds. To this end, students are guided to develop a growing sense of maturity and responsibility by participating in residence hall activities. By doing so, the students are intellectually stimulated to think critically solve problems and maintain an atmosphere conducive to academic pursuits and college life.

### **MISSION STATEMENT**

Residence Life provides a safe, diverse and well-maintained environment that complements and supports the academic mission of the University. We create a dynamic living/learning experience that promotes and inspires individuals to become empowered community members. The following is a summary of the residence life policies that will govern students while they attend Alcorn State University:

### **STUDENT RIGHTS**

In a community living situation, as found in the residence halls, it is necessary to impose certain standards for conduct and behavior to ensure that there is some order to the environment. Each resident living in the residence hall has certain rights they are entitled to:

These rights are:

- The right to sleep
- The right to one's personal belongings
- The right to free access to one's room and suite facilities
- The right to a clean environment in which to live
- The right to read and study free from undue interference in one's room
- The right to complain and be heard
- The right to personal privacy
- The right to be free from verbal or written abuse, threats, intimidation or violence

Residents are expected to respond appropriately to the reasonable requests of other residents and Residence Life staff. Residents will respect the rights of other residents, and each resident is responsible and held accountable for his or her behaviors, as well as for the behavior of his/her guests(s).

### **ELIGIBILITY REQUIREMENTS FOR HOUSING**

All Alcorn State University students enrolled full-time (12 credit hours) Undergraduate and (6 credit hours) Graduate in good standing with the University, are eligible for on-campus housing. Students must present PROOF of completed registration for clearance to check into assigned residence hall.

## MANDATORY RESIDENCY REQUIREMENT

All full-time students attending the University under the age of twenty-one (21) who have completed fifty-nine (59) or fewer hours prior to the first day of classes for the term and are not living at the primary residence of their parents or legal guardians within a 40-mile radius of the University are required to reside on campus and participate in a meal plan.

Attaining the age of requirement does not void the contractual agreements made for housing; provided, however, that a student who will attain the age of twenty-one (21) prior to the first day of classes for the following spring semester may request a one-semester housing contract/and further provided that a student under age twenty-one (21) who satisfactorily completes sixty (60) or more hours during the first semester may be released from the second semester of the housing contract. **A non-refundable \$125.00 application fee is required before the application can be processed.**

- A student who is a military veteran with at least two (2) years of service is exempted from these housing requirements.
- A married student, living with his/her spouse is exempted from these housing requirements.
- A single parent may be exempted from these housing requirements if a child lives with them.
- Students meeting the 40-mile radius must complete the Permission to Live Off Campus Form and bear the seal of the Notary. Forms are available in the Residence Life Office.

## REGISTRATION OF MOTOR VEHICLES

Each person who operates a vehicle on campus must be registered with the Office of Parking Services. Each vehicle must have a valid, properly displayed parking permit. Parking citations are issued for violations, including having no valid permit, and are payable at the Office of Parking Services. The online module for parking rules, registration for parking permits, and payments for citations can be accessed at [www.alcorn.edu/parking](http://www.alcorn.edu/parking).

## COUNSELING AND TESTING CENTER

### Where is the Counseling Center Located?

Walter Washington Administration/Classroom Building (WWACB)  
3<sup>rd</sup> Floor Room #305

### Whom Do We Serve?

Enrolled ASU Students

### How Do I Make an Appointment?

To make an appointment, call 601-877-6230 or come to **Room #305– WWACB**. Walk-ins are welcomed.

### What Services Do We Offer?

- Individual Counseling
- Group Counseling
- Substance Abuse Prevention  
(Alcorn Substance Abuse Prevention Program)
- Standardized Testing Services
- Withdrawal Requests
- Consultation/Referrals
- Outreach Programs

### What is the Cost?

There are no charges for counseling services provided by ASU Counseling and Testing Center. However, if referrals are made to outside agencies, you are responsible for any fees incurred from those agencies.

### **What about Confidentiality?**

Students are assured of confidentiality in accordance with ethical and legal standards set by the American Counseling Association (ACA) and National Association of Social Workers (NASW). All Counseling and Testing staff must sign a Confidentiality Agreement. For additional information, please go to Alcorn's Home page, [www.alcorn.edu](http://www.alcorn.edu), click on Discover Alcorn, then Administrative Offices and search for Counseling and Testing Services under Student Affairs.

## **HEALTH AND DISABILITY SERVICES**

The Department of Health and Disability Services is located in the Rowan Hall, Health Services Center. The telephone number is 601-877-6460. It serves as the primary health care facility on the main campus offering professional services for all Alcorn State University students, faculty and staff. Students who need disability accommodations should submit an application packet with supporting documentation from a qualified professional to the Director of Health and Disability Services. Upon careful review of the documentation and discussion with the student, the Director of Health and Disability Services will arrange reasonable physical and academic accommodations.

### **HOURS OF OPERATION**

The Department of Health and Disability Services hours of operations are:

Monday – Thursday	8:00 a.m. – 5:00 p.m.
Friday	8:00 a.m. – 4:00 p.m.

**After-Hours/Emergency Care: In case of emergency please contact Campus Police/Ambulance Services at 601-877-3000 or Dial 911.**

See the Alcorn State University Student Handbook online at [www.alcorn.edu](http://www.alcorn.edu) for detailed information.

## **LIBRARY AND LEARNNG RESOURCES**

The University library serves as the cornerstone of education at Alcorn State University. It provides services and resources essential to the instructional, research, and public service needs of the University. Renovated and expanded in 2000, the J. D. Boyd Library is a state-of-the-art facility designed to accommodate 1000 users and hold 500,000 volumes.

It contains a thirty-station computer laboratory, a media center with a video classroom, group study rooms, an archival and special collections room and a 140 seat auditorium. Reading and study areas wired for computer access are available on the first and second floors. Administrative offices, as well as circulation, reference, serials, government documents, computer lab, microform area, and technical services facilities are located on the main level. This expansive open area provides easy access to all major reference services. The media center, video classroom, archives, and special collections are located on the second floor. The ground floor contains the shipping and receiving area, storage rooms, computer office, faculty/staff professional development center, and staff lounge. Carrels, tables, and informal seating are interspersed throughout the spacious facility to provide an atmosphere conducive to the learning process.

Books, except for the reserve, African American, and archival collections, are readily accessible on open stacks. Journal back files and government documents are housed in compact shelving. Point of use instruction is available as well as specialized library tours and orientation sessions. Bibliographic instruction classes are conducted each semester as a part of the University Life courses. These sessions are held in the Medgar Wiley Evers library auditorium. Microform reading and printing machines, fax service, and photographic copying services are also available on the main floor.

The library has in its holdings 412,033 print volumes in the circulating and reference collections (including 62,425 micrographic volumes), and maintains a print subscription list of over 321 periodicals including scholarly journals and general interest magazines.

The Library's print collection is supplemented by online services to over 85 databases, 70,000 electronic journals (including over 21,000 full-text), Ebscohost electronic book collections totaling over 44,000 titles, internet access, and CD-ROM resources. A complete listing of library services can be found on the library web page at <http://www.alcorn.edu>.

The library utilizes "SirsiDynix" as its online information management system. SirsiDynix is one of the world's leading providers of library technology solutions, connection to more than 300 million people with information and resources. For more than 30 years libraries have used SirsiDynix to bring the power of their connections to communities. Sirsi provides the library with tools for cataloging, acquisition, serials, academic reserve, materials booking, collection exchange, and system administration.

In addition to the University's library, the Natchez Library Learning Resource Center (NLLRC) is located on the Natchez campus. Students have access to the main campus library resources and services as well. The NLLRC is located in the northeast corner of the new MBA (Master of Business Administration) building. The NLLRC is approximately 6500 square feet, and has a separate study/multi-purpose room that is used extensively by students and faculty. The facility has a seating capacity of 100. Students are provided access to books, periodicals, newspapers, videos, CD's, DVD's, films, and audio cassettes in nursing, business and other related fields. Ten computers with Internet and wireless access are available in the NLLRC for faculty and student use. The library offers users access to library resources 33 hours per week.

The Natchez Library Learning Resource Center holds resources in primary nursing areas, related sciences, and specialty areas comprised of the majority of the collection. However, business and education holdings are being increased to accommodate students who are taking non-nursing courses. The NLLRC subscribes to 164 nursing journals, 95 business journals, and 2 newspapers. Back volumes and microfilms for nursing majors, education, and business journals are also available; total book holdings are 13,912; Audio-visual materials such as videos, CDs, DVDs, films and audio cassettes in nursing and other fields which meet the needs for enhancement and remediation are available, in addition to materials in nursing and science.

Students enrolled in non-nursing courses can make use of resources in the NLLRC. In addition, instructors can make materials available from the J. D. Boyd Library using the Interlibrary Loan (ILL) or the Reserve Book system. Non-nursing service courses have been expanded to meet the needs of the University's curriculum.

Improving library services for the students, faculty, and staff of Alcorn State University is of utmost concern and the number one priority for the University library. Therefore, the library also engages in cooperative relationships with other libraries and agencies in order to increase the proficiency of library resources and services, to support distance learning, and to better serve the entire surrounding University community.

## **PUBLIC RADIO STATION (WPRL)**

WPRL, 91.7 FM your trusted source for news, sports, talk, music and entertainment, is a 3000 watt CPB-qualified public radio station broadcasting on the campus of Alcorn State University to the surrounding communities as a service of the University. WPRL's mission is to engage, educate, and entertain by creating and providing innovative, outstanding programming fueled by intellectual and cultural diversity. WPRL is a member of National Public Radio, an affiliate of Public Radio International and the Associated Press. It provides educational and entertainment programming for the general audience as well as opportunities for students, faculty, staff, and community members to learn practical broadcasting skills as volunteers and interns.

## **CAREER SERVICES**

The Office of Career Services assists 1) students in career planning, 2) enrollees in obtaining employment in jobs for which they are qualified, and 3) presently employed graduates in making desired changes. These services are provided cost-free to students and alumni. Graduates are placed in business, industry, government, education, and other professional areas.

These services include: 1) service to the student –by scheduling interviews with employers, counseling, securing job listings, providing occupational literature on career opportunities, consulting with professional staff and employers, and maintaining and reproducing credentials, 2) service to the employer—by making employers’ needs known to the students and alumni, by enabling them to visit and interview qualified applicants and to make contact with the professors and other University personnel, by keeping them informed of changes in educational and degree programs, and by helping them gain a deeper insight into the placement process through professional organizations; and 3) service to the institution—by establishing a source of accurate and timely information on economic and industrial market trends, by providing information concerning the effectiveness of the curriculum as it relates to specific career areas, by representing the institution to many professional arenas such as business, industry, government, medicine, and education.

## **FOOD SERVICE**

All students living in University residence halls are expected to take their meals in the Clinton Bristow, Jr. Dining Hall. Meals are served cafeteria style. Students obtain permission to eat in the cafeteria by paying board fees in advance. Sandwiches, beverages, and short orders are served in the James L. Bolden Campus Union Building.

## **CAMPUS UNION**

The James L. Bolden Campus Union is the community center of interaction among students, faculty, staff, administration, alumni, and guests. The various boards, committees, and staff of the Union provide a cultural, social recreational program aiming to make free-time activity a cooperative factor in education. The following are campus union facilities and components:

## **GAME ROOM**

The game room offers the campus community the opportunity to use the following recreational facilities: an eight lane bowling alley, ten billiard tables, table tennis, chess, checkers, and cards. The Game Room hours are:

Monday – Thursday	10:00 a.m. – 10:30 p.m.
Friday	10:00 a.m. – 11:00 p.m.
Saturday	5:00 p.m. – 11:00 p.m.
Sunday	5:00 p.m. – 10:30 p.m.

## **PIZZA HUT AND SUB CONNECTION**

Monday – Friday	10:00 a.m. – 10:30 p.m.
Saturday – Sunday	6:00 p.m. – 10:30 p.m.

## **STUDENT SERVICES ACCESS CENTER**

**The Student Services Access Center** is the single point of contact for enrollment services in Natchez. It is our goal to serve as a liaison between you and main campus services. The Student Services Access Center consists of the administrative and support services that assist students throughout their academic career in completing their curricula and managing their University affairs. The center utilizes technological and personal resources to provide quality and convenient services to students.

## **FINANCIAL AID**

Students expecting to receive financial aid must submit all required financial aid documents to the Financial Aid Office. Once the information is received and reviewed, eligibility will be determined. If eligible to receive financial assistance, an award letter will be mailed, emailed or uploaded through Banner Online Services. Any difference in the amount awarded and the amount needed to complete the registration process must be paid before completing the registration process. Previous balances must be paid in full at the time of registration.



## STUDENT AID PROGRAMS

Four basic types of available aid: scholarships, grants, loans and employment. They are derived from federal, state, and institutionally funded programs. When students apply for federal student aid, the information reported is used in a formula that calculates the Expected Family Contribution (EFC), an amount the student and his/her family are expected to contribute toward the student's education.

Students may apply by completing the FAFSA (Free Application for Federal Student Aid) or renewal FAFSA at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). In addition to this requirement, each applicant must complete an ASU Financial Aid Application: This application is available at [www.alcorn.edu](http://www.alcorn.edu) under the Financial Ad/Forms link. **Priority Deadline: March 15<sup>th</sup>.**

### Federal Student Aid Includes:

- Grants – financial aid that doesn't have to be repaid (unless, for example, you withdraw from school and owed a refund)
- Loans – borrowed money for college; you must repay your loans, with interest
- Work-Study – a work program through which you earn money that can help with expenses
- Additional Information concerning Federal Student Aid can be located at <https://studentaid.ed.gov/>
- **State Financial Aid:**
- Even if you're not eligible for federal aid, you might be eligible for financial aid from your state. Contact your [state grant agency](#) for more information.
- Mississippi residents: <http://riseupms.com/state-aid/>.

### Institution Aid:

- Alcorn offers many general and special scholarships to qualified students. Scholarships are offered based on academic merits (contact admissions) and competitive selection for music, band, athletics, etc...
- Visit Alcorn's website ([www.alcorn.edu](http://www.alcorn.edu)) for additional scholarship information or ask the department that offers your course of study; they might have a *scholarship* in your major.
- Fill out any applications required and meet the deadlines.

## ASU FOUNDATION, INCORPORATED SCHOLARSHIPS

### PHASE I APPLICATION PERIOD MARCH - MAY

### PHASE II APPLICATION PERIOD AUGUST - SEPTEMBER

Admitted undergraduate students have the opportunity to apply for merit-based scholarships offered through the Alcorn State University Foundation, Inc. The Foundation administers both endowed scholarships and expendable scholarships, or those that must be replenished with funds from the donating individual or entity. The majority of scholarships available are in the form of endowed scholarships or those that are invested and funds awarded based on available interest. Alumni, former University faculty and staff or family and friends in memory of beloved Alcornites who value the opportunities of an Alcorn education mostly establish endowed scholarships. Most scholarships offered by the Foundation **Require a Minimum 2.0 GPA or Above.**

Students are able to apply during the two (2) application periods - PHASE I Late Spring (mid-March through mid-May) and PHASE II Early Fall (late August). After applications are received, they are evaluated and decisions made by the University's foundation scholarship committee and staff.

If selected, **PHASE I Scholarship Recipients are notified in writing by July 15** and requested to either submit their own typed and signed Thank You Letter to the Foundation and/or schedule an appointment for a "Thank You Letter Writing Session" with the ASU Writing Center in the J.D. Boyd Library at their earliest opportunity.

**PHASE II Walk-In Scholarship Recipients are notified in writing or via telephone by September 11.** All Thank You Letters must be submitted to the ASU Foundation by mid-October. Final Thank You Letters are usually forwarded to the donor to notify them of the recipients' appreciation. If the final Thank You Letter is received in time, the scholarship monies will be posted to the students ASU account during registration.

ASU Foundation scholarship recipients, not only receive financial assistance to defray the cost of an education but they also become one of Alcorn's ambassadors of excellence.

## **AWARDS**

Actual amounts available to be awarded depend on investment portfolio performance. The majority of scholarship awards is a maximum \$1,000 and is awarded for one (1) academic year for both fall and spring semesters. One half of the total award is paid in the fall and the remaining half in the spring. A select number of scholarships are awarded for the summer sessions. There are a few recurring scholarships that are renewable from year-to-year based on students maintaining adherence to certain criteria, however the majority of scholarships are non-recurring.

To apply, click the link below to learn about scholarships available through the ASU Foundation.  
<http://www.alcorn.edu/giving-back/scholarships/scholarship-descriptions/index.aspx>





# **ACADEMIC REGULATIONS AND PROCEDURES**

# ACADEMIC REGULATIONS AND PROCEDURES

## UNDERGRADUATE ADMISSION TO THE UNIVERSITY

All inquiries concerning admission to Alcorn State University should be directed to the Office of Admissions. To be eligible for admission, a person must be a graduate of a recognized high school. Persons who are not high school graduates are required to pass the General Education Development (GED) test and make a satisfactory score on the ACT and/or SAT before being admitted.

Applications for admission are accepted any time during the calendar year. Persons interested in applying should write or call the Admissions Office for an application and instructions for applying. All applicants should have high school and/or college transcripts, ACT or SAT scores, or a GED passing score transcript sent directly to the Office of Admissions, Alcorn State University, Lorman, Mississippi, 39096-7500.

When the application for admission, ACT or SAT profile, transcript and/or GED transcript is received, the applicant will be notified concerning his/her status. It is advantageous to submit a partial transcript, as this will enable the staff to evaluate the academic record and provide an early response to the applicant's request for admission. Partial transcripts should include all available grades earned from freshman year to present. The partial transcript does not substitute for the final transcript, which should be submitted after graduating from high school.

Alcorn State University adheres to the principle of equal opportunity. The University does not discriminate on the grounds of race, color, religion, sex, national origin, age or handicap.

## ADMISSION TO FRESHMAN STANDING

The scholastic requirement for full admission to the freshman class is graduation from an accredited high school with at least a "C" average and completion of the 15 ½ College Prep Curriculum as follows:

### REQUIRED COLLEGE PREP CURRICULUM FOR HIGH SCHOOL GRADUATES TO ATTEND ALCORN STATE UNIVERSITY

**English:** (4 Carnegie Units) Courses must require substantial communication skills (i.e., reading, writing, listening, and speaking).

**Mathematics:** (3 Carnegie Units) Algebra I, algebra II, and geometry. A fourth course in higher level mathematics is highly recommended.

**Science:** (3 Carnegie Units) Biology, advanced biology, chemistry, advanced chemistry, physics, and advanced physics or any other science course with comparable rigor and content. One Carnegie Unit from a physical science course with content at an introductory level may be used. Two of the courses chosen must be laboratory-based.

**Social Studies:** (3 Carnegie Units) United States history (1 unit), world history (1 unit with substantial geography component) government (1/2 unit), and economics (1/2 unit) or geography (1/2 unit).

**Advanced Electives:** (2 Carnegie Units) Foreign language, world geography, 4<sup>th</sup> year laboratory-based science, or 4<sup>th</sup> year mathematics. One unit must be in foreign language or world geography.

**Computer Applications:** (1/2 Carnegie Unit) the courses should include use of application packages, such as word processing and spreadsheets. The course should also include basic computer terminology and hardware operation.

**Eighth Grade Units:** Algebra I or first-year foreign language taken in the eighth grade will be accepted for admission provided course content is the same as the high school course.

## **ADMISSION POLICIES**

### **ADMISSION OF FRESHMEN**

All applicants for admission to freshman standing at Alcorn State University are required to take the American College Testing Program examination or the SAT and have their scores submitted to the Office of Admissions.

There are five criteria to gain admission to Alcorn State University:

1. Complete the College Prep Curriculum with a minimum 3.2 GPA or
2. Complete the College Prep Curriculum with a minimum 2.5 GPA and score at least 16 or higher on the ACT (at least 790 on the SAT) or
3. Rank in the upper 50% of one's class and score at least 16 or higher on the ACT (at least 790 on the SAT)
4. Complete the College Prep Curriculum with a minimum 2.0 GPA and score 18 or higher on the ACT (at least 870 on the SAT)
5. Satisfy the NCAA standards for student-athletes who are "full qualifiers" under Division I guidelines. Students who do not meet one of the above criteria for admission will be invited to campus for an interview. The interview will include a computerized exam, Accuplacer. The results will determine whether a student receives a full admit to freshman standing or will be required to attend our Summer Developmental Program. Upon successful completion of the Summer Developmental Program, students may enroll in the fall semester and be required to participate in a year-long academic support program. If a student fails to successfully complete the Summer Developmental Program, the student will be advised to seek other academic alternatives.

Students entering Alcorn as freshmen will be placed in English and Mathematics courses based upon established cut-off scores in the subtest areas of the ACT assessment. Students scoring below the cut-offs scores will be placed in Intermediate English, Mathematics, and/or Reading courses.

A student who has not completed high school but is 18 or older and wishes to enroll at Alcorn State University must take and successfully pass the General Education Development Test. To take the GED, students must:

- Be 18 years or older.
- Be out of school for 6 months or more.
- Be residents of Mississippi for 30 days or more.

Any students 21 years of age or over who do not have an ACT score or who do not meet minimum admission requirements as set forth under admission to the University may register without meeting these requirements. Such students may register for a maximum of 12 semester hours during the semester. Degree student status may be achieved by meeting the regular admission standards (including ACT score) or by completing a minimum of 12 semester hours with a "C" or above average.

### **ADMISSION OF TRANSFER STUDENTS**

To be eligible for admission as a transfer applicant, a student should have an official transcript showing credits and grades and an official statement of honorable dismissal sent directly from the college or University previously attended to the Admissions Office. All transfer students must receive an authorization form from the University College before entering a major department. A student who is not in good standing with the school from which he/she desires to transfer will not be granted admission to Alcorn until he/she is eligible for readmission to that school.

Transfer students must have an overall average of “C” and the following required 30 semester hours:

6 semester hours	English Composition
3 semester hours	College Algebra or above
6 semester hours	Laboratory Science
9 semester hours	Transferable Electives
6 semester hours	Social /Behavioral Sciences

Full credit is given for all courses passed at other accredited institutions provided the courses and grades of “C” and above are equivalent to the requirements of the curriculum chosen at Alcorn. In all cases, in order for a student to qualify for graduation, he/she must possess a 2.0 average on a 4.0 scale based on his/her record at Alcorn as well as on his/her entire record.

A transfer student from a non-accredited college may be considered for admission on a one-by-one basis, providing the student meets the above semester hour requirements.

Transfer applicants who meet the freshmen admission requirements at Alcorn State University, but choose to enroll at another institution, and who do not have the 30 or 15 hour requirement may transfer at any time provided the following provisions are met:

- The applicant submits a formal application.
- The applicant submits an official transcript from each college or University attended.
- The applicant is in good standing at the last college or University attended.
- The applicant submits a minimum American College Test (ACT) composite score of 16 or Scholastic Aptitude Test (SAT) composite of 790.
- The applicant has a cumulative grade point average of 2.0 on a 4.0 scale (based on methods of computing GPA at Alcorn State University).

Evaluation of Credits: The Dean of the University College, along with the department chairperson of the department to which the student has been admitted, determines courses that can be accepted in the degree program. Students will not receive transfer credit for the courses designed specifically for technical and vocational career programs, or remedial programs. Students transferring from one of the Mississippi public community colleges and following the CORE courses approved by the eight state universities will receive complete credit for the courses outlined in the CORE as stipulated in the articulation agreement between the public universities and the public community colleges’ governing boards.

The chairperson of the department to which the applicant seeks a degree determines the way previously earned credits will apply in the degree program. Students ordinarily receive no transfer credit for courses designed specifically for technical and vocational career programs, or remedial programs.

Once admitted to the University, a student must obtain written approval of his/her department chairperson before taking courses at another institution with the intention of transferring credits toward an Alcorn State University degree.

Grade Requirements: After enrollment at the University, all course work attempted at other institutions should be taken with prior approval from the University College, Department of Major, advisor, and Registrar. Transferred courses with “D” (1.00) will not apply for credit.

At the discretion of the executive officer, the University may allow a limited number of high risk transfer students to enter who have not met the entire 30-hour transfer requirement. This number shall be no greater than a number equivalent to 10 percent of the previous year’s (for summer, fall, and spring terms) first-time transfer students. Each high risk student must have a minimum of fifteen transferable semester hours, with a minimum grade point average of 2.0 on a 4.0 scale. These hours must include six hours of English Composition.

Students from fully accredited institutions ordinarily will be given full credit for work transferred into the University as long as the courses taken are the same as, or equivalent to, courses offered in the department in which the student enrolls.

## ADMISSION OF FORMER STUDENTS

Former students in good standing who have not enrolled for one or more semesters (summer session excluded) must file the brief application for readmission that is available in the Admissions Office. A former student must be in good standing before being readmitted.

## ADMISSION OF INTERNATIONAL STUDENTS

To be considered for admission, an international student must submit the regular Application for Admission form and transcript(s) from secondary school and/or colleges previously attended. A minimum composite score of 18 on the American College Test (ACT) or 790 or above on the SAT is required. The international student should give evidence of having adequate financial support (scholarships, loan, etc.) before his/her arrival on the campus. The University does not assume responsibility for a student who arrives with inadequate resources. Test of English as a Foreign Language (TOEFL) is required to adequately determine proficiency in the English language. If it is determined that English is used as a “second language” in the applicant’s country of origin, the TOEFL requirement may be waived.

A minimum composite score of 525 (PBT), 195 (CBT), or 71 (IBT) on the TOEFL is required. The NACES requirement is waived for student-athletes who satisfy the NCAA standards by receiving a certification of “full qualifier” under D1 Guidelines. Official transcripts and certificates must be sent to the Office of Admissions. The I-20 form authorizing the student’s visa is sent after the student is accepted. The applicant must submit official academic transcripts to a National Association of Credential Evaluation Services (NACES) member and pay the associated fee to assess the authenticity of these documents. (See NACES web site, [www.naces.org](http://www.naces.org), for a list of NACES members.)

## ADMISSION OF SPECIAL STUDENTS

Mature applicants who do not meet all requirements for admission to college standing or who are not candidates for degrees may be admitted as special students to courses for which they demonstrate adequate qualifications. A maximum of 30 semester hours may be taken as a special student. Special students may later become candidates for degrees when they meet regular entrance requirements.

## ADMISSION OF VETERANS

**Examination of Records:** School records and accounts pertaining to veterans and eligible persons enrolled are readily identifiable and available for examination by authorized representatives of the government. All permanent records are maintained in the Registrar’s office.

**Entrance Requirements:** Proof that entrance requirements were met at the time of enrollment is a part of the student’s permanent record.

**Previous Education and Training Requirements:** The University will consider all previous education and/or training of the veteran when he/she applies for admission. The previous education and/or training must become a part of the veteran’s permanent record at the University. It is the sole responsibility of the veteran to inform the University if he/she has attended any other school, college, or University prior to entering Alcorn State. If the veteran fails to report any such previous education and/or training, the University will not be held responsible to the Veterans Administration.

**Progress Records:** The school maintains a permanent record to show progress. The permanent record includes a final grade in each subject for each term. A student is placed on academic probation for one semester if he/she fails to maintain a cumulative point average of 2.0.

Any student who is placed on academic probation will be required to carry a reduced load of academic and extracurricular activities. The student is also expected to earn a 2.0 average or above during the probation period. If the student fails to raise his/her grade point average during the probation period, the VA will be notified that the student has ceased making satisfactory progress. In the event VA benefits are terminated for lack of progress, the student will not be re-certified to the VA unless and until a VA counseling psychologist counsels him/her.

**Attendance:** Regular and prompt class attendance is required of all students. Consistent class attendance by students applies to all classes whether these are lecture or laboratory sessions or periods or delivered through online platforms (e.g., online, Elluminate, Blackboard). The instructor records the absences in the class roll book as they occur.

Class attendance forms are distributed to all veterans' instructors at the end of every term/semester of school. These forms are to be completed and returned to the Registrar's Office promptly. Veterans must advise the University Veterans Advisor of any changes in enrollment status, including drops, adds, or any change in schedule.

**Reports to the Veterans Administration:** Any changes in status from the last certification to the VA is reported promptly. Reports of unsatisfactory progress, drops, withdrawals, and unscheduled interruptions will be made within the month of occurrence or immediately thereafter.

Payments to eligible veterans usually begin about 90 days after certification materials are received in the Regional VA office.

## LEGAL RESIDENCE OF STUDENTS

The University applies the definitions and conditions stated here as required by state of Mississippi law and promulgated by *IHL Board of Trustees Policies and Bylaws* (amended January 2014) in the classification of students as residents or non-residents for the assessment of fees. The student, however, is responsible for knowing and registering under his/her correct residential status. Requests for a review of residency classification should be submitted to the Registrar. Such requests must be accompanied by documentation that all residency requirements have been met by the last day to register or to add courses for the enrollment period as stated in the *ASU University Catalog*.

The following is the basis for determining the residential status for the purpose of enrolling at Alcorn State University.

**Legal residence of a minor:** For purposes of determining of whether a minor pays out-of-state or in-state tuition for attendance at Alcorn State University, the residence of a person less than 21 years of age is that of the father, the mother or a general guardian duly appointed by a proper court in Mississippi. If a court has granted custody of the minor to one parent, the residence of the minor is that of the parent who was granted custody by the court. If both parents are dead, the residence of the minor is that of the last surviving parent at the time of that parent's death, unless the minor lives with a general guardian duly appointed by a proper court of Mississippi, in which case his/her residence becomes that of the guardian. A minor student who, upon registration at Alcorn, presents a transcript demonstrating graduation from a Mississippi secondary school and who has been a secondary school student in Mississippi for not less than the final four years of secondary school attendance shall not be required to pay out-of-state tuition. This policy shall not apply to the residence of a person as it relates to residency for voter registration or voting. See Miss. Code Ann., §37-103-7, as amended.

**Legal residence of an adult:** The residence of an adult is that of place where he/she is domiciled, that is, the place where he/she actually physically resides with the intention of remaining there indefinitely or of returning there permanently when temporary absent. See Miss. Code Ann., §37-103-13, as amended.

**Removal of parents from Mississippi:** If the parents of a minor who is enrolled as a Alcorn State University student move their legal residence from the State of Mississippi, the minor shall be immediately classified as a non-resident student; such a change in classification shall not affect the tuition to be charged upon completion of the semester in which the move takes place. See Miss. Code Ann., §37-103-11, as amended.

**Residence Required:** No student may be admitted to Alcorn State University as a resident of Mississippi unless his/her residence has been in the state of Mississippi preceding his/her admission. Residence shall be defined in Sections 37-103-7 and 37-103-13 unless excepted in Miss. Code Ann., §37-103-1 through 37-103-29.

**Residency Petitions:** Non-residents of Mississippi may petition the institutions for a change of residency classification.

A person who enters the state of Mississippi from another state and enters Alcorn is considered a non-resident, unless the person meets the residency requirements set out in “Residence of a Minor” and “Residence of an Adult” above. Provided, however, that any person who has attained 21 years of age and has thereafter actually established residency as defined within “Residence of a Minor” above and resided within the state of Mississippi for 12 consecutive months after attaining 21 years of age upon sworn affidavit and other representation, may petition the Office of the Registrar of Alcorn State University for a change of residency classification for the purpose of fees and tuition assessment.

Alcorn may make reasonable inquiry into the validity of the petitioner’s claim. Such petition for change of residency must be made on or before the last day a student may register at Alcorn without penalty. (See Section 610 of IHL Board of Trustees Policies and Bylaws.)

**Twelve months of residence required:** No student may be admitted to any institution of higher learning as a resident of Mississippi unless his/her residence, as defined herein above, has been in the State of Mississippi for a continuous period of at least twelve months immediately preceding his/her admission.

**Residence status of a married student:** A married student may claim the residence of the spouse or may claim independent residence status under the same regulations, set forth above, as any other adult.

**Children of parents who are members of the faculty or staff of Alcorn State University:** may be classified as residents for the purpose of attendance at the institution where their parents are faculty or staff members. Miss. Code Ann., §37-103-9, as amended.

**Military personnel assigned on active duty stationed in Mississippi:** Members of the armed forces on extended active duty and stationed within the State of Mississippi, except those military personnel whose active duty assignment is for educational purposes, may be classified as residents, without regard to the residence requirement of 12 months, for the purpose of attendance at the University. Resident status of such military personnel, who are not legal residents of Mississippi, as defined above under LEGAL RESIDENCE OF AN ADULT, shall terminate upon their reassignment of duty in the continental United States outside the State of Mississippi.

**Children of military personnel:** Resident status of children of members of the armed forces on extended active duty shall be that of the military parent for the purpose of attending the University during the time their military parents are stationed within the State of Mississippi. It shall be continued through the time that military parents are stationed in an overseas area with last duty assignment with the State of Mississippi. Resident status of minor children shall terminate upon reassignment under permanent change of station orders of their military parents for duty in the continental United States outside the State of Mississippi, excepting temporary training assignments en route from Mississippi.

**Certification of residence of military personnel:** A military person on active duty stationed in Mississippi who wishes to avail him/herself or his/her dependents of these provisions must submit: a certificate from his military organization showing the name of the military member; the name of the dependent, if for a dependent; a name of the organization, of assignment, and its address (may not be in the letterhead). The military member must be on active duty stationed in Mississippi on the date of registration at the state-supported institution of higher learning or junior college of the State of Mississippi.

The military member must not be on transfer orders. The signature of the Commanding Officer, the Adjutant, or the Personnel Officer, the unit of assignment with signer’s rank and title is required. A military certificate must be presented to the Registrar of the state-supported institute of higher learning or junior college of the State of Mississippi each semester or trimester (or within ten days prior to) at registration each semester for the provisions hereof to be effective.

**Aliens:** All aliens are classified as non-residents, unless they claim residential status under the above regulations.

#### **AUTHORITY TO SET TUTION AND WAIVER OF OUT-OF-STATE TUITION FOR NON-RESIDENTS WHO WERE BORN IN MISSISSIPPI AND ARE VETERANS OF THE ARMED FORCES**

Per Section 612 of the IHL Policies and Bylaws, the Board of Trustees of State Institutions of Higher Learning prescribes the amount of tuition and fees to be paid by Alcorn students.

Except as otherwise provided in this subsection, the total tuition to be paid by residents of other states shall not be less than the average cost per student from appropriated funds. However, the tuition to be paid by a resident of another state shall be equal to the tuition amount established in the above paragraph if:

1. The non-resident student was born in the State of Mississippi, but subsequently relocated and resided outside the state as a minor under the care of the minor's father or mother, or both;
2. The non-resident student is a veteran who served in the Armed Forces of the United States;
3. The non-resident student is domiciled in Mississippi no later than six months after the non-resident student's separation from service, as evidenced by a Report of Separation from Military Service or other military discharge document, for the purpose of enrolling in a state institution of higher learning or a community/junior college.

## **REGISTRATION AND ADVISEMENT**

No freshmen or transfer student should present himself at the University for Registration without a "letter of acceptance" from the Office of Admissions. After a student has been admitted, the University College is notified and information concerning New Student Registration is sent to each student. New Student Registration for students entering the University for the first time is conducted during separate occasions across the summer.

University Orientation is held at the beginning of each semester to help the new students transition and adjust and to make them feel a part of Alcorn State University. University Orientation is separate and distinct from New Student Registration.

To be sure that each student is properly advised, all freshman students must report to the University College for the assignment of an academic advisor. Freshmen and sophomores are advised by academic advisors in the University College. Students will also be assigned a Faculty Mentor. Transfer students must report to the University College for assignment of an advisor or the authorization to transfer to their major department. Once they have been properly assigned to a major department, appropriate departmental faculty advise the students. Students must obtain Undergraduate Student Career Plan forms and Curriculum Status Sheets from their advisors or Faculty Mentors to begin the registration process. Returning students who are currently enrolled may complete registration on the web. The Alcorn website is [www.alcorn.edu](http://www.alcorn.edu). A pin number is required.

## **CHANGE OF PROGRAM**

To add or drop a course the student must initiate a "change of program" with the Registrar's Office and have it approved by the academic advisor. A change of program must be submitted to the Office of the Registrar after being approved. All changes and alterations must be made not later than the date designed in the calendar as "last day for change of registration." No student will receive credit for a course in which he/she is not officially registered.

**ANY STUDENT WHO UNOFFICIALLY DROPS A COURSE WILL RECEIVE A GRADE OF "F."**

**A STUDENT IS CONSIDERED OFFICIALLY REGISTERED AFTER HE/SHE HAS CLEARED PAYMENT OF FEES AT THE BUSINESS OFFICE AND RECEIVED A BILL RECEIPT STAMPED**

**PAID BY THE BUSINESS OFFICE.** If a student finds that he/she cannot continue in the University, he/she may officially withdraw by securing a withdrawal application from the Counseling and Testing Center.

## **WITHDRAWAL**

Any student who desires to withdraw from the University must adhere to the Satisfactory Academic Progression (SAP) policy. The SAP policy may be reviewed at the following web site: [www.alcorn.edu/FinAid/SaPPolicy.html](http://www.alcorn.edu/FinAid/SaPPolicy.html). Also, if a student withdraws from ALL courses before more than 60% of the time has elapsed in the semester, it will be determined if he/she "earned" all financial aid received from federal programs.

If the student did not earn the aforementioned aid, he/she will be informed of the amount that must be repaid and of the options for repayment. The student must submit an application for readmission if he/she plans to re-enroll.



Students must also process the appropriate “Statement of Clearance” issued by the Office of the Vice President for Student Affairs if living in the dormitory. Failure to comply with this regulation will result in the recording of failing grades in all courses for which the student is registered and the losing of any refund of fees to which he/she may otherwise be entitled.

## **CLASSIFICATION OF STUDENTS**

Freshmen:	All students who have 29 or fewer earned semester hours.
Sophomores:	Students who have from 30 to 59 earned semester hours of passing work and a cumulative grade average of 2.0.
Juniors:	Students who have from 60 to 89 semester hours of passing work and a cumulative grade point average of 2.0.
Seniors:	Students who have 90 or more earned semester hours of passing work and a cumulative point average of 2.0.

## **DEGREES GRANTED**

Alcorn State University offers courses of study leading to the awarding of the Associate of Science in Nursing, Bachelor of Arts, Bachelor of Science, Bachelor of Music, Bachelor of Science in Nursing, Master of Science, Master of Science in Education, Master of Business Administration, Executive Master of Business Administration, Master of Art in Teaching, and the Specialist in Education degrees.

## **DEGREES BY MAJOR**

A major at Alcorn State University is defined as a sequence of courses leading to a specified degree. It includes a designated number of core courses, electives, and discipline-specific courses related to the designated degree. Each major requires 120 credit hours, except for the majors in Fine Arts.

### **Degrees offered at Alcorn State University are:**

#### **Associate of Science in Nursing**

**Bachelor of Arts** (in Mass Communication, English, History/Social Science, Music, Political Science/Pre-Law, Sociology, Social Work, and General Studies.)

#### **Bachelor of Music**

**Bachelor of Science** (in Biology, Chemistry, Mathematics, Math Education, Elementary Education, Psychology, Health and Physical Education, Recreation, Sport Management, Accounting, Agriculture, Applied Science, Computer Science, Robotics and Automation Technology, Computer Networking and Information Technology, Criminal Justice, Child Development, and Nutrition and Dietetics.)

#### **Bachelor of Business Administration**

#### **Bachelor of Science in Nursing**

**Master of Arts in Teaching** (in Elementary and Secondary Education)

**Master of Science** (in General Agriculture, Biology, Computer and Information Sciences, Biotechnology, Workforce Education Leadership and Applied Science)

#### **Master of Science in Nursing**

**Master of Science in Education** (in Elementary and Secondary Education)

**Master of Business Administration** (in Business Administration)

**Specialist in Education** (in Elementary Education)

## REQUIREMENTS FOR A BACHELOR'S DEGREE

1. Generally, candidates for the bachelor's degree must earn one hundred twenty credits in the various curricula, unless otherwise recommended by the department head and school dean, and approved by the Vice-President for Academic Affairs. One hundred twenty-two semester hours are required as a very minimum for graduation in any field.
2. Credits may be acquired by extension, correspondence, and examination, but such credits are not to exceed one-fourth of the requirements for graduation. Such credits are further governed by the following regulations:
3. Credits by correspondence are limited to 15 semester hours, acquired at the rate of three credits per semester while engaged in full-time employment, and six credits per semester otherwise. A student may not acquire correspondence credits while in residence.
4. Credits by examination are limited to 15 semester hours of credit.
5. Credits by extension are limited to three per semester while employed in a full-time job and six per semester otherwise.
6. No courses to be counted toward meeting the course requirements in the major field may be taken through correspondence.
7. The student must be prepared to present the appropriate test fee, as described in the CLEP registration bulletin, to the Counseling and Testing Center.

## ADVANCED PLACEMENT PROGRAM

### Advanced Placement Program

Advanced Placement (AP) examinations administered by The College Board **will** receive three hours of credit for a score of 3 and **may** receive six hours of credit for scores of 4 or 5. (An additional one-hour laboratory credit may be awarded for science courses which require a laboratory component. Thus, the total credit awarded could be up to eight credit-hours for courses with an associated laboratory component). The amount of credit awarded will be recommended by the department and approved and recorded by the Registrar. A maximum of 30 semester hours of undergraduate credit may be earned from the following sources: AP Tests, College Level Examination Program (CLEP), and credit by examination.

### College Level Examination Program

Placement and credit are awarded for College Level Examination Program (CLEP) general and subject examinations, as follows:

#### CLEP General Examinations

ASU grants credit for CLEP General Examinations in English Composition, Natural Science, Mathematics, Social Science, and Humanities. A minimum score of 500 is required in each section. Use of the above in University degree programs is subject to approval of the department chairperson and the Vice President for Academic Affairs.

A student who has not earned level credit in the subject area in which he/she seeks credit can take the CLEP subject area examination for advanced placement and college credit. CLEP credit may not be used to remove "F" grades. Credit will be awarded for scale scores of 50 or above. The appropriate department will have the final determination in the amount of credit awarded with the approval of the school dean. Under this program, students are restricted to 30 semester hours, with not more than six hours or two courses in one subject matter area. (It is understood that the 30 hour limit includes all credit earned by examination). The Registrar's Office will be responsible for determining a student's eligibility to earn credit through these examinations.

## **Other Credit-by-Examination Policies**

A student must earn 12 hours at Alcorn State University before credit-by-examination may be recorded on the student's transcript. The total number of hours one may earn in any of the Credit-by-Examination Programs is 30. For students enrolled in Associate degree programs, the maximum number of hours earned through credit-by-examination is 15. Credit earned through the use of examination will be included for the purpose of transfer entrance.

With the approval of the Vice President for Academic Affairs, departments may grant credit by examination in lieu of class enrollment for courses where no CLEP subject area examination is offered. The following guidelines should be adhered to:

- The examination must be given by the department in which the course is offered.
- The department chairperson must be assured that the student has had some formal or informal learning experience that has prepared him/her for the examination.
- The student must make application to the chairman of the department in which the course is offered. Upon approval, the student will pay a \$15.00 per credit hour examination fee in the Business Office. The Business Office issues the student a receipt that he/she presents to the department chairman, who will administer the examination.
- If the student passes the examination, the Registrar is notified. This notification includes the name of department, course number, course title, grade, semester hours, date examination was taken and evidence that the examination fee was paid.
- Credit toward a bachelor's degree may be awarded to those veterans who otherwise meet regular entrance requirements and present either form D.D. 295 or D.D. 214 indicating that they have experienced continuous active duty for at least 90 days. This credit is limited to subject matter that can be substituted for University ROTC credits and/or for training in formal service schools. Credit will further be determined on the basis of recommendations published in A Guide to the Evaluation of Educational Experiences in the Armed Forces. Such credit will be limited to 30 hours.

## **DEPARTMENTAL EXAMINATION OR WRITTEN SENIOR PROJECT**

All prospective candidates for graduation must either pass a departmental examination or complete a written project in their major field. Departmental personnel will determine the exact nature of this requirement. It is the responsibility of the department chairperson to see that this requirement is met and to certify to the Registrar's Office of this fact at least 12 days prior to scheduled commencement exercises.

## **GRADE POINT AVERAGE**

A minimum grade point average of at least 2.0 ("C") is required in one's major field and by the University for graduation.

## **RESIDENCE**

At least 31 semester hours must be taken in full-time residence at this institution in senior level courses and within two semesters prior to the student's graduation. Exceptions are made for students taking pre-professional courses of study for three years; degrees are then granted upon successful completion of one year of professional study.

Thirty-one semester hours taken in 30 weeks of summer school within a seven-year period satisfies the residence requirement as stated above.

At least 20 semester hours of the residence requirement must be taken in the student's major field.

## **COURSE LEVELS**

Credits must be earned in at least 60 semester hours of junior and senior level courses to complete graduation requirements. At least 40 semester hours of credit in major and related fields must be taken in junior and senior level courses.

## **CONTINUITY OF PROGRAM**

If a student drops out of the University for a year or more and later returns to graduate, he/she must meet the requirements in effect for the class in which he/she expects to graduate. The University reserves the right to change course requirements for the degree as long as sufficient notice has been given.

## **COURSES AT OTHER INSTITUTIONS**

Students in attendance at Alcorn State University who wish to take courses in another approved institution may do so providing they have obtained permission from the chairperson of the appropriate department, the school dean, and the Registrar.

Any course taken elsewhere will be considered as part of the total credit load for that semester at Alcorn State. Students must earn a C or above in course work.

## **SCHOLASTIC HONORS**

### **President's Scholars:**

President's scholars are those students who earn a grade-point average of 4.00 for any given semester in which they carry at least 12 semester hours of academic work. These students are given special recognition, annually, by the President of the University.

### **Dean's List:**

The Dean's list is composed of those students who have earned a grade point average of 3.50 or better for a semester's work consisting of not less than 12 semester hours.

## **DEGREES WITH HONORS**

The bachelor's degree will be conferred with "distinction" based upon completion of a minimum of 60 hours earned in residence at Alcorn State University provided, first, that a candidate's scholastic average over the entire period of his/her attendance at Alcorn State University is no less than "B" and, second, that this composite scholastic average (including both the work done at Alcorn State University and at any other institution attended) be no less than "B." All candidates for honors must qualify one semester prior to graduation. Honors are conferred as follows:

Cum Laude	Those candidates who attain a cumulative average of at least 3.2.
Magna Cum Laude	Those candidates who attain a cumulative average of at least 3.5.
Summa Cum Laude	Those candidates who attain a cumulative average of at least 3.8 with no grade below "C".

The Associate degree will be conferred with "Distinction" based upon completion of a minimum of 35 semester hours in residence, provided that a candidate's scholastic average over his/her entire period of attendance at Alcorn State University be no less than "B" and that his/her composite scholastic average (including both the work done at Alcorn State University and at any other institution attended) be no less than "B." All candidates for honors must qualify one semester prior to graduation. Honors distinctions are as follows:

With Honors	Those candidates who attain a cumulative average of at least 3.2.
With High Honors	Those candidates who attain a cumulative average of at least 3.5.
With Highest Honors	Those candidates who attain a cumulative average of at least 3.8 with no grade below "C."

## **CLASS ATTENDANCE REGULATIONS**

Regular and punctual class attendance is required of all students enrolled at Alcorn State University. Class attendance regulations apply to all types of classes (e.g., lecture, laboratory, or practicum) as well as to all modes of instruction (e.g., face-to-face or online). Instructors record absences as they occur. Instructors and departments may set individual policies that operate within the parameters set by the University. Instructors will clearly delineate individual policies in course syllabi distributed to each student during the first week of class. Students must present official documentation for an excuse to the instructor, who will make the decision on the classification and acceptability of the excuse. Disagreements as to acceptable excuses are adjudicated by the Dean of the School.

### 75% Minimum

No matter how justifiable the circumstances for class absences, students must attend a minimum of 75% of the meetings for a given course in order to be eligible to receive a passing grade.

If a student accumulates absences in a course in excess of 25% of the scheduled class meetings for a semester or summer session and does not officially withdraw from the course, he/she receives the grade of "F" in that course unless the circumstances are deemed extenuating by the Provost. Except for absences incurred while representing the University in a required University event (see below), excused absences are counted as absences when computing the 75% minimum.

### Excused Absences

Absences documented by official sources (i.e. medical or death of family member) are excused. Excused absences are counted as absences when computing the 75% minimum. An excused absence allows the student to make up the work and receive a grade for that work if the work is completed within two weeks after the absence. The student is responsible for obtaining assignments, scheduling make-up work, and submitting assignments to the instructor within the two week period after the absence. Periods of absence in excess of one week must be approved and excused by the Office of the Provost.

### Unexcused Absences

Students are allowed one hour of unexcused absence for each semester hour of a course. Instructors may, at their discretion, set class policies that lower grades for unexcused absences incurred above the number of unexcused absences allowed.

### Excessive Absences

Instructors should report student absences via the appropriate reporting system. The University reserves the right to withdraw a student who has missed more than 25% of the scheduled class meetings, and instructors are encouraged to submit names of students with excessive absences to the Office of Academic Affairs. Whenever students miss classes, they should work directly with their instructors to make up work. Students are not relieved of responsibilities to meet all course requirements and complete all class assignments. Students who do not attend within the first two weeks of class are reported to the Office of Academic Affairs for financial aid reporting. See Non-Attendance No Show Purged Form section below.

### Late Registration and Financial Aid

Students should begin attending class on the first day of the semester whether or not registration is complete. Once the Office of the Registrar completes registration and declares the rolls finalized, no student whose name is not on the official roll will be allowed in class.

### Non-Attendance No Show Purged Form

Students who complete the registration process are required to attend class before receiving Federal Student Aid. Those not attending class before the deadline will be deleted from the rolls as a No-Show for non-attendance.

To be reinstated on the roll, the student must attend class and present to the instructor the Non-Attendance Form for the instructor's verification of attendance. Students should print out one Non-Attendance Form for each class of non-attendance. Students must then submit the signed form to Office of Academic Affairs. Applicable forms, further instructions, and information about deadlines are available at the Financial Aid Forms webpage.

#### Tardiness

Instructors may, at their discretion, set policies that consider students absent when they arrive very late to or depart very early from class. All such policies must be approved by the chairperson of the department and maintained on record in the department. The average normal load carried by a student is determined by the department in which he/she is registered and by his/her scholarship. The minimum amount of work for which a full-time student may register is 12 semester hours, unless he/she is a senior and needs less than 12 hours to complete requirements for his/her degree. Students in any department may be required to take fewer semester hours than the average if such is warranted by their scholastic standing.

### **THE MAXIMUM LOAD AT ANY TIME IS 19 SEMESTER HOURS**

Only students with a cumulative grade point average of 3.00 or more can take 19 semester hours, unless 19 is the normal load for a student.

Students may be permitted to take 20 hours per semester if the 20<sup>th</sup> hour is an ensemble, i.e., marching band, concert choir, with ensemble, etc.

Students on probation are expected to carry a reduced load. If they are on probation, they may not take more than 13 semester hours without the approval of the Vice President for Academic Affairs. The course load of students who work will be assessed by their cumulative grade point average and number of hours worked.

Students may earn a maximum of 15 credit hours during the summer school term, provided these 15 credit hours are the **ONLY HOURS** that are needed for completion of degree requirements with the exemption of student teaching. The total hours must be divided between both summer sessions of school. Not more than nine hours per session will be allowed.

An authorization signed by the student's advisor, and approved by the department chair, school dean, Registrar, and/or Vice President for Academic Affairs is required for additional credit hours.

No academic credit will be accepted from concurrent enrollment at other institutions while enrolled at Alcorn State University without prior approval of an advisor, the department head, and the school dean. The maximum number of hours, including concurrent enrollment, is 19.

**SPECIAL NOTE:** It is necessary for the average student to spend approximately three hours of his/her time in "effort" each week for each semester hour of credit carried. This amount of time includes lectures, laboratories, preparations, etc. Advisors may be consulted regarding this matter.

### **GRADING SYSTEM**

Credits are expressed in terms of semester hours with alphabetical grades and numerical grade-points to indicate the quality of the work. These grades cover the work of the entire semester and are based upon the average of daily work, the final examination, and other written work. Characterization of letter grades by plus and minus signs is not authorized.

A	Excellent	4 grade-points per semester hour
B	Good	3 grade-points per semester hour
C	Average	2 grade-points per semester hour
D	Poor but passing	1 grade-point per semester hour
F	Failure	0 grade-points per semester hour

- I Incomplete (unfinished work)
- \*WP Withdrawal while passing
- \*WF Withdrawal while failing
- P Pass (Semester hours are awarded, but no quality points are given)

\*If the student is passing when the withdrawal occurs, such action will not affect his/her grade point average; if he/she is failing, the same semester hours involved will be considered his/her grade point average, i.e., will cause the grade point average to be lowered.

A student who makes grades as follows will receive the grade-points indicated:

Class	Grade	Hours	Points
English	C	3	6
History	B	3	9
Health	A	3	12
Education	D	2	2
Biology	B	4	12
Mathematics	A	3	12
Physical	C	<u>1</u>	<u>2</u>
Education			
<b>Total</b>		<b>19</b>	<b>55</b>

The grade point average is 2.89 – the quotient of 55 divided by 19 – which represents an over-all average above “C.” The term “Incomplete” is used when a student is absent from examination because of sickness, emergency absence due to death in the family, or away from campus a great deal for justifiable reasons. Otherwise, the instructor is required to assign for each student a definite grade based upon the work actually accomplished, irrespective of the circumstances that may have contributed to the results achieved.

A student whose work has been marked “Incomplete” must remove the mark within 60 days after the beginning date of the student’s next enrollment in residence. An incomplete grade must be removed within 13 months after the grade is recorded even if the student fails to enroll.

If the “Incomplete” is not removed within this period, the student will receive a grade of “F.” A grade other than an incomplete may be changed only if an error of calculation or recording as verified by the official roll book. The department chairperson, school dean, and the Vice President for Academic Affairs must approve all changes of grades.

## ACADEMIC AND FINANCIAL AID PROBATION AND RETENTION POLICIES

Federal Rules and Regulations mandate that students who receive student financial aid under programs authorized by Title IV of the Higher Education Act, as amended, must maintain satisfactory progress in their course of study.

Students who attend Alcorn State University must meet the following conditions:

### GRADES

An undergraduate student must maintain satisfactory academic progress. Any student whose grade point average falls below 2.0 will be placed on financial aid probation. The academic consequences governing a grade point average below 2.0 includes: Warning (1<sup>st</sup> Semester); Probation (2<sup>nd</sup> Semester); and Suspension (3<sup>rd</sup> Semester).

Students who are placed on academic or financial aid probation will be required to carry a reduced load of academic and extracurricular activities. They are also expected to make a 2.0 or higher average each semester during the probation period. Those students who fail to earn at least a “C” or a 2.0 average during the probation period will be suspended for one regular semester.

Students who fail to maintain satisfactory academic progress may submit an appeal to the Financial Aid Office any special or mitigating circumstances that they believe should be considered. Students submitting successful appeals will be placed on Financial Aid Probation and allowed to receive federal student aid for one semester. Each successful appeal will include academic requirements that must be met in order to receive aid beyond the one semester.

Students denied aid for failure to meet these Satisfactory Academic Progress requirements may re-establish eligibility once they meet the requirements. An undergraduate student can be on financial aid probation a maximum of three (3) times during his/her educational tenure.

A student having one suspension as a result of academic failure who warrants a second suspension is suspended for one calendar year unless circumstances warrant earlier readmission.

All applications for readmission should be filed with the Director of Admissions. The University Admission Committee determines all readmissions. Readmissions after academic suspension are determined on an individual basis.

## **INCREMENTAL PROGRESS**

In addition to meeting grade requirements, students must make normal progress toward their degree objective. Undergraduate students must average passing 67% of the hours they attempt at Alcorn State University. Acceptable grades are A, B, C and D. Grades of I, F, Audit and W will not be accepted as passing grades. Students not meeting the prescribed and incremental progress standards will be placed on financial aid probation for one term.

If the student does not meet the incremental progress standard during the probation term, financial aid will be terminated until the student has enrolled and successfully met the incremental standard for one academic term at ASU or has made up the deficiency.

In addition, a student will be allowed a maximum of three terms on incremental probation (not necessarily consecutive) in all of his/her undergraduate education.

## **TIME FRAME**

Undergraduate students are no longer eligible to receive federal student aid once the total hours attempted exceeds 192 hours (including hours transferred). Students, upon completion of their first Bachelor's Degree Program, may be allowed up to 60 additional hours to complete a second Bachelor's Degree.

## **AUDIT COURSES**

Courses taken for audit do not meet degree requirements and are not eligible to meet enrollment requirements to receive aid. Change of classes to audit will be treated as a withdrawal and be subjected to any changes of enrollment status policies. Courses enrolled in for audit may not be treated as credit courses. No grades will be given for credit.

## **INTERMEDIATE COURSES**

Students may be advised to enroll in a maximum of three credit hour intermediate classes, namely: Intermediate English, Intermediate Math, and Intermediate Reading. Students may also be advised to enroll in one credit hour year-long Survival Skills course. Intermediate courses are not used to meet credit hour requirements for graduation.

## **REPEATS**

Repeated courses enable the student to achieve a higher cumulative GPA. Repeating courses adversely affects the student's ability to meet the required progression standards by increasing total hours attempted.



## **INCOMPLETES**

Incomplete grades will only be used when a student is absent from examination because of illness, death in the family, and other justifiable reasons, including failure to complete a major class project.

Otherwise, the instructor is required to assign for each student a definite grade based upon the work actually accomplished, irrespective of the circumstances that may have contributed to the results achieved. A student whose work has been marked "Incomplete" must remove the mark within 60 days after the beginning date of the student's next enrollment in residence.

An incomplete grade must be removed within 13 months after the grade is recorded even if a student fails to enroll. If the "Incomplete" is not removed within the required period, the student will receive a grade of "F", unless an extension is requested by the professor on record. Incompletes may be given in courses that have a standardized exit test based upon the policies for issuing incompletes made by the testing committee.

Incompletes given for any other reason must be approved by the department chairperson and school dean. In order for an instructor to issue an incomplete grade, the justification must be given on the incomplete grade report form, approved by the department chairperson or school dean, and submitted electronically to the Registrar's Office.

A grade other than an incomplete may be changed only if there is an error of calculation or recording as verified by the official roll book. The department chairperson, school dean, and the Vice President for Academic Affairs approve all change of grades.

For financial aid purposes, an incomplete will not be factored into the Satisfactory Academic Progress Standards until replaced with a letter grade.

## **APPEALS**

All students will have the right to appeal any suspension of their financial aid. Exceptions to suspension of financial aid may be made in cases of mitigating circumstances such as a death in the immediate family, personal injury, illness, etc., as determined by the Department of Student Financial Aid and the Student Financial Aid Appeals Committee. Appeals should be in writing, using the ASU appeals form provided by the ASU Financial Aid Office.

## **REFUNDS**

### **Refund of Board.**

Refunds are made on board charges at any time during the semester if a student misses his/her meals for seven consecutive days due to emergency leaves or official withdrawals. Students who are involved in an off-campus directed teaching course are not charged for board during this period of absence.

### **Refund of Fees.**

Students who withdraw from the University in good standing are entitled to a refund of all fee (except registration) according to the following schedule:

First official day of class	90%
Between second day and two weeks	80%
Between two and four weeks	60%
Between four and six weeks	40%
After six weeks	No Refund

Students who withdraw unofficially and return weeks or months later to officially withdraw and claim refunds are not entitled to refunds.

## DESCRIPTION OF COURSES

Course descriptions can be found at the end of each academic discipline narrative, as well as, non-degree programs that offer courses for academic credit. Also can be located in the index.

## ACADEMIC CREDIT

One credit hour is awarded for fifty minutes of classroom instruction per week. A three-hour course requires one hundred fifty minutes of classroom instruction per week.

## NUMBERING SYSTEM

A number containing three digits designates each course. The first digit indicates the year in which the course is offered:

100 Level courses	Freshman Year
200 Level courses	Sophomore Year
300 Level courses	Junior Year
400 Level courses	Senior Year
500 Level courses and above	Graduate

The last digit indicates the semester in which the course is offered: an odd number indicates a first semester course; an even number represents a second semester course. The middle digit has no significance but is employed to avoid duplication of course numbers.

Opposite the course title are three digits separated by hyphens. The first digit indicates the number of lecture hours per week required in the course. The second digit indicates the number of laboratory hours required per week in the course, and the third digit indicates the number of semester hour's credit allowed per semester in the course. As an example, BI 132 BOTANY...2-4-4 indicates that two hours of lecture and four hours of laboratory will be required per week, and four semester hours credit may be earned for the course. When variable credit may be earned in a course, the amount is enclosed within parentheses, i.e., 2-((2-4)-(2-3)) indicates that two lecture hours per week will be required, from two to four hours laboratory per week will be required, and from two to three semester hours credit may be earned in the course. Courses offered by university departments are designated by the following symbols:

## NOTIFICATION OF RIGHTS UNDER FERPA FOR ALCORN STATE UNIVERSITY

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records. They are:

- The right to inspect and review the student's educational records within 45 days of the day the University receives a request for access. Students should submit to the registrar, dean, head of the academic department, or other appropriate official, written requests that identify the record(s) they wish to inspect. The University official will make arrangements of access and notify the students of the time and place where the records may be inspected. If records are not maintained by the University official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.
- The right to request the amendment of the student's educational records that the student believes to be inaccurate or misleading. Students may ask the University to amend a record that they believe is inaccurate or misleading. They should write to the University official responsible for the record, clearly identify the part of record they want changed, and specify why it is inaccurate or misleading. If the University decides not to amend the record as requested by the student, the University will notify the student of the decision and advise the student of his/her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

- The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests.

A school official is a person employed by the University in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the University has contracted (such as attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his/her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his/her professional responsibility. Upon request, the University discloses education records without consent to officials of another school in which a student seeks or intends to enroll. [NOTE: FERPA requires an institution to make a responsible attempt to notify the student of the records request unless the institution states in its annual notification that it intends to forward records on request.]

The right to file a complaint with the U.S. Department of Education concerning alleged failures by Alcorn State University to comply with the requirements of FERPA should be forwarded to:

**Family Policy Compliance Office**

U.S. Department of Education  
600 Independence Avenue, SW  
Washington, DC 20202-4605

## **PLAGIARISM**

Honesty requires that any ideas or materials taken from another for either written or oral use must be fully acknowledged. Offering the work of someone else as one's own is plagiarism. The language or ideas thus taken from another may range from isolated formulas, sentences, or paragraphs, to entire articles copied from books, periodicals, speeches, or the writings of other students. The offering of materials assembled or collected by others in the form of projects or collections without acknowledgment also is considered plagiarism. Any student who fails to give credit for ideas or materials that he takes from another, is guilty of plagiarism.



# **ACADEMIC PROGRAMS**

**University College  
Global Programs  
Pre-Professional and Honors Curriculum Programs**

## University College

*Dr. Valerie Thompson, Ph.D., Dean*

*Lanier Hall, 2nd Floor*

*Telephone: (601) 877-6226*

The University College provides the General Education Core Curriculum for all entering freshmen and transfer students. The remaining schools are composed of academic departments, each of which offers more advanced study in one or more major academic fields of study leading to a bachelor's degree. The University College is the component of the University responsible for fulfilling the University's goals of: (1) preparing first-year students with general knowledge in the areas of English and writing, creative arts, social sciences, natural and physical sciences, mathematics, and Health Wellness, (2) providing diversification of educational programs to accommodate students with varying levels of potential for achievement, and (3) preparing effective programs and services for students in the areas of advisement, counseling, academic assessment, tutoring, and instructional methodologies.

The fundamental goal of the University College is to provide students who matriculate at the University with services, activities, and programs which will maximize their chances of success upon entry into a program of study in a selected academic department. To accomplish this goal, the University College:

1. Serves as the initial point of entry for all undergraduate students, both freshmen and transfer, enrolling in the institution for the first time.
2. Maintains general education and developmental education programs commensurate to the expressed and determined needs of students.

It is the responsibility of the University College to:

1. provide students with detailed orientation to collegiate life at the University and its attending stipulations;
2. assess each student's academic and personal development status upon entry;
3. provide each student with the appropriate program(s), services, and activities within and outside the University College that will meet identified needs to the extent that academic personal success is maximized;
4. monitor the progress of each student on a regular and constant basis;
5. make adjustments in student's program based on observations of academic progression;
6. recommend students to their selected major department and school upon completion of the general core; and
7. evaluate annually all programs, academic support services, and appropriate revisions.

All undergraduate students entering the University for the first time and transfer students, who have not met the requirements for transfer to a major department and school, comprise the student population of the University College.

To exit the University College, a student must have completed all required General Education Core courses or be enrolled in no more than six (6) hours pending.

### GENERAL EDUCATION CORE

Each candidate for graduation must be able to demonstrate proficiency in the areas of English (Writing), creative arts, mathematics, natural science and social science. The General Education Core is designed to meet this purpose. These courses must be distributed as follows:

English (6 hours)

EN 111	3 hrs	EN 191*	3 hrs
EN 112	3 hrs	EN 192*	3 hrs

Creative Arts (9 hours) - Chosen from the following courses:

EN 213	3 hrs	AR 214	3 hrs
HO 291*	3 hrs	MU 213	3 hrs
HU 201	3 hrs	HO 292*	3 hrs
SA 223	3 hrs	SA 245	3 hrs

Social Sciences (6 hours) - Two different courses chosen from the following courses:

HI 111	3 hrs	HI 112	3 hrs
HI 191*	3 hrs	PH 132	3 hrs
HI 112	3 hrs	HI 192*	3 hrs
HI 225	3 hrs	HI 226	3 hrs
EC 201	3 hrs	EC 202	3 hrs
SS 111	3 hrs	SS112	3 hrs
GT 101	3 hrs	GT 102	3 hrs
SY 235	3 hrs	ED 200	3 hrs**
		PH 192	3 hrs

Natural/Physical Sciences (6-8 hours total including lab) - One natural science course and one physical science course chosen from the following courses:

BI 111	3 hrs	BI 113	4 hrs
BI 191*	4 hrs	BI 112	4 hrs
BI 125	4 hrs	PY 111	3 hrs
CH 121	4 hrs	PY 214	4 hrs

Mathematics (3 to 5 hours) - Chosen from the following courses:

MA 121	3 hrs	MA 132	3 hrs
MA 191*	3 hrs	MA 135	4 hrs
MA 181	4 hrs		

University Life (1 hr)

UL 101	1 hr
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\*Students must be enrolled in the Honors Program to enroll in these courses.

\*\*Elementary and Secondary Teacher Ed. Majors must enroll in PE 122 and ED 200.

## General Education Core Curriculum Competencies

### 1. Writing

Students should be able to read intelligently and make effective use of writing in the English language. Students should be able to generate, revise, edit, and proofread drafts; critique their own and others' written work; employ the syntax, grammar, punctuation<sup>3</sup>, and spelling of standard written English; and work cooperatively and effectively with others, and when appropriate, to produce written texts that reflect the students' ability to craft a persuasive and coherent argument based on sound logical reasoning.

### 2. Mathematics and Quantitative Reasoning

Students should be able to interpret and solve problems using numerical data, apply geometric principles when appropriate, estimate mathematical relationships, make inferences, obtain exact results, and recognize when to apply mathematical methods to solve problems encountered in their daily lives.

### **3. Research Skills**

Students should be able to perform searches, annotate and document sources, and conduct research projects using both primary and secondary resources, including books, journals, databases, Websites, and other research tools pertinent to the topic of investigation. Students will thus have acquired the ability to use information systems effectively and proficiently, enabling them to pinpoint, evaluate, and master the content of any knowledge base needed.

### **4. The Natural Sciences**

Students should be able to use the scientific method in problem solving and to recognize the logical relationship between the physical and chemical constituents that come together to form the essence of living and non-living systems.

### **5. History**

Students should recognize historical events that have shaped human civilization; cite the origins, structures, and dynamics of individual and group behavior; demonstrate an understanding of the physical, biological and social forces which influence individual and group behavior, and explain the philosophical and scientific methods used to study these events, institutions, and processes.

### **6. The Humanities and Arts**

Students should be able to articulate, orally and in writing, the major ideas, trends, and movements of the specialized areas in the humanities and arts while considering the interconnection between these disciplines and their context in modern culture. Students should be able to distinguish between facts and opinions, distinguish between inferences and assumptions, evaluate the quality of evidence in arguments and recognize fallacies in logic, consider questions from multiple points of view.

## **COURSE DESCRIPTIONS IN UNIVERSITY COLLEGE**

### **UNIVERSITY COLLEGE**

#### **GC 102            1-0-1    SURVIVAL SKILLS I**

This course offers an intensive regimen of topics and activities designed for students to develop and expand the skills necessary to succeed in higher education. Included but not limited to, are time management, note-taking skills, critical reading and thinking, test-taking skills, and effective relationships in a collegial society.

#### **GC 103            1-0-1    SURVIVAL SKILLS II**

This course is a continuation of GC 102. It focuses on the identification and development of student strengths, learning styles, advanced critical thinking, proper physical and mental health, personal financial management, and tolerance and diversity.

#### **RE 111            3-0-3    INTERMEDIATE READING**

This course is designed to enable the student to improve his/her basic reading skills through instruction and participation. Emphasis is placed upon individual improvement in related reading skills, vocabulary enlargement, word recognition, and comprehension.

#### **UL 101            1-0-1    UNIVERSITY LIFE**

This course is designed to ensure students make a successful social and academic transition into the learning environment with a focus on study skills, test-taking skills, time management, career exploration, and guest lecturers. It is the purpose of the course to engage the student in his/her personal and intellectual development with an emphasis on critical thinking, and thereby increase the student's understanding of his/her role as a scholar and as a citizen in a free democracy.

## GLOBAL PROGRAMS

*Dovi Alipoe, Ph.D., Director*

*Multicultural and International Affairs Bldg.*

*Telephone: (601) 877-6533*

*Fax: (601) 877-4189*

Alcorn State University has emphasized international education and spearheaded international development for years. The University established a formal Office to serve as a central unit for international affairs. The mission of the Office is to facilitate global engagement through the infusion of relevant international content, activities, and knowledge to enhance the global competence of stakeholders. The Office coordinates activities in the following major areas: (1) long-term study abroad for college credit and short-term (non-credit) study tours; (2) technical assistance in international development; (3) scientific cooperation/faculty and staff exchange programs; (4) international students, scholars, and visitors; and (5) international trade capacity building. The Office of Global Programs collaborates with academic and non-academic units on campus as well as off-campus partners to achieve its mission.

**Global Studies Enhancement.** The Office of Global Programs coordinates the Enhancement at Alcorn State University. The interdisciplinary program is designed to “add-value” to the student’s specific undergraduate degree program(s) by integrating global competence and knowledge into the student’s disciplinary training. The program encompasses formal course work, study abroad, language enrichment, and a global studies senior level capstone emphasizing research on issues and problems affecting the global community and having an impact at the state or local level. The program is flexible and allows students to focus on a wide range of topics, including: Global Business Initiatives and Impact; Languages; International Development in Agriculture; Economics of Global Trade and Policies; Global Health; Natural Resources; Global Environment and Climate Change; Global Political Systems; International Development organizations; Global Telecommunications; Geographic Information Systems, etc. The program aims at preparing the future workforce to work and live in an increasingly interdependent global society. The enhancement is not an independent major; instead, it is a complement to the formal academic major or field of study. Therefore, it is available to all students in all schools and departments. Students are expected to enroll in the program in the freshman or sophomore year.

### **Requirements:**

- I. Introductory Course: (3 credit hours)  
GP 101 Study Abroad Freshman Level or GP 102 Freshman level II
- II. Global Programs and departmental Approved electives (12 credit hours)  
Include Study abroad or departmental electives.
- III. GP 401 Undergraduate Global Research Experiences Capstone Course (6 credit hours)

**Study Abroad.** Study abroad offers students exciting opportunities to live and learn in another country for at least one semester or summer term while earning academic credit towards a degree at Alcorn State University. Participants are required to be full-time students at the foreign University in programs administered by ASU exchanges or U.S. based and approved study abroad providers. Students wishing to study abroad via direct enrollment or otherwise should follow the steps listed below:

1. Go to the website of the Office of Global Programs at <http://www.alcorn.edu/academics/schools/areas/land-grant-programs/global-programs/index.aspx>
2. Search ASU affiliated study abroad providers or universities for courses in your major (discipline)
3. Select study abroad courses based on requirements in your major
4. Print course syllabi/descriptions, if available online
5. Check the cost of the selected program and compare to your financial aid award
6. Meet with study abroad advisor to fill out the required Title IV forms (bring unofficial transcripts and degree program sheet to the meeting)
7. Meet with academic advisor to discuss study abroad program and obtain signature approving study abroad courses



8. Obtain all other required institutional signatures
9. Apply (by deadline) for the Benjamin Gilman and other scholarships, if you are eligible
10. Submit all applications (with the assistance of the study abroad advisor); apply for passport and visa, obtain necessary immunizations
11. Participate in mandatory pre-departure orientation
12. Upon return to ASU, participate in mandatory debriefing and program evaluation.

## **COURSE DESCRIPTIONS IN GLOBAL PROGRAMS**

### **GLOBAL PROGRAMS (GP)**

#### **GP 101            3-0-3    STUDY ABROAD - FRESHMAN LEVEL I**

Level one of a freshman level course taken in a study abroad program. The abroad course will involve traditional foreign languages such as Spanish, French, Portuguese, German, or less studied languages, e.g., Arabic, Hindi, Chinese, Japanese or others classified as critical need languages. Introductory material involving cross-cultural training in a global context may be covered as well.

#### **GP 102            3-0-3    STUDY ABROAD – FRESHMAN LEVEL II**

Level two of a freshman course taken in a study abroad program. The course may involve a foreign language or cross-cultural training in continuation of GP 101.

#### **GP 201            3-0-3    STUDY ABROAD – SOPHOMORE LEVEL I**

Level one of a sophomore course taken in a study abroad program.

#### **GP 202            3-0-3    STUDY ABROAD – SOPHOMORE LEVEL II**

Level two of sophomore course taken in a study abroad program.

#### **GP 301            3-0-3    STUDY ABROAD – JUNIOR LEVEL I**

Level one of a junior level course (or its equivalent) taken in a study abroad program.

#### **GP 302            3-0-3    STUDY ABOARD – JUNIOR LEVEL II**

Level two of a junior course (or its equivalent) taken in a study abroad program.

#### **GP 305            3-0-3    STUDY ABROAD – JUNIOR LEVEL V**

Advanced junior or beginning senior level course (or equivalent) taken in an approved study abroad program. Furthermore, this course may be taught on campus to cover international development and trade, international agriculture, international business; global health, (or other topics). When taught on campus, the course will include an experiential learning study-tour to a selected foreign country.

#### **GP 400            3-0-3    STUDY ABROAD – SENIOR LEVEL I**

Senior level course (or its equivalent) taken in a study abroad program.

#### **GP 401            6-0-6    STUDY ABROAD/UNDERGRADUATE GLOBAL RESEARCH EXPERIENCES**

This course is designed to provide broad-based international experiences to students in their respective field of study. Students register for this course while undergoing a study abroad program at a foreign University, international research center or institute. Additionally, the requirements of this course may be fulfilled through an intensive University sponsored short term study tour or research abroad program. Pre-approval of Global Programs, the academic advisor, and major department are required.

#### **GP 402            3-0-3    STUDY ABROAD – SENIOR LEVEL II**

Advanced senior level course (or its equivalent) taken in a study abroad program.

**GP 601            6-0-6    GRADUATE GLOBAL RESEARCH EXPERIENCES**

This course is taken by graduate students who have been accepted to do research at a foreign University, international research center or institute. The program of research must be pre-approved by the student's on-campus academic advisor, the academic department, and the School of Graduate Studies. Additionally, graduate students may take this course through an intensive University-sponsored short term study tour or research abroad program. All graduate students registered for this course are expected to present a seminar at the University upon their return.

## PRE-PROFESSIONAL PROGRAM

*Thomas Sturgis, Ph.D., Director*

*Pre-Professional and Honors Curriculum Program Bldg.*

*Telephone: (601) 877-6257*

*Fax: (601) 877-2969*

Alcorn State University's pre-professional and pre-graduate school programs provide promising students value added activities to enhance the students' competitiveness in the professional and graduate school admission process. The programs are meticulously structured to place graduates in professional and graduate schools and help assure their success. The primary goal of the program is to increase the number of minorities applying, entering, and graduating from professional and graduate schools. The program's focus is on placing students in schools of medicine, dentistry, pharmacy, medical sciences, law, veterinary medicine, and Ph.D. programs in the biological, physical, and biomedical sciences.

Admission to Alcorn's pre-professional programs is selective, and academic requirements are rigorous, demanding a high level of commitment from students. Therefore, the University provides a strong program of support to help assure the success of each student willing to dedicate him/herself to the program. The value added activities include pre-professional and pre-graduate school courses, Academic Success, standardized test prep courses, Saturday College, summer/research internships, shadowing the professionals, and volunteer work. In addition, pre-professional and pre-graduate school students are given priority in Honors residence halls provided that space is available.

### FRESHMEN YEAR

#### Fall Semester

PR 101 Improving Vocabulary and Writing Skills

Hrs.

0

#### Spring Semester

PR 102 Verbal Reasoning

Hrs.

0

### SOPHOMORE YEAR

PR 201 Reading Comprehension

0

PR 202 Critical Thinking

0

### JUNIOR YEAR

PR 301 Standardized Test Enrichment

0

PR 302 Standardized Test Enrichment

0

### SENIOR YEAR

PR 401 Seminar I

0

PR 402 Seminar II

0

**\*The pre-professional and pre-graduate school program curricula are designed to complement and support the Biology and Chemistry's pre-health and pre-graduate school curricula. See the Chemistry and Biology Curricula.**

## HONORS CURRICULUM PROGRAM

*Thomas Sturgis, Ph.D., Director*

*Pre-Professional and Honors Curriculum Program Bldg.*

*Telephone: (601) 877-6257*

*Fax: (601) 877-2498*

The Honors Curriculum is an interdisciplinary academic program designed for undergraduate students with a demonstrated record of excellence. Honors students may choose three different program options: a general education core, an enhanced curriculum within academic departments, or a combination of both.

Students may enter into the Program as new freshmen with an ACT score of 24 or at the end of any semester with a grade point average of 3.0 or better. The mission of the program is to offer academically motivated students a diverse interdisciplinary curriculum that has an intense focus on research, service, and experiential learning through a community of faculty, staff, and students at Alcorn State University and within the state, nation, and world. In the freshman year, students are grouped into special honors sections of general education courses. In the sophomore year, students enroll in a colloquium designed to encourage and develop lively communication growing out of enriched reading experiences. Sophomore students may also enroll in special honors sections of multi-section courses, which are offered in response to student interest and when departmental personnel resources permit.

At the upper level, there is an interdisciplinary honors seminar for juniors, which widens the student's outlook and at the same time provides an opportunity for research in a field of special interest. The senior honors student engages in a program of study related to a single major field that offers the possibility for: (a) guided research, (b) a seminar, (c) independent study or (d) a project.

Entering freshman participants for the Honors Program are selected on the basis of scores on admissions and placement examinations. Participants entering after the first semester of the freshman year are selected on the basis of cumulative average plus the recommendations of two faculty members. The required average for second semester freshmen, sophomores and juniors is 3.0 or better; seniors must have achieved an average of 3.25 or better.

A student who has completed a minimum of 24 hours of honors course work, and who has maintained a cumulative grade point average of at least 3.25 in honors and overall, may graduate with the designation of an Honors Scholar. In addition to the above requirements, the recipient of this distinction must be enrolled in a minimum of six hours of honors course work during at least three of the four undergraduate years.

### Honors Program

#### Core (Freshmen and Sophomore Courses)

BI 191-192	Honors Biology	8 Hrs.
CH 191-192	Honors Chemistry	8 Hrs.
EN 191-192	Honors English	8 Hrs.
HI 191-192	Honors World Civilization I-II	8 Hrs.
MA 191-192	Honors Mathematics	8 Hrs.
PH 192	Honors General Psychology	6 Hrs.
HO 291-292	Sophomore Honors Colloquium	6 Hrs.

#### Core (Junior and Senior Courses)

HO 391-392	Junior Honors Seminar	6 Hrs.
HO 491-492	Honors Independent Study	6 Hrs.

### **Other Honors Courses**

(Such as, but not limited to the following)

EN 213	Studies in Literature	3 Hrs.
MA 225	Calculus	4 Hrs.
SA 223	Oral Communication	3 Hrs.

**Students may also select other courses for Honors Enhancement. See the Director of Honors for additional information.**

## **COURSE DESCRIPTIONS IN HONORS AND PRE-PROFESSIONAL PROGRAMS**

### **HONORS (HO)**

#### **HO 291-292 3-0-3 SOPHOMORE HONORS COLLOQUIUM**

These courses emphasize the careful study of great works of literature, through in-depth examination of function and content. A significant part of each course involves developing effective oral and written communicative skills through in-class interaction.

#### **HO 391-392 3-0-3 JUNIOR HONORS SEMINAR**

These courses are designed to serve as initial courses on the development of research techniques for honor students. A topic of significant importance is chosen each semester as the theme of the seminar. The seminar culminates with a written report by the students. Students are required to undertake individual or group research or study of a particular aspect of the theme.

#### **HO 491-492 3-0-3 HONORS INDEPENDENT STUDY**

These courses are designed to provide significant independent study and research opportunities for honor students in any area of interest to the student. Emphasis is placed on research design and research report writing. Arrangements to do the independent study with a particular faculty member will be made through the Director of the Honors Curriculum Program.

### **PRE-PROFESSIONAL (PR)**

#### **PR 101 1-0-0 IMPROVING VOCABULARY AND WRITING SKILLS**

This course is designed to introduce students to vocabulary terms that enhance their ability to communicate their ideas, both orally and written, in a logical and coherent manner. Students are introduced to vocabulary building programs that they can utilize beyond the classroom. The introduction of vocabulary-based concepts enables students to integrate knowledge from one discipline to another, and it provides tools to assist students to perform at the highest level of competency on standardized entrance examinations (e.g., LSAT, MCAT, GRE, etc.)

#### **PR 102 1-0-0 VERBAL REASONING**

This course provides students with the fundamental knowledge needed to gain maximum benefits from the standardized test enrichment courses. The primary focus will be on improving the student's ability to determine meaning from context, to make inferences from main ideas, to apply and compare information, and to derive appropriate conclusions.

#### **PR 201 1-0-0 READING COMPREHENSION**

Students engage in advanced reading skills that are designed to enhance the students' reading comprehension of complex texts, and allow students to read with insight and appropriate interpretation. This course is designed to provide students with opportunities to improve understanding of written materials, reading comprehension strategies and interpretation skills. The primary focus of this course will be geared toward expounding on reading comprehension strategies, main idea/supportive detail comprehension, and written communication.

**PR 202            1-0-0    CRITICAL THINKING**

The Critical Thinking course enables students to identify, evaluate, and construct inductive and deductive arguments in spoken and written forms; recognize common fallacies in everyday reasoning; distinguish the kinds and purposes of definitions; evaluate and interpret quantitative data, and recognize and assess arguments in various forums of reasoning.

**PR 301            1-0-0    STANDARDIZED TEST ENRICHMENT**

A series of seminars and specific test reviews are conducted to assist students to score at their highest potential. Students learn about the nature of the tests and take sample/diagnostic examinations. The standardized test enrichment classes are also designed to provide students the opportunity to review and reinforce those skills and concepts learned during past academic experiences. Classroom instruction is carefully prepared from didactic materials that are integrated into the student's acquired knowledge with techniques and strategies that are useful for the successful performance of skills measured on standardized tests.

**PR 302            1-0-0    STANDARDIZED TEST ENRICHMENT**

PR 302 is a continuation of PR 301.

**PR 401            1-0-0    SEMINAR I**

This course provides students with information about applications and admission procedures to various professional and graduate schools. Exposure to students' chosen profession is enhanced through contact with practicing professionals. The Office of Pre-Graduate School Programs will engage students in mock interview sessions.

**PR 402            1-0-0    SEMINAR II**

Students finalize their preparation for professional and/or graduate school by completing seminars, internship requirements, admissions examinations, and application processes. This course offers students an opportunity to work with the Office of Pre-Professional and Pre-Graduate School Programs to secure financial aid to finance their post-baccalaureate education.



## *Schools of Instruction*



***School of Agriculture, Research,  
Extension and Applied Sciences***



## SCHOOL OF AGRICULTURE, RESEARCH, EXTENSION AND APPLIED SCIENCES

*Ivory W. Lyles, Ph.D.*

*Dean and Director of Land-Grant Programs*

*School of Agriculture, Research, Extension and Applied Sciences*

*Telephone: (601) 877-6137*

*Fax: (601)877-6219*

The mission of Alcorn State University School of Agriculture, Research, Extension and Applied Sciences (AREAS) is to provide enriching educational, research and outreach opportunities that empower its clientele to contribute to the overall improvement of their community, the state of Mississippi, the nation as a whole, and ultimately help improve social and economic conditions of people around the world.

The School of Agriculture, Research, Extension and Applied Sciences at Alcorn State University is a premier land-grant entity that prepares highly competent graduate and under-graduate students for advanced learning. It addresses existing needs of agriculture and applied sciences while facilitating centers of excellence which promote worldwide community development based on the accomplishments of its research and extension professionals.

The major objectives of the School are to: 1) implement functional teaching programs that prepare students for successful careers in Agriculture, Human Sciences, and Technology; 2) conduct research programs that will discover new knowledge and provide better utilization of existing knowledge for the improvement of the citizens in Mississippi, the region, and the nation; and, 3) serve rural and urban individuals and families in the areas of Agriculture, Human Sciences, Technology and other related areas through extension and outreach programs and activities.

The School consists of four academic departments: ***Agriculture, Human Sciences, Advanced Technologies, Bio-Technologies.*** Through the academic departmental structure, undergraduate instructions leading to the Bachelor of Science degrees are offered in the following areas: (1) Agriculture: Agricultural Economics, Plant and Soil Science, Animal Science, Environmental Science, Agribusiness Management; (2) Human Sciences: Child Development, Nutrition and Dietetics); and (3) Advanced Technology: Robotics Automation, Computer Networking Information Technology, and Applied Science.

The school of AREAS also offers instructions leading to the Master's Degree in Education with teaching endorsements in each of the departments. In Agriculture, the Master of Science degree is offered with majors in Agricultural Economics, Plant and Soil Science, and Animal Science. The Department of Bio-Technology offers a Master's of Science Degree in Bio-Technology. Advanced Technology offers the Master of Science in Applied Science. The Master of Science in Workforce Leadership Education is offered jointly with Mississippi State University. Additionally, students may enroll in Pre-Professional Programs in Forestry, Veterinary Medicine in Agriculture, and in Engineering in the Department of Advanced Technology. Throughout the year, each department conducts short courses, workshops, and conferences for various interest groups.

## **Department of Advanced Technologies**

*Jermiah Billa, Ph.D., Interim Chairperson*

*Advanced Technology Bldg., #102*

*Telephone: (601) 877-6484*

*Fax: (601) 877-3941*

The Department of Advanced Technologies offers three Bachelor of Science degrees: Applied Science, Computer Networking and Information Technology, and Robotics and Automation. The unique nature of technology in permeating all disciplines permits hybrid customized curricula with multidisciplinary foci to address student needs and aspirations.

The department also offers a Master of Science degree in Workforce Education Leadership and a transfer program in Pre-Engineering. Students interested in working within the field of Advanced Technologies should consider the options available from the department.

**Scholarships:** The department has several scholarships and awards to support students. These include Diversity Scholarship from the Ayers Settlement, Entergy Scholarships, Nuclear Regulatory Commission Scholarships and the Department of Homeland Security Scholarships. In addition, the department has significant amounts of grant funds from several federal agencies including the Department of Defense (DOD), United States Department of Agriculture (USDA), Department of Labor (DOL), Small Business Administration and the United States Air force dedicated to support students in the diverse areas. Students are exposed to pre-employment training in Engineering, Research, Computer Technology development and Advanced Technologies through the department's Systems Research Institute (SRI) and its centers and laboratories. Industrial Internships and Cooperative educational opportunities are available for students who meet the necessary departmental and industry partners' standards. Students may also benefit from internships and by working with research laboratories in SRI and the Center for Information Technology.

Prospective students (freshmen and Transfers) are encouraged to contact the department for more information on opportunities. For more information on the department and the Systems Research Institute visit the department at [www.adtech.alcorn.edu](http://www.adtech.alcorn.edu).

**Online Courses Policy:** Classes are taught to two primary audiences, on campus and off-campus students. Classes are taught in the traditional class room setting and simultaneously made available live and/or recorded over the internet for students who cannot be in the traditional setting. Approval to enroll in online courses can be obtained from the department. All students are required to take and pass an exit exam in their areas of study before graduation. In some programs of study, industry certifications are also required.

### **Programs**

Current undergraduate programs in the Department of Advanced Technologies include:

- Applied Science
- Computer Networking and Information Technology
- Robotics and Automation Technology
- Pre-Engineering

Current concentrations in Applied Science include:

- Biomedical Engineering Technology
- Computer Engineering Technology
- Electro-Mechanical Engineering Technology
- Geospatial Engineering Technology
- Homeland Security
- Natural Resource Management
- Nuclear Engineering Technology

Radiation Technology (Health Physics HP)  
Medical Radiologic Science and Technology  
Technology Management  
Health Care Management and Administration  
Industrial

## **APPLIED SCIENCE DESCRIPTION OF CONCENTRATIONS IN APPLIED SCIENCE**

### **1. Biomedical Engineering Technology**

The Biomedical Engineering Technology track in Applied Science provides students with the skills of an engineering technologist while focusing specifically on biomedical equipment technology and management. In addition to courses in basic electronics, computer systems, industrial electronics, digital electronics, communications and control systems, the concentration includes courses in major areas of bio-medical engineering technology and management. Supplementary courses in anatomy and physiology complete the medical specialization. Optional field practice internship placements where interactions at hospitals in the region are integrated with a Senior Design project provide students with a practical foundation for employment in the field. Statistics made available by the US department of labor, [www.bls.gov](http://www.bls.gov), indicate a yearly salary between \$33,030 and \$114,360. The usual starting salary is somewhere in the middle with the median annual salary for biomedical engineers being \$61,320.

### **2. Computer Engineering Technology**

The objective of the Computer Engineering Technology track in the Applied Science is to prepare students for careers that require an extensive knowledge of both computer hardware and software. It integrates several fields of electrical engineering and computer science required to develop computer systems. Computer engineering technologists usually have training in electronics, software design, and hardware-software integration. Computer engineers are involved in many hardware and software aspects of computing including the design of microprocessors, personal computers and supercomputers circuit design. The program offers a reasonably equal balance of study and experience in the hardware and software area, enabling graduates to be well prepared for a career in programming, hardware design and testing, system administration, computer hardware and software evaluation, or other related areas. The Bureau of Labor Statistics (BLS) has the Average Starting Salary, 2007, as \$56,201 and the growth projection for 2006-2016, as 5%.

### **3. Electro-Mechanical Engineering Technology**

Electromechanical engineering technology is designed to prepare students for combined knowledge of mechanical engineering technology with knowledge of electrical and electronic circuits to design, develop, test, and manufacture electronic and computer-controlled mechanical systems. The work of practitioners in the area often overlaps that of both electrical and electronics engineering technologists and mechanical engineering technologists. Students learn the theoretical concepts in the classroom and combine that with practical hands-on laboratories. Using a mixture of actual components, systems and computer simulations, students become skilled in the practical application of industrial electronics, computers, hydraulics, programmable controllers, pneumatics, robotics and mechanical principles. The projections point toward a huge demand of electro-mechanical engineers in the energy sector and green collar sector jobs including alternative energies as all the energy systems involve electro-mechanical operation. The BLS has the Average Starting Salary in 2007 as \$54,710 and growth Projection for 2006-2016, as 5%.

### **4. Geospatial Engineering Technology (GET)**

#### **The GET Program Description**

The evolving economy, science and technology are dependent on geospatial engineering and utilities of data marketing. These include data collection and processing; hence the race for satellite engineering and technology. GET's visualization of geo-referenced data has made modern engineering an instant market of high demand-and-supply economic logistics built around different systems applications. For example, The Department of the Interior, which was commissioned to oversee the nation's spatial data and underlying engineering, has placed a high priority on this technology.

The President in his 2012 state of the union address referred to geospatial engineering as one of the next technological frontiers that will define the next world's super powers in education, military, and economy. We are therefore, using our academic resources to train and position our students to embrace this evolution. The main objective is to train students to acquire technological and scientific skills, through an academic system that allows scientific methods, technology presentations, and systems applications in understanding social and economic needs and their desired solutions.

The undergraduate concentration provides students with different opportunities to acquire an interdisciplinary knowledge, through a curriculum that has broad definitions of transportation and environmental engineering. It also covers grounds for homeland security and natural resources management. This curriculum has electives in physical science, computer information science, and construction management, which provide hand-on and hand-held technologies to students. GET is information engineering (IE) that defines concurrent engineering on any system of management, such as Homeland Security and Natural Resource Management.

### **5. Nuclear Engineering Technology**

Nuclear engineers research and develop the processes, instruments, and systems used to derive benefits from nuclear energy and radiation. They design, develop, monitor, and operate nuclear plants to generate power. They may work on the nuclear fuel cycle—the production, handling, and use of nuclear fuel and the safe disposal of waste produced by the generation of nuclear energy—or on the development of fusion energy. Some specialize in the development of nuclear power sources for naval vessels or spacecraft; others find industrial and medical uses for radioactive materials, as in equipment used to diagnose and treat medical problems. The BLS has the Average Starting Salary 2007 as \$56,587 and growth projections for 2006-2016 as 7%.

### **6. Radiation Technology/Health Physics (HP)**

The Radiation Technology concentration prepares its graduates with credential to be employable as Health Physicist in nuclear power plants and other establishments that deal with ionizing radiations. Upon additional training, the graduates of this discipline are also employable as nuclear medicine technologists, diagnostic radiography technologist, radiation therapy technologist in oncology departments, and in the use of ultrasound machines for medical diagnostics in health and medical establishments. This is a multi-disciplinary program in the Department of Advanced Technologies in cooperation with faculty from the Physics, Chemistry, and Biology Departments and the School of Nursing at Alcorn State University. This may be used as a premed option only with advisement from the program leader.

### **7. Medical Radiologic Science and Technology**

The Medical Radiologic Sciences and Technology concentration is designed as an online “2+2” program to offer graduates of community college radiologic sciences programs the ability to obtain a bachelor of applied science degree with education in specialty areas of medical imaging. The specialty areas currently being offered are Computed Tomography (CT), Magnetic Resonance Imaging (MRI) and mammography.

The Radiologic Sciences and Technology curriculum consists of online learning coupled with clinical experience at a medical facility. Upon completion of the program, students receive the Bachelor of Applied Science degree and can apply for the advanced certification examinations in CT, MRI, or mammography offered by the American Registry of Radiologic Technologists (ARRT).

According to the U.S. Department of Labor, the job market is predicted to continue to grow as technology advances all modalities within radiologic sciences. Salary ranges for graduates vary. The advanced specialty registered radiologic technologist can expect to enter the job market at approximately \$50,000 annually, with increases based on geographical region and work shift. Typical employment locations include hospitals, physician offices and out-patient imaging centers.

### **8. Technology Management**

- a) Medical (Health Care Management and Administration)
- b) Industrial

This area of study may be taken online. This concentration is a two-year capstone degree program for persons holding AA, AS, or AAS degrees from an accredited two year college, or equivalent. Medical options targets graduates from Allied Health areas. A professionally relevant curriculum has been designed to equip students with the skills needed to seek career advancement in administration.

Students in the medical option are prepared for mid-level management positions in all types of healthcare organizations such as hospitals, outpatient care services, physician's offices, medical equipment firms, and state or government healthcare programs. Courses include operational management, finance, policy, and analysis.

### **COMPUTER NETWORKING AND INFORMATION TECHNOLOGY (CNIT) PROGRAM**

This program has many domains: information systems management, system building, analysis and design, computer aided systems engineering (CASE), database, telecommunication, systems networks, data communication, and society. The program prepares students for a lifelong career in computer information technology, which is a rapidly changing field that places graduates into employment positions as systems engineering technicians and applications development experts. Graduates are encouraged to consider graduate school as a career development path. The program objective includes training of students for the Information Technology (IT) workforce, preparation of students for entrepreneurship. The program focuses on current technologies and its future trends to keep abreast with the changing technological landscape in industries.

Students majoring in CNIT will be required to gain expertise in designing, implementing and maintaining local area networks, wide area networks, and wireless network systems, application development and web designing using .NET, , and languages such as C#; databases; system administration in Windows, UNIX/Linux, and IBM environment. Certification with external bodies, such as Microsoft and Cisco, is required.

**Certification:** Certification exams are required at the end of the sophomore year and before the last semester prior to graduation. A minimum of 100 hours of internship is required for graduation. The department will assist students on identifying sites for internship. This may be done during the Fall, Spring, and Summer semesters for students to gain practical work experiences which are required in the industry.

### **DESCRIPTION OF ROBOTICS AND AUTOMATION (RAT) PROGRAM**

This program is designed to place program graduates into positions as managers of technology in industry and government. The program prepares students to be technical managers able to move through a lifelong career prepared to change technical occupations if and when needed. Students attain the knowledge of modern computerized and automated systems used in modern industry, transport and government.

Theoretical classes are backed by state of the art laboratories in modern electronics, computers integrated systems and automation. Graduates from this program work as high level technical and hiring managers in well-known companies such as Boeing, ATT, Nissan, Toyota, and others. This program is certified by The Association of Technology, Management, and Applied Engineering. (ATMAE).

### **DESCRIPTION OF PRE-ENGINEERING**

The Pre-Engineering major is designed to prepare students for study in accredited engineering programs. This major allow students to transfer to an engineering degree granting institution and continue with their study in the use of computers, software, and general engineering technology in state-of-the-art labs. Students who choose not to transfer may continue their study and complete a Bachelor of Science degree in one of the following areas: Robotics and Automation Technology, Computer Networking Information Technology or Applied Science with a focus on Bio Medical Engineering Technology, Electro-Mechanical Engineering Technology, Computer Engineering Technology, Nuclear Engineering Technology, or in Geographic Information Sciences and Technology.

Graduate Programs: A Master of Science degree in Applied Science with various concentrations and a master's degree in Workforce Education Leadership through a joint degree program with Alcorn State's land-grant partner, Mississippi State University. In addition, trade, industrial, and teachers may complete a course of study through distance learning leading to teacher certification.

## B.S. Degree Program in Applied Science Concentrations

### Biomedical Engineering Technology (120 Credit Hours)

The Biomedical Engineering Technology program of study at Department of Advanced Technologies provides students with the skills of an engineering technologist while focusing specifically on biomedical equipment technology and management. In addition to courses in basic electronics, computer systems, industrial electronics, digital electronics, communications and control systems, the program includes courses in concentration areas of bio-medical engineering technology and management. Supplementary courses in anatomy and physiology - complete the medical specialization. Optional field practice internship placements where interactions at hospitals in the region are integrated with a Senior Design project provide students with a practical foundation for employment in the field.

#### Freshman Year (36)

First Semester		Hrs.	Second Semester		Hrs.		
EN 111	Composition I	<input type="text"/>	3	HI 111	World Civilization I	<input type="text"/>	3
BI 111	Intro to Biology I	<input type="text"/>	3	EN 112	Composition II	<input type="text"/>	3
MA 121	College Algebra	<input type="text"/>	3	BI 114	Human Ana Phys I	<input type="text"/>	3
CH 121	General Chemistry I	<input type="text"/>	3	BI 114L	Human Anat Phy I Lab	<input type="text"/>	1
CH 121L	General Chemistry I Lab	<input type="text"/>	1	PH 132	General Psychology	<input type="text"/>	3
EG 103	General Engineering	<input type="text"/>	3	IT 101	IT Essentials	<input type="text"/>	3
UL 101	University Life	<input type="text"/>	1	ND 101	Health Wellness	<input type="text"/>	1
PE 100	Physical Education I	<input type="text"/>	1	PE 200	Physical Education	<input type="text"/>	1
	or				or		
MS 101	Fund. of Leadership & Mgt. I	<input type="text"/>	1	MS 102	Fund. of Leadership & Mgt. II	<input type="text"/>	1
	<b>Total</b>	<input type="text"/>	<b>18</b>		<b>Total</b>	<input type="text"/>	<b>18</b>

#### Sophomore Year (31)

HU 201	Humanities	<input type="text"/>	3	EN 213	Studies in Literature	<input type="text"/>	3
PY 215	General Physics (Non-Calculus)	<input type="text"/>	3			<input type="text"/>	
EC 201	Principles of Economics I	<input type="text"/>	3	MA 181	Calculus I w/Ana. Geom.	<input type="text"/>	4
BI 214	Human Ana Physio II	<input type="text"/>	3	SA 223	Speech Arts	<input type="text"/>	3
BI 214L	Human Ana Physio II Lab	<input type="text"/>	1		Restricted Programming Elective	<input type="text"/>	2
TY 232	Circuit Analysis	<input type="text"/>	3	BM 101	Intro to Bio-Medical Engineering Technology	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>16</b>	<b>Total</b>		<input type="text"/>	<b>15</b>

#### Junior Year (29)

TY 331	Electronics	<input type="text"/>	3	EG 302	Dynamics	<input type="text"/>	3
IT 375	Database Management Systems	<input type="text"/>	3	TY 322	Occupational Safety Mgmt.	<input type="text"/>	3
	Guided Technical Elective	<input type="text"/>	2	EG 412	Electronic Comm./Tele.	<input type="text"/>	3
EG 303	Statics	<input type="text"/>	3	TY 450	Industrial Fluid Power	<input type="text"/>	3
EG 400	Digital Electronics	<input type="text"/>	3	RT 340	Operations Mgmt. and Qualitative Methods for Healthcare	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>14</b>	<b>Total</b>		<input type="text"/>	<b>15</b>

#### Senior Year (24)

TY 456	Machine Control Systems	<input type="text"/>	3	RT 421	Healthcare Management	<input type="text"/>	3
EG 404	Electrical Networks	<input type="text"/>	3	TY 438	Project Management	<input type="text"/>	3
RT 343	Healthcare Marketing	<input type="text"/>	3		Restricted Technical Elective	<input type="text"/>	3
EG 490	Senior Design Project I	<input type="text"/>	3	EG 495	Senior Design Project II	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>12</b>	<b>Total</b>		<input type="text"/>	<b>12</b>

### **Electives**

EG 418 Electric Power Systems  
EG 401 Elec. Drives and Machines  
BM 299 Ethics in HealthCare  
BM 401 Biomedical Engineering Technology Internship  
BM 499 Seminar in Bio-Medical Engineering Technologies  
BM 410 Bio-Medical Instrumentation Systems  
BM 420 Telemed and Med Informatics  
IT 333 Mobile Applications I  
IT 350 Communications Systems  
IT 361 Introduction to Data Communications  
IT 363 LAN and Enterprise Networks  
IT 395 Cyber Security  
IT 397 Design of Experiment  
IT 433 Mobile Applications II  
IT 461 Virtualizations Technologies  
RT 331 Statistics for the Health Sciences  
TY 373 Enterprise Systems and Networks I

Or any other approved departmental elective.

### **Programing Electives**

TY 272 Java, CT 326 C++, or course with approval of AT department head.

- Students may obtain permission of the chair of the department to substitute required departmental course(s) with other approved course(s) with justification signed by the area advisor.

## **COURSE DESCRIPTIONS IN BIO-MEDICAL ENGINEERING (BM)**

\*\*\* **Descriptions of Engineering (EG) classes are provided in the Engineering section.**

\*\*\* **Descriptions of Technology (TY) classes are provided in the Robotics and Automation Technology section.**

\*\*\* **Descriptions of Radiation Technology (RT) classes are provided in the Medical Radiation Technology section**

### **BM 101            3-0-3    INTRODUCTION TO BIO-MEDICAL ENGINEERING**

Students in this course get introduced to the role of biomedical engineering technologies in health care management.

### **BM 401            3-0-3    BIO-MEDICAL INSTRUMENTATION SYSTEMS**

This course covers principles of medical instrumentation, and includes study of medical diagnostics. **Pre-requisite:** BM 101.

### **BM 410            3-0-3    BIO-MEDICAL ENGINEERING TECHNOLOGY INTERNSHIP**

Students begin an internship at a biomedical facility. Students keep a detailed journal logging their internship time and activities, and review their field experience with faculty.

### **BM 420            0-3        TELEMEDICINE AND MEDICAL INFORMATICS**

This course covers design principles and implementation of computer infrastructure as related to accessing medical databases, visualizing medical techniques, and transferring and manipulating medical data over communication networks. **Pre-requisite:** MA 181, EG 104, EG 107.

## Computer Engineering Technology (120 Credit Hours)

The Computer Engineering Technology concentration provides the students with the fundamental knowledge in computer software and hardware required in developing the knowledge and skills necessary for the design and implementation of computers and computer systems, the integration of computers into larger systems, and the application of digital solutions to a broad range of engineering problems. The concentration provides the student with well-rounded education encompassing the theory and practice of computer software, hardware, and electronics, to enable the student to pursue careers in computer engineering related industries such as, process control, automotive, cell phone, and other embedded systems applications. The student may also choose to continue his/her education in a wide range of computer-related engineering fields.

The concentration seeks to emphasize hands-on experience, problem solving, and the creative process that prepares the student to work in the dynamic and rapidly expanding field of digital technology.

### Freshman Year (35)

First Semester		Hrs.	Second Semester		Hrs.		
HI 111	World Civilization I	<input type="text"/>	3	_____	Programing Elective	<input type="text"/>	2
MA 121	College Algebra	<input type="text"/>	3	EC 201	Principles of Economics I	<input type="text"/>	3
EN 111	Composition I	<input type="text"/>	3	EN 112	Composition II	<input type="text"/>	3
CH 121	General Chemistry I	<input type="text"/>	3	MA 132	Trigonometry	<input type="text"/>	3
CH 121L	General Chemistry I Lab	<input type="text"/>	1	PH 132	General Psychology	<input type="text"/>	3
CT 127	Introduction to Computer Engineering Technology	<input type="text"/>	3	EG 107	Intro to Computing for Engineers	<input type="text"/>	3
	or	<input type="text"/>				<input type="text"/>	
IT 101	IT Essentials	<input type="text"/>	3			<input type="text"/>	
UL 101	University Life	<input type="text"/>	1			<input type="text"/>	
ND 101	Health Wellness	<input type="text"/>	1			<input type="text"/>	
	<b>Total</b>	<input type="text"/>	<b>18</b>		<b>Total</b>	<input type="text"/>	<b>17</b>

### Sophomore Year (33)

EN 213	Studies in Literature	<input type="text"/>	3	PY 218	General Physics (Calculus)	<input type="text"/>	3
PY 217	General Physics (Calculus)	<input type="text"/>	3	PY 218L	General Physics (Calculus) Lab	<input type="text"/>	1
PY217L	General Physics (Calculus) Lab	<input type="text"/>	1	MA 182	Calculus I w/Ana. Geom.	<input type="text"/>	4
MA 181	Calculus I w/Ana. Geom.	<input type="text"/>	4	EG 212	Circuit Analysis II	<input type="text"/>	3
TY 201	Problems in Engineering	<input type="text"/>	3	AR 214	Art Appreciation	<input type="text"/>	3
PE 100	Physical Education I	<input type="text"/>	1	TY 232	Circuit Analysis	<input type="text"/>	3
	or	<input type="text"/>				<input type="text"/>	
MS 101	Fund. of Leadership & Mgt. I	<input type="text"/>	1	PE 200	Physical Education	<input type="text"/>	1
		<input type="text"/>			or	<input type="text"/>	
<b>Total</b>		<input type="text"/>	15	MS 102	Fund. of Leadership & Mgt. II	<input type="text"/>	1
		<input type="text"/>		<b>Total</b>		<input type="text"/>	18

### Junior Year (28)

CT 326	Comp Programming w/C++	<input type="text"/>	3	CS 321	Data Structures and Algorithms or	<input type="text"/>	3
EG 404	Electrical Networks	<input type="text"/>	3	CT 300	Data Strs Anal of Alg.	<input type="text"/>	
EG 377	Engineering Statistics	<input type="text"/>	3	_____	Technical Elective	<input type="text"/>	2
TY 331	Electronics	<input type="text"/>	3	_____	Restricted Technical Elective	<input type="text"/>	2
IT 375	Database Management Systems	<input type="text"/>	3	CT 320	Microprocessors I	<input type="text"/>	3
		<input type="text"/>		CS 350	Operating Systems	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	15	<b>Total</b>		<input type="text"/>	13

### Senior Year (24)

EG 400	Digital Electronics	<input type="text"/>	3	CT 424/TY 490	Intro to Comp Archit. Eng. Stat. and Random Signals	<input type="text"/>	3
CT 423	Digital System Design	<input type="text"/>	3	EG 412	Elect. Comm./Tele.	<input type="text"/>	3
EG 490	Senior Design Project I	<input type="text"/>	3		Technical Elective	<input type="text"/>	3
	Restricted Technical Elective	<input type="text"/>	3	EG 495	Senior Design Project II	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	12	<b>Total</b>		<input type="text"/>	12



### **Technical Electives**

CT 328 Operating Systems I  
CT 309 Electronics II  
CT 311 Digital Electronics II  
CT 421 Microprocessor II  
CT 422 Advanced Microprocessors  
CT 429 Operating Systems II  
TY 456 Machine Control Systems  
TY 461 PLCs  
IT 478 C# Network Programming  
IT 333 Mobile Applications  
IT 350 Communications Systems  
IT 361 Introduction to Data Communications  
IT 363 LAN and Enterprise Networks  
IT 366 Enterprise Systems and Networking II  
IT 395 Cyber Security  
IT 397 Design of Experiment  
IT 433 Mobile Applications II  
IT 461 Virtualizations Technologies  
IT 468 Network Security II  
TY 373 Enterprise Systems and Networks I  
TY 373 Enterprise Networking I

Or any other approved departmental elective.

### **Programing Electives**

TY 272 Java, CT 326 C++, or programing course outside the department with approval of AT department head.

- Students may obtain permission of the chair of the department to substitute required departmental course(s) with other approved course(s) with justification signed by the area advisor.
- 

### **COURSE DESCRIPTIONS IN COMPUTER ENGINEERING TECHNOLOGY (CT)**

\*\*\* **Descriptions of Engineering (EG) classes are provided in the Engineering section.**

\*\*\* **Descriptions of Technology (TY) classes are provided in the Robotics and Automation Technology section.**

#### **CT 123            2-1-3    COMPUTER PROGRAMMING WITH FORTRAN**

Problem-solving methods, algorithm development, debugging and documentation in the FORTRAN programming language; applications.

#### **CT 125            2-1-3    COMPUTER PROGRAMMING WITH JAVA**

Problem-solving methods, algorithm development, debugging and documentation in the Java programming language; applications.

#### **CT 127            2-1-3    INTRODUCTION TO COMPUTER PROGRAMMING**

Introductory problem solving and computer programming using object-oriented techniques. Theoretical and practical aspects of programming and problem solving.

#### **CT 128            2-1-3    INTERMEDIATE COMPUTER PROGRAMMING**

Object-oriented problem solving, design, and programming. Introduction to data structures, algorithm design, and programming.

#### **CT 210            2-1-3    CIRCUIT ANALYSIS I**

A study of the analysis of DC circuits. Topics include Ohm's law, power, energy, series circuit, parallel circuit, series parallel circuits, nodal analysis, mesh analysis, network theories, capacitors, inductors, magnetic circuits etc. Same as TY 232 and EG 210. **Pre-requisite: MA 182.**

**CT 212            2-1-3    CIRCUIT ANALYSIS II**

Continuation of CT 210. A study of the analysis of AC circuits. Topics include sinusoidal alternating waveforms, phasors; series R-L, R-C, R-L-C circuits; parallel R-C, R-L, and R-L-C circuits; Mesh analysis, nodal analysis, network theories, ac power, resonance, filters, Bode plots etc. **Pre-requisite: CT 210. Same as EG 212.**

**CT 224            2-1-3    COMPUTER PROGRAMMING WITH C**

Problem-solving methods, algorithm development, debugging and documentation in the C programming language; applications.

**CT 300            2-1-3    DATA STRUCTURES AND ANALYSIS OF ALGORITHMS**

Non-linear data structures and their associated algorithms. Trees, graphs, hash tables, relational data model, file organization. Advanced software design and development. **Pre-requisites: CE 127.**

**CT 304            3-0-3    ELECTRICAL NETWORKS (SIGNALS AND SYSTEMS)**

A study of applying network theories to solve electrical circuits and system problems. Topics include Fourier series, convolution, Laplace transforms, state-space analysis and applications. **Pre-requisite: MA 348.**

**CT 306            3-0-3    ELECTRONICS I**

Introduction to electronic signals, semiconductors, semiconductor devices, and circuits. Application as semiconductor devices in electronic circuit such as power supplies and amplifiers. Students are required to apply knowledge gained in the course to design and build working electronic systems. Extensive written and oral communication are required. **Pre-requisite: EG 210 or equivalent.**

**CT 309            2-1-3    ELECTRONICS II**

Continuation of CE 306. Application of concepts in the analysis and design of electronic devices and circuits. Design and construction of electronic circuits such as oscillators, active filters, and modulators. Student projects required. Extensive oral and written communications are required. **Pre-requisite: CE 306.**

**CT 310            2-1-3    DIGITAL ELECTRONICS I**

Introduction to digital logic and circuits. Application of basic digital design and troubleshooting using standard integrated circuits used in industry today. Student-designed projects required. Extensive oral and written communications required.

**CT 311            2-1-3    DIGITAL ELECTRONICS II**

Continuation of CE 410. The course covers flip-flops, code converters, multiplexers, de-multiplexers, registers, counters, multi-vibrators, interfacing to the analog world, semiconductor memory and programmable arrays. Student projects required. Extensive oral and written communications required. **Pre-requisite: CE 310.**

**CT 320            2-1-3    MICROPROCESSORS I**

Introduction to microprocessors and microprocessor-based system design and troubleshooting. A study of interaction between hardware and software and programming techniques required for real-time control of processes and machines by a digital computer. Student projects required. **Pre-requisite: CE 306, CE 410.**

**CT 322            3-0-3    INTRODUCTION TO COMPUTER ARITHMETIC**

Fixed point number systems; algorithms and associated logic level implementations for fixed point addition, subtraction, multiplication, and division; floating-point formats and operation. **Pre-requisite: CE 320.**

**CT 326            2-1-3    COMPUTER PROGRAMMING WITH C++**

Problem-solving methods, algorithm development, debugging and documentation in the C++ programming language; applications.

**CT 328            2-1-3    OPERATING SYSTEMS I**

Historical development of operating systems to control complex computing systems; process management, communication, scheduling techniques; file system concepts and operation; data communication, distributed process management. **Pre-requisite: CE 200.**

**CT 421            2-1-3    MICROPROCESSORS II**

Continuation of CE 420. A study of microcomputer hardware and programming techniques required for real-time control of processes and machines by a digital computer. Student projects required. **Pre-requisite: CE 320.**

**CT 422            2-1-3    ADVANCED MICROPROCESSORS**

The study of architecture, software, and interface techniques utilized by advanced micro-computing systems. Emphasis on multi-programming, multi-processing, and memory management. **Pre-requisite: CE 320, CE 321.**

**CT 423            3-0-3    DIGITAL SYSTEM DESIGN**

Hierarchical digital design using available design software. Computer aided design workstations will be used to give students access to state-of-the-art design techniques. **Pre-requisite: CE 311.**

**CT 424            3-0-3    INTRODUCTION TO COMPUTER ARCHITECTURE**

Design and implementation of a stored-program digital computer system. Designs for the CPU, I/O subsystems, and memory organizations. ALU design and computer arithmetic. **Pre-requisite: CE 321.**

**CT 427            3-0-3    INTRODUCTION TO SOFTWARE ENGINEERING**

Introduction to software engineering: planning, requirements, analysis and specification, design; testing; debugging; maintenance; documentation. Alternative design methods, software metrics, software project management, reuse and reengineering. **Pre-requisite: CE 200.**

**CT 429            3-0-3    OPERATING SYSTEMS II**

Continuation of CE 428. Integrated treatment of hardware and software concepts in operating systems design, procedure implementation, creation and control of processes, name and space management. **Pre-requisite: CE 328.**

**CT 430            0-6-3    SENIOR DESIGN PROJECT I**

Lectures on teaming, project management, engineering standards, economics, and ethical and professional issues. Student must select faculty mentor, perform project design, and present orally.

**CT 431            0-6-3    SENIOR DESIGN PROJECT II**

Development of design, teaming, presentation, and entrepreneurial skills. Teams must complete their project designs, and present written and oral results.

**Electro-Mechanical Engineering Technology  
(120 Credit Hours)**

Electro-Mechanical Engineering Technology provides students with the necessary electrical and mechanical background to enable them to tackle and solve practical electro-mechanical and related problems in various types of industrial settings. Several commercial, industrial, and military equipment consist of electrical and mechanical components that work together to realize the equipment's functionality. It is, therefore, necessary to educate students into the workforce with the proper understanding of the interaction between electrical and mechanical systems.

Electro-Mechanical Engineering Technology is, designed to provide students who desire to enter the industrial world as electrical and mechanical engineers/scientists/specialists with the skills and academic foundations that will enable them to find employment and career opportunities in this ever growing sector of engineering. Graduates will be prepared to pursue graduate school in several technical and management disciplines. Nationwide, there are currently few graduates with an electro-mechanical background. Thus, graduates will have excellent job prospects. Graduates with knowledge and understanding of both electrical and mechanical systems can be employed in almost all industrial, commercial, and military equipment manufacturers such as the automotive industry.

## Freshman Year (34)

First Semester			Hrs.	Second Semester			Hrs.
EN 111	Composition I	<input type="text"/>	3	EN 112	Composition II	<input type="text"/>	3
CH 121	General Chemistry I	<input type="text"/>	3	EC 201	Principles of Economics I	<input type="text"/>	3
CH 121L	General Chemistry II Lab	<input type="text"/>	1	SS 111	Social Institutions	<input type="text"/>	3
HI 111	World Civilization I	<input type="text"/>	3	EG 107	Intro to Computing for Engineers	<input type="text"/>	3
MA 121	College Algebra	<input type="text"/>	3		Restricted Programming Elective	<input type="text"/>	2
PE 100	Physical Education I	<input type="text"/>	1	ND 101	Health Wellness	<input type="text"/>	1
	or						
MS 101	Fund. of Leadership & Mgt. I	<input type="text"/>	1	PE 200	Physical Education	<input type="text"/>	1
EG 103	General Engineering	<input type="text"/>	3		or		
UL 101	University Life	<input type="text"/>	1	MS 102	Fund. of Leadership & Mgt. II	<input type="text"/>	1
	<b>Total</b>	<input type="text"/>	<b>18</b>		<b>Total</b>	<input type="text"/>	<b>16</b>

(Students who are not prepared to begin College Algebra and Calculus I must take the necessary **Pre-requisite** courses in Mathematics in addition to those prescribed in the curriculum.)

## Sophomore Year (32)

MA 181	Calculus I w/Ana. Geom.	<input type="text"/>	4	HU 201	Humanities	<input type="text"/>	3
PY 217	General Physics (Calculus)	<input type="text"/>	3	EG 212	Circuit Analysis II	<input type="text"/>	3
SA 223	Oral Communication	<input type="text"/>	3	PY 218	General Physics II	<input type="text"/>	3
EN 213	Studies in Literature	<input type="text"/>	3	TY 201	Problems in Engineering	<input type="text"/>	3
TY 232	Circuit Analysis	<input type="text"/>	3	MA 182	Calculus II w/Ana. Geom.	<input type="text"/>	4
	<b>Total</b>	<input type="text"/>	<b>16</b>		<b>Total</b>	<input type="text"/>	<b>16</b>

## Junior Year (30)

TY 331	Electronics	<input type="text"/>	3	EG 313	Thermodynamics	<input type="text"/>	3
EG 377	Engineering Statistics	<input type="text"/>	3	EG 314	Mechanics of Materials	<input type="text"/>	3
EG 303	Statics	<input type="text"/>	3	EG 302	Dynamics	<input type="text"/>	3
TY 301	Tech Engin. Analysis	<input type="text"/>	3	EG 305	Mechanics of Machines	<input type="text"/>	3
_____	Technical Elect.	<input type="text"/>	3	TY 450	Industrial Fluid Power	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>15</b>		<b>Total</b>	<input type="text"/>	<b>15</b>

## Senior Year (24)

EG 404	Electrical Networks	<input type="text"/>	3	EG 417/TY 456	Auto. Control and Machine Control Sys.	<input type="text"/>	3
EG 400	Digital Electronics	<input type="text"/>	3	EG 418	Electric Power Systems	<input type="text"/>	3
EG 401	Elec. Drives Machines	<input type="text"/>	3	EG 412	Electronic Comm./Tele.	<input type="text"/>	3
EG 490	Senior Design Project I	<input type="text"/>	3	EG 495	Senior Design Project II	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>12</b>		<b>Total</b>	<input type="text"/>	<b>12</b>

## Electives

The course sequence in unmanned electro-mechanical systems is available to prepare students for jobs in defense industries for application of unmanned systems in search and rescue, border security, and maritime and port security.

EG 299 – Introduction to Unmanned Systems  
 EG 399 – Unmanned Aerial Vehicles  
 EG 493 – Unmanned Water Vehicles  
 IT 333 Mobile Applications  
 IT 350 Communications Systems  
 IT 361 Introduction to Data Communications  
 IT 366 Enterprise Systems and Networking II  
 IT 433 Mobile Applications II  
 IT 461 Virtualizations Technologies  
 TY 373 Enterprise Systems and Networks I

Or any other approved departmental elective.

- Students may obtain permission of the chair of the department to substitute required departmental course(s) with other approved course(s) with justification signed by the area advisor.

## **ENGINEERING (EG)**

### **\*\*\* COURSE DESCRIPTIONS IN TECHNOLOGY (TY)**

**Classes are provided in the Robotics and Automation Technology section.**

#### **EG 103 3-0-3 GENERAL ENGINEERING**

An introduction to the engineering profession, its branches and functions. The distinction among the roles and responsibilities of scientists, engineers, technologists, and technicians. Various engineering disciplines are discussed, with more emphasis on electrical engineering and mechanical engineering programs.

#### **EG 104 3-0-3 ENGINEERING COMPUTATION LABORATORY**

This course introduces students to technical computation using Microsoft Excel, and Mathcad software, and C programming language. The emphasis is on the applications of Excel, Mathcad and C programming to problems in engineering, science and technology. It explores the fundamental principles and logic behind the language. Extensive oral and written communications are required.

#### **EG 107 3-0-3 INTRODUCTION TO COMPUTING FOR ENGINEERS**

This course introduces students to the use of computer programs and application software to solve typical engineering problems. Concepts of critical thinking applied to level mathematics courses in which the students are currently enrolled are also investigated.

#### **EG 210 2-2-3 CIRCUIT ANALYSIS I**

A study of the analysis of DC circuits. Topics include Ohm's law, power, energy, series circuit, parallel circuit, series parallel circuits, nodal analysis, mesh analysis, network theories, capacitors, inductors, magnetic circuits etc. **Pre-requisite:** MA 182.

#### **EG 212 2-1-3 CIRCUIT ANALYSIS II**

Continuation of EG 210. A study of the analysis of AC circuits. Topics include sinusoidal alternating waveforms, phasors; series R-L, R-C, R-L-C circuits; parallel R-C, R-L, and R-L-C circuits; Mesh analysis, nodal analysis, network theories, ac power, resonance, filters, Bode plots etc. **Pre-requisite:** EG 210.

#### **EG 302 3-0-3 DYNAMICS**

This course introduces the principles of dynamics, treating the motion of a particles, the kinematics and kinetic of plane motion of rigid bodies, and principles of work and energy, impulse and momentum. A study of the fundamental behavior of dynamic systems, their formulation, analysis, and control are also covered in this course. Analytical, graphical and computer techniques are employed, emphasizing mechanical systems and their analogs. **Pre-requisites:** MA 283, MA 348, EG 303.

#### **EG 303 3-0-3 STATICS**

A study of force systems in two and three dimensions composition and resolution of forces and force systems: principle of equilibrium applied to various bodies, simple structures and machine friction, centroid moments of inertia, vector algebra is used where appropriate. **Pre-requisites:** MA 283, PY 218.

#### **EG 305 3-0-3 MECHANICS OF MACHINES**

This course introduces the students to graphical and analytical techniques for determining velocity; acceleration, and forces in mechanical linkages, cams, and gear trains, computer solution for kinematic design. **Pre-requisites:** MA 283, PY 218.

**EG 306            2-2-3    ELECTRONICS I**

Introduction to electronic signals, semiconductors, semiconductor devices, and circuits. Application as semiconductor devices in electronic circuit such as power supplies and amplifiers. Students are required to apply knowledge gained in the course to design and build working electronic systems. Extensive written and oral communication are required. **Pre-requisite:** EG 210 or equivalent.

**EG 313            3-0-3    THERMODYNAMICS**

An introductory course covering the fundamental concepts of classical thermodynamics regarding the property relationships of solids, liquids, vapors, and gases. In this course, the first and second laws of thermodynamics are applied to the analysis of processes energy of opened and closed systems and cycles. Introduction to heat transfer is also discussed in this course.

**EG 314            3-0-3    MECHANICS OF MATERIALS**

An introduction to the mechanical behavior of materials; stress and strain at a point, principal stresses, and strains, stress-strain relationships, determination of stresses and deformations in situation involving axial loading, torsional loading of circular cross sections, and flexural loading of straight and bending members.

**EG 320            2-2-3    FLUID MECHANICS**

Fluid mechanics extends the ideas developed in mechanics and thermodynamics to the study of motion and equilibrium of fluids, namely of liquids and gases. This course introduces the fundamental concepts used in analysis of fluid behavior, pressure in stationary fluids, forces on submerged surfaces, buoyancy, integral methods, the Bernoulli equations and pipeline analysis. Dimensional analysis and similitude, flow measurement and differential control volume analyses with applications are also covered in this class. Introduction to turbulence boundary layers. **Pre-requisites:** EG 203, EG 204, EG 305, MA 348.

**EG 370            2-2-3    PROGRAMMABLE LOGIC CONTROLLERS (PLCS)**

A study of the application of PLCs to control machines and processes by means of stored programs and feedback from input/output devices. Hardware and software components will be considered. Student projects required. **Pre-requisites:** EG 212, EG 306.

**EG 377            3-0-3    ENGINEERING STATISTICS**

This course is designed for engineers, scientists, technologists, and managers who routinely analyze data for product development, qualification, and control. This course covers introduction to probability with applications to engineering. Some of the topics are sets and events, probability space, conditional probability, total probability and Bayes' rule. Discrete and continuous random variables, cumulative distribution function, probability mass and density functions, expectation, moments, moment generating functions, multiple random variables, and functions of random variables. Elements of statistics, hypothesis testing, confidence intervals, least squares; and introduction to random processes will also be discussed.

**EG 400            2-2-3    DIGITAL ELECTRONICS**

Introduction to digital logic and circuits, application of basic digital design and troubleshooting using standard integrated circuits used in industry today; Student designs projects required. Extensive oral and written communications are required. They course covers flip-flops, code converters, multiplexers, de-multiplexers, registers, counters, multi-vibrators, interfacing to the analog world, semiconductor memory and programmable arrays. Student project required. Extensive oral and written communications are required. **Pre-requisite:** EG 306.

**EG 401            2-2-3    ELECTRICAL DRIVES AND MACHINES**

A study of process control and instrumentation; Topics include pressure systems, temperature control, flow control, level control systems, analytical instrumentation, industrial process techniques and instrumentation, process control methods. Student projects required. **Pre-requisite:** MA 283, EG 212, and EG 304.

**EG 404            3-0-3    ELECTRICAL NETWORKS**

A study of applying network theories to solve electrical circuits and system problems. Topics include Fourier series, convolution, Laplace transforms, state-space analysis and applications. **Pre-requisite:** MA 348, EG 212.

**EG 412            3-0-3    ELECTRONIC COMMUNICATIONS/TELECOMMUNICATION**

This course introduces the student to the basic concepts of conventional analog electronic communications systems. The basic concepts of the transmission and reception of information using amplitude modulation (AM) and frequency modulation (FM) communications systems are introduced. Equipped with these fundamental concepts, it is expected that the student could understand and expand his/her knowledge to the more modern digital, fiber optic, microwave, satellite, cellular, and PCS telephone communications systems.

**EG 417            2-2-3    AUTOMATIC CONTROL**

A study of automatic control systems. Basic feedback control principles, system modeling, and analysis techniques. Design using frequency response, root locus, and state-variable methods. **Pre-requisites:** MA 348, EG 304.

**EG 418            3-0-3    ELECTRIC POWER SYSTEMS**

A study of power systems analysis, power transmission line parameters for symmetric and non-symmetric multi-phase lines, skin effect, long medium and short line representations. Transformer machine and load representations in power system calculations. Load flow studies, fault analysis, power system stability and economic dispatch. **Pre-requisites:** MA 182, EG 212.

**EG 429            1-0-1    APPLIED ENGINEERING I**

The course engages students in various engineering applications including circuit analysis, thermodynamics, mechanics, electronics, electrical networks and static. Students will apply a systematic approach to solve authentic engineering problems. **Pre-requisites:** EG 212, EG 203, EG 204.

**EG 430            1-0-1    APPLIED ENGINEERING II**

The course engages students in various engineering applications including mechanics, electrical networks, dynamics, control power systems, and PLC. Students will apply a systematic approach to solve authentic engineering problems. **Pre-requisite:** EG 309.

**EG 490            0-6-3    SENIOR DESIGN PROJECT I**

Students work independently or in groups to solve practical Engineering/Technology design problem. The design project is selected in consultation with a faculty advisor (also the instructor) who oversees the project and advises the student(s). **Pre-requisite:** Senior standing and consent of instructor.

**EG 495            0-6-3    SENIOR DESIGN PROJECT II**

Continuation of EG 490. The design project is selected in consultation with a faculty advisor (also the instructor) who oversees the project and advises the student(s). A final project report (thesis) and defense is required. **Pre-requisite:** EG 490.

**GEOSPATIAL ENGINEERING TECHNOLOGY (GET)**

Our GET curriculum for Homeland Security and Natural Resource Management is designed to reflect the fields of study listing by the Survey of Earned Doctorates (SED), conducted by NORC, for the National Science Foundation (NSF), National Institute of Health, Department of Education, and National Endowment for the Humanities, USDA, and NASA. Geospatial Engineering Technology and Homeland Security are relatively new fields of study and this curriculum extends its requirements over the following fields of study: Computer and Information Sciences, Engineering, Life Sciences, Physical Sciences, and Social Sciences. These five fields of study are designed to at least emphasize *the sciences, engineering and technology*.

And with no limitations, the curriculum requires the undergraduate student to apply their concentrations to STEM educational system. This system will give the undergraduate student broad skill, knowledge, and understanding of their academic career. On the other hand, it will allow the graduate students to develop professional STEM techniques in applied research. The SRI is a support utility for undergraduate and graduate student development through STEM education.

**Geospatial Engineering Technology  
(Homeland Security Management)  
(120 Credit Hours)**

**Freshman Year (34)**

First Semester			Hrs.		Second Semester			Hrs.
HI 111	World Civilization I	<input type="checkbox"/>	3	EN 112	Composition II	<input type="checkbox"/>	3	
EN 111	Composition I	<input type="checkbox"/>	3	PH 132	General Psychology	<input type="checkbox"/>	3	
MA 121	College Algebra	<input type="checkbox"/>	3	IT 181	Computer Cartography	<input type="checkbox"/>	3	
CH 121	General Chemistry I	<input type="checkbox"/>	3	TY 201	Problems in Engineering	<input type="checkbox"/>	3	
CH 121L	General Chemistry II Lab	<input type="checkbox"/>	1	ND 101	Health Wellness	<input type="checkbox"/>	1	
IT 101	IT Essentials	<input type="checkbox"/>	3	IT 115	Intro to GIS Applications	<input type="checkbox"/>	3	
UL 101	University Life	<input type="checkbox"/>	1	PE 100	Physical Education I	<input type="checkbox"/>	1	
		<input type="checkbox"/>		MS 101	or Fund. of Leadership & Mgt. I	<input type="checkbox"/>	1	
Total		<input type="checkbox"/>	17	Total		<input type="checkbox"/>	17	

**Sophomore Year (33)**

MA 181	Calculus I w/Ana. Geom.	<input type="checkbox"/>	4	SA 233	Oral Communication	<input type="checkbox"/>	3
IT 381	GIS Techniques, Utilities & Productions	<input type="checkbox"/>	3	HU 201	Humanities	<input type="checkbox"/>	3
_____	Restricted Programing Elective	<input type="checkbox"/>	3	AR 214	Art Appreciation	<input type="checkbox"/>	3
EN 213	Studies in Literature	<input type="checkbox"/>	3	IT 291	Case Studies in Homeland Security	<input type="checkbox"/>	3
		<input type="checkbox"/>		PE 200	Physical Education	<input type="checkbox"/>	1
		<input type="checkbox"/>		or			
PY 215	General Physics (Non-Calculus)	<input type="checkbox"/>	3	MS 102	Fund. of Leadership Mgt. II	<input type="checkbox"/>	1
PY 215L	General Physics Lab (Non-Cal)	<input type="checkbox"/>	1	IT 386	Intro. To Remote Sensing	<input type="checkbox"/>	3
<b>Total</b>		<input type="checkbox"/>	<b>17</b>	<b>Total</b>		<input type="checkbox"/>	<b>16</b>

**Note:** The department recommends that courses be taken in the order they appear in the tables, but if circumstances do not support this appearance, it is the responsibility of the student to obtain permission from the department chair or program leader to get approval to take courses out of sequence.

**Junior Year (27)**

_____	Restrictive Technical Elective	<input type="checkbox"/>	3	IT 407	Remote Sensing at Microwaves	<input type="checkbox"/>	3
IT 375	Database Management Systems	<input type="checkbox"/>	3	_____	Restrictive Technical Elective	<input type="checkbox"/>	3
_____	Restrictive Technical Elective	<input type="checkbox"/>	3	_____	Restrictive Technical Elective	<input type="checkbox"/>	3
IT 384	Advanced GIS (Spa. Analy)	<input type="checkbox"/>	3	_____	Restrictive Technical Elective	<input type="checkbox"/>	3
_____	Restrictive Technical Elective	<input type="checkbox"/>	3			<input type="checkbox"/>	
<b>Total</b>		<input type="checkbox"/>	<b>15</b>	<b>Total</b>		<input type="checkbox"/>	<b>12</b>

**Senior Year (26)**

IT 485	Geostatistics	<input type="checkbox"/>	3	_____	Technical Elective	<input type="checkbox"/>	3
IT 480	Adv. Remote Sensing	<input type="checkbox"/>	3	_____	Technical Elective	<input type="checkbox"/>	3
_____	Technical Elective	<input type="checkbox"/>	3	_____	Restrictive Technical Elective	<input type="checkbox"/>	3
_____	Restrictive Technical Elective	<input type="checkbox"/>	3	_____	Restrictive Technical Elective	<input type="checkbox"/>	2
		<input type="checkbox"/>		TY 280	Senior Project (STEM)	<input type="checkbox"/>	3
<b>Total</b>		<input type="checkbox"/>	<b>12</b>	<b>Total</b>		<input type="checkbox"/>	<b>14</b>

**Note:** The department recommends that courses be taken in the other they appear in the tables, but if circumstances do not support this appearance, it is the responsibility of the student to clear with the department chair or program leader to clip credits earned or get approval to take courses out of sequence.

**ELECTIVES: Choose any three elective**

CS454 Web Applications  
TY 445 Total Quality Management  
TY 322 Occupational Safety Management

IT 390 Emergency Prep. Mgt. and Res.  
IT 481 Transportation Planning  
IT 363 Transportation Logistics (Traffic)



IT 532	Spatial Data Structures Algorithms	IT377	Mobile Computing
IT 389	Aerial Photo Interpretation	IT 420	Spatial Epidemiology
IT 391	Applied Statistics/Data Analytics		
IT 399	Transportation and Econ. Logistics		

Or any other approved departmental elective with permission.

#### **Restricted Electives**

IT 372 Technology in Natural Disaster Planning and Emergency Management  
 IT 385 Energy and Transportation Network  
 IT 486 Infrastructure Risk Analysis  
 IT 477 Remote Sensing of the Environment  
 IT 393 GIS-Crie and Social Analysis  
 IT 394 GIS-Feasibility Studies  
 IT 488 Explosive Detection  
 IT 492 Foundations of U.S. Force Planning  
 IT 493 ESRI and Digital Government (Job Seminar)

Or any other approved departmental elective with permission.

#### Programing Electives

TY 272 Java, CT 326 C++, or course with approval of AT department head.

- Students may obtain permission of the chair of the department to substitute required departmental course(s) with other approved course(s) with justification signed by the area advisor.

### **COURSE DESCRIPTIONS IN GEOGRAPHIC INFORMATION SYSTEM AND TECHNOLOGY (IT)**

\*\*\* **Descriptions of Engineering (EG) classes are provided in the Engineering section.**

\*\*\* **Descriptions of Technology (TY) classes are provided in the Robotics and Automation Technology section.**

#### **IT 115 2-1-2 INTRODUCTION TO GIS APPLICATIONS**

This GIS course is a positive definite requirement in all our GIS-related and concentration areas. It introduces students to different GIS software suites. The course is design for early introduction of GIS software technologies to the student. This will allow the professional software used in the industry.

The course is very dynamic and seeks support and work relations and collaborations with different software developing companies like ESRI, database software. The desired dynamism includes building better understanding of standards of spatial data required by the Federal Geographic Data Committee (FGDC).

#### **IT 117L 0-1-1 COMPUTER APPLICATIONS LABORATORY SPREADSHEET**

This course is a tracker of high school skills on basic computing, especially on Microsoft Excel, Power Point and Word applications. The GIS relates more to the practical applications in using Microsoft Excel for onscreen manipulation of numbers and functions for analysis. The numerical and programmable applications are also covered. But this laboratory is very important to the student's first semester experience in solving analytical problem at college level. The Laboratory comfort zone may help faculty in advising the student.

#### **IT 119 0-1-1 REMOTE SENSING PROCESS AND APPLICATIONS**

This course is used to track students who are new to the program. It gives the students the knowledge of how software promotes applied science; hence, the students are expected to develop understanding and interest in geospatial laboratory techniques. This initial exposure to ERDAS mapping standards gives the students an early start with ERDAS software suites. Correspondingly, the students begin to see the challenges and advantages with which they can prepare to perfect on using the software to establishing strong skills in GIS and remote sensing analysis.

**IT 181            2-1-3    COMPUTER CARTOGRAPHY**

This course introduces students to the underlying theories and process of map making with emphasis on data collection, processing, and database management, and graphic measurement and representation of data as schematics information. The process is necessary for students to build better knowledge of satellite technology in map making and other global schematics of the Earth. It also offers better uses of maps and global positioning systems (GPS) in business, education, navigation, and military. The focus is on mathematical models of the Earth's shape, communication, and projections (flatness of the Earth's surface), through near-Earth satellites for Earth-bound measurements, and the roles of Earth's gravitational field in mapping. The design concept of this course is geodata analysis and management (GDAM) for the production of maps. The analysis includes systems of datum, coordinates and their transformation, map projections, and GPS network design.

**IT 291            3-0-3    CASE STUDIES IN HOMELAND SECURITY**

The strength of this course allows students to evaluate actual threats and problems to Homeland Security, such as natural disaster (climatic and non-climatic interventions), wild fire, failed and executed terror threats and plots. The objective is to put the students in the positions of the emergency or security responders, and sees how the students would contribute improvement to the system. The central design concept is that Homeland security is always challenged by many dimensions of demands (LUCDs/ODDs). These demands include all terror plots, which are promoted through the transportation systems, and executed as demands at the origins or destinations. Relative to these demands, this course is focused on avoidance of political and economic implosion during homeland security emergencies; so, political and economic resilience are emphasized.

**IT 372            3-0-3    TECHNOLOGY IN NATURAL DISASTER PLANNING AND EMERGENCY MANAGEMENT**

The objective of this course is to achieve "best-use" or "best-fit" and synchronization of available equipment and manpower during an emergency response. The course introduces students to appropriate equipment, technology, including manpower needed during different emergencies. It also creates better knowledge of the echelon of authorities and the equipment associated with each team. The course allows students to understand different techniques that are used to avoid activity redundancy or "frequency jamming" as experienced during the 911 terrorist action. Therefore, this course involves professional definitions of activity sites, and assigned resources or responsibilities to different agencies in discharging their respective duties.

**IT 375            2-1-3    DATABASE MANAGEMENT SYSTEMS**

This course is based on ESRI's software suite and support. The focus is to create different database management objectives through clear definitions of the elements of a geographic location (tradition, culture and opportunity), and generate baseline datasets or databanks from these elements. The databanks are configured with classes of vector, raster, and annotations structured to run on different computer/GIS platforms. This will provide the student the ability and structure of data relationships, data integrity, to create diverse intelligence from data features and their attributes. The GIS software platforms are not limited to ESRI but involve other aspects of digital data normalization, modeling, queries, forms reports, calculations and digital manipulations, with extensive and detailed analysis.

**IT 377            3-0-3    INTRO TO MOBILE GIS APPLICATIONS (Programming)**

This course focuses on GIS mobile devices platform application development. The general areas covered include ArcGIS Mobile, ArcPad, and GIS Apps for Smartphones. In addition, considerations are given to some developmental tools that provide APIs, software, and other resources that can be used to create innovative GIS solutions for desktop and mobile devices.

These tools will include, ArcGIS Web Mapping (Flex, JavaScript, and Silverlight), Mobile API (ArcGIS for iOS), Tools for Java, Tools for .NET, Esri Developer Network (EDN), and ArcGIS Engine. These tools are meant to expand GIS applications horizon of students in Homeland Security and Natural Resources Management. The objective of this course is to introduce students to use GIS markets to their advantage.

**IT 381            2-1-3    GIS TECHNIQUES, UTILITIES AND PRODUCTIONS**

This course expands the utility of GIS in two major areas, computer information science and Physical Science-Earth Sciences. It creates the knowledge and understanding of the term "GEO" used in most geoscience courses and uses this knowledge to give the GIS three fundamental introductions: the philosophical introduction of GIS, the scientific introduction, and the traditional introduction. The purpose and functions of GIS also introduce the three audiences driving the GIS market.

Within these introductions, the domains of GIS: geography, data, human, and technology are emphasized to build coherence between Earth science and computer information trends and applications, and to synchronize the GIS techniques and related sciences, such as remote sensing. Spatial analysis is the basic challenge in this course.

**IT 384                    2-1-3    ADVANCED GIS (Spatial Analysis)**

This is an information engineering course with emphasis on data classification (data unit and data frames) built from phenomena of experimental biology in agriculture. It provides students with basic knowledge of measurements of life, and analytical concepts of the biophysical environments (ecosystems). The GIS is focused on the type of measurement (discrete measurements) and records (analytical statistics); of course, with no predictive results. The course is designed for biophysical analysis with respect to ecosystems response to disturbance. This will promote the understanding of the different concepts involved in using a GIS technique to provide solutions to biological problems in different ecosystems. **Pre-requisite:** IT 381.

**IT 385                    3-0-3    ENERGY AND TRANSPORTATION NETWORK**

The fundamentals of energy and transportation networks and their relations are covered in this course. The course is taught with emphasis on the broad definitions of transportation, the security they give to society, and the roles they play in the changes that occur in the physical environment. The emphasis shows in four areas: 1) Geo-technology<sup>1</sup>--transportations systems, acquisition and installation of transportation facilities and infrastructures, safe operation of the transportation systems, and regional impacts of transportation; geotechnology<sup>2</sup> or communication systems is treated separately. 2) Geo-political includes but not limited to environmental, state and regional transportation planning--human and vehicular traffic considerations with respect to regulations for demand/supply, and clean energy (clean air, water, carbon foot printing, and climate change)., 3) Transportation Safety Administration (TSA) with basic focus on terrorism in relations to homeland security. 4) Geo-economic aspects include pure transportation logistics that determine the transportation shares of the economy; the concerns and positions of the Loss and Recovery Industry--insurance companies in dealing with the legal consequences and liabilities in transportation networks.

**IT 386                    2-1-3    INTRO TO REMOTE SENSING TECHNIQUES (Noise and Sensors Eval.)**

This course opens up for students to understand electromagnetic radiation (EMR), electromagnetic spectrum (EMS), electromagnetic force (EMF), and the right photo units associated with these electromagnetic activities. The focus is on radiation principles, terrestrial noise windows, solid and noise angles and how these elements affect remote sensing technologies, such as sensors and data acquisition systems.

**IT 389                    2-1-3    AERIAL PHOTO INTERPRETATION**

Aerial photograph is a subject matter with technical relations to different remote sensing techniques. These techniques are used in creating and managing the cultures of agriculture, land use and physiographic features (physical geography), including photo geometry and crop characterizations. The course is focused on the development of terrestrial intelligence from aerial images, and it provides professional services and support systems to agricultural, urban, and military target developments through different engineering applications.

**IT 390                    3-0-3    EMERGENCY PREPAREDNESS AND MANAGEMENT RESPONSE**

This course deals with the organization, operations, and required leadership of emergency team management, and the roles they play to effectively contain evolving and dynamic crisis situations. It also includes management decision-making protocols, such as concurrent information engineering of human safety, economic stability, and resilience during crisis period(s), like terror attacks and destructive weather interventions. The exclusive focus of this course is to distinguish between preparedness and readiness, and show how each applies to man-made and natural disasters. The LUCDs are used to highlight different levels of emergency response.

**IT 391                    3-0-3    FOREST SURVEY AND HEALTH RESTORATION**

This course allows students to evaluate actual resources in the forest by following the three steps—survey of the forest, evaluation of the forest health, and possible restoration of the forest. This process is based on the evolution of resources and current activities going on in the area; this includes the physical condition such as logging, looting, fragmentation of the forest, and other activities like the execution of mineral entry rights.

**IT 392                    3-0-3    REMOTE SENSING APPLICATIONS TO RESOURCE MANAGEMENT**

The fact that remote sensing is a distant measurement process, it enables the evaluation and monitoring of resources from remote locations.

These locations are equipped with different platform that are capable of very sensitive measurement; for example, satellite sensors are enabled with different levels of phenomenal measurements—the quality of Earth's waters, forest and air. The combination of remote sensing and some GIS techniques can be configured into resources management process, and that is the type of challenge this course focuses on.

#### **IT 393            3-0-3    GIS-(CRIME AND SOCIAL ANALYSIS)**

This is a synthesizing course involving crime identification systems, data collection and analysis, and plan preparation for related database development. Students are educated on how to review and relate crime patterns to some social trends, and how their impacts affect society. It also includes implementation of counter-measures using different GIS techniques.

#### **IT 394            4-0-4    GIS IN ECONOMIC DEVELOPMENT (Feasibility Studies)**

This course applies different GIS techniques as tools to review, analyze and forecast land use development impacts due to development trends. This includes the interpretations of the values of land and their association too different planning units that are involved in urban planning, community, and economic development. The course evaluates the types of developmental convergence, conflicts, and other challenges that result from local and regional land use development practices and how they share the economy and socioeconomic activities.

#### **IT 399            3-0-3    TRANSPORTATION AND ECONOMIC LOGISTIC**

This course fundamentally deals with goods, human and vehicular traffic across regional, state and international borders in trade transactions. The human traffic belongs to the immigration, but goods and vehicular traffic and the scales of economy or threats they bring along are covered in this course. Particular attention is paid to trade and industrial policies that support energy law, international transactions, and the components of economic dissent and creation of disaster in economic dependence among regions are also covered. The objective of the course is for the student to understand how trade collaborations are built among regions, such as pre-shipment inspections, and how to apply such collaborations as border control tools, at airport, seaport, and surface transportation checkpoints. The tools are also used to detect fraudulent and corrupt transactions, including physical threats, like transportation of explosives and other dangerous goods sanctioned by the United Nations and the United States' National Fires Protection Association.

#### **IT 407            3-0-3    REMOTE SENSING AT MICROWAVES (Terrain Analysis)**

This course is focused on using Specific characterizations of microwaves remote sensing as emphasis and techniques for qualitative or quantitative analysis of terrain burden. The burden may be of social, agricultural, climatic, or military applications. The approach is to drive students from micro terrain analysis unto research-base techniques like target acquisition, development and analysis. **Pre-requisite:** IT 392.

#### **IT 420            3-0-3    SPATIAL EPIDEMIOLOGY (Security Systems)**

This is a geodata analysis that gives the student the skills and techniques required for integration of baseline data with demographic data, such as population and disease censuses, land use budgeting, resource mapping, and land ownerships. The analysis, primarily accounts for the social components of humans and the corresponding social and health challenges, such as hunger and spread of diseases. These processes influence the physical development of humans and sometimes, the processes influence socioeconomic activities. The objective is to use the impacts of the relationships to create sustainable environments.

#### **IT 424            3-0-3    GEOSPATIAL THREATS TO AGRICULTURAL AND HUMAN**

This course teaches students the techniques of geospatial investigation--identification and mapping of geochemical migration of contaminants that threaten agricultural and human productivity. These threats are obvious in our immediate environments and have created unfavorable networks in our food systems, resulting into different alleged diseases that affect humans and plants. The subject matter is research oriented, with clear objectives--to use the investigation to establish strong correlations between geochemical contaminants and human health.

#### **IT 477            3-0-3    REMOTE SENSING OF THE ENVIRONMENT (Techniques)**

The techniques of remote sensing involved in this course are designed to give students an explicit understanding of the dimensions of the environment. This includes land, vegetative community, human dimensions, water, and air. The techniques are more applied to understanding the properties of terrestrial botanical materials (TBM) and human dimensions, and their responses to solar radiation.

The response can be due to spatial, temporal, radiometric and spectral interactions, and the course focuses on how these properties are applied in remote sensing. The changes can be due to human disturbance (anthropogenic) or natural changes. But the focus is on how to create some techniques for building better knowledge of the conditions of our intimate environments, such as water contamination, vegetation stress, and rates of urban development, draught, and many more. The course involves some basic mathematical and probabilistic calculations associated with the network of changes we see every day.

**IT 480                    3-0-3    ADVANCED REMOTE SENSING**

This course requires good eyes for details and endeavors to study the impacts of different change regimes on the environment, such as changes in urban, agriculture, and forest terrains. It prepares students for technical applications of remote sensing through computer and digital understanding of changes that occur in the physical world. The changes are due to terrestrial phase withdrawal of surface element in the environment, such as human disturbance (anthropogenic) or natural changes. But the focus is on using some techniques for creating/building better knowledge of the conditions of our intimate environments, such as water contamination, vegetation stress, and rates of urban development, draught, and many more synthetic challenges. The course involves some basic mathematical and probabilistic calculations associated with the network of changes we see every day.

**IT 485                    3-0-3    GEOSTATISTICS (Spatial Analysis)**

The ability to understand effectively use spatial statistics constitutes integral parts of training in Geographic Information Systems (GIS) and Remote Sensing specializations. Problems in spatial statistics fall into one of three major areas of analysis, depending on the type of spatial data available or the spatial process under study. The areas of analysis include point, pattern of spatially continuous data, and the analysis of regional data. This course will enable students to understand basic geostatistical concepts and applications, and become proficient in piloting related software used for spatial estimation.

**IT 486                    3-0-3    INFRASTRUCTURE RISK ANALYSIS**

The course treats different dimensions of non-abstract and comprehensive identification, review and analysis of regional intelligence, and productivity. The regional elements are based on facility definitions and contributions to infrastructure availability, readiness, and uses. The infrastructure considered include housing--residential, commercial, and bridges, and how they develop as support systems. Their vulnerability to economic and terror threats are also dealt with. It also discusses the presence of a working population, and the possibility of reverse logistics from these facilities in the marketplace. The course is about 50% vested in infrastructure targeting, availability, readiness, population, and reverse logistics modeling to alleviate demands during normal and emergency periods.

**IT 487                    3-0-3    ENVIRONMENTAL REGULATION AND IMPACT STATEMENT**

The study is a legal assessment of the environment based on professionally established rules, methodologies, and practices of a plan process. It is policy-oriented toward the predictions and assessment of impacts on specific components of the physical environment. For example, water, air and noise environments.

**IT 488                    3-0-3    EXPLOSIVES DETECTION**

This course exposes students to the art and presentation of terror plots. The dynamics and different objectives that fuel this technologically driven process are vast and very sensitive, but students are focused on the human and technological dimensions of safety in securing a very small threat zone for society.

**IT 492                    3-0-3    FOUNDATIONS OF U.S. FORCE PLANNING**

This course is a support system to the U. S. force planning and for the uniformed organizations within the National Security Decision Making Departments. The course is instrumental to students' position and basic understanding of global economy and the dynamics of politics, with respect to U. S. national interests. How these elements translate into foreign assistance programs, building of alliances, and the use of different policies to approach different problems in different parts of the world are used in this course to position students' academic consciousness--that the impact of a weak global democracy is a threat to U. S. National Security.

**IT 493                    2-0-2    ESRI AND DIGITAL GOVERNMENT (Job Seminars Resume)**

This course uses seminars on ESRI's geospatial mapping techniques and standard applications to expand on employment opportunities for students. It is meant to improve local and regional governments through data sharing at different levels of confidentiality. Seminars on concurrent information engineering technology, with emphasis on digital and e-government are also recommended for job search in the following areas: emerging E-911 and demographic recording systems, emergency management agencies, digital medical recording, taxation, political elections, and disaster and recovery management.

**TY 280                    3-0-3    SENIOR PROJECT STEM**

This course is designed to help students to gain research experience during their senior year. Student can complete the project that involves application of GIS concepts in any STEM fields at any industry/organization. A technical document must be presented at the end of the semester.

**IT 497                    3-0-3    SENIOR PROJECT (GIS Approach to STEM Education)**

This is an educational alignment course for students to demonstrate good understanding of research applications in science, technology, engineering, and mathematics (STEM). The students are allowed to choose one of the four STEM approaches for their senior project research. The research can favor any purpose, objectives or goals adopted by any foundation, industry or organization, but the project is expected to add knowledge to STEM in presenting qualitative, quantitative or policy analysis.

**IT 501                    3-0-3    LAND USE AND PLANNING AND ENVIRONMENTAL JUSTICE**

Different dynamics of data collection provides more information than the information contained in ordinary base map. One of those dynamics is land use planning, which is always focused on environmental equality. Environmental equality is an appellation which does not accomplish anything than create more land and development disputes. This course shows the aesthetics, ethical and intellectual disciplines and how more resources and political aggrandizements are applied in land use and land dispute settlements. The focus is on land use regulatory processes that serve strict social agenda in environmental justice.

**IT 502                    3-0-3    NATURAL RESOURCES AND INTERVENTIONS**

This course leads students to the management policies, maintenance and benefits of composite topographic system (land cover or terrain) and how land use and land cover jointly define regional tradition, culture and economic opportunities. Due to the fact that natural resources define the economic life wires of a people, the synchronization of regional economy with regional resources, including climate, always demands some levels of preparedness, readiness, and resilience in order to maintain a stable economy.

**IT 503                    3-0-3    ENVIRONMENTAL QUALITY--URBAN FRINGES**

This is a geodata analysis that gives the student the skills and techniques required for integration of baseline data with demographic trends, such as population and housing, land use budgeting, resource mapping, and land ownerships. The focus is the future of a region or geographic location, and the analysis primarily accounts for the economic components of urban shadow effects and the various spill-overs. The challenge is human health and social balance, such as hunger and spread of diseases. These processes influence the socioeconomic activities and the physical development of humans. The study creates different impact studies and the results are aimed at improving the urban/urban fringes relationships into sustainable environments.

**IT 507                    3-0-3    SURVEY OF GEOCHEMICAL CONTAMINATION**

This course provides students with better understanding of spatial relationships involving the law of large numbers (outcome = theoretical average, on an independent random process, repeated many times); for example, white noise modeling. The basic focus is on large number of variations and combinations of physical processes we encounter in nature which are responsible for long-term environmental conditions. These conditions include dependencies and relationships that are based on Waldo Tobler's first law of geography, "Everything is related to everything else, but near things are more related than distant things."

The modeling creates inherent knowledge and understanding on how comprehensive the structure of spatial relationships relates to scientific solutions. This course can be taken by undergraduate students and may be considered for graduate credits for students in agriculture. The students are expected to develop better observational skills and knowledge of the processes that account for balance in complex environmental relationships. Students in agriculture are encouraged to take this course.

**IT 509 3-0-3 RESOURCE CONSERVATION (Tampering of Water)**

This course expands the politics of fear on natural resources with the demands for sustainable environments and the definition of comfort; conflicts between socioeconomic activities and the conservation of energy and resources, and how the pursuit of happiness, expressions and adoption of superficial over philosophical lifestyles is exhausting available natural resources with great toll. Humans and their needs for water coexist in states of declining natural resource.

**Geospatial Engineering Technology  
(Natural Resource Management)  
(120 Credit Hours)**

The student must take and complete 63 hours of core courses and 9 hours of recommended electives. **The core courses are:** 12 hours of LUCDs courses, 18 hours of GIS courses, including labs, 12 hours of remote sensing (RS) courses, 9 hours of management courses--geodata management (GDM) courses, 6 hours of ODDs courses, 3 hour of senior project on STEM research (STEM), and 1 hour of spreadsheet lab., and 2hour of ESRI and Digital Government (ESRI). It is the duty of the student to understand and complete the general University academic requirements and the department's recommendations and requirements listed in the tables below.

**Freshman Year (33)**

First Semester		Hrs.	Second Semester		Hrs.
HI 111	World Civilization I	<input type="text"/>	EN 112	Composition II	<input type="text"/>
EN 111	Composition I	<input type="text"/>	PH 132	General Psychology	<input type="text"/>
MA 121	College Algebra	<input type="text"/>	IT 181	Computer Cartography	<input type="text"/>
CH 121	General Chemistry I	<input type="text"/>	TY 201	Problems in Engineering	<input type="text"/>
CH 121L	General Chemistry II Lab	<input type="text"/>	ND 101	Health Wellness	<input type="text"/>
IT 101	IT Essentials	<input type="text"/>	IT 115	Intro to GIS Applications	<input type="text"/>
		<input type="text"/>	PE 100	Physical Education I	<input type="text"/>
		<input type="text"/>	or		<input type="text"/>
		<input type="text"/>	MS 101	Fund. of Leadership & Mgt. I	<input type="text"/>
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>17</b>

**Sophomore Year (32)**

MA 181	Calculus I w/Ana. Geom.	<input type="text"/>	SA 223	Oral Communication	<input type="text"/>
IT 381	GIS Techniques, Utilities & Productions	<input type="text"/>	HU 201	Humanities	<input type="text"/>
	Restricted Programing Elective	<input type="text"/>	AR 214	Art Appreciation	<input type="text"/>
EN 213	Studies in Literature	<input type="text"/>	IT 291	Case Studies in Homeland Security	<input type="text"/>
PY 215	General Physics (Non-Cal)	<input type="text"/>	PE 200	Physical Education	<input type="text"/>
		<input type="text"/>	or		<input type="text"/>
PY 215L	General Physics Lab (Non-Cal)	<input type="text"/>	MS 102	Fund. of Leadership Mgt. II	<input type="text"/>
		<input type="text"/>	IT 386	Intro. To Remote Sensing	<input type="text"/>
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>16</b>

**Note:** The department recommends that courses be taken in the order they appear in the tables, but if circumstances do not support this appearance, it is the responsibility of the student to obtain permission from the department chair or program leader to get approval to take courses out of sequence.

**Junior Year (29)**

IT372	Technology in Natural Disaster Planning and Emergency Management	<input type="text"/>	IT 407	Remote Sensing at Microwaves	<input type="text"/>
IT 375	Database Management Systems	<input type="text"/>	IT 477	Remote Sensing of the Environment	<input type="text"/>
IT 385	Energy and Trans Net.	<input type="text"/>		Elective	<input type="text"/>
IT 384	Advanced GIS (Spa. Analy)	<input type="text"/>		Technical Elective	<input type="text"/>
	Restricted Technical Elective	<input type="text"/>		Technical Elective	<input type="text"/>
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>14</b>

## Senior Year (26)

IT 485	Geostatistics	<input type="checkbox"/>	3		Restricted Technical Elective	<input type="checkbox"/>	3
IT 480	Adv. Remote Sensing	<input type="checkbox"/>	3		Electives	<input type="checkbox"/>	2
	Elective	<input type="checkbox"/>	3	IT 492	Foundations of U. S. Force Planning	<input type="checkbox"/>	3
	Restricted Technical Elective	<input type="checkbox"/>	3	IT 493	ESRI and Digital Govnt. (Job Seminar)	<input type="checkbox"/>	3
		<input type="checkbox"/>		TY 280	Senior Project (STEM)	<input type="checkbox"/>	3
	<b>Total</b>	<input type="checkbox"/>	<b>12</b>		<b>Total</b>	<input type="checkbox"/>	<b>14</b>

## ELECTIVES

Choose any three elective (\*recommended)

CS 454	Web Applications	IT 390	Emergency Prep. Mgt. and Res.
TY 445	Total Quality Management	IT 481	Transportation Planning
TY 322	*Occupational Safety Management	IT 363	Transportation Logistics (Traffic)
IT 532	Spatial Data Structures Algorithms		
IT 377	*Mobile GIS Applications (Programming)	IT 389	Aerial Photo Interpretation
IT486	Infrastructure Risk Analysis	IT 399	Transportation and Econ. Logistics

## Restricted Electives

IT 391	Forest Survey and Health Restoration
IT GIS	Crime and Social
IT424	Geospatial Threats to Agricultural and Human
IT 487	Environ. Impact Studies
IT 501	Land Use Planning and Environmental Justice

## Nuclear Engineering Technology (120 Credit Hours)

The nuclear engineering technology focus is designed to prepare applicants for various activities in nuclear industry. Alcorn State University is perhaps the only University that is located within twelve miles of a major nuclear power station, and hosts one of the early warning safety stations on its campus. Nuclear engineering professionals traditionally are among the top University students and receive one of the highest salaries in engineering. Nuclear power generation, that is currently contributing 20% of the national electrical power, is an inevitable mixture for power generation for foreseeable future. Nuclear power is a prime candidate to provide fuel as society moves from gas-based economy to hydrogen-based economy and as such a graduate of this field is assured one of the highest salaries awarded in the technical field.

## Freshman Year (32)

First Semester		Hrs.	Second Semester		Hrs.		
EN 111	Composition I	<input type="checkbox"/>	3	EN 112	Composition II	<input type="checkbox"/>	3
CH 121	General Chemistry I	<input type="checkbox"/>	3	SS 111	Social Institutions	<input type="checkbox"/>	3
CH 121L	General Chemistry I Lab	<input type="checkbox"/>	1	EG 107	Intro to Computing for Engineers	<input type="checkbox"/>	3
EG 103	General Engineering	<input type="checkbox"/>	3	EG 104	Engineering Comp Lab	<input type="checkbox"/>	3
MA 121	College Algebra	<input type="checkbox"/>	3	ND 101	Health Wellness	<input type="checkbox"/>	1
		<input type="checkbox"/>		HI 111	World Civilization I	<input type="checkbox"/>	3
NE 100	Nuclear Engineering	<input type="checkbox"/>	1	PE 100	Physical Education I	<input type="checkbox"/>	1
		<input type="checkbox"/>			or	<input type="checkbox"/>	
UL 101	University Life	<input type="checkbox"/>	1	MS 101	Fund. of Leadership & Mgt. I	<input type="checkbox"/>	1
	<b>Total</b>	<input type="checkbox"/>	<b>15</b>	<b>Total</b>		<input type="checkbox"/>	<b>17</b>

## Sophomore Year (34)

MA 181	Calculus I w/Ana. Geom.	<input type="checkbox"/>	3	HU 201	Humanities	<input type="checkbox"/>	3
PY 217	General Physics (Calculus)	<input type="checkbox"/>	3	NE 205	Nuclear Reactor systems	<input type="checkbox"/>	3
EC 201	Principles of Economics I	<input type="checkbox"/>	3	PY 218	General Physics	<input type="checkbox"/>	3
EN 213	Studies in Literature	<input type="checkbox"/>	3	SA 223	Oral Communication	<input type="checkbox"/>	3



NE 200	Intro to Nuclear Eng.	<input type="checkbox"/>	3	MA 182	Calculus II w/Ana. Geom.	<input type="checkbox"/>	3
PE 200	Physical Education	<input type="checkbox"/>	1	MA 384	Differential Equations	<input type="checkbox"/>	3
	or						
MS 102	Fund. of Leadership Mgt. II	<input type="checkbox"/>	1			<input type="checkbox"/>	
	<b>Total</b>	<input type="checkbox"/>	16		<b>Total</b>	<input type="checkbox"/>	18

### Junior Year (27)

NE 301	Reactor Theory I	<input type="checkbox"/>	3	EG 313	Thermodynamics	<input type="checkbox"/>	3
EG 377	Engineering Statistics	<input type="checkbox"/>	3	NE 304	Nuclear Materials	<input type="checkbox"/>	3
EG 303	Statics	<input type="checkbox"/>	3	NE 302	Reactor Theory II	<input type="checkbox"/>	3
MA 346	Linear Algebra	<input type="checkbox"/>	3	NE 305	Intro. to Nuclear Health Physics	<input type="checkbox"/>	3
		<input type="checkbox"/>		NE 300	Radiation Instrumentation	<input type="checkbox"/>	3
	<b>Total</b>	<input type="checkbox"/>	12		<b>Total</b>	<input type="checkbox"/>	15

### Senior Year (27)

NE 401	Reactor Safety	<input type="checkbox"/>	3	NE 403	Nuclear Steam Cycle	<input type="checkbox"/>	3
NE 402	Nuclear Heat Transfer	<input type="checkbox"/>	3	NE 406	Nuclear Waste Management	<input type="checkbox"/>	3
NE 404	Nuclear Fuel Cycle	<input type="checkbox"/>	3	NE 408	Nuclear Env. Issues	<input type="checkbox"/>	3
EG 340	Engineering Economics	<input type="checkbox"/>	3	NE 410	Nuclear Computation	<input type="checkbox"/>	3
NE 400	Nuclear Design	<input type="checkbox"/>	3			<input type="checkbox"/>	
	<b>Total</b>	<input type="checkbox"/>	15		<b>Total</b>	<input type="checkbox"/>	12

## COURSE DESCRIPTIONS IN NUCLEAR ENGINEERING TECHNOLOGY (NET)

### NE 100 1-0-1 NUCLEAR ENGINEERING

This is an introductory course for students beginning their studies in nuclear engineering technology. It describes basic history of the field and what is involved in the study of the field.

### NE 200 3-0-3 INTRODUCTION TO NUCLEAR ENGINEERING

This course includes global and national energy requirements, radioactivity, radiation protection, and fission and fusion reactor concepts, types of nuclear power production reactors.

### NE 205 3-0-3 NUCLEAR REACTOR SYSTEMS

A survey of nuclear power production systems are reviewed, their major components are described. Major types of nuclear reactors are studied and advantages and disadvantages are explained and new types of advanced systems and future generations are studied.

### NE 300 3-1-3 RADIATION INSTRUMENTATION

This course studies the interaction of radiation with matter; of various nuclear radiation, principles of radiation detectors are studied. The theoretical and experimental properties of radioisotopes applied to industry are considered and evaluated from engineering technology point of view. **Pre-requisites:** PY 215, PY 216, NE 200.

### NE 301 3-0-3 NUCLEAR REACTOR THEORY I

This course is an introduction to fundamentals that apply to neutron diffusion theory, neutron moderation, conditions for criticality of nuclear reactors. **Pre-requisites:** PY 215, PY 216, NE 205

### NE 302 3-0-3 NUCLEAR REACTOR THEORY II

Continuation of NE 301. This course includes the study of basic radioactivity, nuclear and neutron physics as applied to nuclear engineering. **Pre-requisite:** NE 301.

### NE 304 3-0-3 NUCLEAR REACTOR MATERIALS

This course studies the physical, chemical and metallurgical properties of the materials that are used in structural components and fuels of the nuclear reactor systems. **Pre-requisites:** PY 215, PY 216, CH 121, CH 122 or consent of instructor.

**NE 305                    3-0-3    INTRODUCTION TO NUCLEAR HEALTH PHYSICS**

This course is to give an understanding of the discipline of health physics. Topics include the necessity, importance, acceptance and evolution of health physics discipline. Its functions and contribution in different environments that radiations are used. Professional societies in health physics and accreditation and certification. National and international Regulatory agencies and other health physics related issues.

**NE 400                    3-0-3    NUCLEAR DESIGN**

The study of conventional and advanced generation power reactors, nuclear simulators, transient analysis using available software for reactor simulators; nuclear engineering design methodology; problem formulation and case studies. **Pre-requisite:** NE 205.

**NE 401                    3-0-3    REACTOR SAFETY**

This course investigates the design base safety aspect of the nuclear reactor systems. Possible accidents that can occur are studied and the engineering safety systems that are designed to prevent all undesirable situations are explained.

**NE 402                    3-0-3    NUCLEAR HEAT TRANSFER**

This course studies transport phenomenon with emphasis on the application to nuclear reactors. **Pre-requisites:** NE 205, EG 313.

**NE 403                    3-0-3    NUCLEAR STEAM CYCLE**

This course is a continuation of NE 402 and discusses the nuclear steam generation cycle, its components description and operation, and their optimization. **Pre-requisites:** NE 402, EG 313.

**NE 404                    3-0-3    NUCLEAR FUEL CYCLE**

This course studies nuclear fuel systems, their core arrangement, core residency, and physics and engineering issues associated with them. **Pre-requisites:** NE 301, NE 302, NE 304.

**NE 406                    3-0-3    NUCLEAR WASTES MANAGEMENT**

This course studies issues associated with nuclear reactor wastes, their types, handling, treatments, and management. **Pre-requisite:** NE 404 or Consent of Instructor.

**NE 408                    3-0-3    ENVIRONMENTAL ASPECTS OF NUCLEAR POWER**

Environmental aspects of nuclear power. Environmental issues related to radiation and nuclear are studies including NORM and natural radiation environment. The type, magnitude and distribution of radioactivity added to environment by man-made activities. The evaluation of effects of radiation and radioactivity on ecosystems. **Pre-requisite:** Consent of Instructor.

**NE 410                    3-0-3    NUCLEAR COMPUTATION**

This course studies applications of computers to solve nuclear engineering problems. They include problems in multi-group neutron diffusion, transient heat transfer, optimization and stress analysis. **Pre-requisites:** NE 301, NE 302.

**Radiation Technology (Health Physics)**  
**(120 Credit Hours)**

A Baccalaureate of Science (B.S.) degree in Applied Science at Alcorn State University (ASU), with specialization in Health Physics (HP), requires about 123 credit hours as are tabulated below. This curriculum is compatible with a regular college course load. It can be completed in three or four years by a college-bound traditional student in health physics. This curriculum satisfies all the requirements for ABET accreditation for the B.S. degree in the applied science program.

**Freshman Year (37)****First Semester**

EN 111    Composition I  
 MA 121    College Algebra  
 BI 111    Intro to Biology I

**Hrs.**

☐ 3  
☐ 3  
☐ 3

**First Semester**

EN 112    Composition II  
 MA 181    Calculus I w/Ana. Geom.  
 CH 122    General Chemistry II

**Hrs.**

☐ 3  
☐ 4  
☐ 3

CH 121	General Chemistry I	<input type="checkbox"/>	3	CH 122L	General Chemistry II Lab	<input type="checkbox"/>	1
CH 121L	General Chemistry I Lab.	<input type="checkbox"/>	1	ND 101	Health Wellness	<input type="checkbox"/>	1
UL 101	University Life	<input type="checkbox"/>	1	HP 121	Computation in HP I	<input type="checkbox"/>	3
HP 111	Intro to Health Physics	<input type="checkbox"/>	3	HI 111	World Civilization I	<input type="checkbox"/>	3
PE 100	Physical Education I	<input type="checkbox"/>	1	MS 102	Fund. of Leadership & Mgt. II	<input type="checkbox"/>	1
	or				or		
MS 101	Fund. of Leadership & Mgt. I	<input type="checkbox"/>	1	PE 200	Physical Education	<input type="checkbox"/>	1
<b>Total</b>		<input type="checkbox"/>	<b>18</b>	<b>Total</b>		<input type="checkbox"/>	<b>19</b>

### Sophomore Year (34)

MA 182	Calculus II w/Ana. Geom.	<input type="checkbox"/>	4	SA 223	Oral Communication	<input type="checkbox"/>	3
PY 217	General Physics (Calculus)	<input type="checkbox"/>	3	BI 214	Hum. Ant. Phy. II	<input type="checkbox"/>	3
PY 217L	General Physics (Calculus) Lab	<input type="checkbox"/>	1	BI 214 L	Hum. Ant. Phy. II Lab	<input type="checkbox"/>	1
EC 201	Principles of Economics I	<input type="checkbox"/>	3	PY 218	General Physics II	<input type="checkbox"/>	3
EN 213	Studies in Literature	<input type="checkbox"/>	3	PY 218L	General Physics Lab	<input type="checkbox"/>	1
BI 114	Hum Ant. Phy. I	<input type="checkbox"/>	3	HP 213	HP Regulations	<input type="checkbox"/>	3
BI 114L	Hum. Ant. Phy. I Lab	<input type="checkbox"/>	1	HP 211/TY	Computation in HP II/ Circuit	<input type="checkbox"/>	2
		<input type="checkbox"/>		232	Analysis	<input type="checkbox"/>	
<b>Total</b>		<input type="checkbox"/>	<b>18</b>	<b>Total</b>		<input type="checkbox"/>	<b>16</b>

### Junior Year (25)

HU 201	Humanities	<input type="checkbox"/>	3	HP 325	Radiobiology	<input type="checkbox"/>	3
EG 377	Engineering Statistics	<input type="checkbox"/>	3	HP 311	Radiation Physics II	<input type="checkbox"/>	3
HP 301	Radiation Physics I	<input type="checkbox"/>	3	HP 321	Nuclear Measurement	<input type="checkbox"/>	3
HP 312	External Dosimetry	<input type="checkbox"/>	3	HP 362	Internal Dosimetry	<input type="checkbox"/>	3
_____	Restricted Elective	<input type="checkbox"/>	1			<input type="checkbox"/>	
<b>Total</b>		<input type="checkbox"/>	<b>13</b>	<b>Total</b>		<input type="checkbox"/>	<b>12</b>

### Senior Year (24)

HP 412	Topics in HP I	<input type="checkbox"/>	3	HP 412	Topics in Health Physics II	<input type="checkbox"/>	3
HP 494	Technical Elective in HP I	<input type="checkbox"/>	3	HP 429	Contemporary Issues in HP	<input type="checkbox"/>	3
HP 421	Principles of Rad Safety	<input type="checkbox"/>	3	HP 324	Radiation Instrumentation	<input type="checkbox"/>	3
HP 495	Technical Elective in HP II	<input type="checkbox"/>	3	HP 496	Senior Thesis	<input type="checkbox"/>	3
<b>Total</b>		<input type="checkbox"/>	<b>12</b>	<b>Total</b>		<input type="checkbox"/>	<b>12</b>

The technical electives can be in health physics, nuclear science and engineering, chemistry, physics, biology, zoology, mathematics, environmental science, computer science, or any similar topics. This curriculum is for a traditional student entering the University from high school.

For transfer and non-traditional students who wish to graduate from Alcorn State University, the residency requirement is at least thirty credit hours. Therefore, the University allows students to transfer all except thirty credit hours from a SACS accredited institution or its equivalent if they are comparable to the ABET requirements in the course description categories. This area of study can be finished in three years or less if one includes summer sessions or the transfer credit hours.

In the case of transfer students and/or life learning situations, every case is evaluated individually and the proper credit can be awarded according to University admission and graduation requirements. This curriculum is designed to satisfy the requirement set by ABET for a B.S. degree in Applied Science which is also acceptable by ABHP (the American Board of Health Physics). A student who has completed the above curriculum is qualified to start at a nuclear power plant at the level of Radiation Protection Specialist and soon be eligible for HP certification.

The courses will be offered according to the previously agreed \*document summarized in a rubric titled, "Strategic Vision For a2+2+2+2 Competency-Based Workforce Development and Health Physics Initiative". Students intending to pursue medicine after the bachelors may with advisement from program leader make the substitutions to facilitate the taking the MCAT. A hand out guide is available on request.

\*Agreement between ASU and GGNP.

#### Programing Electives

TY 272 Java, CT 326 C++, or course with approval of AT department head.

- Students may obtain permission of the chair of the department to substitute required departmental course(s) with other approved course(s) with justification signed by the area advisor.

### **COURSE DESCRIPTIONS IN HEALTH PHYSICS (HP)**

#### **HP 111 3-0-3 INTRODUCTION TO HEALTH PHYSICS**

This course is to the discipline of health physics. Topics include the necessity, importance, acceptance and evolution of health physics discipline. Its functions and contribution in different environments that radiations are used. Professional societies in health physics and accreditation and certification. National and international Regulatory agencies and other health physics related issues.

#### **HP 121 3-0-3 COMPUTATION IN HEALTH PHYSICS I**

This course enhances student's capability in using popular computational software to perform health physics types of calculations. Instructor consent is required.

#### **HP 211 3-0-2 COMPUTATION IN HEALTH PHYSICS II**

This course builds up on HP 121 and enhances the computational competency in problems related to health physics.

#### **HP 213 3-0-3 HEALTH PHYSICS REGULATIONS**

Reviewing of national and international regulations including related parts in 10 CFR and portions of 49 CFR that deals with safe shipping and receiving of Radioactive Materials and informing participants about

NCRP, ICRP, NUREG, REG Guides, etc. **Pre-requisites:** Senior standing in HP program or Consent of Instructor.

#### **HP 301 3-0-3 RADIATION PHYSICS I**

This course primarily focuses on basics of radiation, radioactive decay, equilibrium, types of radiation and their interaction with matter. This course will provide students with a strong foundation in health physics and various principles of health physics.

#### **HP 311 3-0-3 RADATION PHYSICS II**

Continuation of HP 301, primarily overviews the specific areas of dosimetry, instrumentation, radiobiology, and other educative areas within the field of Health Physics.

#### **HP 312 3-0-3 EXTERNAL DOSIMETRY**

Topics include defining external dosimetry, techniques and equipment necessary to detect and quantify them are discussed. Some of the external radiation protection methods like point kernel techniques, Monte Carlo modeling, and NCRP-147 methods will be instructed. **Pre-requisites** HP 211, HP 301, or consent of advisor.

#### **HP 321 3-0-3 NUCLEAR MEASUREMENT**

A lecture and laboratory based course that covers the principles and practice of various instruments that are used in the field of health physics. The types of instruments (GM counters, Proportional counters), different supporting electronics like amplifiers, pre-amplifiers, power supplies, counters/timers will be discussed.

#### **HP 324 3-0-3 RADIATION INSTRUMENTATION**

A lecture and laboratory based course that covers the principles and practice of various instruments that are used in the field of health physics. The types of instruments (NaI, HP Ge, LSC), range of applicability and suitability for different situations are studies and their calibration, usage and maintenance are practiced in the laboratory. **Pre-requisite** HP 311 and HP 321 or consent of instructor.

#### **HP 325 3-0-3 RADIOBIOLOGY**

Lecture based class covering aspects of molecular radiobiology, harmful effects of radiation, and acute radiation illnesses. The other topics discussed include non- stochastic and stochastic radiation effects on humans and radiation exposure related epidemiological studies.

**HP 362 3-0-3 INTERNAL DOSIMETRY**

In this course internal exposure and the techniques and instruments to identify and measure them are studied. The emphasis will be on internal radiation protection. The lecture emphasizes understanding ICRP-26, ICRP-30, ICRP-60, ICRP-66, and MIRD methods. Additionally, using internal dosimetry related software like IMBA, LUDEP is discussed. **Pre-requisites:** HP 211, HP 301, HP 311, or consent of advisor.

**HP 412 3-0-3 TOPICS IN HP I**

A lecture/seminar based course covering various topics in Health Physics such as emerging methodologies in detecting radiation, waste disposal, emergency management, or any HP related topic.

**HP 412 3-0-3 TOPICS IN HP II**

Continuation of HP 412.

**HP 421 3-0-3 PRINCIPLES OF RADIATION SAFETY**

A review of basic principles included in the areas of radiation protection, simple methods of estimating doses, and principles of radiation safety will be discussed. In addition practical demonstration of performing routine radiation surveys, calibrations of survey instruments will be discussed.

**HP 429 3-0-3 CONTEMPORARY ISSUES IN HP**

A lecture/seminar course covering special topics in Health Physics dealing with a variety of contemporary health physics issues. The seminar presenters will be selected industry, local, state, and federal regulatory and research laboratory who are active in radiation safety. **Pre-requisites:** Senior standing in HP program.

**HP 494 3-0-3 TECHNICAL ELECTIVE IN HP I (Environmental HP)**

The purpose of this class is to enhance the technical knowledge in different areas of HP.

**HP 495 3-0-3 TECHNICAL ELECTIVE IN HP II (Radiological Emergency Management)**

The purpose of this class is to enhance the technical knowledge in different areas of HP.

**HP 496 3-0-3 SENIOR PROJECT THESIS**

The purpose of the senior project is to have one to experience in development of a professional report, poster and oral presentation drawing materials from any aspects of the undergraduate Health Physics education into a presentable literature survey at professional level. It could also be a research topic in HP. **Pre-requisite:** Graduating senior standing.

**Medical Radiologic Science and Technology**  
**(60 Credits)**

The Medical Radiologic Sciences and Technology track of the Applied Science program is designed as an online "2+2" program to offer graduates of community college radiologic sciences programs the ability to obtain a bachelor of applied science degree with education in specialty areas of medical imaging. The specialty areas currently being offered are Computed Tomography (CT), Magnetic Resonance Imaging (MRI) and mammography.

The Radiologic Sciences and Technology curriculum consists of online learning coupled with clinical experience at a medical facility. Upon completion of the program, students receive the Bachelor of Applied Science degree and can apply for the advanced certification examinations in either CT, MRI, or mammography offered by the American Registry 8888 of Radiologic Technologists (ARRT)

**Junior Year (24)**

RT 320	Radiographic Anatomy POS III
RT 321	Radiographic Pathology
_____	Restricted Technical Elective
_____	Restricted Technical Elective
<b>Total</b>	

3
3
3
3
<b>12</b>

RT 325	Research Methods
RT 331	Statistics for the Health Sciences
_____	Restricted Technical Elective
_____	Restricted Technical Elective
<b>Total</b>	

3
3
3
3
<b>12</b>

## Summer (12)

### Summer I

RT 335	Information Imaging Processing	<input type="text"/>	3
RT 340	Operations Mgmt. Qualitative Methods for Healthcare	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>6</b>

### Summer II

RT 351	Health Law	<input type="text"/>	3
RT 426	Sectional Anatomy	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>6</b>

## Senior Year (24)

RT 4XX	Principles of Selected Specialty (see below)	<input type="text"/>	3
RT 4XX	Applications I of Selected Specialty (see below)	<input type="text"/>	3
_____	Restricted Technical Elective	<input type="text"/>	3
_____	Restricted Technical Elective	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>12</b>

RT 4XX	Applications II of Selected Specialty (see below) (if mammography specialty is chosen RT 475 is taken here)	<input type="text"/>	3
RT 485	Concept Integration and Review	<input type="text"/>	3
_____	Restricted Technical Elective	<input type="text"/>	3
_____	Restricted Technical Elective	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>12</b>

This curriculum is for a student entering from a community college radiologic science program under the 2+2 articulation agreement. For transfer and non-traditional students who wish to graduate from Alcorn State University, the residency requirement is at least twenty four credit hours. The community college student is allowed to transfer 60 hours and the remaining 60 hours must be completed at Alcorn State University. Twenty-eight (28) hours of the sixty (60) transferred hours is granted for the ARRT certification in radiography.

A student who has completed the above curriculum is qualified to take ARRTT (American Registry of Radiologic Technologists) Certification examination in their area of specialty.

### Specialty Courses (RT 4XX)

RT 435 Principles of Computed Tomography  
RT 440 Computed Tomography Applications I  
RT 445 Computed Tomography Applications II  
RT 450 Principles of Magnetic Resonance Imaging  
RT 455 Magnetic Resonance Imaging Applications I  
RT 460 Magnetic Resonance Imaging Applications II  
RT 465 Principles of Mammography  
RT 470 Mammography Applications  
RT 475 Mammographic Quality Assurance

Professional course of study is lockstep

Upon the successful completion of RT 485, students will be awarded an additional 28 semester hours of transfer elective credit based on required coursework completed in the previous program that enables them to sit for and earn their professional credential. Counting the professional courses including the capstone course, Advanced Standing students will be awarded 64 semester credit hours at Alcorn State University.

## COURSE DESCRIPTIONS IN MEDICAL RADIOLOGIC TECHNOLOGY (RT)

### RT 310 3-0-3 RADIOGRAPHY ANATOMY AND POSITIONING II

The course provides demonstration and film evaluation experience in positioning and related anatomy of the spine, pelvis, and lower extremities. **Pre-requisite:** RT 220.

### RT 310L 1-0-1 RADIOGRAPHIC PROCEDURES LAB II

The emphasis is placed on developing practical skills in students based on their theoretical fundamental knowledge. The applied aspects of Anatomy and Positioning II, Radiation Exposure and Radiation Protection are the primary components of the course. The Quality Management concerns for each of the procedures studied are addressed during the course. **Pre-requisite:** RT 310 (complete or in progress).

**RT 311            3-0-3    INFORMATION AND IMAGE PROCESSING**

This course is used to track students who are new to the program. It gives the students the knowledge of how software promotes applied science; hence, the students are expected to develop understanding and interest in geospatial laboratory techniques. This initial exposure to ERDAS mapping standards gives the students an early start with ERDAS software suites. Correspondingly, the students begin to see the challenges and advantages with which they can prepare to perfect on using the software to establishing strong skills in GIS and remote sensing analysis.

**RT 312            3-0-3    PRINCIPLES OF RADIOGRAPHIC EXPOSURE**

Basic Interactions of radiation and matter, Brems radiation, characteristic radiation, Planck's Quantum theory, radiographic artifacts, silver recovery, intensifying screens, radiographic grids, structure of matter, electromagnetic spectrum, x-ray production, image receptors, introduction to factors affecting quality. Preparation of technique charts for radiographic exposure. **Pre-requisite:** PY 215, RT 211 (complete or in progress).

**RT 313            3-0-3    RADIATION PROTECTION**

Examines the interactions of radiation with matter; biologic effects of ionizing radiation; quantities and units; dose response curves, patient and personnel protection. **Pre-requisite:** PY 215, RT 211 (complete or in progress).

**RT 320            3-0-3    RADIOGRAPHIC ANATOMY AND POS III**

The course provides demonstration and film evaluation experience in positioning and related anatomy of the skull, facial bones, sinuses, and mastoids. **Pre-requisite:** RT 220.

**RT 320L          1-0-1    RADIOGRAPHIC PROCEDURES LAB III**

The emphasis is placed on developing practical skills in students based on their theoretical fundamental knowledge. The applied aspects of Anatomy and Positioning III, Radiation Exposure and Radiation Protection are the primary components of the course. The Quality Management concerns for each of the procedures studied are addressed during the course. **Pre-requisite:** RT 320 (complete or in progress).

**RT 321            3-0-3    RADIOGRAPHIC PATHOLOGY**

Introduces changes that occur in disease and injury, with application to radiologic technology. Topics include respiratory, skeletal, gastrointestinal, and urinary systems. Students become familiar with the etiology, symptoms, prognosis, and imaging of disease processes of the cardiovascular, nervous, hematopoietic, endocrine, and reproductive systems. **Pre-requisite:** RT 213 (complete or in progress).

**RT 322            3-0-3    PATHOPHYSIOLOGY**

This course investigates general pathology and organ system pathology. It includes a brief review of normal structure and function, followed by more in-depth descriptions of specific pathologic processes. Students will use textbooks and Internet resources to learn the basic characteristics, etiology, pathogenesis, clinical features, and diagnostic tools including medical imaging procedures, prognoses, and therapies for each of the specific pathologies.

**RT 324            3-0-3    ADVANCED CLINICAL PRACTICE SKILLS**

This course focuses on the current healthcare delivery environment including patient assessment and medical informatics. Advanced patient assessment and care skills such as pharmacology, monitoring, medical charting, and cross-cultural communication are incorporated in the curriculum. Additional topics include an overview of considerations when working in an increasingly digital imaging environment.

**RT 325            3-0-3    RESEARCH METHODS**

This course is an introduction to methods and techniques of research in the radiologic sciences. Topics include basic terminology of research, qualitative and quantitative methods, basic research designs, and data analysis techniques.

**RT 330            3-0-3    ADVANCED DIAGNOSTIC IMAGING**

Teaches the analysis of technically advanced imaging modalities including CT, MRI, PET and other imaging modalities. **Pre-requisite:** RT 111, RT 213 (complete or in progress).

**RT 331            3-0-3    STATISTICS FOR THE HEALTH SCIENCES**

The focus of this course is to provide a statistics course specifically for health science majors using techniques and data structures relevant to clinical investigations. General topics include choosing correct procedures and using statistics to understand clinical data. Specific topics include but are not limited to study design, central tendency and variability, probability, repeated measures analysis of variance, data association and prediction, and evaluating diagnostic procedures.

**RT 335            3-0-3    INFORMATION IMAGING AND PROCESSING**

Presents computed imaging in comparison to screen-film technology. Topics include identifying components understanding how they affect the image, and quality control. Depending on where a radiographer is employed, processing radiographic images may involve screen/film systems and/or digital imaging. Today's radiographers need to be skillful with both methods of processing images to reduce repeated examinations and maintain patient dose as low as reasonably achievable. Students will first be acquainted with methods and equipment for processing film. Automatic processing and processing artifacts will be discussed. Second, students will learn about the evolution in radiology imaging to a film-less environment as they discuss digital imaging and PACS.

**RT 340            3-0-3    OPERATIONS MANAGEMENT AND QUALITATIVE METHODS FOR HEALTHCARE**

This course offers a comprehensive introduction to qualitative methods and techniques. The course will explore practical methods and analysis for operational, tactical, and strategic decisions. Topics will include techniques for forecasting, decision-making, facility location, facility layout, reengineering, staffing, scheduling, productivity, resource allocation, supply chain and inventory management, quality control, project management, queuing models for capacity, and simulation.

**RT 343            3-0-3    HEALTHCARE MARKETING**

This course prepares healthcare professionals to the concepts they need to understand to plan and launch an effective marketing initiative and covers topics such as introduction to healthcare marketing, basics of marketing and overall marketing process. It provides a comprehensive view of the marketing process, from evaluating market needs to developing a marketing campaign to evaluating marketing efforts. This course also discusses recent developments in healthcare that are affecting the marketing of health services, as well as contemporary marketing approaches.

**RT 345            3-0-3    TREND IN RADIOLOGIC SCIENCES**

This course focuses on current trends in the radiologic sciences (i.e., new equipment, new techniques, and business strategies) and is geared to the student's interest. The student will develop a paper on the topic selected under the guidance of the instructor. **Pre-requisites:** EN 111, EN 112.

**RT 347            3-0-3    PACS IN RADIOLOGY**

This course investigates the use of picture archival and communications systems and its impact on healthcare. Topics include comparison of computer-based records to traditional film records, PACS impact on teleradiology, as well as the acquisition of a system, medical-legal, productivity, image compression, and image storage and retrieval issues.

**RT 351            3-0-3    HEALTH LAW IN MEDICAL IMAGING**

This course is an introductory study of laws affecting medical imaging. Topics include administrative law, professional malpractice, patient rights, risk management, labor law, contract law, and ethical considerations.

**RT 355            3-0-3    SEMINAR**

This course requires presentation of oral and written reports on current topics in the Radiological Sciences. Students are required to prepare appropriate visual aids to illustrate their discussion. **Pre-requisite:** EN 111, EN 112.

**RT 405            4-0-4    PRACTICUM I**

This course includes intensive clinical assignment for students within a special interest area related to radiologic sciences. **Pre-requisite: Consent of Program Advisor.**



**RT 410            3-0-3    ESSENTIALS OF RADIATION THERAPY**

The course explores the machines and treatment delivery accessories used during administration of radiation therapy. The principles of radiation therapy treatment planning, including patient positioning, immobilization, and contouring techniques are reviewed. The course also presents a variety of radiation therapy treatment techniques and dose calculation methods. **Pre-requisite:** RT 312, RT 313.

**RT 411            3-0-3    QUALITY MANAGEMENT IN RADIATION SCIENCE**

Evaluation of radiographic systems to assure quality in the delivery of radiographic services. State and federal regulatory agencies assuring quality improvement will be discussed. Equipment quality control discussed and basic testing performed in the laboratory. **Pre-requisite:** RT 220, RT 310, RT 320, RT 330.

**RT 412            3-0-3    ADVANCED RADIOGRAPHIC PROCEDURES AND PATIENT CARE**

This course covers two major areas: 1. through intensive sessions, students expand their knowledge of routine and pathologic radiographic positioning and learn alternative methods for positioning patients to obtain diagnostic images. This course also acquaints students with specialized and highly technical procedures including myelography, body section radiography, vascular procedures, sialograms, and ultrasound. In addition, students learn about specialized equipment including image intensification, video recorders, cineradiography, and digital equipment; 2. The course examines the theory and principles of contrast media used in radiologic examinations and special positioning. Basic instructions on venipuncture methods and procedures for the administration of contrast agents are provided. Routes of administration, safety, basic pharmacology, dosage calculations and emergency procedures are reviewed. **Pre-requisite:** successful completion of all level 3 RT courses.

**RT 413            3-0-3    RADIOGRAPHIC EQUIPMENT AND MAINTENANCE**

The course exposes students to the basic concepts of imaging equipment theory, function, and repair. The principles of equipment installation, calibration, and quality assessment are reviewed. **Pre-requisite:** RT 111, RT 211.

**RT 414            4-0-4    PRACTICUM II**

This course is a continuation of RT 405 and includes intensive clinical assignment for students within a special interest area related to radiologic sciences. **Pre-requisite: Consent of Program Advisor.**

**RT 421            3-0-3    HEALTHCARE MANAGEMENT**

This course is an introduction to application of theories of leadership, change, and management to promote effective healthcare to individuals, families, groups and communities.

**RT 422            3-0-3    RADIATION TECHNOLOGY REVIEW AND CONCEPT INTEGRATION**

The purpose of this course is to prepare students for the American Registry of Radiologic Technologist's (ARRT) National Board Examination. Students analyze, evaluate, and critique the theory and practice of the following: care and management of the patient, radiologic analysis and positioning, radiation protection for radiography, radiation physics, and principles of radiographic technique. **Pre-requisite:** successful completion of all level 3 RT courses, RT 411, RT 412, and RT 413.

**RT 426            3-0-3    SECTIONAL ANATOMY**

This course is a study of human anatomy as viewed in sectional planes. Students will compare planar anatomy to sectional anatomy and recognize anatomical structures as seen in computed tomography and magnetic resonance imaging. Studies will include the cranium, brain, chest, abdomen, spine and pelvis.

**RT 435            3-0-3    PRINCIPLES OF COMPUTED TOMOGRAPHY**

This course explores the basic physical and technical principles of CT scanning. Computer technology, system components, image characteristics and quality control methods are introduced. Access to a CT scanner or instructor consent required.

**RT 440            3-0-3    COMPUTED TOMOGRAPHY APPLICATIONS I**

This course focuses on the use of computed tomography as an imaging tool from the technologist's perspective. Topics include a review of patient, contrast media and adverse reactions, and imaging protocols for the brain, sella turcica, orbit, temporal bone, paranasal sinuses, neck, chest, abdomen, pelvis, and spine. CT-guided interventional techniques will also be discussed. Access to a CT scanner or instructor consent required. **Pre-requisite: RADS 4723 - Principles of CT.**

**RT 445            3-0-3    COMPUTED TOMOGRAPHY APPLICATIONS II**

This course is a continuation of RT 440 and focuses on the use of computed tomography as an imaging tool from the technologist's perspective. Topics include a review of imaging protocols for the brain, sella turcica, orbit, temporal bone, paranasal sinuses, neck, chest, abdomen, pelvis, and spine. CT-guided interventional techniques will also be discussed. Access to a CT scanner or instructor consent required. **Pre-requisite: RADS 4723 - Principles of CT.**

**RT 450            3-0-3    PRINCIPLES OF MAGNETIC RESONANCE IMAGING**

This course explores the basic physical and technical principles of MRI scanning. Related systems components, physics, image characteristics, quality control methods, limitations, safety, and future developments are introduced.

**RT 455            3-0-3    MAGNETIC RESONANCE IMAGING APPLICATIONS I**

This course provides a functional understanding of the basic MRI parameters and how they are used to image specific parts of the body in the axial, coronal, and sagittal planes. The focus of the course will be on MR sequences and presentation of anatomy and pathology. Access to a MRI scanner or instructor consent required.

**RT 460            3-0-3    MAGNETIC RESONANCE IMAGING APPLICATIONS II**

This course is a continuation of RT 455 and provides a functional understanding of the basic MRI parameters and how they are used to image specific parts of the body in the axial, coronal, and sagittal planes. The focus of the course will be on MR sequences and presentation of anatomy and pathology. Access to a MRI scanner or instructor consent required.

**RT 465            3-0-3    PRINCIPLES OF MAMMOGRAPHY**

The purpose of this course is to provide the technologist with guidelines for performing quality mammography examinations. Includes the historical background of breast cancer and technical evolution of mammographic technique, essentials of the "Imaging Chain", patient education, introduction to QA, troubleshooting, instrumentation and positioning.

**RT 470            3-0-3    MAMMOGRAPHY APPLICATIONS**

The purpose of this course is to provide the technologist with guidelines for performing quality mammography examinations. The student will learn mammographic technique, methods of patient education, troubleshooting, instrumentation and positioning.

**RT 475            3-0-3    MAMMOGRAPHIC QUALITY ASSURANCE**

This course will introduce the student to the regulations established under the Mammography Quality Standards Act of 1992 (MQSA), fully implemented in 1999. The focus of the course is based on MQSA principles and quality control procedures.

**RT 480            3-0-3    APPLIED RESEARCH**

This is a capstone course involving directed research in their area of specialty culminating in a substantive paper based on the interest and needs of the student. **Pre-requisite: RADS 325.**

**RT 485            3-0-3    CONCEPT INTEGRATION AND REVIEW**

This is a capstone course involving directed research in their area of specialty culminating in a substantive paper based on the interest and needs of the student. **Pre-requisite: RADS 325.**

**Technology Management  
(Healthcare Management and Administration)  
(60 Credits)**

The Department of Advanced Technologies offers a Bachelor of Applied Science degree with an online Health Care Management and Administration Track. This career-oriented program is a two-year capstone degree program for persons holding AA, AS, or AAS degrees from an accredited two year college, or equivalent. A professionally relevant curriculum has been designed to equip students with the skills needed to seek career advancement in medical administration.

Students are prepared for mid-level management positions in all types of healthcare organizations such as hospitals, outpatient care services, physician's offices, medical equipment firms, and state or government healthcare programs.

In addition to meeting the general education core requirements, students seeking the Bachelor of Applied Sciences – Technology Management degree must meet the requirements listed below. Students should consult an academic advisor for courses which may satisfy general education core requirements. Also, some courses listed in the curriculum may require **Pre-requisites**.

The program of study is available online to meet the needs of a targeted audience of two year degreed graduates currently in the work place seeking to enhance their management skills and acquire a bachelor's degree in the process. However, some in-person sessions may be required. Examinations are done in person and students in the program must make arrangement to have a proctored exam in a place and setting approved by the department.

### Junior Year (30)

First Semester		Hrs.	Second Semester		Hrs.
TY 323	Principles of Technical Mgmt.	<input type="text"/> 3	RT 340	Operations Mgmt. and Qualitative Methods for Healthcare	<input type="text"/> 3
AC 212	Accounting Survey	<input type="text"/> 3	TY 322	Occupational Safety Mgmt.	<input type="text"/> 3
RT 343	Healthcare Marketing	<input type="text"/> 3	MG 301	Principles of Management	<input type="text"/> 3
TY 215	Industrial Research Methods	<input type="text"/> 3	CT 326	Comp Programming w/C++	<input type="text"/> 3
EG 377	Engineering Statistics	<input type="text"/> 3		Guided Elective	<input type="text"/> 3
<b>Total</b>		<input type="text"/> 15	<b>Total</b>		<input type="text"/> 15

### Senior Year (30)

RT 421	Healthcare Management	<input type="text"/> 3	TY 438	Project Management	<input type="text"/> 3
_____	Guided Elective	<input type="text"/> 3	BA 239	Business Ethics	<input type="text"/> 3
_____	Guided Elective	<input type="text"/> 3	TY 498	Industrial Internship	<input type="text"/> 3
			or		
TY 445	Total Quality Management	<input type="text"/> 3	CE XXX	Cooperative Education	<input type="text"/> 3
IT 375	Database Management Systems	<input type="text"/> 3		Guided Elective	<input type="text"/> 3
			_____	Guided Elective	<input type="text"/> 3
<b>Total</b>		<input type="text"/> 15	<b>Total</b>		<input type="text"/> 15

### Programing Electives

TY 272 Java, CT 326 C++, or course with approval of AT department head.

- Students may obtain permission of the chair of the department to substitute required departmental course(s) with other approved course(s) with justification signed by the area advisor.

### **Technology Management (Industrial)** **(60 Credits)**

The Department of Advanced Technologies offers a Bachelor of Applied Science degree with a Technology Management track online. This career-oriented program is a two-year capstone degree program for persons holding AA, AS, or AAS degrees from an accredited two year college in a technical/occupational field. Students are prepared for mid-level management positions in all types of technology driven organizations.

In addition to meeting University and General College requirements, students seeking the Bachelor of Applied Sciences – Technology Management degree must meet the requirements listed below.

Students should consult an academic advisor for courses which may satisfy General College program requirements. Also, some courses listed in the curriculum may require **Pre-requisites**.



### Sophomore Year (30)

[illegible]

### Junior Year (30)

IT 365	Server Conf. Admin	<input type="checkbox"/>	3	IT 362	Advanced Routing	<input type="checkbox"/>	3
IT 373	Web Design	<input type="checkbox"/>	3	IT 364	Introduction to Unix	<input type="checkbox"/>	3
IT 375	Database Management Systems	<input type="checkbox"/>	3	IT 374	Internet Programming	<input type="checkbox"/>	3
EG 377	Engineering Statistics	<input type="checkbox"/>	3	IT 376	Database Server Admin	<input type="checkbox"/>	3
	Technical Elective	<input type="checkbox"/>	3	IT 378	Application Development	<input type="checkbox"/>	3
	<b>Total</b>	<input type="checkbox"/>	<b>15</b>		<b>Total</b>	<input type="checkbox"/>	<b>15</b>

### Senior Year (27)

IT 471	System Analysis Design		3		Technical Elective		2
IT 495	Thesis Research		1	IT 494	Thesis		3
IT 466	Network Security		3	TY 438	Project Management		3
IT 473	Wireless Technologies		3		ATMAE Restricted Elective		3
TY 445	Total Quality Management		<u>3</u>				
					<b>Certification Examination Required</b>		<u>3</u>
	<b>Total</b>		<b>13</b>	<b>Total</b>			<b>14</b>

All students completing degree programs in the department are expected to pursue graduate studies in a cognate area. Some will enter graduate school immediately; others will work full-time while pursuing graduate studies part-time. A listing of specific courses designed to assist students for key graduate programs is below.

Computer Networking and Information Technology majors will work in diverse industrial and governmental environments which will require critical knowledge, skills, and abilities. The Information Technology faculty and its advisory council encourage computer networks, information systems, integrated manufacturing, GIS and remote sensing, energy and power systems, and computer science as priority areas. Modern industrial production operations will require networking professionals to run the array of information technologies which are the key infrastructure supporting their commerce. If additional diversification of a student's program of study is needed, an advisor will recommend a course from the list of technology course descriptions in the Description of Courses section of this catalog.

All students completing degree programs in the department are expected to pursue graduate studies in a cognate area a listing of specific courses designed to assist students for key graduate programs is below.

Computer Networking and Information Technology majors will work in diverse industrial and governmental environments which will require critical knowledge, skills, and abilities. The Information Technology faculty and its advisory council encourage computer networks, information systems, integrated manufacturing, GIS and remote sensing, energy and power systems, and computer science as priority areas. Modern industrial production operations will require networking professionals to run the array of information technologies which are the key infrastructure supporting their commerce. If additional diversification of a student's program of study is needed, an advisor will recommend a course from the list of technology course descriptions in the Description of Courses section of this catalog.

**NOTE:** Industry certification and a minimum of 100 hours of an approved internships are required for graduation. The department will assist students on identifying sites for internship. This may be done during the Fall, Spring, and Summer semesters for students to gain practical work experiences which are required in the industry.

The internship may be completed any time after the sophomore year. Certification is required by the end of the internship.

Recommended electives pool for Computer Networking Majors pursuing:

IT 333 Mobile Applications  
IT 350 Communications Systems  
IT 361 Introduction to Data Communications  
IT 363 LAN and Enterprise Networks  
IT 366 Enterprise Systems and Networking II  
IT 391 Applied Statistics I /Data Analytics  
IT 392 Applied Statistics II /Data Analytics  
IT 395 Cyber Security  
IT 397 Design of Experiment  
IT 410 Backup Recovery Systems Architecture  
IT 412 Cloud Infrastructure and Services  
IT 414 Distributed Systems and Cloud Computing  
IT 433 Mobile Applications II  
IT 461 Virtualizations Technologies  
IT 462 CCNA Review  
IT 468 Network Security II  
IT 472 Fiber Optics  
IT 477 Remote Sensing of the Environment  
TY 373 Enterprise Systems and Networks I

Or any other approved departmental elective with permission.

Programing Electives

TY 272 Java, CT 326 Computer Programming w/C++, or course with approval of AT department head.

- Students may obtain permission of the chair of the department to substitute required departmental course(s) with other approved course(s) with justification signed by the area advisor.

## **COURSE DESCRIPTIONS IN COMPUTER NETWORKING AND INFORMATION TECHNOLOGY (IT)**

### **IT 100L 0-2-1 BASIC COMPUTER SYSTEMS LAB**

This course is specifically designed for students with little or no practical background related to computers. Through complete hands-on sessions, students will learn the importance of every component inside the computer such as the motherboard, expansion cards, and the microprocessor among others. Students will assemble a computer from its individual components. Also, students will install and configure various software programs such as the operating system (Windows 98/2000) and applications such as Microsoft Office and Corel WordPerfect.

### **IT 101 3-0-3 IT ESSENTIALS**

The course introduces students to computer components, portable devices, wireless connectivity, security and safety, environmental concerns, and diagnostic tools. You learn the fundamentals of computer technology, networking, and security. The course also provides a more hands-on orientation and scenarios in which troubleshooting and tools are applied to resolve problems.

### **IT 107L 0-2-1 COMPUTER APPLICATIONS LABORATORY SPREADSHEET**

After successful completion of this class, students will be qualified to take MOUS specialist certification exam in Word at Word Expert level. Students will gain skills in formatting and organizing content, formatting documents, collaborating and customizing MS Word.

### **IT 117L 0-2-1 COMPUTER APPLICATIONS LAB - SPREADSHEETS**

After successful completing of this class, students will be qualified to take MOS Specialist certification exam in Excel at Excel Expert level. Students will gain skills in organizing and analyzing data, formatting data and content, collaborating, managing data and workbooks, and customizing excel.

**IT 127L      0-2-1    COMPUTER APPLICATIONS LAB – PRESENTATIONS**

After successful completion of this class, students will be qualified to take MOS specialist certification exam in PowerPoint at the PowerPoint Expert level. Students will gain skills in creating content, formatting content, collaborating and managing and delivering presentations.

**IT 137L      0-2-1    COMPUTER APPLICATION DATABASE LAB**

After successful completion of this class, students will be qualified to take MOS specialist certification exam in access. Students will gain skills in creating content, formatting content, collaborating and managing and delivering presentations.

**IT 162      3-0-3    COMPUTER NETWORKING FUNDAMENTALS LAB**

A laboratory course covering exercises that will teach students to setup a small computer network.

**IT 261      3-0-3    ROUTING AND SWITCHING BASICS**

This course discusses the importance of routing and switching in the networking field. Students will configure routers and switches for small to medium sized networks. Routed protocols such as TCP/IP and IPX/SPX are also discussed. Routing Protocols such as RIP and IGRP; Switching concepts such as STP, VLAN, VTP are also covered. Finally, students will learn to configure firewalls on the routers through ACL's. **Pre-requisite:** IT 162.

**IT 262      3-0-3    INTRODUCTION TO WAN**

Concepts and implementation of WAN technologies such as Analog Dialup, ISDN, X.25, and Frame Relay are covered in this course. Students are introduced to the concept of network administration through formal lectures and discussions. Finally, preparatory tests are given to students to enable them to pass the CCNA certification exam. **Pre-requisite:** IT 261.

**IT 263      3-0-3    INDUSTRIAL STANDARDS IN COMPUTER NETWORKING**

This course focuses on industry standards and certification. A preparatory class for Industry Certification.

**IT 271      3-0-3    PROGRAMMING ESSENTIALS**

This course teaches programming in Microsoft C Sharp. Topics include programming constructs and methodology, algorithm development, event driven programming and creating visual interface for applications.

**IT 362      3-0-3    ADVANCED ROUTING**

Beginning with the routing principles and extending IP addresses, this course focuses on the features; and implementation guidelines for advanced routing protocols such as OSPF, EIGRP, IS-IS and BGP. Use of multiple routing protocols in the single network is also discussed. After completing the course, students should be able to implement medium and large sized networks. **Pre-requisite:** IT 262.

**IT 363      2-2-3    LAN I DESIGN**

This course focuses on the Mainframe platform and will introduce the student to both the OS and networks using the network operating system ZOS. The student will be introduced to the most important topics of ZOS and related networking concepts. **Pre-requisite:** IT 162.

**IT 364      3-0-3    INTRODUCTION TO UNIX**

This course uses a complete hands-on approach to teach the UNIX operating system. Students begin by learning commands of UNIX followed by shell scripting and C programming. System administration in UNIX is a part of this course. Students install the Linux operating system on individual computers either as a single OS or in dual-boot mode. **Pre-requisite:** IT 162.

**IT 365      2-2-3    SERVER CONFIGURATION AND ADMINISTRATION**

This course teaches the installation, configuration, and administration of Windows Server in a network environment. Students receive a grade for this course in addition to passing the certification exam. Specific exams will be indicated before or during the course. **Pre-requisite:** IT 262. Technologies include Microsoft's Windows 2000 Server Operating System.

**IT 373            2-2-3    WEB DESIGN**

This course covers designing and creating content for the web. Topics include tables, forms and cascading style sheets (CSS) using HTML tags. The course also introduces graphics/animation techniques for websites using Macromedia tools. **Pre-requisite:** TY 107.

**IT 374            2-2-3    INTERNET PROGRAMMING**

This course covers programming techniques used to create web-based applications. It uses Microsoft's Active Server Pages (ASP) technology. In this course you will use various technologies learnt in IT 380 to create dynamic web content. Topics include server-side scripting and client-side scripting languages. The course also covers how to install and configure windows, Internet Information Server (IIS) and how to configure and set up a web site. **Pre-requisites:** TY 107, IT 271, IT 373, IT 378.

**IT 375            2-2-3    GEO/DATABASE MANAGEMENT SYSTEMS**

This course is based on ESRI's software suite and support. The focus is to create different database management objectives through clear definitions of the elements of a geographic location (tradition, culture and opportunity), and generate baseline datasets or databanks from these elements. The databanks are configured with classes of vector, raster, and annotations structured to run on different computer/GIS platforms. This will provide the student the ability and structure of data relationships, data integrity, to create diverse intelligence from data features and their attributes.

The GIS software platforms are not limited to ESRI but involve other aspects of digital data normalization, modeling, queries, forms reports, calculations and digital manipulations, with extensive and detailed analysis.

**IT 376            2-2-3    DATABASE SERVER ADMINISTRATION**

This class focuses on physical design issues such as data storage, table operations, storage methods, sequential storage, pointers, indexes, clustering and portioning. Administration issues relating to task, tools, performance monitoring, backup and recovery, distribution and integration of data, e-commerce databases, distributed databases, and the web. Pre requisite: IT 375.

**IT 378            2-2-3    APPLICATION DEVELOPMENT**

This course teaches application development in the windows environment using Microsoft Visual Basic 6.0. In this course students use various techniques learned in IT 272 to develop applications in database, file handling, objects and graphics/animation. Technologies include Microsoft Visual Basic 6.0, Microsoft Access Database, Third Party Controls - ActiveX, COM components. **Pre-requisite:** IT 271, IT 375.

**IT 410            2-2-3    BACK, RECOVERY SYSTEM ARCHITURE**

This course introduces students to concepts in Backup and recovery. Topics covered include backup and recovery terminology, recovery operations, types of storage systems, concepts and components, major sources of backup data, backup storage media, their advantages and disadvantages, planning for backup and recovery.

**IT 412            2-2-3    CLOUD INFRASTRUCTURE SERVICES**

The Cloud Infrastructure and Services (CIS) course educates participants about cloud deployment and service models, cloud infrastructure, and the key considerations in migrating cloud computing. For all definitions of cloud computing, the course has resorted to the U.S. national Institute of Standards and Technology as a guide. The course covers technologies required to build classic (traditional), virtualized, and cloud data center environments. These technologies include compute, storage, networking, desktop, and application virtualization. Additional areas of focus include backup/recovery, business continuity, security and management. Students will learn about the key considerations and steps involved in transitioning from the current state of their data center to a cloud computing environment. Upon completing the course, participants will have the knowledge to make informed decisions about migrating to cloud infrastructure and choosing the best deployment model for their organization.

**IT 414            2-2-3    DISTRIBUTED SYSTEMS AND CLOUD COMPUTING****IT 466            2-2-3    NETWORK SECURITY**

Security is one of the most important components of a computer network. Students will be introduced to the process of designing and implementing a secure computer network. **Pre-requisite:** IT 362.



**IT 471                    2-2-3    SYSTEM ANALYSIS AND DESIGN**

This course covers wireless networking and related technologies. Topics include fundamental wireless communication concepts, standards, wireless local area networks (LANs), and cellular systems. Wireless specific protocol elements are addressed in typical application environments. Data communications in multiple wireless environments is emphasized. **Pre-requisite:** IT 262.

**IT 473                    2-2-3    WIRELESS THECHNOGIES**

This course covers wireless networking and related technologies. Topics include fundamental wireless communication concepts, standards, wireless local area networks (LANs), and cellular systems. Wireless specific protocol elements are addressed in typical application environments. Data communications in multiple wireless environments is emphasized. **Pre-requisite:** IT 262.

**IT 474                    2-2-3    WIRELESS THECHNOGIES II**

This course (Wireless LAN Security) consists of the latest enterprise wireless LAN security and auditing equipment. This course addresses in detail the most up-to-date WLAN intrusion and DoS tools and techniques, functionality of the 802.11i amendment to the 82.11 standard, the inner-working of each EAP type used with wireless LANs today, and every class and type of WLAN security solution available on the market-from wireless intrusion prevention systems to wireless network management systems. Students who complete the course will acquire the necessary skills for implementing and managing wireless security in the enterprise by creating layer 2 and layer 3 hardware and software solutions with tools from the industry's leading manufacturers. **Pre-requisites:** IT 473 and IT 473L Co-requisite: IT 474L.

**IT 494                    3-0-3    THESIS DEFENSE**

This course is a continuation of IT 495. Students are required to present and defend their research findings orally using Microsoft PowerPoint or a similar format. **Pre-requisite:** IT 495 Thesis Research.

**IT 495                    1-0-1    THESIS RESEARCH**

This course is designed for graduating seniors to gain experience and show competencies in researching and preparing a technical report commensurate with graduate standing. It is for graduating students to demonstrate their capability producing professional level technical reports in their field(s) of study.

**B.S. Degree Program in Robotics and Automation Technology**  
**(120 Credit Hours)**

In the Robotics and Automation Technology program, students learn to use computer systems to program robots, manage automated systems, run databases in inventory, payroll, project planning and scheduling, and purchasing. The program is designed to place graduates into positions as managers of automation technology in industry and government. This program prepares students to be technical generalists so they can move through a lifelong career prepared to change technical occupations if and when needed. After finishing the program, the student will be able to design and manage facilities with modern, intelligent, control, computerized, and robotics systems.

The Robotics and Automation Technology program is certified by **The Association of Technology, Management, and Applied Engineering**. (ATMAE). Also, a national board certification examination is administered to complete graduation requirements: **The Association of Technology, Management, and Applied Engineering's** (ATMAE) Certified Technology Manager (CTM) examination.

**Freshman Year (32)**

First Semester		Hrs.	Second Semester		Hrs.
TY 101	Problems in Technology	<input type="checkbox"/> 3	EN 112	Composition II	<input type="checkbox"/> 3
EN 111	Composition I	<input type="checkbox"/> 3	MA 121	College Algebra	<input type="checkbox"/> 3
HI 111	World Civilization I	<input type="checkbox"/> 3	SS 111	Studies in Literature	<input type="checkbox"/> 3
		<input type="checkbox"/>	IT 117	Comp App Spread Sheets	<input type="checkbox"/> 1
IT 101	IT Essentials	<input type="checkbox"/> 3	ND 101	Health Wellness	<input type="checkbox"/> 1
		<input type="checkbox"/>		Programming Elective	<input type="checkbox"/> 3

CH 121	Chemistry	<input type="text"/>	3	UL 101	University Life	<input type="text"/>	1
CH 121 L	Chemistry Lab	<input type="text"/>	<u>1</u>	PE 100	Physical Education I	<input type="text"/>	1
		<input type="text"/>		or		<input type="text"/>	
		<input type="text"/>		MS 101	Fund. of Leadership & Mgt. I	<input type="text"/>	<u>1</u>
<b>Total</b>		<input type="text"/>	<b>16</b>	<b>Total</b>		<input type="text"/>	<b>16</b>

### Sophomore Year (30)

TY 209	Robotics Applications	<input type="text"/>	3	SA 223	Oral Communication	<input type="text"/>	3
MA 181	Calculus I w/Ana. Geom.	<input type="text"/>	4	EC 201	Principles of Economics I	<input type="text"/>	3
PY 215	General Physics (Non-Calculus)	<input type="text"/>	3	EN 213	Studies in Literature	<input type="text"/>	3
PY 215L	General Physics (Non-Calculus) Lab	<input type="text"/>	1	TY 207	CAD/CAM	<input type="text"/>	3
TY 232	Circuit Analysis	<input type="text"/>	3	TY 201	Problems in Engineering	<input type="text"/>	<u>3</u>
PE 200	Physical Education	<input type="text"/>	1			<input type="text"/>	
	or	<input type="text"/>				<input type="text"/>	
MS 102	Fund. of Leadership Mgt. II	<input type="text"/>	<u>1</u>			<input type="text"/>	
0	<b>Total</b>	<input type="text"/>	<b>15</b>	<b>Total</b>		<input type="text"/>	<b>15</b>

### Junior Year (30)

TY 301	Tech and Engin. Analysis	<input type="text"/>	3	TY 322	Occupational Safety Mgmt.	<input type="text"/>	3
TY 308	Production Planning Control	<input type="text"/>	3	TY 320	Comput. Intg. Manufacturing	<input type="text"/>	3
TY 319	Manufacturing Processes	<input type="text"/>	3	TY 339	Plant Layout Material Handling	<input type="text"/>	3
	Technical Restricted Electives	<input type="text"/>	3	TY 394	Lean Manufacturing	<input type="text"/>	3
TY 331	Electronics	<input type="text"/>	<u>3</u>	TY 323	Principles of Technical Management	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>15</b>	<b>Total</b>		<input type="text"/>	<b>15</b>

### Senior Year (28)

TY 450	Industrial Fluid Power	<input type="text"/>	3	TY 438	Project Management	<input type="text"/>	3
TY 461	PLCs	<input type="text"/>	3	TY 446/EG 495	Senior Capstone/Senior Design Project II	<input type="text"/>	3
EG 490	Senior Design Project I	<input type="text"/>	3	TY 487	Robotics Programming	<input type="text"/>	3
	Technical Elective	<input type="text"/>	2	TY 456	Machine Control Systems	<input type="text"/>	3
TY 445	Total Quality Management	<input type="text"/>	<u>3</u>		Technical Elective	<input type="text"/>	<u>2</u>
		<input type="text"/>		<b>ATMAE CERTIFICATION EXAM</b>		<input type="text"/>	
<b>Total</b>		<input type="text"/>	<b>14</b>	<b>Total</b>		<input type="text"/>	<b>14</b>

### Acceptable Electives for Robotics and Automation Technology

The Advanced Technologies faculty and its advisory council require students majoring in Robotics and Automation Technology to select electives in computer networking, management, GIS/remote sensing, computer science, and energy and power systems. Consider, after consulting your industrial technology advisor, selecting at least 3 semester hours of elective courses from the list as follows:

- Any Computer Networking (CN) or Computer Science class (CS) above the sophomore level is acceptable.
- Engineering and Electro-Mechanical Technology classes are acceptable upon consultation and permission from an assigned student advisor.
- GIST classes are acceptable upon consultation and permission from an assigned student advisor.

### Other acceptable Electives

MA 336 Mathematical Modeling  
MA 346 Linear Algebra

TY 338 Digital Electronics and Micro-processors  
TY 361 Feedback Control  
TY 405 Industrial Quality Control  
TY 467 Electrical Power Distribution Systems  
TY 490 Engineering Statistics and Random Signals  
TY 499 Environmental Hazards Management

Or any other approved departmental elective with permission.

#### Programing Electives

TY 272 Java, CT 326 Computer Programming w/C++, IT 478 C# Programming or programing with approval of AT department head.

- Students may obtain permission of the chair of the department to substitute required departmental course(s) with other approved course(s) with justification signed by the area advisor.

### **COURSE DESCRIPTIONS IN ROBOTICS AND AUTOMATION (TY)**

#### **TY 101 3-0-3 PROBLEMS IN TECHNOLOGY**

Basic technological problems and equipment characteristics, velocity, speed, pressure, and temperature calculations and transformations, international and American measurement units, trigonometry in 2D and 3D geometric forms, projections, tolerances, measurement errors, sensitivity of instruments. **Pre-requisites:** Consent of Instructor.

#### **TY 107 1-0-1 COMPUTER APPLICATIONS LAB**

This course is designed to introduce individuals with little or no computer skills to some of the basic concepts involved in computer application. The course involves a hands-on approach to learning concepts of word processing; electronic spreadsheets database management and graphics. This course will focus on Microsoft Office Suite Application Software (Word, Excel, PowerPoint, Access, and FrontPage). In addition to the above-mentioned Microsoft applications, the course introduces some basic computer concepts and a brief introduction to the Internet. This class is offered to non-technology majors.

#### **TY 174 3-0-3 ENGINEERING AND TECHNOLOGY COMPUTATION AND SIMULATION**

This course introduces students to technical computation using Matlab, Scilab and c-programming. The focus will be on solving problems in science and technology. It will explore the fundamental principles and logic behind the language. Extensive oral and written communications are required.

#### **TY 201 3-0-3 PROBLEMS IN ENGINEERING**

Vibrations, coils, nonlinear characteristics and elements, spherical elements and bodies, numeric methods in problems solving, basics of computer dynamic modeling and simulations. **Pre-requisite:** TY 101.

#### **TY 207 3-0-3 CAD/CAM**

Basic principles required for pattern drafting, machine drawing, design tolerance and fabrication drawing. This includes emphasis on isometric, oblique, orthographic and simple projections. Computer Aided-Design (CAD) and Computer Aided-Manufacturing (CAM) principles and their practical applications as fundamental elements of the contemporary product realization process. **Pre-requisites:** MA 121, TY 101 and TY 201.

#### **TY 209 3-0-3 ROBOTICS**

Industrial Robots, types and methods of control. Application to various industrial processes including programmable logic controllers, robot programming, kinematics and dynamics, robots system planning and human factors in robot applications. **Pre-requisites:** MA 121, MA 181, TY 101, TY 201.

#### **TY 215 3-0-3 INDUSTRIAL RESEARCH METHODS**

An introduction to general research methodology which involves industrial research design and statistical data analysis. Emphasis is placed on research problem identification, alternative solutions and solving research problems through proper data collection, analysis, and conclusions.

**TY 232            3-0-3    CIRCUIT ANALYSIS**

Atomic structure of matter; electron, proton, neutron, sources of electricity; battery, Ohm's law, power law, resistance, inductance, capacitance, electro-magnetism, relays transformers, electrical meters, motors, and generators. Extensive oral and written communications are required. **Pre-requisites:** MA 121, MA 225, MA 226

**TY 246            3-0-3    MACHINE CONTROL SYSTEMS**

An introduction to design and application of machine control systems. Course emphasis is placed on practical aspects and principles of automatic control systems dealing with controllers, calibrators, flow movements, relays, and switching. Extensive oral and written communications are required. **Pre-requisite:** TY 107, TY 174, MA 121, MA 225.

**TY 301            3-0-3    TECHNOLOGY AND ENGINEERING ANALYSIS**

System and process modeling, simulation, technological process design and simulation, applications of mathematics in technology, matrices in solving technological problems, basic statistics, and Monte-Carlo simulations.

**TY 308            3-0-3    PRODUCTION PLANNING AND CONTROL**

This course deals with theories and concepts that are essential when considering material flow, management problems, decision making techniques and supporting data base in manufacturing industry. Emphasis is placed on information systems and the use of contemporary manufacturing resources and a material requirement planning software and applications.

**TY 311            3-0-3    APPLIED ENGINEERING CALCULATIONS**

Differential and difference equations in engineering, Fourier and Laplace transform, linear systems, systems of equations, numerical integration and differentiation. **Pre-requisite:** TY 301.

**TY 319            3-0-3    MANUFACTURING PROCESSES**

Elements of manufacturing processes. Major emphasis will be placed on materials and processes as they pertain to the concept of inspection and quality control. Extensive oral and written communications are required. **Pre-requisite:** Consent of Instructor.

**TY 320            3-0-3    COMPUTER INTEGRATED MANUFACTURING**

This course is designed to provide students with a comprehensive technical survey of the important topics in Computer Integrated Manufacturing (CIM) Systems. Emphasis is placed on physical integration of both hardware and software in automation and production systems. **Pre-requisite:** Consent of Instructor.

**TY 322            3-0-3    OCCUPATIONAL SAFETY AND MANAGEMENT**

This course provides the student with a broad background knowledge of the safety rules and regulations with reference to OSHA, EPA, Policies and a variety of scientific studies and investigations on ways and means of controlling diseases, accidents and other industrial hazardous problems in the workplace. **Pre-requisite:** Consent of Instructor.

**TY 323            3-0-3    PRINCIPLES OF TECHNICAL MANAGEMENT**

This course presents methods of management applied to technical systems aimed at continuous improvement of those systems. Total quality management, human resources management, safety management, project management, and operations and production management are key concepts introduced in the course. The course provides the foundation of technical management approaches. Course also deals with day-to-day operational problems in contemporary manufacturing industries including Optimized Production Technology (OPT) and other ideas. Special emphasis is placed on a detail treatment of just-in-time (JIT) production scheduling, the scheduling of Flexible Manufacturing Systems (FMS) and complete treatment of distribution requirements for aggregate planning and inventory management.

**TY 331            3-0-3    ELECTRONICS**

Electronic theory is discrete devices, and integrated circuits. Applications of semi-conductor devices; diodes, SCR, and transistors. An introduction to transistors, amplifiers, oscillators and active filters. Intro to digital electronics. Extensive oral and written communications are required. **Pre-requisites:** MA 225, TY 301, TY 232.

**TY 338            3-0-3    DIGITAL ELECTRONICS AND MICRO-PROCESSORS**

The course will cover number systems, digital signals, logic gates, combinational logic, medium scale IC's sequential logic circuits, and analog converters. Micro-processor memories, PLDs, architectures, intermediate hardware and software, interface applications. Extensive oral and written communications are required. **Pre-requisite:** TY 232 Circuit Analysis.

**TY 339            3-0-3    PLANT LAYOUT AND MATERIAL HANDLING**

The fundamental theories, practices, and methods for the design of manufacturing facilities and analysis of contemporary material handling procedures. Emphasis is placed on plant layout procedures and techniques of material flow for production of goods and services.

**TY 361            3-0-3    FEEDBACK CONTROL**

Modeling and simulation. Single input and single output control, multiple input and multiple output systems. BIBO and asymptotic stability. Control of linear systems, PID controllers, optimal linear control. **Pre-requisites:** MA 225, TY 232, TY 201.

**TY 394            3-0-3    LEAN MANUFACTURING**

This course addresses modern principles and techniques of lean manufacturing. Major topics include lean principles, six sigma and continuous improvement.

**TY 401            3-0-3    APPLICATIONS IN TECHNOLOGY**

This class summarizes applications in technology covered in the first three semesters of the student's program and introduces students to applications that will be explained in detail in the following semesters.

**TY 405            3-0-3    INDUSTRIAL QUALITY CONTROL**

A course that thoroughly examines basic statistical process control concepts and applications. Emphasis is on control charts, including setting scales, charts, interpreting, and analyzing process capability. Problem solving techniques are also emphasized, and all learning is linked to the actual implementation in the workplace. Extensive oral and written communications are required. **Pre-requisite:** MA 121 or consent of instructor.

**TY 438            3-0-3    PROJECT MANAGEMENT**

Fundamentals of planning, scheduling, and control phases of project activities based on CPM, PERT, and other network based techniques. Extensive oral and written communications are required. **Pre-requisite:** TY 323 Principles of Technical Management.

**TY 445            4-0-4    TOTAL QUALITY MANAGEMENT**

An application of total quality management principles and management tools used as a framework for productivity and continuous improvement in all business and industry decisions, including market research, product definition and specification, manufacture, sales and distribution, and service and support.

**TY 445            4-0-4    Extensive oral and written communications are required. Pre-requisite:** TY 323 Principles of Technical Management.

**TY 446            3-0-3    SENIOR CAPSTONE**

Individual student computer integrated manufacturing project. This course aimed to show the knowledge of robotics, NC machines, PLCs and industrial networks. Written report and public presentation are required.

**TY 450            3-0-3    INDUSTRIAL FLUID POWER**

A study of basic hydraulics and pneumatics systems, circuits and devices. Emphasis is placed on the design and application of logic controls in hydraulics and pneumatics. Extensive oral and written communications are required. **Pre-requisite:** Consent of instructor.

**TY 456            3-0-3    MACHINE CONTROL SYSTEMS**

An introduction to design and application of machine control systems. Course emphasis is placed on practical aspects and principles of automatic control systems dealing with controllers, calibrators, flow movements, relays, and switching. Extensive oral and written communications are required. **Pre-requisite:** TY 107, TY 174, MA 121, MA 225.

**TY 461            3-0-3    PLCs**

The course will cover PLC types and architectures. Different input and output hardware. Modular and non-modular PLCs. Ladder logic programming. Treating analog measurements using PLCs. Higher level PLC programming languages. Basics of PLC networking. **Pre-requisites:** Consent of Instructor.

**TY 466            3-0-3    SCADA AND HMI SYSTEMS**

Definition and basics of SCADA and HMI systems, elements of SCADA and HMI systems, industrial databases, condition based maintenance, data logging and monitoring, alarms.

**TY 467            3-0-3    ELECTRICAL POWER DISTRIBUTION SYSTEMS**

Study of techniques and solution to fundamental problems in the electrical power industry. Emphasis on practical applications. An introduction to power system elements; three and poly-phase circuits, transmission lines, transformers and AC-DC machines. Extensive oral and written communications are required. **Pre-requisite:** TY 232 or consent of instructor.

**TY 477            3-0-3    SENSORS AND COMPUTER MEASUREMENT INDUSTRY**

The course will cover PLC types and architectures. Different input and output hardware. Modular and non-modular PLCs. Ladder logic programming. Treating analog measurements using PLCs. Higher level PLC programming languages. Basics of PLC networking. **Pre-requisites:** Consent of Instructor.

**TY 487            3-0-3    ADVANCED ROBOTICS**

Advanced engineering principles in the design and analysis of robots. Industrial application of robots. Emphasis is placed upon the use of numerically controlled machines. Extensive oral and written communications are required.

**TY 490            3-0-3    ENGINEERING STATISTICS AND RANDOM SIGNAL**

The course deals with applied statistics and stochastics in engineering. It treats basic statistics, probability, cumulative density functions, probability density functions, signal spectra, noise, filtering, modeling and simulation of random processes and signals in engineering. **Pre-requisites:** MA 225, TY 101, TY 201

**TY 495            3-0-3    SEMINAR AND THESIS RESEARCH**

This course is designed for graduating seniors to gain experience and show competencies in researching and preparing a technical report commensurate with graduate standing. It is for graduating students to demonstrate their capability producing professional level technical reports in their field(s) of study.

**TY 496            3-0-3    SEMINAR AND THESIS DEFENSE**

This course is a continuation of TY 495. Students are required to present and defend their research findings orally using Microsoft PowerPoint or a similar format. **Pre-requisite:** TY 495 Thesis Research.

**TY 498            3-0-3    INDUSTRIAL INTERNSHIP**

This course is designed for graduating seniors to gain work experience through internships/ Co-op education at an industry/organization and show competencies in research and preparing a technical document. It is for graduating students to demonstrate their capability producing professional level technical reports in their field(s) of study.

**TY 499            3-0-3    ENVIRONMENTAL HAZARDS MANAGEMENT**

This course is designed for student to gain industrial work experience in managing workplace environmental hazards. The student also completes a minimum of 7 hours each of classroom contact time in preparing for the returning from the industrial site. Satisfactory performance in the course is determined by information obtained from the industrial site supervisor and independent study assignments, and teacher evaluations. Extensive oral and written communications are required.

**PRE-ENGINEERING  
(98 Credit Hours)**

The Pre-Engineering program is designed as a cooperative undertaking between Alcorn State University and other universities having fully accredited engineering programs. This major requires students to earn approved credit hours at Alcorn and acquire the additional required courses by transferring to a cooperating institution.

Students who choose not to transfer may continue their studies and complete a Bachelor of Science degree in one of the following programs/majors: Robotics and Automation Technology, Computer Networking Information Technology, or Applied Sciences (i.e. Electro-Mechanical Engineering Technology, Geographic Information Sciences and Technology (GIST), or Computer Engineering Technology).

Designed for students who did not complete engineering prep courses in high school, this major leads to a Bachelor of Science degree in Engineering at cooperating institutions. It will also prepare students to enter their junior year at institutions that offer a Bachelor of Science degree in the following majors:

Aerospace Engineering  
Agricultural Engineering  
Chemical Engineering  
Civil Engineering  
Civil Engineering Technology  
Computer Engineering  
Computer Engineering Technology

Electrical Engineering  
Engineering Technology  
General Engineering  
Industrial Engineering  
Materials Engineering  
Mechanical Engineering  
Textile Engineering

### Freshman Year (34)

First Semester		Hrs.	Second Semester		Hrs.
EN 111	Composition I	<input type="text" value="3"/>	EN 112	Composition II	<input type="text" value="3"/>
CH 121	Chemistry	<input type="text" value="3"/>	SS 112	Social Institutions	<input type="text" value="3"/>
CH 121L	Chemistry Lab	<input type="text" value="1"/>		Programming Elective	<input type="text" value="3"/>
HI 111	World Civilization I	<input type="text" value="3"/>	EG 104	Engineering Comp Lab	<input type="text" value="3"/>
MA 121	College Algebra	<input type="text" value="3"/>	ND 101	Health Wellness	<input type="text" value="1"/>
EG 103	General Engineering	<input type="text" value="3"/>	EC 201	Principles of Economics I	<input type="text" value="3"/>
PE 100	Physical Education I	<input type="text" value="1"/>	PE 200	Physical Education	<input type="text" value="1"/>
	or			or	
MS 101	Fund. of Leadership & Mgt. I	<input type="text" value="1"/>	MS 102	Fund. of Leadership & Mgt. II	<input type="text" value="1"/>
	<b>Total</b>	<input type="text" value="17"/>		<b>Total</b>	<input type="text" value="17"/>

(Students who are not prepared to begin College Algebra and Calculus I must take the necessary **Pre-requisite** courses in Mathematics in addition to those prescribed in the curriculum.)

### Sophomore Year (34)

MA 181	Calculus I w/Ana. Geom.	<input type="text"/>	3	HU 201	Humanities	<input type="text"/>	3
PY 217	General Physics (Calculus)	<input type="text"/>	3	EG 212	Circuit Analysis II	<input type="text"/>	3
SA 201	Oral Communication	<input type="text"/>	3	PY 218	General Physics II	<input type="text"/>	3
EN 213	Studies in Literature	<input type="text"/>	3	TY 201	Problems in Engineering	<input type="text"/>	3
EG 210	Circuit Analysis I	<input type="text"/>	3	MA 182	Calculus II w/Ana. Geom.	<input type="text"/>	3
PE 200	Physical Education	<input type="text"/>	1		Technical Elective	<input type="text"/>	3
	or					<input type="text"/>	
MS 102	Fund. of Leadership Mgt. II	<input type="text"/>	1			<input type="text"/>	
	<b>Total</b>	<input type="text"/>	16		<b>Total</b>	<input type="text"/>	18

### Junior Year (30)

EG 306	Electronics I	<input type="text"/>	3	EG 313	Thermodynamics	<input type="text"/>	3
EG 377	Engineering Statistics	<input type="text"/>	3	EG 314	Mechanics of Materials	<input type="text"/>	3
EG 303	Statics	<input type="text"/>	3	EG 302	Dynamics	<input type="text"/>	3
	Technical Elective	<input type="text"/>	3	EG 305	Mechanics of Machines	<input type="text"/>	3
TY 301	Tech. Engin Analysis	<input type="text"/>	3	EG 320	Fluid Mechanics	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	15		<b>Total</b>	<input type="text"/>	15

Upon completion of the course work listed, students will transfer to an engineering degree granting institution and choose an engineering discipline as a major. The engineering program at Alcorn State University prepares students to enroll in majors listed above and closely related disciplines. Students should expect to complete their degrees in five academic years. Students who do not transfer should select a major in applied sciences.

## **COURSE DESCRIPTIONS IN PRE-ENGINEERING (EG)**

### **EG 103            3-0-3    GENERAL ENGINEERING**

An introduction to the engineering profession, its branches and functions. The distinction among the roles and responsibilities of scientists, engineers, technologists, and technicians. Various engineering disciplines are discussed, with more emphasis on electrical engineering and mechanical engineering programs.

### **EG 104            3-0-3    ENGINEERING COMPUTATION LABORATORY**

This course introduces students to technical computation using Microsoft Excel, and Mathcad software, and C programming language. The emphasis is on the applications of Excel, Mathcad and C programming to problems in engineering, science and technology. It explores the fundamental principles and logic behind the language. Extensive oral and written communications are required.

### **EG 107            3-0-3    INTRODUCTION TO COMPUTING FOR ENGINEERS**

This course introduces students to the use of computer programs and application software to solve typical engineering problems. Concepts of critical thinking applied to level mathematics courses in which the students are currently enrolled are also investigated.

### **EG 210            2-2-3    CIRCUIT ANALYSIS I**

A study of the analysis of DC circuits. Topics include Ohm's law, power, energy, series circuit, parallel circuit, series parallel circuits, nodal analysis, mesh analysis, network theories, capacitors, inductors, magnetic circuits etc. **Pre-requisite:** MA 182.

### **EG 212            2-1-3    CIRCUIT ANALYSIS II**

Continuation of EG 210. A study of the analysis of AC circuits. Topics include sinusoidal alternating waveforms, phasors; series R-L, R-C, R-L-C circuits; parallel R-C, R-L, and R-L-C circuits; Mesh analysis, nodal analysis, network theories, ac power, resonance, filters, Bode plots etc. **Pre-requisite:** EG 210.

### **EG 302            3-0-3    DYNAMICS**

This course introduces the principles of dynamics, treating the motion of a particles, the kinematics and kinetic of plane motion of rigid bodies, and principles of work and energy, impulse and momentum. A study of the fundamental behavior of dynamic systems, their formulation, analysis, and control are also covered in this course. Analytical, graphical and computer techniques are employed, emphasizing mechanical systems and their analogs. **Pre-requisites:** MA 283, MA 348, EG 303.

### **EG 303            3-0-3    STATICS**

A study of force systems in two and three dimensions composition and resolution of forces and force systems: principle of equilibrium applied to various bodies, simple structures and machine friction, centroid moments of inertia, vector algebra is used where appropriate. **Pre-requisites:** MA 283, PY 218.

### **EG 305            3-0-3    MECHANICS OF MACHINES**

**This course introduces the students** to graphical and analytical techniques for determining velocity; acceleration, and forces in mechanical linkages, cams, and gear trains, computer solution for kinematic design. **Pre-requisites:** MA 283, PY 218.

### **EG 306            2-2-3    ELECTRONICS I**

Introduction to electronic signals, semiconductors, semiconductor devices, and circuits. Application as semiconductor devices in electronic circuit such as power supplies and amplifiers. Students are required to apply knowledge gained in the course to design and build working electronic systems. Extensive written and oral communication are required. **Pre-requisite:** EG 210 or equivalent.

### **EG 313            3-0-3    THERMODYNAMICS**

An introductory course covering the fundamental concepts of classical thermodynamics regarding the property relationships of solids, liquids, vapors, and gases. In this course, the first and second laws of thermodynamics are applied to the analysis of processes energy of opened and closed systems and cycles. Introduction to heat transfer is also discussed in this course.



**EG 314            3-0-3    MECHANICS OF MATERIALS**

An introduction to the mechanical behavior of materials; stress and strain at a point, principal stresses, and strains, stress-strain relationships, determination of stresses and deformations in situation involving axial loading, torsional loading of circular cross sections, and flexural loading of straight and bending members. Stresses due to combined loading and buckling of columns. Emphasis is placed on the physical and mechanical properties of typical construction materials. **Pre-requisites:** CH 122, PY 217, MA 182.

**EG 320            2-2-3    FLUID MECHANICS**

Fluid mechanics extends the ideas developed in mechanics and thermodynamics to the study of motion and equilibrium of fluids, namely of liquids and gases. This course introduces the fundamental concepts used in analysis of fluid behavior, pressure in stationary fluids, forces on submerged surfaces, buoyancy, integral methods, the Bernoulli equations and pipeline analysis. Dimensional analysis and similitude, flow measurement and differential control volume analysis with applications are also covered in this class. Introduction to turbulence boundary layers. **Pre-requisites:** EG 203, EG 204, EG 305, MA 348.

**EG 370            2-2-3    PROGRAMMABLE LOGIC CONTROLLERS (PLCs)**

A study of the application of PLCs to control machines and processes by means of stored programs and feedback from input/output devices. Hardware and software components will be considered. Student projects required. **Pre-requisites:** EG 212, EG 306.

**EG 377            3-0-3    ENGINEERING STATISTICS**

This course is designed for engineers, scientists, technologists, and managers who routinely analyze data for product development, qualification, and control. This course covers introduction to probability with applications to engineering. Some of the topics are sets and events, probability space, conditional probability, total probability and Bayes' rule. Discrete and continuous random variables, cumulative distribution function, probability mass and density functions, expectation, moments, moment generating functions, multiple random variables, and functions of random variables. Elements of statistics, hypothesis testing, confidence intervals, least squares; and introduction to random processes will also be discussed.

**EG 400            2-2-3    DIGITAL ELECTRONICS**

Introduction to digital logic and circuits, application of basic digital design and troubleshooting using standard integrated circuits used in industry today; Student designs projects required. Extensive oral and written communications are required. They course covers flip-flops, code converters, multiplexers, de-multiplexers, registers, counters, multi-vibrators, interfacing to the analog world, semiconductor memory and programmable arrays. Student project required. Extensive oral and written communications are required. **Pre-requisite:** EG 306.

**EG 401            2-2-3    ELECTRICAL DRIVES AND MACHINES**

A study of process control and instrumentation; Topics include pressure systems, temperature control, flow control, level control systems, analytical instrumentation, industrial process techniques and instrumentation, process control methods. Student projects required. **Pre-requisite:** MA 283, EG 212, and EG 304

**EG 404            3-0-3    ELECTRICAL NETWORKS**

A study of applying network theories to solve electrical circuits and system problems. Topics include Fourier series, convolution, Laplace transforms, state-space analysis and applications. **Pre-requisite:** MA 348, EG 212.

**EG 412            3-0-3    ELECTRONIC COMMUNICATIONS/TELECOMMUNICATIONS**

This course introduces the student to the basic concepts of conventional analog electronic communications systems. The basic concepts of the transmission and reception of information using amplitude modulation (AM) and frequency modulation (FM) communications systems are introduced. Equipped with these fundamental concepts, it is expected that the student could understand and expand his/her knowledge to the more modern digital, fiber optic, microwave, satellite, cellular, and PCS telephone communications systems.

**EG 417            2-2-3    AUTOMATIC CONTROL**

A study of automatic control systems. Basic feedback control principles, system modeling, and analysis techniques. Design using frequency response, root locus, and state-variable methods. **Pre-requisites:** MA 348, EG 304.

**EG 418            3-0-3    ELECTRIC POWER SYSTEMS**

A study of power systems analysis, power transmission line parameters for symmetric and non-symmetric multi-phase lines, skin effect, long medium and short line representations. Transformer machine and load representations in power system calculations. Load flow studies, fault analysis, power system stability and economic dispatch. **Pre-requisites:** MA 182, EG 212.

**EG 429            1-0-1    APPLIED ENGINEERING I**

The course engages students in various engineering applications including circuit analysis, thermodynamics, mechanics, electronics, electrical networks and static. Students will apply a systematic approach to solve authentic engineering problems. **Pre-requisites:** EG 212, EG 203, EG 204.

**EG 430            1-0-1    APPLIED ENGINEERING II**

The course engages students in various engineering applications including mechanics, electrical networks, dynamics, control power systems, and PLC. Students will apply a systematic approach to solve authentic engineering problems. **Pre-requisite:** EG 309.

**EG 490            0-6-3    SENIOR DESIGN PROJECT I**

Students work independently or in groups to solve practical Engineering/Technology design problem. The design project is selected in consultation with a faculty advisor (also the instructor) who oversees the project and advises the student(s). **Pre-requisite:** Senior standing and consent of instructor.

**EG 495            0-6-3    SENIOR DESIGN PROJECT II**

Continuation of EG 490. The design project is selected in consultation with a faculty advisor (also the instructor) who oversees the project and advises the student(s). A final project report (thesis) and defense is required. **Pre-requisite:** EG 490.

**COURSE DESCRIPTIONS IN TRADES AND INDUSTRIAL EDUCATION**

In addition to the several degree granting programs, the department also provides professional courses in trades and industrial education to aid teachers of trade subjects in meeting state certification requirements. In order for the prospective trade and industrial teachers to begin working toward meeting the minimum requirements for certification, the following courses are offered;

TI 489/589	Philosophy and Principles of Vocational Education	3
TI 452/552	Instructional Planning in Industrial and Vocational Programs	3
TI 451/518	Development of Use of Instructional Materials in Industrial	3
	Vocational Programs	3
TI 450/550	Delivering Instruction in Industrial and Vocational Programs	3
IE 326/526	Principles, Objectives and Evaluation of Industrial	
	Vocational Programs	3
IE 316/516	Organizing and Managing the Learning Environment in	
	Industrial and Vocational Programs	3

**COURSE DESCRIPTIONS IN TRADES AND INDUSTRIAL EDUCATION****TI 325            3-0-3    TRADE JOB AND OCCUPATIONAL ANALAYSIS AND COURSE CONSTRUCTION**

The development of an orderly procedure for identifying and listing instructional elements to be used in teaching a trade or occupation. Planning an operational informational breakdown of topics for useful elements in trade reference to exploring, investigating, and choosing an occupation suitable to one's interest, physical and intellectual ability.

**TI 450/550       3-0-3    DELIVERING INSTRUCTION IN INDUSTRIAL AND VOCATIONAL PROGRAMS**

Teaching methods and techniques of current trends and problems in management of laboratory courses.

**TI 451/518      3-0-3      DEVELOPMENT AND USE OF INSTRUCTIONAL MATERIALS IN INDUSTRIAL AND VOCATIONAL PROGRAMS**

Identification, development and use of instructional aids and materials, including job instruction, information and planning sheets.

**TI 452/552      3-0-3      INSTRUCTIONAL PLANNING IN INDUSTRIAL AND VOCATIONAL PROGRAMS**

A study of the problems and practices underlying curriculum construction in Trade and Industrial Education. A study of the relationship between general education and vocational education on the secondary level.

**TI 453      3-0-3      DIRECTED TEACHING IN TRADE AND INDUSTRIAL EDUCATION**

Directed teaching includes eight weeks of laboratory experience, observing and teaching in one of the cooperating educational centers, and participation in a pre-seminar and post-seminar. These seminars are designed to identify and discuss practical guidelines for the directed teaching process, with special emphasis given to analysis and evaluation of on-the-field experiences.

**TI 589      3-0-3      PHILOSOPHY AND PRINCIPLES OF VOCATIONAL EDUCATION**

Trend, development and operation of vocational and technical programs with special emphasis placed on trade and industrial education

## Department of Agriculture

*Victor Njiti, Ph.D., Chairperson*

*Morris-Boykin Agricultural Science Bldg.*

*Telephone: (601) 877-6572*

*Fax: (601) 877-6523*

The Department of Agriculture at Alcorn State University is dedicated to training students for successful careers in the Agriculture Sciences. The disciplines offered prepare students for a private sector career and/or graduate/professional school. The total aim is to equip the student with practical knowledge and skills based on theoretical and proven techniques. The broad span of the Agriculture Sciences is dynamic; therefore, it is imperative that students be involved in every aspect of their educational endeavor. The faculty members are highly trained and academically aggressive. Degrees are conferred after successful completion of courses in the following areas: agricultural economics, agricultural education, general agriculture, animal science, environmental science, forestry, plant and soil science, biotechnology, international option in agricultural economics and agribusiness management.

The programs are designed with student input whereby course offerings greatly impact the student's level of success. Employment opportunities are vast. Great strides are taken to ensure that the programs offered are future oriented, yet applicable to the present agricultural industry keeping the avenues of graduate and professional school as priorities.

The Department of Agriculture is also concerned with conducting research and service activities that are in keeping with the functions of land-grant colleges.

### Bachelor of Science in Agricultural Economics (120 Credit Hours)

#### Freshman Year (32)

First Semester		Hrs.	Second Semester		Hrs.		
EN 111	Composition I	<input type="text"/>	3	EN 112	Composition II	<input type="text"/>	3
BI 111	Introduction to Biology I	<input type="text"/>	3	BI 124	General Botany	<input type="text"/>	3
HI 111	World Civilization I	<input type="text"/>	3	BI 124L	General Botany Lab	<input type="text"/>	1
MA 121	College Algebra	<input type="text"/>	3	MA 132	Trigonometry	<input type="text"/>	3
AE 111	Fund. & Concepts in Ag.	<input type="text"/>	3	ND 101	Health and Wellness	<input type="text"/>	1
UL 101	University Life	<input type="text"/>	1	CS 100	Info. Tech. Proficiency	<input type="text"/>	1
		<input type="text"/>		PS 122	Crop Production	<input type="text"/>	4
	<b>Total</b>	<input type="text"/>	16		<b>Total</b>	<input type="text"/>	16

#### Sophomore Year (32)

EN 213	Studies in Literature	<input type="text"/>	3	BI 311	Survey of Biological Sciences	<input type="text"/>	3
BI 121	General Zoology I or	<input type="text"/>	3	EC 202	Principles of Economics II	<input type="text"/>	3
CH 121	General Chemistry I	<input type="text"/>			Free Elective	<input type="text"/>	1
BI 121L	General Zoology I Lab or	<input type="text"/>	1			<input type="text"/>	
CH 121L	General Chemistry I Lab	<input type="text"/>		BA 233	Business Comp. App. I	<input type="text"/>	3
AS 213	Animal Production	<input type="text"/>	3	AR 214	Art Appreciation	<input type="text"/>	3
AE 213	Principles of Ag. Econ	<input type="text"/>	3	PH 132	General Psychology	<input type="text"/>	3
SS 111	Social Institutions	<input type="text"/>	3			<input type="text"/>	
	<b>Total</b>	<input type="text"/>	16		<b>Total</b>	<input type="text"/>	16

#### Junior Year (30)

AC 213	Financial Accounting	<input type="text"/>	3	AE 356	Mkt. Ag. Products Coop	<input type="text"/>	3
AE 325	Farm Rec and Acct	<input type="text"/>	3	AE 346	Agricultural Price Analysis	<input type="text"/>	3
MA 377	Statistics I	<input type="text"/>	3	MA 223	Intro. to Analysis w/App.	<input type="text"/>	3
AE 215	Agricultural Finance	<input type="text"/>	3		Free Elective	<input type="text"/>	3
SA 223	Oral Communications	<input type="text"/>	3	PS 315	Soils	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	15		<b>Total</b>	<input type="text"/>	15

### Senior Year (26)

AG 315	Farm Mechanics	<input type="text"/>	3
AE 365	Free Elective	<input type="text"/>	3
AE 475	Microecon. In Agric. or Production Economics	<input type="text"/>	3
AE 497	Ag. Econ. Seminar	<input type="text"/>	1
AE 463	Agriculture Statistics	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>13</b>

AE 478	Farm Org Management	<input type="text"/>	4
AE 438	Research in Ag Econ.	<input type="text"/>	3
IA 302	Econ. of Ag. Dev. & Trade or Land Economics	<input type="text"/>	3
AE 467		<input type="text"/>	
AG 499	Thesis or Internship	<input type="text"/>	3
AE 439	<b>Total</b>	<input type="text"/>	<b>13</b>

### Bachelor of Science in Agricultural Economics (International Agriculture Emphasis) (120 Credit Hours)

#### Freshman Year (32)

First Semester		Hrs.
EN 111	Composition I	<input type="text"/> 3
BI 111	Introduction to Biology I	<input type="text"/> 3
HI 111	World Civilization I	<input type="text"/> 3
MA 121	College Algebra	<input type="text"/> 3
AE 111	Fund. & Concepts in Ag.	<input type="text"/> 3
UL 101	University Life	<input type="text"/> 1
	<b>Total</b>	<input type="text"/> <b>16</b>

Second Semester		Hrs.
EN 112	Composition II	<input type="text"/> 3
BI 124	General Botany	<input type="text"/> 3
BI 124 L	General Botany Lab.	<input type="text"/> 1
PS 122	Crop Production	<input type="text"/> 4
	Foreign Lang Elective	<input type="text"/> 3
ND 101	Health and Wellness	<input type="text"/> 1
CS 100	Info. Tech. Proficiency	<input type="text"/> 1
	<b>Total</b>	<input type="text"/> <b>16</b>

#### Sophomore Year (32)

SS 111	Social Institutions	<input type="text"/> 3
BI 121	General Zoology I or	<input type="text"/> 4
CH 121	General Chemistry I	<input type="text"/>
AS 213	Animal Production	<input type="text"/> 3
AE 213	Principles of Ag. Econ.	<input type="text"/> 3
SA 223	Oral Communication	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> <b>16</b>

BI 311	Survey of Biological Science	<input type="text"/> 3
EC 202	Principles of Econ II	<input type="text"/> 3
	Free Elective	<input type="text"/> 1
	Free Elective	<input type="text"/> 3
PH 132	General Psychology	<input type="text"/> 3
EN 213	Studies in Literature	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> <b>16</b>

#### Junior Year (30)

AC 213	Financial Accounting	<input type="text"/> 3
AE 325	Farm Rec and Accounts	<input type="text"/> 3
AE 365 AE	Microecon. in Agric. or:	<input type="text"/> 3
475	Production Economics	<input type="text"/>
MA 377	Statistics I	<input type="text"/> 3
AE 215	Agricultural Finance	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> <b>15</b>

AE 356	Mkt. Ag. Products Coop	<input type="text"/> 3
AE 346	Agricultural Price Analysis	<input type="text"/> 3
IA 302 AE	Econ. of Ag. Dev. & Trade or Land	<input type="text"/> 3
467	Economics	<input type="text"/>
BA 226	Intro. to Small Bus. Develop.	<input type="text"/> 3
	Free Ag Elective	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> <b>15</b>

#### Senior Year (26)

MA 223	Intro. to Analysis w/App.	<input type="text"/> 3
AE 497	Ag. Economics Seminar	<input type="text"/> 1
BA 303	International Business	<input type="text"/> 3
PS 315	Soils	<input type="text"/> 3
		<input type="text"/>
AE 463	Agriculture Statistics	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> <b>13</b>

AE 478	Farm Org Management	<input type="text"/> 4
AG 499	Thesis	<input type="text"/> 3
AE 438	Research in Ag Econ.	<input type="text"/> 3
IA 482	World Food Prod. Dist. or Prod	<input type="text"/> 3
AE 475	Economics or	<input type="text"/>
IA 510	Research Development	<input type="text"/>
	<b>Total</b>	<input type="text"/> <b>13</b>

## Bachelor of Science in Agribusiness Management (120 Credit Hours)

### Freshman Year (31)

First Semester		Hrs.
EN 111	Composition I	<input type="text"/> 3
BI 111	Intro. to Biology I	<input type="text"/> 3
HI 111	World Civilization I	<input type="text"/> 3
MA 121	College Algebra	<input type="text"/> 3
AE 111	Fund. & Concepts in Ag.	<input type="text"/> 3
UL 101	University Life	<input type="text"/> 1
<b>Total</b>		<input type="text"/> 16

Second Semester		Hrs.
EN 112	Composition II	<input type="text"/> 3
BA 133	Intro. to Bus. Comp. Appl.	<input type="text"/> 3
PS 122	Crop Production	<input type="text"/> 4
PH 132	General Psychology	<input type="text"/> 3
ND 101	Health and wellness	<input type="text"/> 1
CS 100	Info. Tech. Proficiency	<input type="text"/> 1
<b>Total</b>		<input type="text"/> 15

### Sophomore Year (31)

EN 213	Studies in Literature	<input type="text"/> 3
CH 121	General Chemistry I	<input type="text"/> 4
AC 213	Financial Accounting	<input type="text"/> 3
AE 213	Principles of Ag. Econ	<input type="text"/> 3
AB 366	El. Meth. Quantitative Analysis	<input type="text"/> 3
<b>Total</b>		<input type="text"/> 16

SA 223	Oral Communication	<input type="text"/> 3
EC 202	Principles of Economics II	<input type="text"/> 3
AR 214	Art Appreciation	<input type="text"/> 3
AC 214	Managerial Accounting	<input type="text"/> 3
AN 320	Leaderships	<input type="text"/> 3
<b>Total</b>		<input type="text"/> 15

### Junior Year (30)

AS 213	Animal Production.	<input type="text"/> 3
MA 377	Statistics I	<input type="text"/> 3
PS 315	Soils	<input type="text"/> 3
AE 215	Agricultural Finance	<input type="text"/> 3
AE 325	Farm Rec. and Accts.	<input type="text"/> 3
<b>Total</b>		<input type="text"/> 15

AB 392	Ag Bus. Marketing or	<input type="text"/> 3
AE 356	Mkt. Ag. Prod. Coop	<input type="text"/> 3
AE 346	Agricultural Price Analysis	<input type="text"/> 3
AE 365	Microeconomics Ag. or	<input type="text"/> 3
EC 420	Managerial Economics	<input type="text"/> 3
PS 497	Ag. Environment Law	<input type="text"/> 3
MG 301	Principles of Management	<input type="text"/> 3
<b>Total</b>		<input type="text"/> 15

### Senior Year (28)

AB 491	Agribusiness Mgt.	<input type="text"/> 3
AB 493	Farm Ranch App.	<input type="text"/> 3
AE 463	Agricultural Statistics	<input type="text"/> 3
_____	Ag. Elective	<input type="text"/> 3
_____	Free Elective	<input type="text"/> 3
<b>Total</b>		<input type="text"/> 15

AE 478	Farm Org Management	<input type="text"/> 4
MG 320	Organizational Behavior or Ag. Elective	<input type="text"/> 3
AG 499	Thesis or	<input type="text"/> 3
AB 494	Agri-business Internship	<input type="text"/> 3
_____	Bus/Ag. Econ. Elective	<input type="text"/> 3
<b>Total</b>		<input type="text"/> 13

## Bachelor of Science in Agricultural Sciences Plant and Soil Science Emphasis (120 Credit Hours)

### Freshman Year (33)

First Semester		Hrs.
BI 111	Intro. to Biology I	<input type="text"/> 3
EN 111	Composition I	<input type="text"/> 3
CH 121	General Chemistry	<input type="text"/> 4
HI 111	World Civilization I	<input type="text"/> 3
AE 111	Fund. & Concepts in Ag.	<input type="text"/> 3
UL 101	University Life	<input type="text"/> 1
<b>Total</b>		<input type="text"/> 17

Second Semester		Hrs.
EN 112	Composition II	<input type="text"/> 3
CH 122	General Chemistry II & Lab	<input type="text"/> 4
PS 122	Crop Production	<input type="text"/> 4
PH 132	General Psychology	<input type="text"/> 3
ND 101	Health and Wellness	<input type="text"/> 1
CS 100	Info. Tech. Proficiency	<input type="text"/> 1
<b>Total</b>		<input type="text"/> 16

### Sophomore Year (29)

EN 213	Studies in Literature	<input type="text"/>	3
CH 221	Organic Chemistry I & Lab	<input type="text"/>	4
PS 205	Principles of Genetics	<input type="text"/>	3
MA 121	College Algebra	<input type="text"/>	3
PS 220	Principles of Cell Tissue Culture	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>16</b>

AE 213	Prin. Of Agricultural Econ	<input type="text"/>	3
SA 223	Oral Communication	<input type="text"/>	3
CH 222	Organic Chemistry II	<input type="text"/>	4
		<input type="text"/>	
	Elective (Fine Arts)	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>13</b>

### Junior Year (28)

PS 439	Soil Microbiology	<input type="text"/>	3
PS 315	Soils	<input type="text"/>	3
PS 316	General Horticulture	<input type="text"/>	4
PS 482	Weed Control	<input type="text"/>	3
PS 320	Biomass Bioenergy	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>16</b>

PS 305	Plant Devt. Physiology	<input type="text"/>	3
AE 463	Ag Statistics	<input type="text"/>	3
PS 345	Landscape Gardening	<input type="text"/>	3
		<input type="text"/>	
PS 346	General Entomology	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>12</b>

### Senior Year (30)

PS 490	Research Methods	<input type="text"/>	3
PS 428	Crop Improvement	<input type="text"/>	3
PS 459	Soil Fertility	<input type="text"/>	3
PS 437	Soil Cons. Land Use	<input type="text"/>	3
PS 441	Gen Plant Pathology	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>15</b>

PS 446	Soil Morp. Classif.	<input type="text"/>	3
PS 447	Forage Crops	<input type="text"/>	3
PS 448	Soil Management	<input type="text"/>	3
PS 449	Vegetable Production	<input type="text"/>	3
PS 475	Plant Breeding	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>15</b>

### Bachelor of Science in Agricultural Sciences Forestry Emphasis (120 Credit Hours)

This is a cooperative program with Mississippi State University. Students who do not transfer to Mississippi State's B.S. Degree in Forestry program may continue their studies at Alcorn State University and complete a B.S. Degree in Plant and Soil Science, majoring in Forestry.

### Freshman Year (33)

First Semester		Hrs.
EN 111	Composition I	<input type="text"/> 3
BI 111	Intro. to Biology I	<input type="text"/> 3
CH 121	General Chemistry I	<input type="text"/> 4
PE 100	Physical Education I or	<input type="text"/>
MS 111	Military Science I	<input type="text"/> 1
AE 111	Fund. & Concepts in Ag..	<input type="text"/> 3
UL 101	University Life	<input type="text"/> <u>1</u>
<b>Total</b>		<input type="text"/> <b>15</b>

Second Semester		Hrs.
EN 112	Composition II	<input type="text"/> 3
BI 124	General Botany	<input type="text"/> 4
CH 122	General Chemistry II & L	<input type="text"/> 4
PE 201	Phys. Ed. Activity or	<input type="text"/> 1
MS 112	Military Science II	<input type="text"/>
MA 121	College Algebra	<input type="text"/> 3
HU 201	Humanities	<input type="text"/> <u>3</u>
<b>Total</b>		<input type="text"/> <b>18</b>

### Sophomore Year (30)

EN 213	Studies in Literature	<input type="text"/> 3
SA 223	Oral Communication	<input type="text"/> 3
SS 111	Social Institutions	<input type="text"/> 3
AE 213	Prin. of Ag. Economics	<input type="text"/> 3
PS 242	Wood Products	<input type="text"/> <u>3</u>
<b>Total</b>		<input type="text"/> <b>15</b>

AR 214	Art Appreciation	<input type="text"/> 3
CS 201	Intro. to Comp. Prog. in Visual Basic	<input type="text"/> 3
PS 257	Wood Science Tech	<input type="text"/> 3
HI 111	World Civilization I	<input type="text"/> 3
PS 220	Prin. Cell Tissue Culture	<input type="text"/> <u>3</u>
<b>Total</b>		<input type="text"/> <b>15</b>

### Junior Year (26)

PS 351	Forestry	<input type="text"/> 3
PS 315	Soils	<input type="text"/> 3
CH 315	Survey of Organic Chem	<input type="text"/> 4
PS 354	Forest Pathology	<input type="text"/> <u>3</u>
<b>Total</b>		<input type="text"/> <b>13</b>

PS 353	Forestry Environment	<input type="text"/> 3
PS 346	Gen. Entomology	<input type="text"/> 3
PS 316	General Horticulture	<input type="text"/> 4
EN 351	Technical Writing	<input type="text"/> <u>3</u>
<b>Total</b>		<input type="text"/> <b>13</b>

**Senior Year (31)**

AG 499	Thesis	<input type="text"/>	3
PS 439	Internship	<input type="text"/>	6
AE 463	Agri Statistics	<input type="text"/>	3
PS 478	Seminar	<input type="text"/>	1
PS 421	Wood Chemistry	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>16</b>

PS 457	Forest Management	<input type="text"/>	3
PS 497	Agri. Environnent	<input type="text"/>	3
PS 495	Exp. Design	<input type="text"/>	3
PS 475	Plant Breeding	<input type="text"/>	3
PS 482	Weed Control	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>15</b>

**Bachelor of Science in Agricultural Sciences**  
**Animal Science Emphasis**  
**(120 Credit Hours)**
**Freshman Year (27)**

<b>First Semester</b>		<b>Hrs.</b>	
EN 111	Composition I	<input type="text"/>	3
BI 121	General Zoology I	<input type="text"/>	3
HI 111	World Civilization I	<input type="text"/>	3
AE 111	Fund. & Concepts in Ag.	<input type="text"/>	3
UL 101	University Life	<input type="text"/>	<u>1</u>
<b>Total</b>		<input type="text"/>	<b>13</b>

<b>Second Semester</b>		<b>Hrs.</b>	
EN 112	Composition II	<input type="text"/>	3
BI 122	General Zoology II	<input type="text"/>	4
AS 111	Poultry Production	<input type="text"/>	3
ND 101	Health and Wellness	<input type="text"/>	1
MA 121	College Algebra	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>14</b>

**Sophomore Year (29)**

EN 213	Studies in Literature	<input type="text"/>	3
SS 111	Social Institutions	<input type="text"/>	3
CH 121	General Chemistry I	<input type="text"/>	4
AS 213	*Animal Production	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>13</b>

SA 223	Oral Communications	<input type="text"/>	3
CH 122	General Chemistry II & Lab	<input type="text"/>	4
AS 233	Meat and Animal Products	<input type="text"/>	3
MU 213	Music Appreciation or	<input type="text"/>	
AR 214	Art Appreciation	<input type="text"/>	3
HU 201	Humanities	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>16</b>

**Junior Year (35)**

AS 353	*Intro to Nutrition	<input type="text"/>	3
BI 325	General Microbiology	<input type="text"/>	4
BI 355	General Parasitology	<input type="text"/>	4
AS ____	Elective	<input type="text"/>	3
AE 213	Princ. of Ag. Eco	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>17</b>

CS 201	Intro. to Comp. Prog. in Visual Basic	<input type="text"/>	3
AS 323	*Livestock Dis. Sanitarew	<input type="text"/>	3
AS 343	*Ana Phys. of Farm Animal	<input type="text"/>	3
AS 303	Livestock Judging	<input type="text"/>	3
AS 216	Swine Production	<input type="text"/>	3
AS 363	Animal Management	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>18</b>

**Senior Year (29)**

AG 458	Special Problem	<input type="text"/>	1
AS 433	*Physiology of Reproduction	<input type="text"/>	3
PS 447	Forage Crops	<input type="text"/>	3
BI 445	Genetics	<input type="text"/>	4
AE 463	Agri. Statistics	<input type="text"/>	3
	Elective	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>17</b>

AS 423	*Livestock Breeding	<input type="text"/>	3
<del>AS 439</del>	Internship Internship	<input type="text"/>	6
AG 499	*Thesis	<input type="text"/>	<u>3</u>
<b>Total</b>		<input type="text"/>	<b>12</b>

**\*A grade of C or higher is required to graduate. Two of AS 111, 216, and 363 electives are mandatory.**



**Bachelor of Science in Agricultural Sciences  
Veterinary Science Emphasis  
(120 Credit Hours)**

**Freshman Year (29)**

First Semester		Hrs.	Second Semester		Hrs.		
EN 111	Composition I	<input type="text"/>	3	EN 112	Composition II	<input type="text"/>	3
BI 121	General Zoology I	<input type="text"/>	3	BI 122	General Zoology II	<input type="text"/>	4
HI 111	World Civilization I	<input type="text"/>	3	AS 111	Poultry Production	<input type="text"/>	3
PE 101	Physical Education or	<input type="text"/>	1	PE 201	Phys. Ed. Activity or	<input type="text"/>	
MS 111	Military Science	<input type="text"/>		MS 112	Military Science	<input type="text"/>	1
AE 111	Fund. & Concepts in Ag.	<input type="text"/>	3	ND 101	Health and Wellness	<input type="text"/>	1
UL 101	University Life	<input type="text"/>	1	MA 121	College Algebra	<input type="text"/>	3
Total		<input type="text"/>	14	Total		<input type="text"/>	15

**Sophomore Year (32)**

EN 213	Studies in Literature	<input type="text"/>	3	BI 325	General Microbiology	<input type="text"/>	4
CH 221	Organic Chemistry I & Lab	<input type="text"/>	4	PH 132	General Psychology	<input type="text"/>	3
PY 215	General Physics	<input type="text"/>	4	PY 216	General Physics & Lab	<input type="text"/>	4
AS 213	Animal Production	<input type="text"/>	3	SA 223	Oral Communications	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	14	CH 222	Organic Chemistry II	<input type="text"/>	4
				<b>Total</b>		<input type="text"/>	18

**Junior Year (30)**

HU 201	Humanities	<input type="text"/>	3	CS 201	Intro. to Comp. Prog. in Visual Basic	<input type="text"/>	3
AS 323	Livestock Dis. Sanitation	<input type="text"/>	3	PS 346	General Entomology	<input type="text"/>	4
MA 135	Pre Calculus	<input type="text"/>	4	AS 343	Ana. Phy. Of Farm Ani.	<input type="text"/>	3
AS 353	Intro to Nutrition	<input type="text"/>	3	BI 326	Pharmacology	<input type="text"/>	3
AS 478	Seminar in Animal Science	<input type="text"/>	1		Animal Sci Elective	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	14	<b>Total</b>		<input type="text"/>	16

**Senior Year (29)**

BI 446	Histology	<input type="text"/>	3	AG 499	Thesis	<input type="text"/>	3
AE463	Agri. Statistics	<input type="text"/>	3	AS 439	Agriculture Internship I	<input type="text"/>	3
BI 445	Genetics	<input type="text"/>	4	AS 440	Agriculture Internship II	<input type="text"/>	3
CH 331	Biochemistry I w/lab	<input type="text"/>	4		Electives	<input type="text"/>	3
PS 447	Forage Crops	<input type="text"/>	3			<input type="text"/>	
<b>Total</b>		<input type="text"/>	17	<b>Total</b>		<input type="text"/>	12

**A grade of C or higher is required to graduate. Two of AS 111, 216, and 363 electives are mandatory  
Electives courses: AS 111, 216, 363, 303, 433, and BI 355**

**Bachelor of Science in Agricultural Sciences  
Environmental Science Emphasis  
(120 Credit Hours)**

**Freshman Year (33)**

First Semester		Hrs.	Second Semester		Hrs.		
EN 111	Composition I	<input type="text"/>	3	EN 112	Composition II	<input type="text"/>	3
BI 111	Intro. to Biology I	<input type="text"/>	3	PS 122	Crop Production	<input type="text"/>	4
AE 111	Fund. & Concepts in Ag.	<input type="text"/>	3	PE 201	Phys. Ed. Activity or	<input type="text"/>	1
PE 101	Physical Education or	<input type="text"/>	1	MS 102	Fund. of Leadership & mgt.II	<input type="text"/>	
MS 101	Fund. of Leadership.& Mgt.I	<input type="text"/>		CH 122	Gen. Chemistry II	<input type="text"/>	3
MA 121	College Algebra	<input type="text"/>	3	ND 101	Health and Wellness	<input type="text"/>	1
CH 121	Gen. Chemistry I & Lab	<input type="text"/>	4	HI 111	World Civilization I	<input type="text"/>	3
UL 101	University Life	<input type="text"/>	1			<input type="text"/>	
Total		<input type="text"/>	18	Total		<input type="text"/>	15

## Sophomore Year (32)

EN 213	Studies in Literature	<input type="text"/>	3
GT 102	American Government	<input type="text"/>	3
CS 202	Programming in C++ I	<input type="text"/>	3
AE 213	Prin. Of Ag. Econ.	<input type="text"/>	3
SA 223	Oral Communication	<input type="text"/>	3
PS 478	Seminar in Agronomy	<input type="text"/>	1
<b>Total</b>		<input type="text"/>	<b>16</b>

PS 270	Environmental Ecology	<input type="text"/>	3
CH 221	Organic Chemistry I & Lab	<input type="text"/>	4
PS 360	Water Quality	<input type="text"/>	3
MU 213	Music Appreciation or	<input type="text"/>	3
AR 214	Art Appreciation	<input type="text"/>	
PS 351	Forestry	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>16</b>

## Junior Year (24)

PS 315	Soils	<input type="text"/>	3
PS 391	Concepts of Environ. Science	<input type="text"/>	3
AE463	Agri. Statistics	<input type="text"/>	3
BI 453	Environ. Risk Assessment	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>12</b>

PS 490	Research Methods	<input type="text"/>	3
IT 381	GIS Techniques, Utilities & Productions	<input type="text"/>	3
PS 497	Ag. Environmental Law	<input type="text"/>	3
PS 480	Soil Chemistry	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>12</b>

## Senior Year (31)

PS 439	Soil Microbiology	<input type="text"/>	3
BI 481	Intro to Toxicology	<input type="text"/>	3
AE 467	Land Economics	<input type="text"/>	3
PS 479	Special Problems in Plant and Soil Science	<input type="text"/>	3
PS 437	Soil Cons Land Use	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>15</b>

PS 448	Soil Management	<input type="text"/>	3
PS 460	Watershed Hydrology	<input type="text"/>	3
PS 493	Soil Physics	<input type="text"/>	3
PS 478	Seminar	<input type="text"/>	1
	Elective	<input type="text"/>	3
	Plant Soil Elective	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>16</b>

## Bachelor of Science in Agricultural Sciences Agricultural Education Emphasis (120 Credit Hours)

### Freshman Year (30)

First Semester		Hrs.
AE 111	Fund. & Concepts in Ag.	<input type="text"/>
EN 111	Composition I	<input type="text"/>
HI 111	World Civilization I	<input type="text"/>
MA 121	College Algebra	<input type="text"/>
ND 101	Health and Wellness	<input type="text"/>
PH 132	General Psychology	<input type="text"/>
UL 101	University Life	<input type="text"/>
<b>Total</b>		<input type="text"/>

Second Semester		Hrs.
BI 111	Intro to Biology I	<input type="text"/>
CH 121	General Chemistry I & Lab	<input type="text"/>
EN 112	Composition II	<input type="text"/>
CS 100	Info. Tech. Proficiency	<input type="text"/>
MS 102	Fund of Leader Mgt. II	<input type="text"/>
<b>Total</b>		<input type="text"/>

### Sophomore Year (27)

AE 213	Prin. Of Ag. Economics	<input type="text"/>	3
AS 213	Animal Production	<input type="text"/>	3
EN 213	Studies in Literature	<input type="text"/>	3
SA 223	Oral Communications	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>12</b>

BA 233	Bus. Comp. Applications	<input type="text"/>	3
ED 200	Social Studies/Multicultural Ed.	<input type="text"/>	3
PH 325	Adolescent Psychology	<input type="text"/>	3
	Elective (Free)	<input type="text"/>	3
AR 214	Art Appreciation or	<input type="text"/>	3
MU 213	Music Appreciation	<input type="text"/>	
<b>Total</b>		<input type="text"/>	<b>15</b>

### Junior Year (34)

AG 315	Farm Mechanics I	<input type="text"/>	3
AN 315	Prin. Phil. of Ag. Edu.	<input type="text"/>	3
ED 351	Classroom Management	<input type="text"/>	3
PS 315	Soils	<input type="text"/>	3
PS 316	General Horticulture	<input type="text"/>	4
<b>Total</b>		<input type="text"/>	<b>16</b>

AG 316	Farm Mechanics II	<input type="text"/>	3
AN 318	Career Education	<input type="text"/>	3
AN 320	Leaderships	<input type="text"/>	3
ED 348	Foundations of Education	<input type="text"/>	3
AE 463	Agri. Statistics	<input type="text"/>	3
PH 336*	Educational Psychology	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>18</b>

### Senior Year (29)

AE 478	Farm Org. Management	<input type="text"/>	4
AN 316*	Special Methods in Ag.	<input type="text"/>	3
AN 480	Problems and Trends in Ag. Ed.	<input type="text"/>	3
ED 498	Teaching Reading in the Sec. School	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>13</b>

AN 437*	Direct Teaching Elective	<input type="text"/>	12
		<input type="text"/>	4
		<input type="text"/>	
		<input type="text"/>	
<b>Total</b>		<input type="text"/>	<b>16</b>

### Bachelor of Science in Agricultural Sciences Horticulture Emphasis (120 Credit Hours)

#### Freshman Year (35)

First Semester		Hrs.	
AE 111	Fund. & Concepts in Ag.	<input type="text"/>	3
BI 111	Intro to Biology I	<input type="text"/>	3
CH 121	General Chemistry I	<input type="text"/>	4
EN 111	Composition I	<input type="text"/>	3
MA 121	College Algebra	<input type="text"/>	3
UL 101	University Life	<input type="text"/>	1
<b>Total</b>		<input type="text"/>	<b>17</b>

Second Semester		Hrs.	
AE 213	Prin. of Ag. Economics or	<input type="text"/>	3
AE 215	Agricultural Finance	<input type="text"/>	
BI 124	General Botany	<input type="text"/>	4
CH122	General Chemistry II	<input type="text"/>	4
EN 112	Composition II	<input type="text"/>	3
PS 122	Crop Production	<input type="text"/>	4
<b>Total</b>		<input type="text"/>	<b>18</b>

#### Sophomore Year (29)

AS 213	Animal Production	<input type="text"/>	3
CH 221	Organic Chemistry I & Lab	<input type="text"/>	4
CS 201	Intro. to Comp. Prog. in Visual Basic	<input type="text"/>	3
EN 213	Studies in Literature	<input type="text"/>	3
HI 111	World Civilization I	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>16</b>

AR 214	Art Appreciation	<input type="text"/>	3
HI 112	World Civilization	<input type="text"/>	3
PS 315	Soils	<input type="text"/>	3
SA 223	Oral Communications	<input type="text"/>	3
	Elective	<input type="text"/>	1
<b>Total</b>		<input type="text"/>	<b>13</b>

#### Junior Year (31)

AG 315	Farm Mechanics I	<input type="text"/>	3
BI 325	General Microbiology	<input type="text"/>	3
BI 346	General Entomology	<input type="text"/>	3
PS 316	General Horticulture	<input type="text"/>	4
PS 345	Landscape Gardening	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>16</b>

PS 205	Principles of Genetics	<input type="text"/>	3
PS 305	Plant Dev. Physiology	<input type="text"/>	3
PS 401	Small Fruit Production	<input type="text"/>	3
PS 441	General Plant Pathology	<input type="text"/>	3
PS 428	Crop Improvement Seed Production	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>15</b>

#### Senior Year (25)

PS 449	Vegetable Production	<input type="text"/>	3
PS 459	Soil Fertility	<input type="text"/>	3
PS 475	Plant Breeding	<input type="text"/>	3
AE 463	Agri. Statistics	<input type="text"/>	3
	Elective	<input type="text"/>	1
<b>Total</b>		<input type="text"/>	<b>13</b>

PS 482	Weed Control	<input type="text"/>	3
PS 483	Environmental Science	<input type="text"/>	3
PS 484	Greenhouse Crops	<input type="text"/>	3
	Elective	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>12</b>

**Bachelor of Science in Agricultural Sciences**  
**Agricultural Biotechnology Emphasis**  
**(120 Credit Hours)**

**Freshman Year (31)**

First Semester		Hrs.
CH 121	General Chemistry I	4
EN 111	Composition I	3
HI 111	World Civilization I	3
UL 101	University Life	1
BI 111	General Biology I or	3
BI 125	Intro to Biology I	
MS 111	Military Science or	1
PE 101	Physical Education	
<b>Total</b>		<b>15</b>

Second Semester		Hrs.
EN 112	Composition II	3
CH 122	General Chemistry II & Lab	4
AE 111	Fund. & Concepts in Ag.	3
PH 132	General Psychology	3
MS 102	Fund of Lead mgmt. II	1
ND 101	Health and Wellness	1
CS 100	Info. Tech. Proficiency	1
<b>Total</b>		<b>16</b>

**Sophomore Year (31)**

First Semester		
EN 213	Studies in Literature	3
CH221	Organic Chemistry	4
SS 111	Social Institutions	3
MA 121	College Algebra	3
PS 122	Crop Production	4
<b>Total</b>		<b>17</b>

Second Semester		
PS 205	Principles of Genetics	3
SA 223	Oral Communication	3
CH 222	Organic Chemistry	4
PS 220	Prin of Cell Tissue Culture	3
PS 221	Cell Tissue Culture Lab	1
<b>Total</b>		<b>14</b>

**Junior Year (28)**

First Semester		
BI 325	Microbiology	4
BI 361	Cell Mole Biology	4
PS 316	General Horticulture	4
PS 300	General Bioethics	3
<b>Total</b>		<b>15</b>

Second Semester		
PS 305	PI Develop Physiology	3
AE 463	Agri. Statistics	3
PS 320	Biomass and Bioenergy	3
PS 346	General Entomology	4
<b>Total</b>		<b>13</b>

**Senior Year (30)**

First Semester		
PS 430	Concept in Biotechnology	3
PS 495	Experimental Design	3
PS 441	General Plant Pathology	3
PS 448	Soil Management	3
	Elective	1
	Elective	1
<b>Total</b>		<b>14</b>

Second Semester		
CH 331	Biochemistry I & Lab	4
PS 447	Forage Crops	3
PS 403	Current Issues in Biotech	3
PS 475	Plant Breeding	3
	Elective or Internship	3
<b>Total</b>		<b>16</b>

## **COURSES DESCRIPTIONS IN AGRIBUSINESS (AB)**

### **AB 366 3-0-3 ELEMENTARY METHODS OF QUANTITATIVE ANALYSIS IN AGRIBUSINESS**

Elementary calculus and statistical methods applied to selected economic and managerial problems; linear and nonlinear relationships; mathematical models and their applications in agribusiness.

### **AB 392 3-0-3 AGRIBUSINESS MARKETING**

This course covers a systematic examination of market structure, conduct and performance in the various sub-sectors of production agriculture and the agribusiness system. Special attention will be given to the following: factors affecting prices, study of marketing channels and agencies, agricultural and agribusiness cooperatives, and strategies for managing the marketing mix. This course is cross-listed with AE 356.

### **AB 395 3-0-3 AGRICULTURAL COMMODITY FUTURES**

This course introduces students to the theory and practice of commodity futures and options. The course covers the fundamentals of futures contracts and trading, basis and theoretical price relationships, market equilibrium and performance, commodity futures hedging, options on futures and regulations and policies affecting futures markets. Pre-requisites: AE 213, AE 346, AE 356 or AB 392.

### **AB 472 3-0-3 RISK MANAGEMENT IN AGRIBUSINESS**

Study of techniques and procedures used in agriculture and agribusiness to address production, marketing, financial and operational risks. The course involves intensive coverage of production and marketing contracts, enterprise diversification, crop insurance through government programs and the private sector, commodity futures hedging, financial planning and management as well as other efficient risk management strategies used in liberalized agricultural markets. Pre-requisite: AB 395.

### **AB 491 3-0-3 AGRIBUSINESS MANAGEMENT**

Intensive study of management concepts and techniques applied to decision-making situations and problems encountered by agribusiness firms in the transportation, storage, manufacturing and distribution of agricultural inputs, products and services.

### **AB 493 3-0-3 FARM AND RANCH APPRAISAL**

A study of factors that affect the value and price of agricultural land and other real estate. Various approaches used in real estate valuation are covered. Students are required to do the appraisal of a farm, ranch or home and prepare an appraisal report.

### **AB 494 3-0-3 AGRIBUSINESS INTERNSHIP**

This course must be taken by all agribusiness majors between the sophomore and senior year. The course is taken by correspondence while the student is completing internship training with an agribusiness firm or government agency.

The student's performance is evaluated by the advisor on campus and the supervisor in industry. All students are required to write and present an internship report.

## **COURSE DESCRIPTIONS IN AGRICULTURAL ECONOMICS (AE)**

### **AE 111 3-0-3 FUNDAMENTALS AND CONCEPTS IN AGRICULTURE**

This course is taken or challenged by all students majoring in Agriculture. The course may be challenged by any student. This course is designed to provide those competencies and experiences needed by students in Agriculture, which will assist the student in his/her achievement in subsequent courses taken and in the world of work.

### **AE 213 3-0-3 PRINCIPLES OF AGRICULTURAL ECONOMICS**

This course teaches fundamental concepts and theories of microeconomics. It applies economic principles to current problems and issues in agriculture and agriculturally related industries. A primary mission of the course is to prepare students for more advanced courses in economics, agricultural economics, agribusiness and technical agriculture

**AE 215            3-0-3    AGRICULTURAL FINANCE**

This course is concerned with capital and credit needs of farmers, agencies supplying credit, problems of borrowers and lenders, insurance and taxation.

**AE 325            3-0-3    FARM RECORDS AND ACCOUNTS**

A study of physical and financial records of the farm business from the standpoint of improving the efficiency of the business.

**AE 346            3-0-3    AGRICULTURAL PRICE ANALYSIS**

Provides students with an understanding of the complex array of forces that influence the level and behavior of agricultural and other commodity prices. It also introduces students to empirical studies and analytical techniques that are useful in predicting economic changes or the economic consequences of price behavior and changes. Although the agricultural sector is a declining component of most national economies, agriculture and agricultural product prices remain important both economically and politically. They strongly influence the level of farm income and in many countries, the level of food and fiber prices are important determinants of consumer welfare and the amount of export earnings

**AE 356            3-0-3    MARKETING OF AGRICULTURAL PRODUCTS AND  
COOPERATIVES IN AGRICULTURE**

The course provides for a critical study of methods followed and agencies engaged in marketing farm products, services performed, factors affecting prices, and a study of market channels, to marketing agricultural products through cooperatives. Principles underlying the establishment and operation of cooperatives will be given special consideration.

**AE 365            3-0-3    MICROECONOMICS IN AGRICULTURE**

Develop understanding of and appreciation for differences in trade policies, agricultural systems, resource endowments, populations and production possibilities in Developed and Lesser Developed nations; build understanding of theory and policy options that are likely to help resolve food availability problems; complete an intensive study of the overall economic/ agricultural sector in a selected country or region of the world and identify policies which might help resolve problems of economic growth and nutrition.

**AE 438            3-0-3    RESEARCH IN AGRICULTURAL ECONOMICS**

This course will focus on research philosophy and techniques, collecting data, handling data and evaluating studies in agricultural economics. It is specifically designed to improve student research writing proficiency as well as to give students a broad understanding of the philosophy of research and of research techniques in agricultural economics

**AE 463            3-0-3    AGRICULTURAL STATISTICS**

This course emphasizes the basic ideas and procedures of statistical analysis as applied to economic and business problems in agriculture. Special attention will be given to the nature and use of statistical data, measures of central tendency, dispersion and other aspects of distribution, statistical inference, regression and correlation analysis. This course presupposes an introductory course in basic statistics. Pre-requisite: EC 307 or consent of instructor.

**AE 467            3-0-3    LAND ECONOMICS**

This course provides for a study of the ways in which the use of land is affected by physical, institutional, and economic factors. Consideration is given to farm land prices, rents, taxes, tenancy, transfer of land, procedures in acquiring land, conserving and improving land. The latter phase of this course is devoted to farm law, and a brief study of some legal rules and procedures that are of particular importance to farmers.

**AE 470            3-0-3    CONSUMER ECONOMICS**

Decision making of family units within the frame of reference provided by modern economics, consumption and saving and their effects upon income, demand and price in relation to types of market structure.

**AE 475            3-0-3    PRODUCTION ECONOMICS**

Economic analysis of agriculture production, including theory of the farm resource, allocation, production and cost functions, input-output analysis, farm size, enterprise combinations, tenure arrangements, risk, and decision making.

**AE 478            3-2-4    FARM ORGANIZATION AND MANAGEMENT**

A study of the principles underlying the successful organization and management of the farm as a business unit. Stress is placed upon the types and systems of farming followed, factors affecting the combination of enterprises, and factors affecting returns from farming. Data concerning farms in Mississippi are presented for study. Field trips to actual farms will be taken during the course.

**AE 488            3-2-4    AGRICULTURAL PROBLEMS AND POLICIES**

A critical study of agricultural problems past and present that have involved various levels of government action. The development of various programs and agencies that have worked to solve these problems will be considered. Special attention will be given to important problems common to small farmers and how government policies have affected these farmers.

**AE 495            3-0-3    COOPERATIVES FOR LIMITED-RESOURCE PEOPLE**

A study of the organization and operation of cooperatives for limited-resource people.

**AE 497            3-0-3    SEMINAR IN AGRICULTURAL ECONOMICS**

A review and discussion of current topics/events in Agricultural Economics.

**COURSE DESCRIPTIONS IN INTERNATIONAL AGRICULTURE (IA)****IA 302            3-03    ECONOMICS OF AGRICULTURAL DEV AND TRADE**

This course will examine the processes of economic growth and agricultural development overtime and in various parts of the world. Special emphasis will be placed on theories of economic and agricultural development; poverty; globalization; and the institutional factors likely to influence the agricultural sector in developed and developing countries. Development economics focuses on the poorest two-thirds of the world's population. These are the vast majority of people in developing countries; many of them are inadequately fed and housed, in poor health and are illiterate. The course will help to provide a better understanding of a number of the critical questions relating to the economics of the developed and developing world as well as the prospects for global integration.

**IA 482            3-03    ECONOMICS OF WORLD FOOD PRODUCTION AND DISTRIBUTION**

Develop understanding of and appreciation for differences in trade policies, agricultural systems, resource endowments, populations and production possibilities in Developed and Lesser Developed nations; build understanding of theory and policy options that are likely to help resolve food availability problems; complete an intensive study of the overall economic/ agricultural sector in a selected country or region of the world and identify policies which might help resolve problems of economic growth and nutrition.

**IA 510            1-4-3    RESEARCH DEVELOPMENT**

Students in this course will continue the self-assessment and career awareness process. In addition, students will also focus on career preparation and will get ready to transition to a formal, supervised work experience, as well as, refine their plan for employment, education, and training.

**AG 315            1-4-3    FARM MECHANICS I**

This course is designed to provide information necessary for planning, operating and maintaining a vocational agriculture or farm mechanics facility.

**AG 316            1-4-3    FARM MECHANICS II**

Emphasis will be placed on the development of orderly and safe laboratory procedures for many practical skills to be developed. Prerequisite: AG 315

**AG 418            1-4-3    FARM SURVEYING AND DRAINAGE**

Location, design, and construction of drainage systems on the farm. Land surveying for acre and mapping farms.

**AG 437            1-4-3    AGRICULTURAL MACHINERY**

The care, operation, and maintenance of farm machinery, with emphasis on agricultural equipment.

**AG 438            1-4-3    AGRICULTURAL FARM BUILDING**

Planning, maintaining, laying out, and constructing farm buildings and structures.

**AG 439            1-4-3    Internships**

This internship will provide students with industry, government or academic settings for direct work experience.

**AG 448            1-4-3    TERRACING (WATER MANAGEMENT)**

Field practice in laying out, constructing, and maintaining terraces, terrace outlets and diversion ditches.

**AG 458            1-4-3    SPECIAL PROBLEMS**

This is primarily for students who desire to develop their skills in farm shop.

**AG 468            1-4-3    ADVANCED PROBLEMS IN AGRICULTURAL ENGINEERING**

Primarily for in-service teachers who have a need for improving their abilities in certain areas of farm mechanics.

**AG 477            1-4-3    AGRICULTURAL POWER AND MACHINERY**

The care, operation and maintenance of farm machinery with emphasis in mechanization and cybernation.

**AG 478            1-4-3    AGRICULTURAL POWER AND MACHINERY**

A continuation of AG 477.

**AG 480            1-4-3    SMALL GASOLINE ENGINES**

The care and maintenance of small two cycle and four cycle engines.

**AG 484            1-4-3    AGRICULTURAL MECHANICS AND TECHNOLOGY**

This course is concerned with designing and design modification of agricultural machinery.

**AG 485            1-4-3    AGRICULTURAL POWER AND MACHINERY MANAGEMENT**

This course is concerned with the efficient selection, operation, repair and maintenance, and replacement of machinery.

**AG 499            1-0-3    THESIS RESEARCH/THESIS**

This course will introduce students to the rules governing the development of a thesis document from scientific research. Students will be required to develop short papers from topics. Further, students will be presented with strategies of developing a research project that can be written in thesis format. Extensive exercises requiring independent topic research is required. Writing styles and experimental design will be emphasized.

**COURSE DESCRIPTIONS IN AGRICULTURAL EDUCATION (AN)**

**AN 315            3-0-3    PRINCIPLES AND PHILOSOPHY OF TEACHING VOCATIONAL EDUCATION**

Legal and social aspects of vocational education; objectives, ideals, principles, values, philosophies, and standard practices employed in training for specific vocations.

**AN 316            3-0-3    SPECIAL METHODS**

A preview of special methods and materials used in teaching vocational agriculture. Pre-requisite: AN 315.

**AN 318            3-0-3    CAREER EDUCATION**

This course provides background information relevant to careers and career education with emphasis in teaching on the secondary level.

**AN 320            3-0-3    LEADERSHIPS**

This course provides agricultural students or related major with trainings on most recent knowledge and organization structures of agricultural practices for training future agriculture leaderships.

**AN 329            3-0-3    LEADERSHIP**

An examination of youth and adult organizations that promote Agricultural Education. Methods and procedures involved in organizing and implementing organizations.



**AN 437            3-0-3    DIRECTED TEACHING IN AGRICULTURE**

This course employs methods, techniques, experiences, and practice of teaching agriculture in-school and out-of-school students with much emphasis given to advising FFA and managing a high school Department of Agriculture.

**AN 465            3-0-3    PLANNING INSTRUCTIONAL PROGRAMS FOR OUT-OF-SCHOOL STUDENTS**

A study of developing and implementing programs for adults. Special emphasis will be given students who plan to teach Vocational Education and work with Cooperative Extension.

**AN 468            3-0-3    PROGRAM BUILDING**

This course provides for a review of teaching programs for in school and adult classes in vocational agriculture; the building of community programs of work and the organization of community groups for the execution of community programs.

**AN 470            3-0-3    COOPERATIVE EDUCATION**

Analysis of procedures for developing and implementing Agricultural Cooperative Programs with emphasis on the high school level.

**AN 478            3-0-3    EXTENSION ORGANIZATION AND METHODS**

Problems and practices of the extension agent.

**AN 459            3-0-3    ADVANCED AGRICULTURAL EDUCATION**

This course is designed primarily for in-service teachers of vocational agriculture and county agricultural agents. It provides for a review of course building and program planning for a specific community.

**AN 480            3-0-3    PROBLEMS AND TRENDS IN VOCATIONAL EDUCATION**

A survey of problems and developments in Vocational Education as indicated by recent legislation and research. The literature will be selected to focus attention on current and future trends regarding organization, course content, and procedures in Vocational Education at the secondary school level. Students are encouraged to make special studies in their particular areas of interest. Enrollment is limited to in-service teachers or the approval of instructor.

**AN 484            3-0-3    OCCUPATIONAL INFORMATION**

An introduction and exploration of the world of work; a study of principles, classification and content inherent to the various occupations with an emphasis directed toward teaching.

**AN 487            3-0-3    VOCATIONAL EDUCATION CURRICULUM AND TECHNIQUES OF TEACHING THE RURAL DISADVANTAGED**

An analysis of vocational curriculum and teaching techniques with an emphasis directed toward special needs of the disadvantaged and the handicapped.

**AN 491            (1-3)-0-3    RESEARCH OR INDEPENDENT STUDY (Honors)**

This course is limited to superior senior agricultural students who are invited to join the honors program.

**AN 492            (1-3)-0-3    RESEARCH OR INDEPENDENT STUDY (Honors)**

A continuation of AN 491.

**AN 493            1-0-1    AGRICULTURAL PROBLEMS**

This course embraces a study of problems and research in agriculture. Special emphasis is placed on communication among various professions, industry, and government. Emphasis will be placed on proper procedures in seeking employment. (Seniors Only).

**AN 499            1-0-3    THESIS RESEARCH/THESIS**

This course will introduce students to the rules governing the development of a thesis document from scientific research. Students will be required to develop short papers from topics. Further, students will be presented with strategies of developing a research project that can be written in thesis format. Extensive exercises requiring independent topic research is required. Writing styles and experimental design will be emphasized.

## **COURSE DESCRIPTIONS IN ANIMAL SCIENCE (AS)**

### **AS 103 1-4-3 POULTRY PRODUCTION**

The practices involved in managing a flock: Breeding, selecting, culling, feeding, housing, sanitation, disease control, judging, and fitting for the market. Emphasis is placed on both farm flocks and commercial production.

### **AS 105 1-4-3 MILK AND MILK PRODUCTS**

A study of the general principles and practices involved in the development, processing, and packaging of milk and dairy products.

### **AS 111 3-0-3 POULTRY PRODUCTION**

The practices involved in managing a flock: Breeding, selecting, culling, feeding, housing, sanitation, disease control, judging, and fitting for the market. Emphasis is placed on both farm flocks and commercial production.

### **PS 122 3-0-3 CROP PRODUCTION**

This course deals with the study of agronomic and horticultural crop production. The lecture classes cover studies on soil management, fertilizer application, cultivation, agronomic practices, and harvesting.

### **PS 122L 1-0-3 CROP PRODUCTION LAB**

This class covers practical training in lab, greenhouse, and field. The crop fields include vegetable plots, vineyards, orchards, and nut plantations.

### **AS 213 1-4-3 ANIMAL PRODUCTION**

A study of the general principles and practices involved in the development of livestock industry. Special emphasis is placed on the study of the major farm livestock, types, breeds, judging, feeding and fitting of these animals for the market.

### **AS 216 1-2-3 SWINE PRODUCTION**

This course will deal with the importance and characteristics of the U.S. Swine Industry. Emphasis will be placed on Swine enterprises, buildings, and systems of production, management of breeding herd, environmental control, selection or replacements, feeding, diseases, and marketing. There will be a one-hour lecture and a 2-hour lab. The lab period is utilized to develop skills associated with swine (AI internship and certification program). (Pre-requisite: AS 213).

### **AS 223 1-4-3 DAIRY PRODUCTION**

The milk production, feeding, judging, fitting, breeding and management of dairy animals for the market.

### **AS 233 1-4-3 MEATS AND MEAT PRODUCTS**

Selection of meat animals. Killing, cooling, cutting, curing, preserving, and cooking of meats.

### **AS 243 3-0-3 MEATS AND MEAT PRODUCTS**

Selection of meat animals. Killing, cooling, cutting, curing, preserving, and cooking of meats.

### **AS 323 2-2-3 LIVESTOCK DISEASE AND SANITATION**

Common diseases of farm animals. The prevention and cure of these diseases. Sanitation practices in all livestock areas.

### **AS 303 2-2-3 LIVESTOCK JUDGING**

This course is designed for students who has interest on animals. Course includes the basic and recent concepts of selection, evaluation of performance data, and visual appraisal in placing classes of livestock.

### **AS 326 1-4-3 THERAPEUTIC AGENTS**

The objective of this course is to provide agricultural majors with current information on drugs and chemicals used in conjunction with farm animals. This course will emphasize modes of action, effects, and public health significance of drug residues on living systems.

### **AS 333 1-4-3 POULTRY MANAGEMENT**

A study of the various methods of maintaining an efficient and profitable flock with special emphasis on housing, breeding, feeding, marketing, and disease control. Emphasis is placed on both farm and commercial flocks.

**AS 336            1-4-3    PARASITOLOGY OF FARM ANIMALS**

The objective of this course is to provide agriculture majors with a fundamental understanding of the morphological characteristics of organisms that live as pathogens and parasites. Pre-requisite: BI 121 or BI 111.

**AS 343            2-2-3    PHYSIOLOGY AND ANATOMY OF FARM ANIMALS**

A survey of structure and function of the animal body systems and a study of their interrelationships; function of cellular components; cell division and metabolism; economically important aspects of body form and function.

**AS 353            3-0-3    INTRODUCTION OF NUTRITION**

Monogastric nutrition. Anatomy, physiology, digestion, absorption and metabolism pertaining to monogastric domestic species. Nutritional requirements, digestive disorders, and metabolic dysfunction of domestic monogastrics.

**AS 363            2-2-3    ANIMAL MANAGEMENT**

This course provides training and experience in the care and management of beef cattle, swine and sheep, their feeding, breeding, judging, fitting, and integration into the modern system of grassland farming.

**AS 413            3-0-3    ANIMAL NUTRITION**

Ruminant nutrition. Anatomy, physiology, digestion, absorption, and metabolism pertaining to the ruminant; fate of feedstuffs and nutritional requirements of ruminants; rumen dysfunction and metabolic disorders.

**AS 423            3-0-3    LIVESTOCK BREEDING**

A study of the genetic and physical aspects of breeding in relationship to the improvement of farm animals. The various systems and methods of breeding as employed by successful husbandry-men. Required Pre-requisite BI 445

**AS 433            2-2-3    PHYSIOLOGY OF REPRODUCTION**

Anatomy and physiology of the reproductive organs of farm animals; artificial insemination techniques; reproductive efficiency and reproductive management of farm animals. Hormonal control of reproductive processes will be discussed.

**AS 439            3-0-3    INTERNSHIP**

The objective of an internship is to gain hands-on-experience in the student's chosen field of animal science. This internship may be conducted whether on campus or off campus. It is desired that students have off campus internships.

**AS 440            3-0-3    AGRICULTURE INTERNSHIPS II**

This internship course is specifically designed with the intent to enrich the learning experience throughout direct work experience. Student will have in-depth hands on training for a specific profession or occupation, explore career options and develop leadership and other interpersonal skills needed for career placement and advancement.

**AS 443            2-2-3    PRINCIPLES OF DAIRY MANUFACTURING**

Theories and practices of procuring and processing fluid milk. Production of fluid, fermented, frozen, and concentrated creamery products.

**AS 453            2-2-3    PHYSIOLOGY OF LACTATION**

A study of the structure and function of the mammary system, its relation to the other systems of the body, and of those factors that affect milk yield. Pre-requisite: AS 480.

**AS 463            1-0-1    HATCHERY MANAGEMENT**

Study of management practices and techniques used in hatching poultry.

**AS 473            1-4-3    LAYER MANAGEMENT**

Study of management practices used in management of layers and other poultry with special emphasis on breeder and market egg production.

**AS 478            1-0-1    SEMINAR IN ANIMAL SCIENCE**

A review and discussion of current topics/events in Animal Science.

**AS 483            1-4-3    FEEDS AND FEEDING**

Characteristics of feedstuffs used in livestock enterprises; manual and computer ration formulation procedures and life cycle nutritional management of beef, swine, sheep, dairy, horses, fish and pets; methods of grain, protein supplement and forage processing and evaluation; commercial and on-the-farm feed mixing methods and feed control laws.

**COURSE DESCRIPTIONS IN PLANT AND SOIL SCIENCE (PS)**

**PS 122            3-0-3    CROP PRODUCTION**

This course deals with the study of agronomic and horticultural crop production. The lecture classes cover studies on soil management, fertilizer application, cultivation, agronomic practices and harvesting.

**PS 122L          3-0-3    CROP PRODUCTION LAB**

This class covers practical training and lab, greenhouse, and field. The crop fields include vegetable plots, vineyards, orchards, and nut plantations.

**PS 205            3-0-3    PRINCIPLES OF GENETICS**

This introductory genetic course covers classical Mendelian genetics, extension of Mendelism, gene structure, function, and regulation, gene mutations and effect on gene function, synthesis and duplication of genetic materials, population genetics and evolution, genetic screening and gene therapy.

**PS 220            3-0-3    PRINCIPLES OF CELL AND TISSUE CULTURE**

This course presents an overview of the techniques and underlying theory of plant tissue culture and genetic engineering, research and commercial applications. The course is designed to provide knowledge of the basic principles and application of tissue, cell and protoplast culture, recombinant DNA technology and genetic transformation of plants and their application to plant improvement.

**PS 221            3-0-3    PRINCIPLES OF CELL AND TISSUE CULTURE (LAB)**

This course should be taken concurrently with PS220 "Principles of Cell and Tissue Culture". This laboratory intensive course will expose students to laboratory cell and tissue culture equipment and techniques; Callus induction and cell suspension culture; plant genetic transformation experiment design and practices.

**PS 242            3-0-3    WOOD PRODUCTS**

This course explains the industrial materials formulated from harvested trees in the forest (s). Many wood industries assumed strange roles that produced the products that are household names today. This course will relate the history of the wood products we use in today's market.

**PS 257            3-0-3    WOOD SCIENCE AND TECHNOLOGY**

This course utilizes the industrial techniques to characterize wood properties and the chemical structure of wood in the manufacturing process. This course explains the fundamentals of wood mechanics and conduction.

**PS 270            3-0-3    ENVIRONMENTAL ECOLOGY**

Overview of ecological effects of disturbances, pollution and other stressors. Particular attention will be paid to stressors associated with human activities.

**PS 300            3-0-3    GENERAL BIOETHICS**

Ethics is the study of how we ought to live. In this course, we will study the ethical issues involving biotechnology. We hear about euthanasia, abortion, genes, genomes, and health care in the news almost nightly. The ethical issues that accompany these new technologies are enormous, and force us to reexamine what words like person, death, fair, right, and consciousness mean. These issues cluster roughly around five concepts: reproduction and birth, death, genetics, healthcare, and the role of the physician. We will examine these issues from as many angles as possible and identify the moral issues raised by each and generate arguments for or against each position.

**PS 305                    3-0-3    PLANT DEVELOPMENT AND PHYSIOLOGY**

With the growing human population it is a huge challenge to meet the food requirements of the future generations. Achieving the food security depends on the successful cultivation and obtaining best crop yields. To achieve greater yields in-depth understanding of crop physiology and growth regulation are vital. This course will introduce the fundamentals of crop physiology and plant growth regulation. Specifically the course deals with the architecture of plant cell, photosynthesis, metabolism of macro molecules, secondary metabolites and plant hormones.

**PS 315                    2-2-3    SOILS**

Formation, composition, and classification of the physical and biological properties related to plant growth, and principles of soil management.

**PS 316                    3-2-4    GENERAL HORTICULTURE**

Principles and practices applied to production and preservation of fruits and vegetables.

**PS 320                    3-0-3    BIOMASS AND BIOENERGY**

The overall objective of the course is to introduce the concept of renewable energy and sustainability. The course will focus on opportunities of renewable resources and their utilization for energy production. The bioenergy will focus on past present and future potential. A brief history of bioenergy and bioproduct development. Recent developments in bioenergy such as biomass feed stock selection, bioprocess development, genetic engineering and socioeconomic impact. Policy and regulations in renewable energy specifically bioenergy. A lecture and laboratory model dissemination of knowledge. Students are asked to present a research relevant to the bioenergy and sustainability in groups.

**PS 338                    2-1-3    MAJOR CROPS IN MISSISSIPPI**

Major crops (soybeans, rice, corn, field peas and cotton) will be discussed from the production and management points of view concerning Mississippi soil environment.

**PS 345                    2-2-3    LANDSCAPE GARDENING**

This course is designed to train students for landscape service; nursery management; propagating and planting; growing and transplanting of ornamental plants.

**PS 346                    3-0-3    GENERAL ENTOMOLOGY**

Fundamentals of structure, function, biology and identification of different insect groups. Study of principles, concepts and components of insect pest management. Pest management program in specific crops. Develop an extension pest fact sheet for pests, types of damage incurred, their biology and behavior.

**PS 350                    2-2-3    FORESTRY TAXONOMY**

A course designed to acquaint students with taxonomic system of classifying forest trees with emphasis on southern forests.

**PS 351                    2-3-3    FORESTRY**

A basic course in forestry emphasizing the relationship of the different branches of the forestry industry in the South.

**PS 353                    2-3-3    FORESTRY ENVIRONMENT**

A basic course on our environment for forestry emphasizing the relationship of components of forestry and their impacts.

**PS 257                    3-0-3    WOOD SCIENCE AND TECHNOLOGY**

This course utilizes the industrial techniques to characterize wood properties and the chemical structure of wood in the manufacturing process. This course explains the fundamentals of wood mechanics and conduction.

**PS 352                    3-0-3    FOREST MEASUREMENT**

In this course, students will calculate the parameters of tree measurements to determine the health and vigor of the forest. Basic tools and designed for foresters will be discussed. This course will demonstrate how technology have had a profound impact on how forest resources are assessed.

**PS 354            3-0-3    FOREST PATHOLOGY**

Forest pathology trains students to understand tree diseases and from the perspective of basic biology and ecology as well as that of societal needs. Topics covered include environmental, fungal and viral tree diseases; mycorrhizae; wood decay; monitoring and impact assessment of disease in forest and urban tree systems; epidemiology of tree diseases and the genetics of resistance to tree diseases and pathogen variability.

**PS 360            1-4-3    WATER QUALITY**

Introduction to water quality and its influences in the environment. Interactions with land management and relationships to issues in environmental quality. Requires field trips.

**PS 270            3-0-3    ENVIRONMENTAL ECOLOGY**

Overview of ecological effects of disturbances, pollution and other stressors. Particular attention will be paid to stressors associated with human activities.

**PS 391            3-0-3    CONCEPTS OF ENVIRONMENT SCIENCE**

This course will introduce students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, environmental problems and solutions for these problems.

**PS 401            2-3-3    SMALL FRUIT PRODUCTION**

Small fruit establishment and culture, with emphasis on kinds, varieties, seeding practices, cultural practices, and harvesting methods.

**PS 403            3-0-3    CONCEPT IN BIOTECHNOLOGY**

This course will provide a practical experience in the major techniques used in plant genetic analysis at the molecular and bioinformatic levels. It will teach students about all aspects of the biotechnology field. Topics will include the biology, cells, genes, DNA, proteins, genetic engineering, drug development, biofuels, agriculture, bioremediation, biotechnology company structure, and the regulations affecting the field. This course will increase the student's knowledge of major cellular and molecular concepts and techniques in molecular and cell biology.

**PS 404            3-0-3    CONCEPT IN BIOTECHNOLOGY LAB**

This course will provide students with the fundamentals of molecular biology research. Students will be instructed to follow, create and maintain laboratory procedures for the purpose of experimental design and analysis. The students will learn about DNA, RNA and protein extraction and detection. Working with established laboratory protocols, students will perform various experimental techniques for genomics, functional genomics, gene functional assay and protein biochemistry.

**PS 418            2-2-3    FARM FORESTRY**

Principles of farm and woodland management including measurement of logs, trees and stands, planting and harvesting methods; illustration and protection; basic silvicultural principles.

**PS 403            3-0-3    CURRENT ISSUES IN BIOTECHNOLOGY**

This course will deal with recent discoveries and concepts in biotechnology. The discussions will be focused on gene organization, gene transcription and translation; analysis and manipulation of genes and the applications of the biotechnology knowledge. Successful completion of this course material will enable the students to have a broad over-view of molecular gene expression, and to undertake advanced study in any of the various sub-disciplines.

**PS 421            3-0-3    WOOD CHEMISTRY**

This course evaluates the chemical composition of wood on a micro and macroscopic level. This course requires a knowledge of carbohydrate chemistry to get full understanding and a comprehensive background. Students will learn how chemistry is applied to wood and the chemical components that are the backbone of wood products.

**PS 427            3-2-4    FARM AND HOME BEAUTIFICATION**

This course deals with identification and description of ornamental plants materials, the care of lawns, landscape planting, plant propagation, establishment and care of lawns, and planning of the farm and home grounds.

**PS 428            2-2-3    CROP IMPROVEMENT-SEED PRODUCTION AND MARKETING**

Practical methods of crop improvement, curing, cleaning, storing and distribution. Certification of seeds of small grains, legumes, corn, and cotton.

**PS 430            3-0-3    CONCEPT IN BIOTECHNOLOGY**

This course will provide a practical experience in the major techniques used in plant genetic analysis at the molecular and bioinformatic levels. It will teach students about all aspects of the biotechnology field. Topics will include the biology, cells, genes, DNA, proteins, genetic engineering, drug development, biofuels, agriculture, bioremediation, biotechnology company structure, and the regulations affecting the field. This course will increase the student's knowledge of major cellular and molecular concepts and techniques in molecular and cell biology.

**PS 431            1-0-1    CONCEPT IN BIOTECHNOLOGY LAB**

This course will introduce students to the fundamentals of molecular biology research. Students will be instructed to follow, create and maintain laboratory procedures for the purpose of experimental design and analysis. The students will learn about DNA, RNA and protein extraction and detection. Working with established laboratory protocols, students will perform various experimental techniques for genomics, functional genomics, gene functional assay and protein biochemistry.

**PS 437            3-0-3    SOIL CONSERVATION AND LAND USE**

A study of the principles of soil conservation and improvement through the practices of the use of soil and building crops, contouring, crop rotation, tillage, drainage, sodding, forest tree planting, terracing and other mechanical means. Emphasis will also be given to proper land use based on land capability classes with reference to the State of Mississippi. The economic importance of soil erosion and agencies having to do with its control will be reviewed. Students will be required to execute a detailed soil conservation plan for one of the farms in the local county or their own farms as meeting the requirements for the final examination in this course.

**PS 439            2-2-3    SOIL MICROBIOLOGY**

The biological activities of soil microorganisms with emphasis on organic matter transformation and nutrients released on soil systems.

**PS 441            3-0-3    INTRODUCTION TO PLANT PATHOLOGY**

This course will cover the basic concepts and principles of Plant Pathology. Students will study microorganisms that induce plant diseases, mechanisms and environmental conditions that stimulate plant disease, interactions between the disease causing agents and methods of preventing, managing, or alleviating the damage of plant disease. Students will acquire an understanding of the perspectives and problem solving processes used by Plant Pathologists.

**PS 446            2-2-3    SOIL MORPHOLOGY AND CLASSIFICATION**

Soil genesis and standard techniques to study soil profiles are covered. Soil forming factors and a basic understanding of 7th approximation of soil classification system are also included.

**PS 447            2-2-3    FORAGE CROPS**

Selection, culture, handling, and preservation of forage crops, their relations to the livestock industry and maintenance of soil fertility. Special attention will be given to hay and pasture problems in the South.

**PS 448            3-0-3    SOIL MANAGEMENT**

Basically this course is designed to acquaint the student with good soil conservation practices and soil analysis; along with showing the importance of soil moisture in the uptake of cations and anions and the functional roles of cations and anions in the nutrition of plants.

**PS 449            2-2-3    VEGETABLE PRODUCTION**

Practices and problems involved in production of the important fresh marketed and processed vegetable crops. Field trips to areas devoted to commercial production constitute a part of the course. Pre-requisite: PS 316.

**PS 455            2-2-3    CHEMISTRY OF SOILS AND FERTILIZER TECHNOLOGY**

The application of fundamental laws of solid chemistry to inorganic soil colloids with an emphasis on cation exchange, chemical equilibria and chelation. Practical problems related to fertilizer application and soil reactions will be discussed.

**PS 457                    3-0-3    FOREST MANAGEMENT**

This course correlates issues that are obtain in the development of a health forest. It also describes the necessary information needed to aid landowners in managing their natural resources in the forest environment. After completion of this course, students will be able to design and implement forest plans to cater to the needs of their clientele.

**PS 459                    2-2-3    SOIL FERTILITY**

Basic concepts of soil fertility with emphasis on physical, chemical, biological and mineralogical properties of soils. Soil-plant relationships from a nutritional standpoint and uses of different fertilizers under various souls conditions for better crop growth will be studied.

**PS 460                    3-3-3    WATERSHED HYDROLOGY**

Application of the fundamental principles of quantifying the basic processes occurring in watersheds. Hydrologic impacts of land use and management activities on watersheds will be emphasized. Pre-requisites: MA 225, PS 437, TY 382 and PS 370.

**PS 467                    2-2-3    FOREST SOIL**

Environmental influence on soil formation with greater emphasis on soil properties in a forest eco-system.

**PS 475                    2-2-3    PLANT BREEDING**

Principles, techniques, and practices in breeding improved varieties of crop plants.

**PS 478                    1-0-1    SEMINAR AGRICULTURE**

A review and discussion of current topics in Crop Production and Soil Management.

**PS 479                    2-2-3    SPECIAL PROBLEMS IN PLANT AND SOIL SCIENCE**

The student will select a problem of his/her major interest in crops or soils and solve it under the supervision of the instructor in the particular area.

**PS 480                    3-0-3    SOIL CHEMISTRY**

Introduction to the most recent concepts in the physio-chemical properties of soil colloids.

**PS 482                    1-4-3    WEED CONTROL**

The identification of weeds, seeds and plants with additional emphasis on weed problems and methods of control in agriculture.

**PS 483                    2-2-3    ENVIRONMENTAL SCIENCE**

A study of the effects of fertilizers and pesticides on soils, plants, and water quality.

**PS 484                    1-4-3    GREENHOUSE CROPS**

The principles of greenhouse management including production and management problems of potted plants.

**PS 490                    3-0-3    RESEARCH METHODS**

A course designed to acquaint the student with the use and operation of the various materials and equipment used in collecting, tabulating, and recording experimental data.

**PS 492                    2-3-3    MICROCLIMATOLOGY**

Physical mechanisms of flows of mass and energy between the atmosphere and the earth surface. This course is designed to address the principles of energy exchange and their application to near surface environments. Lectures will concentrate on problems in agriculture, forestry, hydrology and urban systems.

**PS 493                    1-4-3    SOIL PHYSICS**

This course is designed to provide the student with a thorough knowledge and understanding of the physical properties of soils.

**PS 495                    3-0-3    EXPERIMENTAL DESIGN**

Fundamental principles of experimental designs especially in relation to computation and analyses of biological research data.



**PS 497                    3-0-3    AGRICULTURAL AND ENVIRONMENTAL LAW**

A journey through the world of Environmental Law. Emphasis will be placed on the U.S. legal system-major legal and regulatory development; common marketplace problems and their solutions.

**PS 603                    3-0-3    INSECT PEST MANAGEMENT (IPM)**

Study of principles, concepts and components of insect pest management. IPM and environmental education. Application of IPM concepts involved in ecologically sustainable development. Management decision-making based on monitoring and recording pest activity and establishing economic thresholds and injury levels.

## **Department of Human Sciences**

*Carrie Ford, Ph.D., Chairperson*

*Eunice Powell Hall, #5B*

*Telephone: (601) 877-6252*

*Fax: (601) 877-3960*

The Department of Human Sciences is a vibrant, interdisciplinary department where socially competent and bright students focus on today's most critical issues facing human well-being and society-at-large. Our two degree programs, Child Development and Nutrition and Dietetics, prepare students for careers in education, social services, business, industry, law, health, and human services.

The mission of the department aligns with the Land Grant mission of the University to prepare and empower students through effective teaching, intensive training, rigorous research, and expansive public service.

To achieve this mission the Department of Human Sciences will:

- provide high-quality undergraduate programs in the Human Sciences and support disciplines, that will prepare students for leadership, scholarship, and services as well as ensure student success in graduate and professional schools;
- support the Land-Grant function of the University in the areas of teaching, research, and extension services in meeting community needs and responding to demands of a democratic society;
- provide comprehensive student services, such as advisement, counseling, tutoring, financial services, cultural activities, and instructional methodologies, in a safe, healthy environment conducive to personal, professional, and social development;
- offer rigorous curricula and a broad range of programs that prepare students to compete professionally within the human sciences' field and contribute to society's well-being.

### **Special Features**

#### **Child Development Laboratory Center**

The Child Development Laboratory Center is licensed by the Mississippi State Department of Health for forty-five children. The Child Development Laboratory Center accepts infants and children from 6 weeks to five years, from various cultural and socio-economic backgrounds. The Center supports a wide range of instructional programs at the University by providing a laboratory setting in which students may observe and interact with young children during their formative years of development.

#### **Nutrition and Biochemical Laboratories**

The Nutrition and Dietetics program has four state-of-the-art laboratories located within the department. Nutrition students use the Meal Management and Quantity Food Preparation laboratories as well as the Food Science and Biochemical laboratories. These labs provide students with experiential learning and research opportunities under the supervision of Nutrition and Dietetics faculty or faculty from the Biotechnology Center.

#### **Practicum**

The curricula in the Department of Human Sciences offer students a broad general education with emphasis on developing critical thinking in a prescribed and integrative manner in the areas of child development, education, psychology, science, social sciences, and specialized courses in the field of study. Practical experiences are provided for Child Development majors in settings relevant to the well-being of children and families. Similarly, Nutrition and Dietetics majors gain practical experience in hospitals, nursing homes, community health departments, industry, and business.

#### **Academic Regulations**

The Department of Human Sciences' requirements for graduation are the same as the University. Students majoring in programs must earn a grade of "C" or better in their major courses. All students will be required to take the departmental exit exam with a passing score of 80 percent to be eligible for graduation.

## NUTRITION AND DIETETICS

The Nutrition and Dietetics program is a Didactic Program in Dietetics accredited by the Commission on Accreditation for Dietetics Education of the Academy of Nutrition and Dietetics, Chicago, IL. This program will prepare students for entry level positions in hospitals, nursing homes, community health departments, industry, and business. Students successfully completing this program may enter a post-baccalaureate dietetic internship or pre-professional practice program. All Nutrition and Dietetics majors are required to become a Student Member of Academy of Nutrition and Dietetics. The dues are \$60.00. This entitles you to membership in the national and local organizations.

### Nutrition and Dietetics (120 Credit Hours)

#### Freshman Year (33)

First Semester		Hrs.	Second Semester		Hrs.
EN 111	Composition I	<input type="text"/> 3	EN 112	Composition II	<input type="text"/> 3
ND 101	Health Wellness	<input type="text"/> 1	MA 121	College Algebra	<input type="text"/> 3
HS 203	Survey Human Sciences	<input type="text"/> 3	PH 132	General Psychology	<input type="text"/> 3
UL 101	University Life	<input type="text"/> 1	CH 122	General Chemistry	<input type="text"/> 3
BI 125	General Biology I	<input type="text"/> 3	CH 122L	General Chemistry Lab	<input type="text"/> 1
BI 125L	General Biology I Lab	<input type="text"/> 1	SS 111	Social Institutions	<input type="text"/> 3
CH 121	General Chemistry I	<input type="text"/> 3	CS 100	Info. Tech. Proficiency	<input type="text"/> 1
CH 121	General Chemistry I Lab	<input type="text"/> 1			<input type="text"/>
Total		<input type="text"/> 16	Total		<input type="text"/> 17

#### Sophomore Year (33)

BI 114	Anatomy Physiology	<input type="text"/>	3	MG 301	Principles of Management	<input type="text"/>	3
BI 114L	Anatomy Physiology Lab	<input type="text"/>	1	ND 225	Intro. to Nutrition	<input type="text"/>	3
		<input type="text"/>				<input type="text"/>	
HU 201	Humanities	<input type="text"/>	3	MA 377	Statistics I	<input type="text"/>	3
SA 223	Oral Communication	<input type="text"/>	3	BI 214	Anatomy Physiology II Lab	<input type="text"/>	3
BI 420	Medical Microbiology	<input type="text"/>	3	BI 214L	Anatomy Physiology II Lab	<input type="text"/>	1
BI 420L	Medical Microbiology Lab	<input type="text"/>	1	EN 351	Technical Writing	<input type="text"/>	3
EN 213	Studies in Literature	<input type="text"/>	3			<input type="text"/>	
<b>Total</b>		<input type="text"/>	<b>17</b>	<b>Total</b>		<input type="text"/>	<b>16</b>

#### Junior Year (29)

ND 214	Meal Management	<input type="text"/>	3	ND 366	Qty Food Purchasing and Production	<input type="text"/>	4
ND 376	Food Service Sys. Mngt/HACCP	<input type="text"/>	3	ND 320	Nutrition Through the Life Cycle	<input type="text"/>	3
ND 230	Nutritional Assessment	<input type="text"/>	3	ND 322	Community Nutrition	<input type="text"/>	3
ND 321	Nutrition Ed. Counseling	<input type="text"/>	3	ND 328	Medical Nut. Therapy I	<input type="text"/>	3
ND 316	Current Trends in Nut.	<input type="text"/>	1			<input type="text"/>	
ND 325	Nutrition Biochemistry	<input type="text"/>	3			<input type="text"/>	
<b>Total</b>		<input type="text"/>	<b>16</b>	<b>Total</b>		<input type="text"/>	<b>13</b>

#### Senior Year (25)

ND 428/L	Medical Nutrition Therapy II and Lab	<input type="text"/>	4	ND 451	Practicum in Dietetics II	<input type="text"/>	6
ND 421	Food Science	<input type="text"/>	3	HS 493	Senior Seminar	<input type="text"/>	3
ND 450	Practicum in Dietetics I (FOOD SERVICE)	<input type="text"/>	6	ND 430	Nutrition and Exercise	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>13</b>	<b>Total</b>		<input type="text"/>	<b>12</b>

Special Note: All Nutrition and Dietetics students are required to receive HACCP/ServeSafe Certification prior to graduation. However, there are additional fees for Nutrition and Dietetics students (lab coats, malpractice insurance and travel).

## **COURSE DESCRIPTIONS IN NUTRITION AND DIETETICS (ND)**

### **ND 101            1-0-1    HEALTH AND WELLNESS**

The course will introduce students to the field of nutrition. Topics will include carbohydrates, fats, food labeling, food regulations, weight control, exercise and diets.

### **ND 214L           2-1-3    MEAL MANAGEMENT**

Students will study the principles of food selection, planning, preparation, and service of meals. Efficiency in the use of food dollars, time, and energy will be emphasized. Students will also perform laboratory experiences in meal management.

### **ND 225            3-0-3    INTRODUCTION TO NUTRITION**

A study of the body's need for food, including the chemistry of digestion, metabolism, and nutritive requirements of the body during the life cycle. Students will study the principles of nutrition including: nutrient sources, functions, metabolism, dietary requirements and methods of evaluating the practical importance of nutrition in humans.

### **ND 230            2-1-3    NUTRITIONAL ASSESSMENT**

The course explores standards for nutrient intake, methods for measuring diets and the strengths and weaknesses of each technique; results from National Nutrition Surveys; anthropometric techniques, for healthy and ill people; nutritional assessments in disease prevention; laboratory methods of assessing nutrients and reviews of the major theories and techniques of both individuals and group counseling methods. **Pre-requisite: ND 225.**

### **ND 248            3-0-3    MATERNAL AND CHILD NUTRITION**

This course will provide an overview of nutrition issues affecting pregnant and postpartum women, females of reproductive age, infants and young children. Influence of maternal and infant nutrition on the health of populations. Application of evidence-based approaches to maternal and infant nutrition recommendations. **Pre-requisite: ND 225.**

### **ND 316            1-0-1    CURRENT TRENDS IN NUTRITION**

Students will explore recent developments in the field of nutrition, prepare written reviews and present a final project. **Pre-requisite: ND 225.**

### **ND 320            3-0-3    NUTRITION THROUGH THE LIFE CYCLE**

This course presents an overview of the special nutritional issues and requirements during different periods of the life cycle. **Pre-requisite: ND 225.**

### **ND 321            3-0-3    NUTRITION AND EDUCATION COUNSELING**

This course focuses on the principles, methods and materials needed to apply nutrition education and counseling processes. Emphasis is placed on behavior changes and developing the skills needed to be an effective nutrition educator and counselor. **Pre-requisite: ND 225.**

### **ND 322            3-0-3    COMMUNITY NUTRITION**

In this course students study the principles of Public Health and Community Nutrition, Epidemiology, Healthcare, Legislation and Nutrition. Principles of entrepreneurship and their application to community nutrition are examined. The course also focuses on the tools of the community nutritionist: Program planning, management, leadership, budgeting, social marketing, evaluation, principles of community needs assessment and the knowledge of consumer behavior. **Pre-requisite: ND 225.**

### **ND 325            3-0-3    NUTRITIONAL BIOCHEMISTRY**

This course will study of the effects of specific nutrients in human metabolism. Digestion, function, and metabolism of proteins and amino acids, carbohydrates, and lipids. Detailed analysis of the digestion, absorption, transport, and intermediary metabolism of nutrients. Nutrient requirements are evaluated in the context of their physiological and biochemical functions. This will include lectures and discussions on metabolic pathways and the role of specific nutrients in these pathways. **Pre-requisite: CH 122 and CH 122L.**

**ND 328            3-0-3    MEDICAL NUTRITION THERAPY I**

This course will explore the scientific basis for modifying diets in order to manage disease. This includes an understanding of why diet modifications are necessary and the physiological basis for modifying diets to manage disease. **Pre-requisite:** ND 225, ND 230.

**ND 366            3-1-4    QUANTITY FOOD PURCHASING AND PREPARATION**

The purpose of this course is to acquaint the students with modified methods for menu planning food purchasing and preparation, storage, and serving of food in volume. **Pre-requisite:** ND 214L.

**ND 376            3-0-3    FOOD SERVICE SYSTEMS IN MANAGEMENT/HACCP**

A study of the organization and management of food service institutions; professional qualifications for managers, personnel management, schedules, purchasing and records. This course explores the organization and administration of food service systems. Functions and responsibilities related to the management of these systems, including planning, site design, marketing, human resource management and cost accounting as it relates to equipment, food and labor are also addressed. This course will also offer the ServSafe® program. This is a food safety training and certification course developed by the National Restaurant Association Education Foundation. The seven-hour course is followed by an exam consisting of 90 questions. Topics include: Food Safety's Impact on the Operation, The Flow of Food through the Operation, and Managing Your Operation.

**ND 421            3-0-3    FOOD SCIENCE**

In this course students will study the scientific and technological principles related to the physical, chemical, nutritional and organoleptic properties of foods; emphasis on ingredients and safety. Microbiology and biochemistry of food spoilage, engineering techniques and biotechnology of food production, and food plant sanitation and biotechnology of food production, and food plant sanitation methods of food preservation. **Pre-requisite:** ND 325.

**ND 424            3-0-3    NUTRITION AND AGING**

This course presents an overview of the special nutritional issues and requirements affecting the Elderly. **Pre-requisite:** ND 225.

**ND 428            3-0-3    MEDICAL NUTRITION THERAPY II**

Study of the biochemical and physiological principles for therapeutic diets and dietary treatment for a variety of disease states. **Pre-requisite:** ND 225, **Co-requisite:** ND 428L.

**ND 428L          0-1-1    MEDICAL NUTRITION THERAPY II LABORATORY**

Application of MNT II through classroom simulated and field experiences. **Co-requisite:** ND 428.

**ND 429            3-0-3    MEDICAL NUTRITION THERAPY III**

Continuation of the study of the biochemical and physiological principles for therapeutic diets and dietary treatment for a variety of disease states. **Pre-requisite:** ND 325, ND 428, ND 428L, **Co-requisite:** ND 429L.

**ND 429L          0-1-1    MEDICAL NUTRITION THERAPY III LABORATORY**

Application of MNT II through classroom simulated and field experiences. **Co-requisite:** ND 429.

**ND 430            3-0-3    NUTRITION AND EXERCISE**

The course focuses on the relationship between nutrition and exercise. Students will gain both basic and applied understanding of the metabolic and physiological role of nutrition in exercise. **Pre-requisite:** ND 325.

**ND 450            6-0-6    PRACTICUM IN DIETETICS I**

Student will gain experience in the dietetics profession through supervised training in various settings including: hospitals, nursing homes, community health centers and food service establishments.

**Pre-requisites:** Senior standing and completion of all classes up through the final semester of senior year.

**Pre-requisite:** Departmental Approval.

**ND 451            6-0-6    PRACTICUM IN DIETETICS II**

A continuation of ND 450. **Pre-requisite:** Departmental Approval.

**ND 490 3-0-3 HACCP/SERVSAFE**

The course will examine Hazard Analysis and Critical Control Point (HACCP) principles especially related to meat and poultry, microbiological and process overviews, good manufacturing practices (GMPs), and standard operating procedures (SOPs). Students may become ServSafe certified. **Pre-requisites: ND 421, ND 325.**

**CHILD DEVELOPMENT AND FAMILY STUDIES**

The Bachelor of Science degree program in Child Development and Family Studies focuses on the prescribed and integrative curriculum is synergistic and multidisciplinary in content, knowledge, and experiential learning from various fields for the purpose of studying individuals and families across the life span. The program of study views the child, family, and community as interrelated and you to membership in the national and local organization.

**Child Development  
(120 Credit Hours)****Freshman Year (27)**

First Semester		Hrs.	Second Semester		Hrs.
HS 203	Survey of Human Sciences	<input type="checkbox"/> 3	EN 112	Composition II	<input type="checkbox"/> 3
EN 111	Composition I	<input type="checkbox"/> 3	PY 111	Physical Science I	<input type="checkbox"/> 3
MA 121	College Algebra	<input type="checkbox"/> 3	SS 111	Social Institutions	<input type="checkbox"/> 3
		<input type="checkbox"/>	PH 132	General Psychology	<input type="checkbox"/> 3
UL 101	University Life	<input type="checkbox"/> 1	CS 100	Info. Tech. Proficiency	<input type="checkbox"/> 1
BI 111	Intro. to Biology I	<input type="checkbox"/> 3			<input type="checkbox"/>
BI 111L	Intro. to Biology I Lab	<input type="checkbox"/> 1			<input type="checkbox"/>
	<b>Total</b>	<input type="checkbox"/> 14		<b>Total</b>	<input type="checkbox"/> 13

**Sophomore Year (33)**

EN 213	Studies in Literature	<input type="checkbox"/> 3	CD 253	Child Development I	<input type="checkbox"/> 3
CD 201	Human Development	<input type="checkbox"/> 3	HS 224	Family Health	<input type="checkbox"/> 3
HS 475	Consumer Education	<input type="checkbox"/> 3	HU 201	Humanities	<input type="checkbox"/> 3
ND 225	Intro. to Nutrition	<input type="checkbox"/> 3	ND 248	Maternal Child Nutrition	<input type="checkbox"/> 3
BA 226	Intro. to Small Business Dev.	<input type="checkbox"/> 3	CD 280	Issues and Trends in Child Dev.	<input type="checkbox"/> 3
		<input type="checkbox"/>			<input type="checkbox"/>
SA 223	Oral Communication	<input type="checkbox"/> 3			<input type="checkbox"/>
	<b>Total</b>	<input type="checkbox"/> 18		<b>Total</b>	<input type="checkbox"/> 15

**Junior Year (36)**

CD 331	Parenting	<input type="checkbox"/> 3	CD 367	Creative Arts	<input type="checkbox"/> 3
CD 350	Practicum	<input type="checkbox"/> 6	CD 302	Child Care Admin.	<input type="checkbox"/> 3
CD 347	Infant Development	<input type="checkbox"/> 3	CD 353	Child Development II	<input type="checkbox"/> 3
EN 351	Technical Writing	<input type="checkbox"/> 3	CD 335	Pub. Policies in Child Care	<input type="checkbox"/> 3
HS 327	Marriage Family Relations	<input type="checkbox"/> 3	CD 320	Guidance of Young Child.	<input type="checkbox"/> 3
		<input type="checkbox"/>	CD 317	Early Intervention	<input type="checkbox"/> 3
	<b>Total</b>	<input type="checkbox"/> 18		<b>Total</b>	<input type="checkbox"/> 18

**Senior Year (24)**

CD 420	Child Community Life	<input type="checkbox"/> 3	CD 450	Practicum	<input type="checkbox"/> 12
		<input type="checkbox"/>			<input type="checkbox"/>
CD 425	Prin. Prac. Of Teaching	<input type="checkbox"/> 3			<input type="checkbox"/>
HS 493	Seminar (Senior)	<input type="checkbox"/> 3			<input type="checkbox"/>
CD 318	Early Literacy	<input type="checkbox"/> 3			<input type="checkbox"/>
	<b>Total</b>	<input type="checkbox"/> 12		<b>Total</b>	<input type="checkbox"/> 12

## **COURSE DESCRIPTIONS IN CHILD DEVELOPMENT (CD)**

### **CD 103            1-0-1    PROFESSIONAL AND FIELD EXPERIENCES**

This course is designed to study the field of child development and introduce students to the occupational opportunities in programs serving families and children. Students will learn child development through classroom instruction, while learning the process of observation as well as developing and presenting age appropriate activities to children. Community internships may include placement in preschools, childcare centers, and elementary schools.

### **CD 201            3-0-3    HUMAN DEVELOPMENT**

This course is designed to provide a comprehensive account of human development across the life span; to build theoretical and empirical foundations that enable students to become educated and critical interpreters of developmental information; and to present a blend of basic and applied research as well as controversial topics and emerging trends, to demonstrate connections between the laboratory and life and the dynamic nature of the science of human development.

### **CD 253            3-0-3    CHILD DEVELOPMENT I**

A study of developmental characteristics of children, including physical, motor, emotional, intellectual, and social characteristics with emphasis on the early years (birth to age 8), related laboratory experiences included.

### **CD 280            3-0-3    ISSUES AND TRENDS IN CHILD DEVELOPMENT**

Current issues related to the child development profession are studied with linkages to global and multicultural perspectives.

### **CD 302            3-0-3    CHILD CARE ADMINISTRATION**

This course introduces students to managerial practices and procedures (Planning, delegation and supervision) as they apply to the operation of programs for young children using Mississippi State Department of Health Childcare Regulations and other local, state and national standards of practice (NAEYC, AAFCS, MS State Department of Education).

### **CD 317            3-0-3    EARLY INTERVENTION**

The course is designed to provide students and overview of the philosophy and history of early intervention. Students also gain insights into various early intervention service delivery models such as universal design. Legal and social history is used as a backdrop for teaching the evolution of early intervention. Practices in early childhood education, special education and early intervention and their implications for current practice are discussed.

### **CD 318            3-0-3    EARLY LITERACY**

This course is designed to explore early literacy development- reading, writing, listening, and speaking from birth through 5. Emphasis is on current research in language theory, literacy definitions, concepts of literacy, foundations of literacy growth and needs, brain-based learning, family literacy, prevention of reading difficulties and early literacy practices. Students will analyze literacy stages and plan appropriate materials and activities useful in fostering early literacy in young children.

### **CD 320            3-0-3    GUIDANCE OF YOUNG CHILDREN**

The course provides future child-care providers with practical problem-solving techniques that support social and emotional development in young children exclude the use of punishment, blame, and guilt. Emphasis is placed on the importance of environment first and then progressing to listening skills, negotiating, conflict resolution, and setting limits. Students will have the opportunity to observe real life examples, sample dialogs, and case studies that vividly bring to life the daily interaction of children and teachers in the childcare setting.

**Pre-requisite: CD 253.**

### **CD 331            3-0-3    PARENTING**

This course introduces students to families and their transition into parenthood. The relationships between parents and children are studied, the lens of parenting structures, styles and practices. Patterns of home and school interaction are studied.

**CD 335            3-0-3    PUBLIC POLICIES IN CHILD CARE**

The focus of the course is on the broader perspectives that have guided and shaped policies in the area of child development. Beginning with an historical view of child development, emphasis will be placed on the emergence of modern children in a multicultural society. The particular focus of the course will be the development of social policy as it affects families and children from different cultural backgrounds and the childcare industry.

**CD 347            3-0-3    INFANT DEVELOPMENT**

This is the study of infant growth, development and his/her environment from conception to two years of age.

**Pre-requisite: CD 253.**

**CD 350            6-0-6    PRACTICUM**

Supervised unpaid entry level work experience in child development centers, family service centers and related settings. This setting is to familiarize students with professionalism in the workplace. All students are required to have Form 121 (Immunization), Criminal Background Check, TB Skin Test, 3 letters of recommendation, and an up-to-date transcript prior to placement. **Pre-requisite: departmental approval.**

**CD 353            3-0-3    CHILD DEVELOPMENT II**

A continuation of CD 253. A study of developmental characteristics of children, including physical, motor, emotional, intellectual, and social characteristics, ages 9-19 years, related laboratory experiences included and observations are provided real life settings. **Pre-requisite: CD 253 Child Development I.**

**CD 367            3-0-3    CREATIVE ARTS**

Students study the concept of creative activities in the development of cognitive competency; methods of teaching creative activities to children; techniques and methods that support the development of creative behavioral and thinking potentials in children as a natural means of their organization; and utilization of environmental stimuli.

**CD 420            3-0-3    CHILD AND COMMUNITY LIFE**

This course will study the influence of environmental, psychological, cultural and societal factors on the growth and development of young children within the family. Various forms of are is introduced with the use of environmental stimuli. Emphases place on human ecological system developed by Theorist Urie Bronfenbrenner. **Pre-requisite: CD 353 Child Development II.**

**CD 425            3-0-3    PRINCIPLES AND PRACTICES OF TEACHING**

A study of teaching techniques and practices related to early learners; emphasis is on selection, development, planning, implementation, and evaluation of instructional strategies for various types of learning.

**Pre-requisite: CD 320.**

**CD 450            12-0-12    PRACTICUM**

A supervised unpaid off-campus full-day work experience in a child or family related business. Experiences are planned with consideration of the student's interest. **Pre-requisite: Completion of all professional courses through the first semester of senior year. Pre-requisite: Departmental approval.**

**CD 481            1-0-1    SPECIAL PROBLEMS**

Child development programs and literature are studied; students may elect to study problems in child development that are of personal and professional interest. Specialized arrangements that allows students to explore study questions in Family and Child Development that is of personal professional interest.

**COURSE DESCRIPTIONS IN HUMAN SCIENCES (HS)****HS 101            1-0-1    PERSONAL AND SOCIAL DEVELOPMENT**

This course is designed to aid students in the development of personal and social skills for success as related to University life and professionalism. Emphasis is placed on college survival skills, professional strategy/image, social usage, and selected concepts of wellness and management, including resource utilization, values, goals and decision-making. An overview is included of the University's history, organization, and role.



**HS 203            3-0-3    SURVEY OF HUMAN SCIENCES**

(Required of all Human Science Majors)

A study of Human Sciences as a profession addresses being a leader in the practice to find solutions for children family and community entities. The Human Sciences profession, includes philosophy, leaders, legislation, historical and ethical considerations; a treatment of Human Sciences disciplines, including career opportunities, preparation requirements, and interrelationships of the biological, physical and social sciences.

**HS 114            1-0-1    FRESHMAN SEMINAR**

(Required by all Human Sciences Majors) A survey of recent developments in research related to the Human Sciences. Students will be introduced to the process of critically reviewing peer-reviewed publications, preparing written summaries and presenting their findings.

**HS 224            3-0-3    FAMILY HEALTH**

A study of the concepts and importance of health with emphasis on the principles of health maintenance and care of family members; nursing principles and techniques in home care of the sick and injured are discussed; and practice in making improvised and emergency devices for care of the sick.

**HS 315            3-0-3    PARENT/PRE-SCHOOL RELATIONS**

A study of parent/child relations with emphasis on principles, procedures, and methods of working with parents in individual or group settings.

**HS 327            3-0-3    MARRIAGE AND FAMILY RELATIONS**

(Open to all students) A study of interpersonal relations of the individual and his or her family through various stages of the life cycle; an accounting of processes in the development, change, and termination of human relationships, application of concepts and data to issues, and problems in primary relationships.

**HS 376            3-0-3    MATERIALS AND METHODS**

Principles and techniques basic to teaching Human Sciences in secondary schools, curricula organizations, selection and evaluation of instructional materials; department organization, program planning, methods of teaching and effective use of teaching materials.

**HS 427            3-0-3    MANAGEMENT OF FAMILY RESOURCES**

This course develops efficiency and skill in the use of time, energy, and money in the household buying and management, as well as methods of evaluating goods and services available to the modern homemaker.

**HS 475            3-0-3    CONSUMER EDUCATION**

(Open to all students) (Required by all Human Sciences Majors) An introduction to the principles and factors affecting the quality, cost and durability of selected consumer goods, including resource management and protection aspects of income, as well as concepts of systems of economics.

**HS 479            1-2-3    OCCUPATIONAL HOME ECONOMICS**

This course is concentrated with the philosophy and program planning for success in teaching occupational programs at the secondary and post-secondary levels.

**HS 480            3-0-3    SUPERVISED FIELD EXPERIENCE IN HUMAN SCIENCES RELATED OCCUPATIONS**

(Offered in Summer Only) Supervised experience in an occupational environment selected from those designed by the Teacher Educator and utilizing the established criteria; Inservice "hands on" work experience provided.

**Pre-requisite: completion of general professional and specialized courses through the junior year.**

**HS 482            1-0-1    ISSUES AND TRENDS IN HUMAN SCIENCES**

Current issues and trends in areas of certification (Graduating Seniors only).

**HS 493            3-0-3    SEMINAR (SENIOR)**

This course requires seniors to conduct an extensive literature review in an area of research in their major and prepare a comprehensive written review. Students will utilize existing state-of-the-art technologies to present their thesis to an audience of faculty and their peers.

**HS 494                    2-0-2    THESIS**

This is a capstone course and a continuation of HS 493. Students will be required to prepare an in-depth written composition in an area of research related to their major. **Pre-requisite: Departmental Approval/Graduating Seniors only.**

**HS 499                    (1-3)-0-(1-3)    SPECIAL PROBLEMS**

Selected current professional problems in human sciences. **Pre-requisite: Departmental approval.**

## **SCHOOL OF ARTS AND SCIENCES**

***Dr. Babu P. Patlolla, Dean***

***Mathematics and Science Bldg. #216***

***Telephone: (601) 877-6120***

***Fax: (601) 877-3989***

The School of Arts and Sciences consists of the Departments of *Biological Sciences, Chemistry and Physics, English, Languages and Mass Communication, Fine Arts, Mathematical and Computer Sciences, Military Science, Social Sciences, and Social Work*. The principle thrust of the School of Arts Sciences is to provide all students with the ability to think critically; to speak and write clearly; to compute accurately; to explain the central social, historical, creative, and cultural developments of civilization; to protect and inhabit the natural environment and comprehend its physical make-up; to function skillfully in an ever-changing technological environment; and to employ this knowledge and these skills in developing a set of personal values and attitudes that induce ethical and moral reasoning.

The School offers undergraduate programs leading to the *Bachelor of Science* in Biology, Chemistry, Mathematics, and Computer Science. The *Bachelor of Arts* degree is offered in Communication, English, Music and Social Science. The Bachelor of Music degree is offered in the Department of Fine Arts and Bachelor of Social Work degree is offered in the Department of Social Work. Students seeking a degree in teaching may obtain a Bachelor's degree in Secondary Education in Biology, Chemistry, English, Music, Mathematics, and Social Science. Teaching endorsements in Science, Mathematics, and the Social Sciences are also offered in the School of Arts and Sciences. The Biological Sciences Department offers a Master of Science degree in Biology, and the Department of Mathematical and Computer Sciences offers a Master of Computer and Information Sciences degree.

Curricula programs offered by each department are structured to allow students straightforward access and scheduling of courses in a sequential, semester-by-semester approach. For this reason, courses are scheduled and taught following the layout as they appear in the *ASU University Catalog* and the student's Program Status Sheets (acquired from the major department). Students are expected to enroll in courses in the sequence depicted in these curricula displays; otherwise, they will get off track and may find it difficult to get back on track. In the event this happens, students will have to attend *one, two, or more* summer sessions to get back on track or to move on an accelerated path.

Students who complete a major program in the School of Arts and Sciences will have gained the skills necessary to be life-long learners, to be philosophers of the basic principles of the creative arts, mathematicians, scientists, historians, effective communicators, problem solvers, and educators. They will meet or exceed expectations for competitive work in graduate and professional schools, and will be able to make positive contributions to the global sustainability of our community, environment, and the world.

## **Department of Biological Sciences**

*Voletta P. Williams Ph.D., Interim Chairperson*

*Math and Science Bldg., #313A*

*Telephone: (601) 877-6243*

*Fax: (601) 877-2328*

The mission of the Department of Biological Sciences is to provide students with a broad-based understanding of the principles of biological sciences that fully exploit existing and emerging technologies and to prepare students to excel as researchers, educators, healthcare professionals, and for other careers in the private and/or public sectors while serving the community, the state, the nation and globally in areas related to life sciences.

Members of the faculty and the professional staff in the department strive to prepare students for scholarship, research and community service in the area of biological sciences by:

- a) Offering a preemptive undergraduate curricula which will engage students to pursue professional or graduate studies, pursue a career in secondary education in biology, or enable them to gain employment;
- b) Providing Master of Science degree Programs that will enable students to pursue advanced academic and scholarly research training.

To accomplish its mission, the department has set several goals/objectives. These goals are reviewed and revised based upon student outcome data. The undergraduate curricula in Biological Sciences are designed to provide broad-based skills and knowledge of the fundamental concepts of biology and to prepare students for scholarship, research and service in the areas of the biological sciences including the rapidly expanding field of molecular and nano-biology. Specific courses will also meet the requirements for general biology for non-majors. The biology curricula are integrated for the use of various methods of assessing student learning outcomes with opportunities for self-assessment. Our faculty members work incessantly to assure that all students will receive unique and enriching learning opportunities to excel academically.

### **The Department of Biological Sciences offers the following degree programs:**

- 1. Baccalaureate in Science (B.S.) degree in Biology**
- 2. Baccalaureate in Science (B.S.) degree in Biology Education**  
(This curriculum is offered in collaboration with the School of Education and Psychology).

Students majoring in Biology will have opportunities to choose the following concentrations to meet the needs of their educational and career goals:

- a. Molecular Biology (Biotechnology)**
- b. Environmental Biology and Ecology**
- c. Health Science**
- d. Pre-Professional**

This specialized curriculum prepares students for admission to a professional program such as: Medicine, Dentistry, Pharmacy, Veterinary Medicine and other health science professional programs.

- e. Pre-Physical Therapy**

After completion of this curriculum, a student will be able to seek admission to a Doctor of Physical Therapy program at a Physical Therapy degree granting institution of her/his choice.

To facilitate the specific needs of our students, the following two-year, non-degree curriculum is offered:

- f. Pre-Nursing**

This curriculum prepares students for admission to a B.S. in Nursing Program at Alcorn State University or an institution of choice.

After being admitted to Alcorn State University and choosing Biology as a major, each student is required to meet with an appropriate faculty advisors to discuss detailed academic/curricular requirements. The faculty advisor will assist the student with the chosen curriculum and/or course offerings. The student should follow the curriculum to successfully complete the B.S. degree.

The Department offers the following Graduate Programs:

**a. Master of Science in Biology and an Online Master of Science Degree**

This curriculum supports students' needs and interests to pursue advanced studies to doctoral programs or to prepare for a career of their choice.

**b. Master of Science in Secondary Education with an endorsement in Biology**

This master degree level curriculum is developed in collaboration with the School of Education and Psychology.

**EXIT Examination:** To fulfill requirements for the completion of a B.S. degree in the Biological Sciences, all students must pass the Departmental Exit Examination. The content and composition of this comprehensive examination will satisfy the requirements for the learning outcomes assessment in the Biological Sciences. The exit examination includes skills and knowledge from the courses in the biological sciences. The examination is given to all graduating seniors in November and March of each academic year.

**Suggestion to prospective biology students:** Detailed Curricula listing of courses by year and semester for each concentration is available for advisement as well as in the Department's main office. At the time of registration, it is to the advantage of a student to ensure that the selection of courses follow the published Curriculum Plan for the designated major and concentration. A student must seek assistance or advice from his/her faculty advisor to avoid frustrations and disappointments or a "mix-up" in course selection. This becomes critical with regard to certain advance level courses that are randomly offered each semester. Biology majors must score a minimum grade of "C" in all biology major courses to avoid retaking the course or delaying graduation.

Checking with faculty advisors prior to registering for courses will eliminate or prevent problems or the need for substitutions and/or changes of courses at the time of graduation. Biology majors must periodically meet their respective faculty advisors and/or the Department Chairperson to ensure good standing with reference to meeting the needs of their chosen academic curriculum.

## **GRADUATION REQUIREMENTS**

**To receive a B.S. Degree in Biology, a candidate must:**

- a) Complete a designated number of semester hours of course work (120 hours) as prescribed in the Curricula for each area of concentration;
- b) Receive a minimum grade of "C" or above in all biology courses as required for the chosen area of concentration;
- c) Pass the Departmental Exit Examination.

Any exceptions to these requirements must be approved by the Departmental Chair and when necessary, by the Dean of the School of Arts and Sciences.

## **CURRICULAR SUPPORT SERVICES**

To provide opportunities for students to gain additional experiences and knowledge in support of the curricula, and to prepare them for admission to professional or graduate schools, the Department of Biological Sciences have developed and instituted several unique and enriching programs. Students interested in taking advantage of these programs should contact the appropriate faculty advisor of a given program. Below is a list of major resources/programs currently available in the Department:

1. **Biology Computer Learning Laboratory:** This laboratory is equipped with computers and Internet connectivity with printing capability. Appropriate software support is available for student assigned course or research work requiring assistance.

Computers are also supported with statistical software for statistical data analysis. The department plans have hardware and software to facilitate WEB access for online group discussions on Critiquing Research Papers sponsored by ASU-Pennsylvania State University Bridge to Doctoral Program in Biomedical Sciences.

2. **Research Opportunities in Faculty Directed Research Projects:** Faculty members are engaged in externally funded research projects. These projects support both graduate and undergraduate students. Students are encouraged to seek available positions in the department with faculty members who are principal investigators of research projects as well as other research and/or intern opportunities. These externally funded research programs will provide students with excellent competitive research experiences, and in some cases, with financial assistance. Many of these programs provide support for travel expenses to regional or national scientific conferences.
3. **Bridge to Doctorate Program at Pennsylvania State University:** Funded by NIH (National Institute of Health), collaborative arrangements have been made between Alcorn State University (ASU) and Pennsylvania State University (PSU) to provide opportunities for students completing the M.S. degree at ASU and transitioning into the doctoral degree at PSU in a selected area in the biomedical sciences. At ASU, Bridge participants will receive monthly stipends, tuition, plus travel expenses to attend and present research presentations at conferences. Additionally, opportunities are also provided for on-site research training as well as to attend colloquium at PSU while working on the Master Degree at Alcorn State University. All students selected and trained under this program are guaranteed admission to a doctoral program in an appropriate area of biological studies at Pennsylvania State University. For more information please visit <http://www.vetsci.psu.edu/bridges>.

## **B.S. Degree in Biology**

### **Biology Major (120 Credit Hours)**

This curriculum fulfills requirements for B.S. degree in Biology. Students with a B.S. degree in Biology may advance to the M.S. Degree Program in Biology or a closely related area at Alcorn State University or any accredited institution offering an advanced degree. (If, a student wishes, s/he may also qualify for ASU-Pennsylvania State University Bridge Program to Doctoral Degree in Biomedical and Biological Sciences). This B.S. degree program also qualifies students for entry into selected professional programs upon the completion of qualifying entrance examinations. This degree also prepares students for entry level employment opportunities. Enrollment in advanced level biology courses (BI 300 and above) requires exiting from the First Year Experience Program at Alcorn State University. For successful completion of biology courses, a student must receive a minimum of grade "C". Prior to registering for advanced courses (300 and 400 levels), students must complete the appropriate **Pre-requisites**. A transfer student who has completed biology courses at other institutions must seek advisement from a departmental academic advisor or the chairperson. Upon completion of a curricular program and passing a departmental exit examination, a student will receive a B.S. degree in Biology from Alcorn State University.

### **Biology Major**

#### **A Proposed Program of Study for the Baccalaureate Degree in Biology (120 Credit Hours)**

##### **Freshman Year (32)**

<b>First Semester</b>		<b>Hrs.</b>	<b>Second Semester</b>		<b>Hrs.</b>
CH 121	General Chemistry I	<input type="checkbox"/> 3	CH 122	General Chemistry II	<input type="checkbox"/> 3
CH 121L	General Chemistry I Lab	<input type="checkbox"/> 1	CH 122L	General Chemistry II Lab	<input type="checkbox"/> 1
BI 125	General Biology I	<input type="checkbox"/> 3	BI 126	General Biology II	<input type="checkbox"/> 3

BI 125L	General Biology I Lab	<input type="checkbox"/>	1	BI 126L	General Biology II Lab	<input type="checkbox"/>	1
	or				or		
BI 191	Honors Biology I	<input type="checkbox"/>	3	BI 192	Honors Biology II	<input type="checkbox"/>	3
BI 191L	Honors Biology I Lab	<input type="checkbox"/>	1	BI 192L	Honors Biology II Lab	<input type="checkbox"/>	1
EN 111	Composition I	<input type="checkbox"/>	3	EN 112	Composition II	<input type="checkbox"/>	3
MA 135	Pre - Calculus	<input type="checkbox"/>	4	MA 181	Calculus I w/Ana. Geom.	<input type="checkbox"/>	4
UL 101	University Life	<input type="checkbox"/>	<u>1</u>	ND 101	Health Wellness	<input type="checkbox"/>	<u>1</u>
	<b>Total</b>	<input type="checkbox"/>	<b>16</b>		<b>Total</b>	<input type="checkbox"/>	<b>16</b>

### Sophomore Year (31)

BI 215L	Comparative Anatomy Lab	<input type="checkbox"/>	1	PY 112	Physical Science II	<input type="checkbox"/>	3
BI 215	Comparative Anatomy	<input type="checkbox"/>	3	BI 300	Biological Chemistry	<input type="checkbox"/>	3
SA 223	Oral Communication	<input type="checkbox"/>	3	EN 213	Studies in Literature	<input type="checkbox"/>	3
HI 111	World Civilization I	<input type="checkbox"/>	3	EC 201	Principles of Economics I	<input type="checkbox"/>	3
	or						
SY 235	General Sociology	<input type="checkbox"/>	3	HI 112	World Civilization II	<input type="checkbox"/>	3
					or		
PY 111	Physical Science I	<input type="checkbox"/>	<u>3</u>	PH 132	General Psychology	<input type="checkbox"/>	3
		<input type="checkbox"/>		MU 213	Music Appreciation	<input type="checkbox"/>	<u>3</u>
		<input type="checkbox"/>			or		
		<input type="checkbox"/>		AR 214	Art Appreciation	<input type="checkbox"/>	<u>3</u>
	<b>Total</b>	<input type="checkbox"/>	<b>13</b>		<b>Total</b>	<input type="checkbox"/>	<b>18</b>

### Junior Year (28)

BI 335	Human Anatomy	<input type="checkbox"/>	3	CH 315	Survey of Org. Chemistry	<input type="checkbox"/>	3
BI 335L	Human Anatomy Lab	<input type="checkbox"/>	1	CH 315L	Survey of Org. Chem. Lab	<input type="checkbox"/>	1
BI 325	General Microbiology	<input type="checkbox"/>	3	BI 336	Human Physiology	<input type="checkbox"/>	3
BI 325L	General Microbiology Lab	<input type="checkbox"/>	1	BI 336L	Human Physiology Lab	<input type="checkbox"/>	1
BI 390	Env. Bio. Ecol.	<input type="checkbox"/>	3	BI 327	Cell Biology	<input type="checkbox"/>	3
BI-390L	Envi.Bio. Ecol. Lab	<input type="checkbox"/>	<u>1</u>	BI 327L	Cell Biology Lab	<input type="checkbox"/>	1
		<input type="checkbox"/>		BI 355	General Parasitology	<input type="checkbox"/>	3
		<input type="checkbox"/>		BI 355L	General Parasitology Lab	<input type="checkbox"/>	<u>1</u>
		<input type="checkbox"/>			Total	<input type="checkbox"/>	<b>16</b>
	<b>Total</b>	<input type="checkbox"/>	<b>12</b>				

### Senior Year (29)

BI 423	Introduction to Biostatistics	<input type="checkbox"/>	3	BI 420	Medical Microbiology	<input type="checkbox"/>	3
BI 425	Prin. of Immunology	<input type="checkbox"/>	3	BI 420L	Medical Microbiology Lab	<input type="checkbox"/>	1
BI 425L	Prin. of Immunology Lab	<input type="checkbox"/>	1	BI 446	Histology	<input type="checkbox"/>	3
BI 445	Genetics	<input type="checkbox"/>	3	BI 446	Histology Lab	<input type="checkbox"/>	1
BI 445L	Genetics Lab	<input type="checkbox"/>	1	BI 481	Introduction to Toxicology	<input type="checkbox"/>	3
BI*	Elective	<input type="checkbox"/>	4	BI *	Biology Elective	<input type="checkbox"/>	<u>3</u>
	<b>Total</b>	<input type="checkbox"/>	<b>15</b>		<b>Total</b>	<input type="checkbox"/>	<b>14</b>

\*Suggested Biology Elective: BI 124 General Botany, BI 348 Human Physiology, BI 400 Evolution, or other courses with the approval of Curriculum Advisor

### Bachelor of Science Degree: Biology Education Concentration (120 Credit Hours)

This curriculum is designed to provide the fundamental concepts in the content areas such as zoology, botany, general biology, and other specialized areas in the biological sciences needed for Biology Educators. Courses are chosen in order to provide the prospective science educator with a broad background in the biological sciences. The department offers methodology courses in conjunction with the Department of Education and Psychology. The methods courses are intended to familiarize students with various pedagogical theories and their application to learning, and materials that are used to teach biology. After completing 44 semester credit hours of Core Courses with a minimum Grade Point Average of 2.75, and a cumulative Grade Point Average of 2.75, with a minimum grade of "C" or better in the prescribed math and English courses, the student must apply for admission to the Teacher Education Program. To be admitted to the School of Education and Psychology, the student must pass Praxis I.

## Freshman Year (32)

First Semester		Hrs.	Second Semester		Hrs.
BI 121	General Zoology I	3	CH 122	General Chemistry II	3
BI 121L	General Zoology I Lab	1	CH 122L	General Chemistry II Lab	1
CH 121	General Chemistry I	3	BI 124	General Botany	3
CH 121L	General Chemistry I Lab	1	BI 124L	General Botany Lab	1
MA 121	College Algebra	3	MA 132	Trigonometry	3
EN 111	Composition I	3	EN 112	Composition II	3
UL 101	University Life	1	HI 111	World Civilization I	3
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>17</b>

## Sophomore Year (33)

AR 214	Art Appreciation	3	BI 336	Human Physiology	3
	or				
MU 213	Music Appreciation		BI 336L	Human Physiology Lab	1
SA 223	Oral Communication	3	BI 226	Developmental Biology	3
BI 311	Survey of Biological Sciences	3	BI 226L	Developmental Biology Lab	1
BI 335	Human Anatomy	3	HI 112	World Civilization II	3
BI 335L	Human Anatomy Lab	1	PH 132	General Psychology	3
EN 213	Studies in Literature	3	ED 200	Social Studies/Multicultural Ed	3
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>17</b>

## Junior Year (28)

BI 327	Cell Biology	3	BI 485	Teaching Science in the Secondary School	3
BI 327L	Cell Biology Lab	1	BI 449	Senior Project	2
BI 325	General Microbiology	3	PH 326	Psychology of the Excep. Child	3
BI 325L	General Microbiology Lab	1	ED 498	Reading in the Secondary School	3
ED 302	Teaching Practicum/Technology	3	BI 415	Computer Applications in the Biological Sciences	3
ED 351	Managing Classroom Beh.	3	<b>Total</b>		<b>14</b>
<b>Total</b>		<b>14</b>			

## Senior Year (27)

BI 445	Genetics	3	ED 468	Directed Teaching	12
BI 445L	Genetics Lab	1			
BI 390	Env. Bio. Ecology	3			
BI 390L	Env. Bio. Ecology Lab	1			
ED 348	Foundations of Ed.	3			
PH 347	Measurement Evaluation	3			
BI 450	Senior Seminar	1			
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>12</b>

\*Suggested Biology Electives: BI-400, BI-402; Courses for electives must be approved by the Curricula

## B.S. Degree in Biology: Molecular Biology (Biotechnology)

### Major (120 Credit Hours)

The purpose of this curriculum is to prepare students in cellular and molecular bioscience, as well as genetic engineering. The students will be provided with a foundation in the principles of genetics and molecular biology of both prokaryotic and eukaryotic organisms. After successful completion of this program, the student will be able to gain additional specialized training in forensic, pharmaceutical, or seek in employment in specialized laboratory.



## Freshman Year (31)

First Semester		Hrs.	Second Semester		Hrs.
BI 125	General Biology I	3	BI 126	General Biology II	3
BI 125L	General Biology I Lab	1	BI 126L	General Biology II Lab	1
	or			or	
BI 121	General Zoology I	3	BI 122	General Zoology II	3
BI 121L	General Zoology I Lab	1	BI 122L	General Zoology II Lab	1
CH 121	General Chemistry I	3	CH 122	General Chemistry II	3
CH 121L	General Chemistry I Lab	1	CH 122L	General Chemistry II Lab	1
EN 111	Composition I	3	EN 112	Composition II	3
MA 181	Calculus I w/Ana. Geom.	4	MA 182	Calculus II w/Ana. Geom.	4
UL 101	University Life	1			
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>15</b>

## Sophomore Year (31)

CH 221	Organic Chemistry I	3	CH 222	Organic Chemistry II	3
CH 221L	Organic Chemistry I Lab	1	CH 222L	Organic Chemistry II Lab	1
PY 215	General Physics (Non-Calculus)	3	PY 216	General Physics	3
PY 215L	General Physics (Non-Calculus) Lab	1	PY 216L	General Physics Lab	1
HI 111	World Civilization I	3	HI 112	World Civilization II	3
EN 213	Studies in Literature	3	PH 132	General Psychology	3
			MU 213	Music Appreciation	3
				or	
			AR 214	Art Appreciation	3
<b>Total</b>		<b>14</b>	<b>Total</b>		<b>17</b>

## Junior Year (28)

BI 325	General Microbiology	3	CH 332	Biochemistry II	3
BI 325L	General Microbiology Lab	1	CH 332L	Biochemistry II lab	1
CH 331	Biochemistry I	3	BI 362	Adv. Cell Mole. Biology II	3
CH 331L	Biochemistry I Lab	1	BI 362L	Adv. Cell Mole. Biology II Lab	1
BI 361	Adv. Cell Mole. Biology I	3	BI 402	Bioethics	3
BI 361L	Adv. Cell Mole. Biology I Lab	1	SA 223	Oral Communication	3
BI 449	Senior Project	2			
<b>Total</b>		<b>14</b>	<b>Total</b>		<b>14</b>

## Senior Year (30)

BI 415	Computer Applications in the Biological Sciences	3	BI 425	Prin. of Immunology	3
BI 445	Genetics	3	BI 425L	Prin. of Immunology Lab	1
BI 445L	Genetics Lab	1	BI 403	Mycology	3
BI 458	Microbial Genetics	3	BI 403L	Mycology Lab	1
BI 458L	Microbial Genetics Lab	1	BI 400	Evolution	3
BI 498	Bio. Research Instrumentation	3	BI 423	Introduction to Biostatistics	3
BI 498L	Bio. Research Instrumentation Lab	1	BI 450	Senior Seminar	1
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>15</b>

**\*Suggested Electives:** BI-124 Botany, BI-402 Bioethics, Agriculture/Plant majors choose BI-124 as an elective. BI-191/192 or BI-121/122 may be substituted for BI-125/126 and Lab. Elective courses must be approved by the Curriculum Advisor.

**B. S. Degree in Biology: Environmental Biology and Ecology Major**  
**(120 Credit Hours)**

The Environmental Biology and Ecology concentration is an interdisciplinary program that addresses global environment-related issues.

The curriculum is designed to provide instruction to students with reference to the processes and associated methodologies that are needed to assess potential beneficial and descriptive impacts on complex environmental systems. Students are advised to check with their faculty advisors for any additions, substitutions, waivers and deletions of courses in this curriculum.

**Freshman Year (30)**

First Semester		Hrs.	Second Semester		Hrs.		
CH 121	General Chemistry I	<input type="text"/>	3	CH 122	General Chemistry II	<input type="text"/>	3
CH 121L	General Chemistry I Lab	<input type="text"/>	1	CH 122L	General Chemistry II Lab	<input type="text"/>	1
BI 125	General Biology I	<input type="text"/>	3	BI 126	General Biology II	<input type="text"/>	3
BI 125L	General Biology I Lab	<input type="text"/>	1	BI 126L	General Biology II Lab	<input type="text"/>	1
	or				or		
BI 191	Honors Biology I	<input type="text"/>	3	BI 192	Honors Biology II	<input type="text"/>	3
BI 191L	Honors Biology I Lab	<input type="text"/>	1	BI 192L	Honors Biology II Lab	<input type="text"/>	1
EN 111	Composition I	<input type="text"/>	3	EN 112	Composition II	<input type="text"/>	3
MA 121	College Algebra	<input type="text"/>	3	MA 132	Trigonometry	<input type="text"/>	3
UL 101	University Life	<input type="text"/>	1	ND 101	Health Wellness	<input type="text"/>	1
Total		<input type="text"/>	15	Total		<input type="text"/>	15

**Sophomore Year (33)**

BI 113	Intro to Envir. Biology	<input type="text"/>	3	BI 124	General Botany	<input type="text"/>	3
BI 113L	Intro to Envir. Biology Lab	<input type="text"/>	1	BI 124L	General Botany Lab	<input type="text"/>	1
BI 215	Comparative Anatomy	<input type="text"/>	3	PH 132	General Psychology	<input type="text"/>	3
BI 215L	Comparative Anatomy Lab	<input type="text"/>	1	SP 112	Spanish II	<input type="text"/>	3
SP 111	Spanish I	<input type="text"/>	3	EC 201	Principles of Economics I	<input type="text"/>	3
EN 213	Studies in Literature	<input type="text"/>	3	PY 111	Physical Science I	<input type="text"/>	3
HI 111	World Civilization I	<input type="text"/>	3			<input type="text"/>	
	or					<input type="text"/>	
SY 235	General Sociology	<input type="text"/>	3			<input type="text"/>	
<b>Total</b>		<input type="text"/>	<b>17</b>	<b>Total</b>		<input type="text"/>	<b>16</b>

**Junior Year (29)**

BI 325	General Microbiology	<input type="text"/>	3	BI 318	Field Bio Ecology	<input type="text"/>	3
BI 325L	General Microbiology Lab	<input type="text"/>	1	BI 318L	Field Bio Ecology	<input type="text"/>	1
BI 423	Introduction to Biostatistics	<input type="text"/>	3	BI 390	Env. Biol. Ecology	<input type="text"/>	3
BI 327	Cell Biology	<input type="text"/>	3	BI 390L	Env. Bio. Ecology Lab	<input type="text"/>	1
BI 327L	Cell Biology Lab	<input type="text"/>	1	BI 300	Biological Chemistry	<input type="text"/>	3
SA 223	Oral Communication	<input type="text"/>	3	BI 355	General Parasitology	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>14</b>	BI 355L	General Parasitology Lab	<input type="text"/>	1
				<b>Total</b>		<input type="text"/>	<b>15</b>

**Senior Year (28)**

BI 400	Evolution	<input type="text"/>	3	MU 213	Music Appreciation	<input type="text"/>	3
BI 445	Genetics	<input type="text"/>	3	BI 348	Plant Physiology	<input type="text"/>	3
BI 445L	Genetics Lab	<input type="text"/>	1	BI 348L	Plant Physiology Lab	<input type="text"/>	1

BI 453	Environ. Risk Assessment	<input type="text"/>	3
BI 456	Special Topics in Environ. Biology/Ecology	<input type="text"/>	3
		<input type="text"/>	
		<input type="text"/>	
	<b>Total</b>	<input type="text"/>	<b>13</b>

BI 481	Introduction to Toxicology	<input type="text"/>	3
BI 462	Environmental Policy	<input type="text"/>	3
		<input type="text"/>	
BI 449	Senior Project	<input type="text"/>	2
	<b>Total</b>	<input type="text"/>	<b>15</b>

**\*Suggested Biology Electives:** BI-400 Evolution, BI-402 Ethics. Students may choose any two courses in biology as electives with the approval of the Curriculum Advisor

## B. S. Degree in Biology: Health Science Major (120 Credit Hours)

The Health Science concentration is a B.S. degree curriculum in Biology which prepares students for careers in health related fields through a broad understanding of human development and factors which influence human health. This option prepares students for graduate studies in fields, such as nutrition, public health, health service, planning and administration, public health and other areas related to health science. After successful completion of the curriculum and passing a Departmental Comprehensive (exit) Examination, a student will receive a degree in Biology with a concentration in Health Science.

### Freshman Year (30)

First Semester		Hrs.	Second Semester		Hrs.		
BI 191	Honors Biology I	<input type="text"/>	3	BI 192	Honors Biology II	<input type="text"/>	3
BI 191L	Honors Biology I Lab	<input type="text"/>	1	BI 192L	Honors Biology II Lab	<input type="text"/>	1
CH 121	General Chemistry I	<input type="text"/>	3	CH 122	General Chemistry II	<input type="text"/>	3
CH 121L	General Chemistry I Lab	<input type="text"/>	1	CH 122L	General Chemistry Lab	<input type="text"/>	1
EN 111	Composition I	<input type="text"/>	3	EN 112	Composition II	<input type="text"/>	3
MA121	College Algebra	<input type="text"/>	3	MA 132	Trigonometry	<input type="text"/>	3
UL 101	University Life	<input type="text"/>	1	ND 101	Health Wellness	<input type="text"/>	1
Total		<input type="text"/>	15	Total		<input type="text"/>	15

### Sophomore Year (31)

BI 124	General Botany	<input type="text"/>	3	BI 300	Biological Chemistry	<input type="text"/>	3
CH-221	Organic Chemistry I	<input type="text"/>	3	BI 308	Introduction to Health Science	<input type="text"/>	3
CH-221L	Organic Chemistry I Lab	<input type="text"/>	1	SA 223	Oral Communication	<input type="text"/>	3
SY 235	General Sociology	<input type="text"/>	3	HI-111	World Civilization I	<input type="text"/>	3
	or				or		
PH 132	General Psychology	<input type="text"/>	3	EC 201	Principles of Economics I	<input type="text"/>	3
EN 213	Studies in Literature	<input type="text"/>	3	PE 245	First Aid Safety	<input type="text"/>	3
PE 122	Health	<input type="text"/>	3			<input type="text"/>	
	<b>Total</b>	<input type="text"/>	<b>16</b>		<b>Total</b>	<input type="text"/>	<b>15</b>

### Junior Year (29)

BI 335	Human Anatomy	<input type="text"/>	3	BI 336	Human Physiology	<input type="text"/>	3
BI 335L	Human Anatomy Lab	<input type="text"/>	1	BI 336L	Human Physiology Lab	<input type="text"/>	1
BI 325	General Microbiology	<input type="text"/>	3	BI 320	Medical Terminology	<input type="text"/>	3
BI 325L	General Microbiology Lab	<input type="text"/>	1	PH 320	Developmental Psychology	<input type="text"/>	3
ND 225	Intro. to Nutrition	<input type="text"/>	3	BI 327	Cell Biology	<input type="text"/>	3
BI 355	General Parasitology	<input type="text"/>	3	BI 327L	Cell Biology Lab	<input type="text"/>	1
BI 355L	General Parasitology Lab	<input type="text"/>	1			<input type="text"/>	
	<b>Total</b>	<input type="text"/>	<b>15</b>		<b>Total</b>	<input type="text"/>	<b>14</b>

### Senior Year (30)

MU 213	Music Appreciation	<input type="text"/>	3	BI-425	Immunology	<input type="text"/>	3
	or						
AR 214	Art Appreciation	<input type="text"/>	3	BI425L	Immunology Lab	<input type="text"/>	1
BI 420	Medical Microbiology	<input type="text"/>	3	BI *	Biology Elective	<input type="text"/>	4
BI 420L	Medical Microbiology Lab	<input type="text"/>	1	BI 445	Genetics	<input type="text"/>	3

BI 415	Computer Applications in the Biological Sciences	<input type="text"/>	3	BI 445L	Genetics Lab	<input type="text"/>	1
BI 390	Env. Bio. Ecology	<input type="text"/>	3			<input type="text"/>	
BI 390L	Env. Bio. Eco. Lab	<input type="text"/>	1			<input type="text"/>	
BI*	Biology Elective	<input type="text"/>	4			<input type="text"/>	
<b>Total</b>			<b>18</b>	<b>Total</b>			<b>12</b>

**\*Suggested Biology Electives:** BI-400 Evolution, BI-402 Ethics, BI-311 Survey of Biology, BI 481 Introduction to Toxicology, BI 326 Pharmacology or other courses by the permission of the Curriculum Advisor.

### B.S. in Biology Degree: Pre-Professional Concentration (120 Credit Hours)

This curriculum is designed for students who are interested in seeking admission to Medical School, School of Dentistry, School of Pharmacy, or School of Veterinary Medicine. Upon the completion of this curriculum, the students will be required to make a favorable score on the MCAT /DAT and/or other professional admission tests. The Pre-professional Office and the departmental advisors provide the students with academic training materials and activities to help prepare them for the examinations.

The students must maintain a Cumulative Grade Point Average of 3:00 or better. A student interested in entering a professional program, must actively participate in all academic activities at Alcorn State University in support of the curriculum. Students are encouraged to consult regularly with the faculty advisors.

#### Freshman Year (32)

First Semester			Hrs.	Second Semester			Hrs.
CH 121	General Chemistry I		3	CH 122	General Chemistry II		3
CH 121L	General Chemistry I Lab		1	CH 122L	General Chemistry Lab		1
BI 125	General Biology I		3	BI 126	General Biology II		3
BI 125L	General Biology I Lab		1	BI 126L	General Biology II Lab		1
	or				or		
BI 191	Honors Biology I		3	BI 192	Honors Biology II		3
BI 191L	Honors Biology I Lab		1	BI 192L	Honors Biology II Lab		1
EN 111	Composition I		3	EN 112	Composition II		3
MA 135	Pre-Calculus		4	MA 181	Calculus I w/Ana. Geom.		4
UL 101	University Life		1	PR 102	Verbal Reasoning		0
PR 101	Improving Vocabulary and Writing Skills		0	ND 101	Health Wellness		1
Total			16	Total			16

#### Sophomore Year (31)

CH 221	Organic Chemistry I	<input type="text"/>	3	MU 213	Music Appreciation	<input type="text"/>	3
					or		
CH 221L	Organic Chemistry I Lab	<input type="text"/>	1	AR 214	Art Appreciation	<input type="text"/>	3
SA 223	Oral Communication	<input type="text"/>	3	CH 222	Organic Chemistry II	<input type="text"/>	3
HI 111	World Civilization I	<input type="text"/>	3	CH 222L	Organic Chemistry II Lab	<input type="text"/>	1
	or						
SY 235	General Sociology	<input type="text"/>		EN 213	Studies in Literature	<input type="text"/>	3
PY 215	General Physics (Non-Calculus)	<input type="text"/>	3	PH 132	General Psychology	<input type="text"/>	3
PY 215L	General Physics (Non-Calculus) Lab	<input type="text"/>	1	PY 216	General Physics	<input type="text"/>	3
PR 201	Reading Comprehension	<input type="text"/>	0	PY 216L	General Physics Lab	<input type="text"/>	1
				PR 202	Critical Thinking	<input type="text"/>	0
<b>Total</b>			<b>14</b>	<b>Total</b>			<b>17</b>

### Junior Year (31)

BI 335	Human Anatomy	<input type="text"/>	3	BI 215	Comparative Anatomy	<input type="text"/>	3
BI 335L	Human Anatomy Lab	<input type="text"/>	1	BI 215L	Comparative Anatomy Lab	<input type="text"/>	1
BI 361	Adv. Cell and Mole. Biology I	<input type="text"/>	3	BI 482	Applied Physiology	<input type="text"/>	3
BI 361L	Adv. Cell and Mole. Biology I Lab	<input type="text"/>	1	BI 482L	Applied Physiology Lab	<input type="text"/>	1
CH 331	Biochemistry I	<input type="text"/>	3	BI 325	General Microbiology	<input type="text"/>	3
CH 331L	Biochemistry I Lab	<input type="text"/>	1	BI 325L	General Microbiology Lab	<input type="text"/>	1
PR 301	Stand. Test Enrichment	<input type="text"/>	0	BI 390	Env. Bio. Ecology	<input type="text"/>	3
BI 328	Conceptional Analysis and Critical Thinking	<input type="text"/>	3	BI 390 L	Env. Bio. Ecology Lab	<input type="text"/>	1
		<input type="text"/>		PR 302	Standardized Test Enrichment	<input type="text"/>	0
<b>Total</b>		<input type="text"/>	<b>15</b>	<b>Total</b>		<input type="text"/>	<b>16</b>

### Senior Year (26)

CH 321	Quantitative Analysis	<input type="text"/>	3	BI 420	Medical Microbiology	<input type="text"/>	3
CH 321L	Quantitative Analysis Lab	<input type="text"/>	1	BI 420L	Medical Microbiology Lab	<input type="text"/>	1
BI 425	Prin. of Immunology	<input type="text"/>	3	BI 423	Introduction to Biostatistics	<input type="text"/>	3
BI 425L	Prin. of Immunology Lab	<input type="text"/>	1	BI*	BI Elective	<input type="text"/>	3
BI 445	Genetics	<input type="text"/>	3	BI 446	Histology	<input type="text"/>	3
BI 445L	Genetics Lab	<input type="text"/>	1	BI 446L	Histology Lab	<input type="text"/>	1
PR 401	Seminar I	<input type="text"/>	0	PR 402	Seminar II	<input type="text"/>	0
<b>Total</b>		<input type="text"/>	<b>12</b>	<b>Total</b>		<input type="text"/>	<b>14</b>

**\*Suggested Biology Electives:** BI 355 General Parasitology, BI 400 Evolution, BI 329 Critical Thinking and Analysis II, BI 481, Toxicology, BI 326, Pharmacology or other courses with the approval of the Curriculum Advisor.

### B.S. in Biology Degree: Pre-Physical Therapy Concentration (120 Credit Hours)

The curriculum is designed for students interested in a professional career in physical therapy. Physical therapy schools differ significantly in their pre-professional requirements. Therefore, students should consult with an advisor, explore physical therapy programs of interest, and coordinate their specific pre-professional curriculum in line with these schools.

The Physical Therapy curriculum is a generalized curriculum to prepare students for the highly competitive nature of admittance into a Doctor of Physical Therapy Program. Course substitutions should be handled carefully and approved only by a curriculum advisor. This curriculum consists of the most commonly required physical therapy **Pre-requisites**. The curriculum leads to a Bachelor of Science Degree in Biology.

### Freshman Year (33)

First Semester		Hrs.	Second Semester		Hrs.		
CH 121	General Chemistry I	<input type="text"/>	3	CH 122	General Chemistry II	<input type="text"/>	3
CH 121L	General Chemistry I Lab	<input type="text"/>	1	CH 122L	General Chemistry Lab	<input type="text"/>	1
BI 125	General Biology I	<input type="text"/>	3	BI 126	General Biology II	<input type="text"/>	3
BI 125L	General Biology I Lab	<input type="text"/>	1	BI 126L	General Biology II Lab	<input type="text"/>	1
	or				or		
BI 191	Honors Biology I	<input type="text"/>	3	BI 192	Honors Biology II	<input type="text"/>	3
BI 191L	Honors Biology I Lab	<input type="text"/>	1	BI 192L	Honors Biology II Lab	<input type="text"/>	1
EN 111	Composition I	<input type="text"/>	3	EN 112	Composition II	<input type="text"/>	3
MA 121	College Algebra	<input type="text"/>	3	MA 132	Trigonometry	<input type="text"/>	3
UL 101	University Life	<input type="text"/>	1	PH 132	General Psychology	<input type="text"/>	3
		<input type="text"/>		ND 101	Health Wellness	<input type="text"/>	1
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## Sophomore Year (29)

SP 111	Spanish I	<input type="text"/>	3	SP 112	Spanish II	<input type="text"/>	3
SA 223	Oral Communication	<input type="text"/>	3	EN 213	Studies in Literature	<input type="text"/>	3
PY 215	General Physics (Non-Calculus)	<input type="text"/>	3	PY 216	General Physics	<input type="text"/>	3
PY 215L	General Physics (Non-Calculus) Lab	<input type="text"/>	1	PY 216L	General Physics Lab	<input type="text"/>	1
EC 201	Principles of Economics I	<input type="text"/>	3	MA 377	Statistics I	<input type="text"/>	3
		<input type="text"/>		PH 320	Developmental Psychology	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	13		<b>Total</b>	<input type="text"/>	16

## Junior Year (29)

BI 335	Human Anatomy	<input type="text"/>	3	BI 215	Comparative Anatomy	<input type="text"/>	3
BI 335L	Human Anatomy Lab	<input type="text"/>	1	BI 215L	Comparative Anatomy Lab	<input type="text"/>	1
BI 325	General Microbiology	<input type="text"/>	3	BI 336	Human Physiology	<input type="text"/>	3
BI 325L	General Microbiology Lab	<input type="text"/>	1	BI 336L	Human Physiology Lab	<input type="text"/>	1
HI 111	World Civilization I	<input type="text"/>	3	BI 320	Medical Terminology	<input type="text"/>	3
BI 390	Env.Bio. Ecology	<input type="text"/>	3	AR 214	Art Appreciation	<input type="text"/>	3
		<input type="text"/>		or		<input type="text"/>	
		<input type="text"/>		MU 213	Music Appreciation	<input type="text"/>	
BI 390L	Env. Bio. Ecology Lab	<input type="text"/>	1			<input type="text"/>	
	<b>Total</b>	<input type="text"/>	15		<b>Total</b>	<input type="text"/>	14

## Senior Year (29)

BI 445	Genetics	<input type="text"/>	3	BI 420	Medical Microbiology	<input type="text"/>	3
BI 445L	Genetics Lab	<input type="text"/>	1	BI 420L	Medical Microbiology Lab	<input type="text"/>	1
BI 468	Kinesiology	<input type="text"/>	3	BI 415	Computer Applications in the Biological Sciences	<input type="text"/>	3
BI 468L	Kinesiology Lab	<input type="text"/>	1	BI 481	Introduction to Toxicology	<input type="text"/>	3
BI 326	Pharmacology	<input type="text"/>	3	BI*	Electives	<input type="text"/>	3
BI 449	Senior Project	<input type="text"/>	2	PE 435	Physiology of Exercise	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	13		<b>Total</b>	<input type="text"/>	16

\*Suggested Biology Electives: BI 400, BI 402, other courses may be substituted at the advisement and with approval of the Academic Advisor or Chairperson. Courses related to Motor Skills Development, Kinesiology etc., are strongly recommended.

## Pre-Nursing

The lower level pre-professional curriculum in nursing is designed to focus on courses in the liberal arts and in the behavioral, biological, physical, and social sciences. The curriculum meets the general education core requirements for eligibility to apply for admission Alcorn's Bachelor of Science in Nursing (BSN) Program. Please note, this curriculum satisfies the general education core requirements for Alcorn State University. Admission to institutions other than Alcorn may require additional general education course work.

Minimum eligibility requirements to qualify for admission to Alcorn's BSN Program are: a grade of "C" in all courses, a grade point average of 2.5, and a composite ACT score of 21. Completing general education course work at Alcorn State University and meeting minimum admission criteria does not guarantee admission to the BSN Program.

## Pre-Nursing Curriculum (50 Credit Hours)

### Freshman Year (25)

First Semester		Hrs.	Second Semester		Hrs.		
BI 114	Anatomy/Physiology I	<input type="text"/>	3	BI 214	Anatomy/Physiology II	<input type="text"/>	3
BI 114L	Anatomy/Physiology I Lab	<input type="text"/>	1	BI 214L	Anatomy/Physiology II Lab	<input type="text"/>	1
EN 111	Composition I	<input type="text"/>	3	EN 112	Composition II	<input type="text"/>	3
MA 121	College Algebra	<input type="text"/>	3	ND 225	Intro to Nutrition	<input type="text"/>	3
ND 101	Health and Wellness	<input type="text"/>	1	PH 132	General Psychology	<input type="text"/>	3

UL 101	University Life	<input type="checkbox"/>	1		<input type="checkbox"/>
	<b>Total</b>	<input type="checkbox"/>	12	<b>Total</b>	<input type="checkbox"/> 13

### Sophomore Year (25)

BI 436	General Microbiology	<input type="checkbox"/>	3	HI 225	United States History	<input type="checkbox"/>	3
BI 114L	General Microbiology Lab	<input type="checkbox"/>	1	SA 223	Oral Communication	<input type="checkbox"/>	3
EN 213	Intro to Literature	<input type="checkbox"/>	3	SS 307	Statistical Methods	<input type="checkbox"/>	3
PH 320	Developmental Psychology	<input type="checkbox"/>	3		Creative Arts Elective	<input type="checkbox"/>	3
SY 235	Intro to Sociology	<input type="checkbox"/>	3			<input type="checkbox"/>	
	<b>Total</b>	<input type="checkbox"/>	13	<b>Total</b>		<input type="checkbox"/>	12

### COURSE DESCRIPTIONS IN BIOLOGY (BI)

#### BI 111 3-0-3 INTRODUCTION TO BIOLOGY I

(This course is for biology non-majors) A study of the principles and fundamental concepts on which the science of life is based. Emphasis is placed on the facts supporting these principles and how they arise from facts. The speculations and uncertainties of biology are also stressed.

#### BI 112 3-0-3 INTRODUCTION TO BIOLOGY II

(This course is for biology non-majors) A continuation of BI 111. Emphasis will be placed on evolution and ecology, the physiological processes and the origin and classification of life.

#### BI 113 3-0-3 INTRODUCTORY ENVIRONMENTAL BIOLOGY/ECOLOGY

This is a basic interdisciplinary course designed to understand the environment. It is a study of the scientific and ecological principles that govern human interactions with the physical and biotic systems of the Earth. Ecosystems and their characteristics, human population dynamics, resource issues and the roles of technological and ethical decisions will be considered. The course includes field trips.

#### BI 113L 0-2-1 INTRO. ENVIRONMENTAL BIOLOGY AND ECOLOGY LABORATORY

This laboratory is a component of BI 113. A laboratory course emphasizing practical experiences including occasional field trips. Exercises complement lecture topics. Audiovisual aids are employed.

**Co-requisite BI-113.**

#### BI 114 3-2-4 HUMAN ANATOMY AND PHYSIOLOGY I

A study dealing with the structure and function of the human body. Emphasis will be placed on the gross and microscopic composition and activity of cells, tissues, organs, and systems and their interrelated processes of homeostasis, metabolism, and unification.

#### BI 114L 0-2-1 HUMAN ANATOMY AND PHYSIOLOGY I LABORATORY

Anatomy and Physiology laboratory complements BI 114 lecture. A basic integrated study of the general body parts, body chemistry, cells, tissue, the skeletal, muscular and nervous systems.

#### BI 121 3-0-3 GENERAL ZOOLOGY I

A study composed of the common invertebrate and vertebrate animals, their life histories, habitats and morphological characteristics. **Co-requisite: BI 121L.**

#### BI 121L 0-2-1 GENERAL ZOOLOGY I LABORATORY

Zoology laboratory work is designed to guide the students in a practical approach to understanding the concepts and systems of animals. The students will dissect the representative animals from the phyla studied in the course.

**BI 122            3-0-3    GENERAL ZOOLOGY II**

This course is designed to study the common vertebrates, their life antiquities, habitats and morphological characteristics. Concepts of organic evolution, genetics, ecological principles and their relation to current issues are considered. Much of the knowledge learned in this course has application in improving humanity and the quality of life. **Co- requisite: BI 122L.**

**BI 122L            0-2-1    GENERAL ZOOLOGY II LABORATORY**

Zoology laboratory work is designed to guide students in a practical approach to understand the concepts and systems of animals. Students will dissect representative animals from the phyla studied in the course.

**BI 124            3-0-3    GENERAL BOTANY**

A systematic study of the common plant kingdom emphasizing comparative structure, function, development and evolution of plants. **Co-requisite: BI 124L.**

**BI 124L            0-2-1    GENERAL BOTANY LABORATORY**

This laboratory accompanies the course BI 124 and should be taken in the same semester. Students will learn differences between plant and animal cells, study the structure of cells from different parts of plants; study parts of plants, root system, fruit, seeds, stem, and leaves. Students will also be introduced to photosynthesis, respiration and transpiration. **Co-requisite: BI 124.**

**BI 125            3-0-3    GENERAL BIOLOGY I**

A study of the basic molecular and descriptive principles and generalizations of the biological sciences. Emphasis is placed on the elementary pathway in the life sciences, with regard to the functional morphology of the cell to the organism.

**BI 125L            0-2-1    GENERAL BIOLOGY I LABORATORY**

Co-requisite: BI 125. Laboratory experiments demonstrating the principles presented in the lecture course. Scientific inquiry, cell structure and functions, physiology, genetics, biodiversity, evolution and ecology. Should be taken in the same semester as with BI 125.

**BI 126            3-0-3    GENERAL BIOLOGY II**

Designed as a continuation for BI 125, this course provides an introduction to biological models and their roles in carrying out cellular functions. The primary focus will be on cellular processes such as DNA replication, RNA transcription, and protein translation. The course will also cover the origin of life on Earth at the level of the various biological molecules such as RNA, DNA, lipids, and proteins, which interacted to form the foundation of the planet's enormous biodiversity.

**BI 126L            0-2-1    GENERAL BIOLOGY II LABORATORY**

Co-requisite: BI 126. Laboratory experiments demonstrating the principles presented in the lecture course. Scientific inquiry, molecular basis for cellular mechanism such as transcription, translation, and DNA replication. The evolutionary relationships that result as a function of speciation will also be considered. Should be taken the same semester as with BI 126.

**BI 191            3-0-3    HONORS BIOLOGY I**

This course deals with the major principles of biology from an evolutionary standpoint. The course includes topics regarding the science of biology, the nature of molecules, the chemical building blocks of life, the origin and early history of life, cell structure and membranes, energy and metabolism, photosynthesis and how cells divide (mitosis). Emphasis is placed on methods and skills.

**BI 191L            0-2-1    HONORS BIOLOGY I LABORATORY**

Laboratory component of BI 191. This laboratory class complements BI 191 Honors Biology and allows students to learn numerous techniques and methods (including the use of the microscope) that go along with the lecture.

**BI 192            0-2-1    HONORS BIOLOGY II**

This course is a continuation of BI 191 Honors Biology I. Students will study meiosis, genetics, genes and how genes work, the vertebrate body, and the circulatory, respiratory, digestive, excretory and reproductive systems.



**BI 192L 0-2-1 HONORS BIOLOGY II LABORATORY**

This laboratory course complements BI 192 Honors Biology and allows students to learn numerous techniques and methods that go along with the lecture. Special emphasis is placed on the dissection of various animals to study their organ systems.

**BI 214 3-0-3 HUMAN ANATOMY AND PHYSIOLOGY II**

This course includes discussion of the following topics: blood, reproductive systems, oogenesis, anatomy of the kidneys, urine composition and formation, respiration, the process of inhalation and exhalation, Boyle's law, Dalton's law, the cardiovascular system, nutrition and metabolism, endocrine system, lymphatic system and immunity and the digestive system. The discussions will follow in sequence as listed in the textbook.

**BI 214L 0-2-1 HUMAN ANATOMY AND PHYSIOLOGY LABORATORY**

This laboratory course complements BI 214 lecture. A basic integrated study of the endocrine, cardiovascular, digestive, urinary, respiratory, integumentary, lymphatic and reproductive systems and fluid electrolyte and base balance. **Co-requisite: BI 214.**

**BI 215 3-0-3 COMPARATIVE ANATOMY**

This course deals with a comparative study of structural, functional, and evolutionary aspects of various vertebrate groups. It deals with the similarity and dissimilarity of these organisms as it relates to the structural and physiological aspects of different habitats. **Pre-requisites: BI 121 and BI 122.**

**Co-requisite: BI 215L.**

**BI 215L 0-2-1 COMPARATIVE ANATOMY LABORATORY**

The activities of this course are designed to enhance the information provided in BI 215 (Comparative Anatomy). It involves the following topics: the body of vertebrates as a whole; the structural and functional aspects of protochordates and pre-vertebrates; the dissection of the dogfish shark; comparative study of the anatomy of; frog, cat, and human skeletal system, and the dissection of the cat.

**BI 226 3-0-3 DEVELOPMENTAL BIOLOGY**

The study of the process by which organisms grow and develop, and is closely related to Ontogeny. Developmental biology studies the genetic control of cell growth, differentiation and morphogenesis, which is the process that gives rise to tissues, organs and anatomy, but also regeneration and aging.

**Pre-requisites: BI 121 and BI 122 or BI 125 and BI 126.**

**BI 226L 0-2-1 DEVELOPMENTAL BIOLOGY LABORATORY**

The activities of this course are designed to enhance the information provided in BI 226 Developmental Biology. It involves the following topics: (1) cell reproduction (mitosis and meiosis), (2) the early stages of animal development, (3) the stages of frog development, (4) the stages of chicken development, (5) the stages of fetal pig development. **Co-requisite: BI 226.**

**BI 300 3-0-3 BIOLOGICAL CHEMISTRY**

This course is designed to articulate a detailed view of the basic chemical aspects in a cell. The class starts with a review of the fundamental structures of amino acids, nucleotides, and carbohydrates. Additional consideration will be given to biochemical mechanisms that link these fundamentals together by discussing in greater detail the components and mechanisms of the central dogma: DNA replication, transcription, and translation.

**BI 308 3-0-3 INTRODUCTION TO HEALTH SCIENCE**

This course will familiarize students to the health fields and possibilities for a health career. Various diseases that commonly affect man will be discussed. The biological implications of these diseases will be explored. Specifically this course will: (1) investigate the biological cause and cure for certain diseases, (2) ways in which diseases are prevented, (3) recent advancement in the treatment of various diseases.

**BI 311 3-0-3 SURVEY OF BIOLOGICAL SCIENCES**

This course deals with integrated principles, theories, and techniques of biological sciences. The primary objective is to help students apply theories, principles, and techniques that have been learned in previous biology courses, as well as, expose students to actual classroom situations.

**BI 318            3-0-3    FIELD BIOLOGY AND ECOLOGY**

A study of the influence of environmental factors on the distribution of plants and animals including the interrelationships of terrestrial and aquatic ecosystems, while concentrating on biological, physical, and chemical relationships. **Pre-requisites for biology majors: BI 121-122 or 123, BI 124 or 323-324, or BI 111-112.**

**BI 318L            0-2-1    FIELD BIOLOGY AND ECOLOGY LABORATORY**

This laboratory is a component for the lecture BI 318. A laboratory course emphasizing practical experience hands-on activities, and field trips. Exercises complement the lecture topics. Audiovisual aids are employed. **Co-requisite BI 318.**

**BI 320            3-0-3    MEDICAL TERMINOLOGY**

This course is designed to use a variety of pedagogical features which will aid students in developing a strong foundation in medical terminology, broaden their vocabulary, aid them in effectively communicating in the field of medicine, and provide an overview to the advanced courses in the various curricula.

**BI 324            3-0-3    BOTANY**

A study of plant cells, plant morphology, physiology, development, evolutionary and ecological relationships. Individual observations and field studies will be included for plant taxonomy.

**Co-requisite: BI 324L.**

**BI 324L            0-2-1    BOTANY LABORATORY**

BI 324 laboratory is the co-requisite for the lecture course BI 324 and should be taken in the same semester. Experiments emphasizing practical experience, hands-on activities, and field trips are included.

**BI 325            3-0-3    GENERAL MICROBIOLOGY**

A study of the fundamental principles of microbiology and the applications of this science. Special emphasis is placed on the relationships of microorganisms to diseases, sanitation and foods. **Pre-requisites: BI 124/323 or BI 121/122, or BI 111/112.** Note: Associate Degree Nursing students are not required to take the above listed **Pre-requisites** for BI 325.

**BI 325L            0-2-1    GENERAL MICROBIOLOGY LABORATORY**

This laboratory accompanies BI 325 and should be taken in the same semester. This laboratory is designed to allow students to apply basic skills and techniques that are germane to microbiology.

**Co-requisite: BI 325.**

**BI 326            3-0-3    PHARMACOLOGY**

This course is a general survey of drugs and chemicals with reference to their action on living systems. The mechanism by which these drugs produce their effects will be emphasized.

**BI 327            3-0-3    CELL BIOLOGY**

Cell biology is an advanced course for college students who wish to understand modern cytology, implication of a cell as a basic unit of life, and to understand its role in other fields of biology such as medicine, cytogenetics, general biology, general zoology, general botany, or veterinary medicine. This course will also include a discussion on structure and functions of genetic molecules.

**Pre-requisite: BI 111-112, BI 121-122 or BI 123**

**BI 327L            0-2-1    CELL BIOLOGY LABORATORY**

A laboratory in experimental bacteriology and cell biology. Emphasis will be on experimental approaches and techniques used in the study of cells and microorganisms. Experiments in microscopy, cell fractionation, metabolism, physiology, genetics, and regulation. **Co-requisite: BI 327.**

**BI 328            3-0-3    CONCEPTUAL ANALYSIS AND CRITICAL THINKING**

A three hour non-lab course for students majoring in the sciences and who plans to pursue a professional career in Medicine, Dentistry, Pharmacy or Allied Health. The content will give the student a review of information that has specific application on diagnostic or entrance exams in the professional field.

**BI 329 3-0-3 CONCEPTIONAL ANALYSIS AND CRITICAL THINKING**

This course is a continuation of BI 329 for students enrolled in the Pre-Professional Program of Study. It provides review of materials to aid the students with diagnostic testing.

**BI 335 3-0-3 HUMAN ANATOMY**

A study of structural aspects of the human body-gross and microscopic; cell contents, organization of structures-cells, tissues, organs, and systems; location and relationship of parts.

**Pre-requisite:** BI 112 or BI 122 or BI 123.

**BI 335L 0-2-1 HUMAN ANATOMY LABORATORY**

This laboratory accompanies BI 335 and should be taken in the same semester. It will emphasize laboratory applications of lecture concepts studied in BI 335. **Co-requisite:** BI 335.

**BI 336 3-0-3 HUMAN PHYSIOLOGY**

Functional aspects of the human body, homeostasis, metabolism, and unification in structures are emphasized. Physiological properties of protoplasm; functions and cellular constituents, cells, tissues, organs, and systems will be studied. **Pre-requisites:** BI 112, BI 123, or BI 122. BI 335 is recommended.

**BI 336L 0-2-1 HUMAN PHYSIOLOGY LABORATORY**

This laboratory accompanies BI 336 and should be taken in the same semester. It will emphasize laboratory applications of lecture concepts studied in BI 336. **Co-requisite:** BI 336.

**BI 350 3-0-3 PLANT PATHOLOGY**

An introductory course dealing with the nature, cause, symptoms, epidemiology, and control of diseases in plants. **Pre-requisites:** BI 124 or BI 324. BI 350L is a co-requisite. This course is specifically designed to meet the needs of agricultural and closely related science majors.

**BI 350L 0-2-1 PLANT PATHOLOGY LABORATORY**

This laboratory course accompanies the lecture course BI 350 and should be taken in the same semester. Laboratory experiences include: microscopic study of various pathogens including fungi and bacteria responsible for plant diseases. Symptoms of selected plant diseases will be studied by examining diseased plant parts collected from the affected field. Students will learn how to distinguish between symptoms due to environmental factors and symptoms caused by infectious pathogens. Students will write term papers on selected significant diseases attacking economic as well as field crops. **Co-requisite:** BI 350.

**BI 355 3-0-3 GENERAL PARASITOLOGY**

The objective of this course is to provide biology majors with a fundamental understanding of the morphological and physiological characteristics of organisms that live as pathogens and parasites.

**Pre-requisite:** BI 122 or BI 123.

**BI 355L 0-2-1 GENERAL PARASITOLOGY LABORATORY**

Laboratory component for BI 355. A lab course emphasizing practical experience with parasites. The laboratory exercises complement lecture topics. Demonstrations as well as audiovisual aids are employed. **Co-requisite** BI 355.

**BI 356 3-0-3 PARASITE ECOLOGY AND EVOLUTION**

A study of the relationship between parasites and their environment, primarily, the hosts and the abiotic conditions to which some life cycle stages such as spores, eggs, and juveniles, are exposed. The symbiotic relationships and the evolutionary associates between parasites and their hosts are considered. In other words, the pattern of association among parasites, hosts, and the ecological distribution of each will be studied.

**BI 356L 0-2-1 PARASITE ECOLOGY AND EVOLUTION LABORATORY**

This laboratory follows the course BI 356 and should be taken in the same semester as the course. Experiments will be conducted relative to lectures. The students will be given hands-on instruction and will demonstrate the stages of spores, eggs, and juveniles. Students will also conduct experiments using parasites, their hosts and those of different animal species.

**BI 361                    3-0-3    ADVANCED CELLULAR AND MOLECULAR BIOLOGY I**

The course will emphasize the importance of both modern and classical biomedical research and medicine of a comprehensive understanding of cell structure and function. Upon completion of this course, students will be able to demonstrate a material understanding of the following concepts, cell organization, DNA replication, transcription, protein synthesis and enzymology, selected topics in molecular genetics including DNA recombination.

**BI 361L                    0-2-1    ADVANCED CELLULAR AND MOLECULAR BIOLOGY I LABORATORY**

BI 361 Lab Laboratory Experiments to support an applicable understanding of the concept areas listed in the BI 361

**BI 362                    3-0-3    ADVANCED CELLULAR AND MOLECULAR BIOLOGY II**

The course will emphasize the importance of both modern and classical biomedical research and medicine of a comprehensive understanding of cell structure and function. Upon completion of this course, students will be able to demonstrate a material understanding of the following concepts, gene structure, function and regulation, selected topics related to developmental systems (i.e., skeletal muscle) and the, molecular cloning and molecular tools for studying genes and gene activity.

**BI 362L                    3-0-3    ADVANCED CELLULAR AND MOLECULAR BIOLOGY II LABORATORY**

Lab Laboratory Experiments to support an applicable understanding of the concept areas listed in the BI 36.

**BI 390                    3-0-3    ENVIRONMENTAL BIOLOGY AND ECOLOGY**

This course is a study of the ecological problems of the environment with special emphasis on research techniques, conservation, and solutions; Effects of environmental pollutants on health and welfare of humans; An in- depth examination of Environmental Science and its scope toward further understand ecological and environmental interrelationships; examining various geographic regions; to gain an understanding of biodiversity and its ramifications; become familiar with land-use planning.

**BI 390L                    0-1-1    ENVIRONMENTAL BIOLOGY LABORATORY**

BI 390L is a co-requisite hands-on activity based laboratory course to aid in further understanding the concepts taught in BI 390 Environmental Biology course. The students will receive training via field trips, laboratory experiments, workshops, seminars as well as through experts in the area of environmental biology. Laboratory experiments will include activities both on and off campus.

**BI 391                    3-0-3    HUMAN SEXUALITY**

This course is designed to challenge the students' knowledge of their sexual being. It allows them to assess their sexual behavior, attitudes, and feelings while keeping in mind that their sexual behavior, attitudes and feelings may conflict at various times. It is organized to test their current level of knowledge and assist them in ascertaining new knowledge through self-discovery. Various aspects of human reproduction are covered including the anatomy and physiology of each system, birth control, sexually transmitted diseases, and the phase of the sexual response cycle.

**BI 400                    3-0-3    EVOLUTION**

This is an introductory course into the principles and mechanisms of biological evolution. Topics will include cosmology, evidence of evolution, heredity, speciation and human evolution. Under the topic of today and beyond, we will explore genetic engineering and cloning and the impact of these subjects on evolutionary biology. Students will be expected to discuss these and other topics in class and to make presentations on assigned topics.

**BI 402                    3-0-3    BIOETHICS**

The course will examine various ethical, moral and legal issues in the biological sciences. Topics will include pressing contemporary issues in health, clinical medical practice and biomedical research on both local and global levels. Students will be expected to discuss these issues. Although many current and controversial topics will be discussed, students are also expected to address particular concerns of their own choosing.

**BI 403                    3-0-3    MYCOLOGY**

Students will study the diversity of the fungi, with an emphasis on form as related to function, and how both are integral to the evolution of perhaps the second most metabolically active kingdom of organisms. Students will be guided through their exploration of the fungi from a biological vantage which will include cellular, medical, horticultural, taxonomic, cultural, evolutionary, nutritional, and ecological perspectives.

**BI 403            0-2-1    MYCOLOGY LABORATORY**

Collect and preserve six different specimens from the Basidiomycota. Three specimens should be identified to species; the remaining three should be identified to genus. Isolate and identify to order three pure cultures of fungi from different substrates. Included in the collection should be one zygomycete fungus. You will learn sterile technique, how to isolate and handle fungi from nature, and how to discern important microscopic characteristics of fungi.

**BI 415            3-0-3    COMPUTER APPLICATIONS IN THE BIOLOGICAL SCIENCES**

This course provides introduction to computer applications in the biological sciences. The three major applications involved in this course are data interpretation, presentation in appropriate formats, charts, graphs, tables, database usage, and statistical analysis.

**BI 420            3-0-3    MEDICAL MICROBIOLOGY**

This is an introductory course into the etiology and pathogenesis of infectious disease. It will begin with basic microbiology and describe major pathogens and the diseases they cause. Bacteria, viruses, fungi and parasites will be addressed although other nontraditional infectious agents (such as prions) will also be discussed. Major emphasis will be on those microbes associated with human infections and center on the pathophysiological mechanisms that provoke the various responses.

**BI 420L          0-2-1    MEDICAL MICROBIOLOGY LABORATORY**

This laboratory accompanies BI 420 and should be taken in the same semester. This laboratory is designed to allow students to apply advanced skills and techniques that are germane to medical microbiology.

**Co-requisite: BI 420.**

**BI 423            3-0-3    INTRODUCTION TO BIOSTATISTICS**

This course provides an introduction to the methods of collection, tabulation, analysis, and application of biological data specifically related to various problem solving activities in biology using descriptive statistics, probability theory, and statistical inference.

**BI 425            3-0-3    PRINCIPLES OF IMMUNOLOGY**

This course is the study of the structure, function, and complex interactions associated with the immune system. Special emphasis will be placed on cellular interactions, regulation of the immune response, antibody structure and function, and the immune response to microbes. **Pre-requisite: BI 110 or BI 325 equivalent.**

**BI 425L          0-2-1    PRINCIPLES OF IMMUNOLOGY LABORATORY**

Laboratory component of BI 425. This laboratory class complements BI 425 and allows students to learn, hands-on, several techniques and methods used in the field. Experiments will allow students to identify blood cells, type blood, and visualize antigen-antibody interactions in numerous ways.

**BI 445            3-0-3    GENETICS**

The principles of heredity and its implications for man in respect to agriculture and medicine. The course also deals with the principles of classical and molecular genetics. **Pre-requisite: BI 111-112, BI 121/122 or 124 and 327; CH 122 and CH 332 are highly recommended.**

**BI 445L          0-2-1    GENETICS LABORATORY**

This laboratory is a co-requisite for the course BI 445 and should be taken in the same semester. The laboratory experiments will coincide with the lecture series with emphasis on epistasis, genes, mitosis and meiosis, chromosomes and Mendel's rule of inheritance.

**BI 446            3-0-3    HISTOLOGY**

Lectures on the microscopic structure and chemical composition structures of organs, tissues, and their cell constituents. The laboratory includes the interpretation of photomicrographs of tissues and cellular structures. **Pre-requisites: BI 215, BI 325, BI 335, and BI 336.**

**BI 446L          0-2-1    HISTOLOGY LABORATORY**

This laboratory course complements BI 446 lecture. A basic integrated study of the microscopic and ultra-structures of the human cells and representation tissues of each of the major systems of the human body **Co- requisite: BI 446.**

**BI 449            2-0-2    SENIOR PROJECT**

This course involves literature review, writing a research proposal, and understanding methods of collecting, organizing, and analyzing information. Statistical methods and procedures will be discussed from a descriptive and inferential approach. As part of this course a student will be assigned a research project in the area of biological science or any topic that a student may wish to select on his/her own. The student will conduct an organized research study centering the problem or topic selected. Design and run experiments, collect data, do statistical analyses of the data, make an interpretation and write a descriptive research paper. The conduct of the research, significance of the results, and the clarity of the written research paper will form the basis for evaluation of this course. A student may select either the instructor or any other faculty member in the department as research advisor.

**BI 450            1-0-1    SENIOR SEMINAR**

Open to senior biology majors who have successfully completed the BI 499 course. Students with an incomplete or less than a "C" grade in BI 449 are not allowed to register for this course. Students will learn how to interpret research data, prepare various formats of data presentations including: tables, charts, graphs, histograms, etc. Students will learn effective use of PowerPoint presentations and other audio-visuals. Students will present data research information generated in their Senior Project (BI 449).

**BI 453            3-0-3    ENVIRONMENTAL RISK ASSESSMENT**

This course is designed so that students can understand the basic and applied concepts of analyzing toxicological effects from chemical exposure using statistical analysis.

**BI 456            2-0-2    SPECIAL TOPICS IN ENVIRONMENTAL BIOLOGY/ECOLOGY**

A study of selected topics dealing with developments in environmental science and/or ecology.

**BI 458            3-0-3    MICROBIAL GENETICS**

Students will study the synthesis and manipulation of DNA and the principles of gene expression at the molecular level in prokaryotes and eukaryotes. Among the topics that will be covered include, DNA replication, repair and the packaging of the genome into chromosomes. In preparation for this course you should have an understanding of basic college level introductory biology (BI 125/126) and one or more of the following more specialized biology course such as Microbiology, Botany, Zoology, Genetics or Biochemistry.

**BI 458            0-2-1    MICROBIAL GENETICS LABORATORY** To provide "hands-on" experience in the investigation and manipulation of bacteria and their genes. Experiments will include chemical and transposon mutagenesis, analysis of mutants, gene transfer, and strain construction. Molecular genetic procedures such as chromosomal and plasmid DNA isolation, DNA amplification by standard or quantitative polymerase chain reaction (PCR or PCR), hybridization, gene cloning, and restriction site analysis will also be introduced.

**BI 462            3-0-3    ENVIRONMENTAL POLICY**

This course will deal with the laws, mandates, and regulations on environmental policy as made by the Environmental Protection Agency (EPA) and other agencies or governing bodies.

**BI 468            3-0-3    KINESIOLOGY**

To further understand the anatomical and physiological aspects of kinesiology, the laboratory class will be structured so that the students will gain hands-on experience using palpation and observatory methods to examine the upper extremity of bones, joints, ligaments, muscles, and nerves. The study of the lower extremity of bones, joints, ligaments, muscles, nerves, and their functions in the various motor movements involved in games, sports, calisthenics and other physical activities.

**BI 468L          0-2-1    KINESIOLOGY LABORATORY**

To further understand the anatomical and physiological aspects of kinesiology, the laboratory class will be structured so that the students will gain hands-on experience using palpation and observatory methods to examine the upper extremity of bones, joints, ligaments, muscles, and nerves. To further understand the anatomical and physiological aspects of kinesiology, the laboratory class will be structured so that the students will gain hands-on experience using palpation and observatory methods to examine the lower extremity of bones, joints, ligaments, muscles, and nerves.

**BI 481            3-0-3    INTRODUCTION TO TOXICOLOGY**

This course deals with the basic concepts and methods employed in toxicology. Specific topics that will be considered in this course include: toxicity testing, sub lethal effects of chemical exposure on environmental organisms, the toxicity of generic types of chemicals (such as pesticides, carcinogenic chemicals and metals) to organisms, the distribution and fate of chemicals in the environment; and the assessment of the potential hazards posed by the use or discharge of chemicals in our environment.

**BI 482            3-0-3    APPLIED PHYSIOLOGY**

This course will focus on the functional, pathological, and applied aspects of cardiovascular, respiratory, urinary, immune, and nervous systems. **Pre-requisites: BI 111 and BI 112, or BI 125 and 126, or BI 191 and 192, and BI 335.**

**BI 482L          3-0-3    APPLIED PHYSIOLOGY LABORATORY**

This laboratory accompanies BI 482 and should be taken in the same semester. It will emphasize laboratory applications of lecture concepts studied in BI 482.

**BI 485            3-0-3    TEACHING SCIENCE IN THE SECONDARY SCHOOL**

This course presents the methods of teaching science in the secondary school, placing emphasis upon the integration of the curriculum and the individual in a democracy. It seeks to provide experiences leading to the creation of dynamic classroom conditions for effective teaching--essentially a special methods course dealing with techniques and procedures on the high school level. Students will be required to prepare teaching units, lesson plans, examinations, and to observe classroom teaching in nearby schools.

**BI 498            3-0-3    BIOLOGY RESEARCH INSTRUMENTATION**

This is a laboratory-based course where students will learn the theory and practice behind techniques and instruments commonly used in modern biological research with special emphasis on detection, quantification, and analysis of nucleic acids and proteins, enzymatic assays, fluorescent microscopy, cell structure, and aseptic technique. Students will learn basic experimental design and methods, and will be expected to present their experiences in a seminar format. **Pre-requisites: BI 327, BI 327L, BI 300, BI 300L, or instructor's permission.**

**BI 545            3-0-3    ADVANCED IMMUNOLOGY**

This is a graduate level course in the study of the immune system. The course will consist of lecture and handouts. Several papers from early key studies to modern ones will be provided and students must answer assigned questions regarding those papers. The papers will cover the history of much of what we know about immunology and will provide some insight into how we came to know these things. Students will learn the various techniques involved that allowed the researchers to make their discoveries. Thus, much of this will be from a historical viewpoint and several of the manuscripts are considered classics in the field.

## Department of Chemistry and Physics

*Sandra L. Barnes, Ph.D., Chairperson*

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The Department of Chemistry and Physics provides for all students the basic knowledge of the physical sciences necessary for an understanding of today's scientific and technological society. The Chemistry Department offers a Bachelor of Science Degree in Chemistry with concentrations in:

1. **Chemistry** for students planning to pursue advanced study in chemistry;
2. **Biochemistry** for students planning to enter medical, dental or other schools related directly or indirectly to medicine and dentistry;
3. **Chemical Physics** for those students who desire a more integrated course of study between chemistry, physics, and mathematics.

Each curriculum consists of (a) core courses to assure a basic liberal arts foundation, (b) courses required for competences and depth in a chosen major, and (c) electives to allow for specific variations in career goals, and personal development. It is strongly suggested that a student follow the proper sequence of courses as listed in the chosen concentration. All majors are required to take and pass an exit exam that is a combination of the major areas of chemistry (general chemistry, organic chemistry, analytical chemistry, and physical chemistry).

### Chemical Physics (120 Credit Hours)

Chemical Physics is an interdisciplinary course of study for those students who wish to interface physics with chemistry. In addition, many students who plan careers in the nuclear industry or areas relating to chemical engineering or physics will find this interdisciplinary curriculum appropriate.

#### Freshman Year (35)

First Semester		Hrs.	Second Semester		Hrs.
CH 123	General Chemistry	<input type="checkbox"/> 3	CH 124	General Chemistry	<input type="checkbox"/> 3
CH 123L	General Chemistry Lab	<input type="checkbox"/> 1	CH 124L	General Chemistry Lab	<input type="checkbox"/> 1
EN 111	Composition I	<input type="checkbox"/> 3	EN 112	Composition II	<input type="checkbox"/> 3
MA 181	Calculus w/Ana. Geom.	<input type="checkbox"/> 4	MA 182	Calculus II w/Ana. Geom.	<input type="checkbox"/> 4
CS 100	Info. Tech. Proficiency	<input type="checkbox"/> 1	SS 111	Social Institutions	<input type="checkbox"/> 3
PE 101	Physical Education	<input type="checkbox"/> 1	ND 101	Health Wellness	<input type="checkbox"/> 1
	or			Fine Arts Elective	<input type="checkbox"/> 3
MS 101	Fund. of Leadership & Mgt. I	<input type="checkbox"/>			<input type="checkbox"/>
HI 111	World Civilization I	<input type="checkbox"/> 3			<input type="checkbox"/>
UL 101	University Life	<input type="checkbox"/> 1			<input type="checkbox"/>
	<b>Total</b>	<input type="checkbox"/> 17		<b>Total</b>	<input type="checkbox"/> 18

#### Sophomore Year (32)

PY 217	General Physics (Calculus)	<input type="checkbox"/> 3	PY 218	General Physics	<input type="checkbox"/> 3
PY 217L	General Physics (Calculus) Lab	<input type="checkbox"/> 1	PY 218L	General Physics Lab	<input type="checkbox"/> 1
EN 213	Studies in Literature	<input type="checkbox"/> 3	MA 348	Differential Equations	<input type="checkbox"/> 3
MA 283	Calculus III	<input type="checkbox"/> 3	CH 205	Chemical Literature	<input type="checkbox"/> 1
CS 202	Programming in C++ I	<input type="checkbox"/> 3	CH 222	Organic Chemistry II	<input type="checkbox"/> 3
CH 221	Organic Chemistry I	<input type="checkbox"/> 3	CH 221L	Organic Chemistry II Lab	<input type="checkbox"/> 1
CH 221L	Organic Chemistry I Lab	<input type="checkbox"/> 1	HU 201	Humanities	<input type="checkbox"/> 3
		<input type="checkbox"/>			<input type="checkbox"/>
	<b>Total</b>	<input type="checkbox"/> 17		<b>Total</b>	<input type="checkbox"/> 15

#### Junior Year (26)

CH 323	Physical Chemistry I	<input type="checkbox"/> 3	CH 322	Instrumental Methods	<input type="checkbox"/> 3
CH 323L	Physical Chemistry II Lab	<input type="checkbox"/> 1	CH 322L	Instrumental Methods Lab	<input type="checkbox"/> 1
CH 321	Quantitative Analysis	<input type="checkbox"/> 3	CH 324	Physical Chemistry I	<input type="checkbox"/> 3



CH 321L	Quantitative Analysis Lab	<input type="checkbox"/>	1
CH 398	Ungrad. Lab Instruction I	<input type="checkbox"/>	1
_____	Elective (MA or CS)	<input type="checkbox"/>	3
	<b>Total</b>	<input type="checkbox"/>	<b>12</b>

CH 324L	Physical Chemistry II Lab	<input type="checkbox"/>	1
SA 223	Oral Communication	<input type="checkbox"/>	3
_____	Elective (MA or CS)	<input type="checkbox"/>	3
	<b>Total</b>	<input type="checkbox"/>	<b>14</b>

### Senior Year (27)

CH 480	Spectroscopy Chemical Research or Independent Study	<input type="checkbox"/>	3
CH 423	Chemistry Elective	<input type="checkbox"/>	3
CH410	Organic Qualitative Analysis	<input type="checkbox"/>	3
_____	Elective (MA or CS)	<input type="checkbox"/>	3
	<b>Total</b>	<input type="checkbox"/>	<b>15</b>

CH 403	Seminar	<input type="checkbox"/>	1
CH 404	Seminar	<input type="checkbox"/>	1
CH 421	Inorganic Chemistry	<input type="checkbox"/>	2
EN 351	Technical Writing	<input type="checkbox"/>	3
CH 421L	Inorganic Chemistry Lab	<input type="checkbox"/>	2
_____	Elective (MA or CS)	<input type="checkbox"/>	3
	<b>Total</b>	<input type="checkbox"/>	<b>13</b>

+Students not prepared for Calculus must take the necessary **Pre-requisite** courses in mathematics in addition to those prescribed in the curriculum. Students must earn a "C" or better in all math and science courses.

Senior Exit Exam Pass \_\_\_\_\_ Fail \_\_\_\_\_

### Chemistry (120 Credit Hours)

Students who receive a degree in Chemistry (for advanced study) will be prepared to enter the workforce or continue their studies in chemistry or a related field. A degree from this program will allow you to become a research scientist or college professor.

### Freshman Year (32)

First Semester	Hrs.
CH 123	<input type="checkbox"/> 3
CH 123L	<input type="checkbox"/> 1
EN 111	<input type="checkbox"/> 3
MA 181	<input type="checkbox"/> 4
HI 111	<input type="checkbox"/> 3
UL 101	<input type="checkbox"/> 1
<b>Total</b>	<input type="checkbox"/> <b>15</b>

Second Semester	Hrs.
CH 124	<input type="checkbox"/> 3
CH 124L	<input type="checkbox"/> 1
EN 112	<input type="checkbox"/> 3
MA 182	<input type="checkbox"/> 4
SS 111	<input type="checkbox"/> 3
_____	<input type="checkbox"/> 3
<b>Total</b>	<input type="checkbox"/> <b>17</b>

### Sophomore Year (33)

PY 217	General Physics (Calculus)	<input type="checkbox"/>	3
PY 217L	General Physics (Calculus) Lab	<input type="checkbox"/>	1
EN 213	Studies in Literature	<input type="checkbox"/>	3
CH 221	Organic Chemistry I	<input type="checkbox"/>	3
CH 221L	Organic Chemistry I Lab	<input type="checkbox"/>	1
MA 283	Calculus III	<input type="checkbox"/>	3
CS 202	Programming in C++ I	<input type="checkbox"/>	3
	<b>Total</b>	<input type="checkbox"/>	<b>17</b>

PY 218	General Physics	<input type="checkbox"/>	3
PY 218L	General Physics Lab	<input type="checkbox"/>	1
CH 205	Chemical Literature	<input type="checkbox"/>	1
HU 201	Humanities	<input type="checkbox"/>	3
MA 348	Differential Equations	<input type="checkbox"/>	3
CH 222	Organic Chemistry II	<input type="checkbox"/>	3
CH 222L	Organic Chemistry II Lab	<input type="checkbox"/>	1
ND 101	Health Wellness	<input type="checkbox"/>	1
	<b>Total</b>	<input type="checkbox"/>	<b>16</b>

### Junior Year (30)

CH 323	Physical Chemistry I	<input type="checkbox"/>	3
CH 323L	Physical Chemistry I Lab	<input type="checkbox"/>	1
CH 321	Quantitative Analysis	<input type="checkbox"/>	3
CH 321L	Quantitative Analysis Lab	<input type="checkbox"/>	1
_____	*Elective (Chem or Phy.)	<input type="checkbox"/>	3
_____	Elective (SP or CS)	<input type="checkbox"/>	3
CH 398	Undergrad Lab Instruction I	<input type="checkbox"/>	1
CS 100	Info. Tech. Proficiency	<input type="checkbox"/>	1
	<b>Total</b>	<input type="checkbox"/>	<b>16</b>

CH 322	Instrumental Methods	<input type="checkbox"/>	3
CH 322L	Instrumental Methods Lab	<input type="checkbox"/>	1
CH 324	Physical Chemistry II	<input type="checkbox"/>	3
CH 324L	Physical Chemistry II Lab	<input type="checkbox"/>	1
MA 346	Linear Algebra	<input type="checkbox"/>	3
SA 223	Oral Communication	<input type="checkbox"/>	3
_____		<input type="checkbox"/>	
	<b>Total</b>	<input type="checkbox"/>	<b>14</b>

### Senior Year (25)

EN 351	Technical Writing		3	CH 404	Seminar		1
CH 480	Spectroscopy		3	CH 421	Inorganic Chemistry		2
CH 410	Organic Qualitative Analysis		3	CH 421L	Inorganic Chemistry Lab		2
CH 403	Seminar		1	PY 325	Modern Physics		3
CH 423	Chemical Research/Independent Study		<u>3</u>	CH 399	Undergrad Lab Instruction II		1
				CH 424	Chemical Research/Independent Study		<u>3</u>
<b>Total</b>			<b>13</b>	<b>Total</b>			<b>12</b>

\*It is required that portion of electives be devoted to a non-structured course such as chemical research. Students must earn a “C” or better in all math and science courses.

**Senior Exit Exam Pass** **Fail**

## Biochemistry

**(Pre-Medicine, Pre-Dentistry and Pre-Optometry, Pre-Pharmacy)**

**(120 Credit Hours)**

Students who aspire to become a medical doctor, dentist, pharmacist, or optometrist should choose the biochemistry concentration in preparation for professional school. Students interested in pursuing an advanced degree in the biomedical field may also choose this concentration.

### Freshman Year (35)

First Semester		Hrs.	Second Semester		Hrs.
CH 123	General Chemistry	3	CH 124	General Chemistry	3
CH 123L	General Chemistry Lab	1	CH 124L	General Chemistry Lab	1
EN 111	Composition I	3	EN 112	Composition II	3
MA 181	Calculus I w/Ana. Geom.	4	MA 182	Calculus II w/Ana. Geom.	4
PH 132	General Psychology	3	PE 101	Physical Education	
HI 111	World Civilization I	3			
UL 101	University Life	1	BI 111	General Biology	3
			BI 111L	General Biology Lab	1
			ND 101	Health and Wellness	1
<b>Total</b>		<b>18</b>	<b>Total</b>		<b>17</b>

### Sophomore Year (27)

PY 217	General Physics (Calculus)	3	PY 218	General Physics	3
PY 217L	General Physics (Calculus) Lab	1	PY 218L	General Physics Lab	1
EN 213	Studies in Literature	3	SA 223	Oral Communication	3
CH 221	Organic Chemistry I	3	CH 222	Organic Chemistry II	3
CH 221L	Organic Chemistry I Lab	1	CH 222L	Organic Chemistry II Lab	1
CS 100	Info Tech. Proficiency	<u>1</u>	HU 201	Humanities	<u>3</u>
			CH 205	Chemical Literature	1
<b>Total</b>		<b>12</b>	<b>Total</b>		<b>15</b>

### Junior Year (30)

CH 323	Physical Chemistry I		3	CH 322	Instrumental Methods		3
CH 323L	Physical Chemistry I Lab		1	CH 322L	Instrumental Methods Lab		1
CH 321	Quantitative Analysis		3	CH 324	Physical Chemistry II		3
CH 321L	Quantitative Analysis Lab		1	CH 324	Physical Chemistry II Lab		1
BI 325	General Microbiology		3	CH 399	Undergrad Lab Instruction II		1
BI 325L	General Microbiology Lab		1	CH 332	Biochemistry II		3
CH 331	Biochemistry I		3	CH 332L	Biochemistry II Lab		1
CH 331L	Biochemistry Lab II		1	CH 403	Seminar		1
	<b>Total</b>		<b>16</b>		<b>Total</b>		<b>14</b>

## Senior Year (28)

	*Elective (Chemistry)
BI 445	Genetics
BI 445L	Genetics Lab
BI 327	Cell Biology
BI 327L	Cell Biology Lab
CH 410	Organic Qualitative Analysis
	<b>Total</b>

	3
	3
	1
	3
	1
	3
	<b>14</b>

CH 404
PY 325

Biology Elective	3
Biology Elective Lab	1
Seminar	1
Modern Physics	3
*Elective (BI )	3
*Elective (BI )	3
<b>Total</b>	<b>14</b>

\* It is required that a portion of electives be devoted to a non-structured course such as chemical research. Students must earn a "C" or better in all math and science courses.

Senior Exit Exam Pass \_\_\_\_\_ Fail \_\_\_\_\_

## COURSE DESCRIPTIONS IN CHEMISTRY (CH)

### CH 101 3-0-3 INTRODUCTION TO CHEMISTRY

An introductory course covering basic concepts important as **Pre-requisites** to the study of General Chemistry. Math skills are stressed.

### CH 121 3-0-3 GENERAL CHEMISTRY I

A comprehensive course in chemistry covering all major areas of the discipline: inorganic, physical, analytical, and organic. Topics include nomenclature, the mole concept, stereochemistry, structure, bonding, the periodic table, gas laws. For students needing a rigorous introductory course in chemistry in preparation for advanced courses. **Co-requisite: CH 121L, MA 121.**

### CH 121L 0-2-1 GENERAL CHEMISTRY I LABORATORY

Laboratory component of CH 121. A laboratory course emphasizing techniques for measuring mass, volume, temperature, hands on experience, etc. Exercises complement lecture topics. Group-centered learning experiences and demonstrations as well as audiovisual aids and instrumentation are employed. **Co-requisite: CH 121.**

### CH 122 3-0-3 GENERAL CHEMISTRY II

A continuation of CH 121. Topics include solutions, acid-base chemistry, kinetics, equilibrium, thermodynamics, electrochemistry, and organic chemistry. **Pre-requisite: CH 121. Co-requisite: CH 122L.**

### CH 122L 0-2-1 GENERAL CHEMISTRY II LABORATORY

Laboratory component of CH 122. A laboratory demonstrating key concepts of the course and hands on experience. **Co-requisite: CH 122.**

### CH 123 3-2-4 GENERAL CHEMISTRY

With qualitative analysis. An introduction to the four main divisions of chemistry with a strenuous laboratory involvement; mainly for chemistry majors and those majors requiring qualitative analysis. **Co-requisite: CH 123L**

### CH 124 3-2-4 GENERAL CHEMISTRY

With qualitative analysis. A continuation of CH 123. **Co-requisite: CH 124L.**

### CH 123H 3-2-4 HONORS CHEMISTRY

An honors level first year survey college chemistry course introducing basic concepts on chemical reaction, bonding, molecular structure, gases, states of matter, properties of solutions, equilibrium, electrochemical cells, coordination compounds, acids and bases, and atomic structure. This course has a strenuous laboratory component. **Co-requisite: CH 123H L**

### CH 124H 3-2-4 HONORS CHEMISTRY

A continuation of CH 123H. **Co-requisite: CH 124HL.**

**CH 141            3-0-3    GENERAL, ORGANIC, AND BIOLOGICAL CHEMISTRY I**

An introduction to general and organic chemistry. Topics included are atomic structure and theory, periodic table, bonding, solutions and mixtures, acid-base chemistry, radioactivity, inorganic nomenclature, hydrocarbons – their nomenclature, physical properties, and reactions. A course in chemistry for students in the agricultural, family and consumer, nursing, and allied health sciences.

**CH 141L            0-2-1    GENERAL, ORGANIC, AND BIOLOGICAL CHEMISTRY  
LABORATORY I**

Laboratory component of CH 141. A laboratory course in chemistry for students in the agricultural, family and consumer, nursing, and health sciences.

**CH 142            3-0-3    GENERAL, ORGANIC, AND BIOLOGICAL CHEMISTRY II**

A continuation of CH 141. Topics include major functional groups of carbon compounds, their preparations and reactions, an introduction to biomolecular including carbohydrates, proteins, and lipids, essential fluids, and elementary metabolism.

**CH 142L            0-2-1    GENERAL, ORGANIC, AND BIOLOGICAL CHEMISTRY LAB II**

Laboratory component of CH 142. A laboratory demonstrating key concepts of the course and hands on experience.

**CH 205            1-0-1    CHEMICAL LITERATURE**

The scope, variety, and use of chemical publications.

**CH 221            3-0-3    ORGANIC CHEMISTRY I**

A general organic chemistry course comprising aliphatic and aromatic hydrocarbons, major functional groups, nomenclature, origins, preparations, syntheses and reaction mechanisms of organic compounds. A course for students preparing for graduate work in chemistry, medicine, dentistry, pharmacy, and related disciplines.

**Pre-requisite:** CH 122. **Co-requisite:** CH 221L.

**CH 221L            0-4-1    ORGANIC CHEMISTRY LABORATORY I**

Laboratory component of CH 221. A laboratory emphasizing techniques such as extraction, distillation, re-crystallization, utilized in organic synthesis. Laboratory experiences are supplemented with hands on instrumentation, audio-visual, computer, and Web-based activities. **Pre-requisite:** CH 122L.

**Co-requisite:** CH 221.

**CH 222            3-0-3    ORGANIC CHEMISTRY II**

A continuation of CH 221. **Pre-requisite:** CH 221. **Co-requisite:** CH 222L.

**CH 222L            0-4-1    ORGANIC CHEMISTRY LABORATORY II**

Laboratory Component of CH 222. A laboratory demonstrating key concepts of the course and hands on experience. **Pre-requisite:** CH 221L. **Co-requisite:** CH 222.

**CH 301            2-0-2    CHEMISTRY AND LIFE**

A consideration of the basic concepts of chemistry from the viewpoint of their relevance to familiar situations of everyday modern life.

**CH 301            0-(2-4)-(1-2)    CHEMISTRY AND LIFE LABORATORY**

A laboratory with variable credit hours that focuses on the chemistry of appropriate life experiences.

**CH 315            3-0-3    SURVEY OF ORGANIC CHEMISTRY**

A brief survey of major organic chemistry topics, such as functional groups, nomenclature, reactions and uses of organic compounds. A terminal course in organic chemistry for certain students in agricultural, family and consumer or allied health sciences. **Pre-requisite:** CH 142 or CH 122. **Co-requisite:** CH 315L.

**CH 315L            (0-2)-(0-2-1)    SURVEY OF ORGANIC CHEMISTRY LABORATORY**

Laboratory component of CH 315. A laboratory course covering the basic techniques, methods, and analysis of organic compounds and hands on experience.

**Pre-requisite:** CH 122L. **Co-requisite:** CH 315.

**CH 320            3-0-3    ENVIRONMENTAL CHEMISTRY**

A study of the chemistry of the natural environment and the effects of pollution on the environment.

**Pre-requisite:** CH 122.

**CH 321            3-0-3    QUANTITATIVE ANALYSIS**

The principles and techniques for the quantitative examination of common inorganic substances using both titrimetric and gravimetric procedures. **Pre-requisite:** CH 122 or CH 142.

**CH 321L           0-4-1    QUANTITATIVE ANALYSIS LABORATORY**

Laboratory component of CH 321. A laboratory demonstrating key concepts of the course and hands on experience. **Co-requisite:** CH 321.

**CH 322            3-0-3    INSTRUMENTAL METHODS OF ANALYSIS**

A study of the theory and practical applications of research-type instrumentation in qualitative and quantitative analysis. **Pre-requisite:** CH 321, CH 323 is highly recommended.

**CH 322L           0-2-1    INSTRUMENTAL METHODS OF ANALYSIS LABORATORY**

Laboratory component of CH 322. A laboratory demonstrating sample preparation and instrumental analysis techniques, such as spectrophotometry and chromatography. **Co-requisite:** CH 322.

**CH 323            3-0-3    PHYSICAL CHEMISTRY I**

The fundamental laws and theories of chemistry as applied to gases, liquids, solids, and solutions.

**Pre-requisite:** CH 122, PY 216 or PY 218, and MA 181, and MA 225.

**CH 323L           0-2-1    PHYSICAL CHEMISTRY I LABORATORY**

A hands-on laboratory course where students perform experiments that test the fundamental laws and theories of chemistry as applied to gases, liquids, solids, and solutions. **Co-requisite:** CH 323.

**CH 324            3-0-3    PHYSICAL CHEMISTRY II**

A continuation of CH 323.

**CH 324L           0-2-1    PHYSICAL CHEMISTRY II LABORATORY**

Laboratory component of CH 324. A continuation of hands-on experiments. **Co-requisite:** CH 324.

**CH 330            3-0-3    SURVEY OF BIOCHEMISTRY**

A brief survey of chemistry of biomolecules, including amino acids, carbohydrates, fats/lipids, and peptides/proteins as regards to their structure, nomenclature, function, metabolism and analysis. A terminal course in biochemistry for certain students in agricultural, family and consumer, or allied sciences.

**Pre-requisite:** CH 315.

**CH 330L           (0-2)-0-(2-1)    SURVEY OF BIOCHEMISTRY LABORATORY**

Laboratory component of CH 330. A laboratory course exploring basic reactions and behaviors of certain biomolecules and hands on experience. **Co-requisite:** CH 330.

**CH 331            3-0-3    BIOCHEMISTRY I**

A description and analysis of the physical and chemical requirements of living organisms; including a description of protein structure and function, enzymes, coenzymes, enzyme kinetics, and regulation. **Pre-requisite:** CH 222.

**CH 331L           0-2-1    BIOCHEMISTRY LABORATORY I**

Laboratory component of CH 331. A laboratory demonstrating key concepts of the course and hands on experience. **Co-requisite:** CH 331.

**CH 332            3-0-3    BIOCHEMISTRY II**

A continuation of CH 331 to include the major metabolic pathways of carbohydrates, lipids, and nitrogen containing compounds. The physical and chemical properties of carbohydrates, lipids, and nitrogen compounds are also treated. **Pre-requisite:** CH 331.

**CH 332L      0-2-1    BIOCHEMISTRY LABORATORY II**

**Co-requisite:** CH 332. A laboratory demonstrating key concepts of the course.

**CH 342      3-0-3    PHYSIOLOGICAL, ORGANIC, AND BIOCHEMISTRY**

A course that discusses organic nomenclature and functional groups reactions. It also emphasizes biochemical events in mammals and particularly the human organism. Topics: metabolic pathways, hormonal regulation, nutrition, and the chemistry of specialized tissues and body fluids. **Pre-requisite:** CH 121.

**CH 370      3-0-3    SURVEY OF INDUSTRIAL ORGANIC CHEMISTRY**

A survey of the reactions, formulations, and applications of industrial organic chemistry. Topics include most important industrial products, economics, and cost analysis, and historical development of the industry. **Pre-requisite:** CH 222.

**CH 398      0-2-1    UNDERGRADUATE LAB INSTRUCTION I**

A course for majors exposing them to preparation, instruction, and analysis in teaching laboratories.

**CH 399      0-2-1    UNDERGRADUATE LAB INSTRUCTION II**

A course for majors exposing them to preparation, instruction, and analysis in teaching laboratories.

**CH 403      1-0-1    SEMINAR**

Discussion of current periodicals, books, and research reports, original research.

**CH 404      1-0-1    SEMINAR**

A course designed for chemistry majors that emphasizes the principals of ethics, with a focus of ethics in the field of Chemistry. The class is discussion based with a writing component use to develop a deeper understanding of the importance of ethics in the field of Chemistry.

**CH 410      1-6-3    ORGANIC QUALITATIVE ANALYSIS**

Principles and experimental techniques used in the identification of organic compounds and the separation of mixtures. **Pre-requisite:** CH 222.

**CH 415      2-3-3    NUCLEAR AND RADIOCHEMISTRY**

A survey course treating concepts of radioactivity, transmutation, elementary particles, nuclear energy, radioactive labeling and radiation counting and monitoring. **Pre-requisite:** CH 324, MA 181, PY 218.

**CH 419      2-0-2    DESCRIPTIVE INORGANIC CHEMISTRY**

A course on the chemistry of the main group elements and transition metals.

**CH 421      2-0-2    INORGANIC CHEMISTRY**

An introduction to functional topics in inorganic chemistry including atomic structure, periodicity, acid-base theories, bonding theories, non-aqueous solvents, nuclear chemistry, and magnetic properties of inorganic compounds. **Pre-requisite:** CH 323, CH 321. **Co-requisite:** CH 420L.

**CH 421L      0-4-2    INORGANIC LABORATORY**

A laboratory course dealing primarily with various synthetic methods in inorganic chemistry.

**Pre-requisite:** CH 222L, CH 321L. **Co-requisite:** CH 421.

**CH 423      0-6-3    CHEMICAL RESEARCH OR INDEPENDENT STUDY**

This program of research or independent study is designed to give students insight into basic research. Students work independently on a problem or topic under the direction of an approved advisor. **Pre-requisite:** Senior status and departmental consent.

**CH 424      0-6-3    CHEMICAL RESEARCH OR INDEPENDENT STUDY**

A continuation of CH 423.

**CH 425      0-6-3    EXPERIMENTAL METHODS**

An unstructured laboratory course with experimental problems from organic, analytical, physical, inorganic, and biochemistry. **Pre-requisites:** CH 322, CH 323.

**CH 426            3-0-3    KINETICS AND THERMODYNAMICS**

A course dealing with the applications of kinetics and thermodynamics, emphasizing coordination chemistry and the chemistry of biological systems. **Pre-requisites: CH 324, CH 421.**

**CH 440            3-3-4    BIOCHEMISTRY**

A treatment of the storage and utilization of genetic information including the structure of RNA and DNA, replication and repair of DNA, RNA synthesis and processing, protein synthesis, and the regulation of gene expression. **Pre-requisite: CH 332.**

**CH 460            (1-3)-0-(1-3)    MODERN TOPICS IN CHEMISTRY**

A course designed to treat any specialized topic(s) or area(s) of chemistry. **Pre-requisite: CH 222.**

**CH 480            3-0-3    SPECTROSCOPY**

An introduction to fundamental theories on spectroscopy. Topics include mechanics, ultraviolet, visible, infrared, Raman, magnetic resonance, mass spectroscopy. **Pre-requisites: CH 323, MA 324; Co-requisite CH 421.**

**CH 401            2-2-3    PRINCIPLES OF CHEMISTRY FOR TEACHERS I**

A course designed for in-service teachers. An investigation of the main concepts of the five major areas of chemistry with emphasis on those concepts involved in the teaching of secondary school chemistry. An integrated laboratory is involved to relate chemical principles to laboratory activity. **Pre-requisite: CH 222.**

**CH 402            2-2-3    PRINCIPLES OF CHEMISTRY FOR TEACHERS II**

A continuation of CH 401.

**COURSE DESCRIPTIONS IN PHYSICAL SCIENCE AND PHYSICS (PY)****PY 111            2-2-3    PHYSICAL SCIENCE I**

A course designed to give the student an appreciation of the natural phenomena of the physical world. Included are laws encountered in working with static's, motion, chemical combination, light, heat, gravity, gases, etc. a laboratory self-discovery approach is stressed.

**PY 112            2-2-3    PHYSICAL SCIENCE II**

Includes: study of atoms, nucleus, chemical elements and compounds, basic astronomy, atmosphere and structural geology. **Pre-requisite PY 111.**

**PY 215            3-0-3    GENERAL PHYSICS (Non-Calculus)**

The study of fundamental principles of mechanics, heat, and sound. **Pre-requisite: MA 121 or equivalent. Co-requisite: 215L.**

**PY 215L            0-2-1    GENERAL PHYSICS LABORATORY (Non-Calculus)**

A laboratory demonstrating key concepts of the course, hands on experience, and verifying the fundamental concepts. **Co-requisite: PY 215.**

**PY 216            3-0-3    GENERAL PHYSICS (Non-Calculus)**

The study of fundamental principles of light, electricity, and magnetism. **Pre-requisites: PY 215, PY 215L. Co-requisite: PY 216L.**

**PY 216L            0-2-1    GENERAL PHYSICS LABORATORY (Non-Calculus)**

A laboratory demonstrating key concepts of the course, hands on experience, and verifying the fundamental concepts. **Co-requisite: PY 216.**

**PY 217            3-0-3    GENERAL PHYSICS (Calculus)**

Basic principles of physics with mathematical interpretation at the level of calculus. **Pre-requisite: MA 181 or MA 182. Co-requisite: MA 225, PY 217L.**

**PY 217L            0-2-1    GENERAL PHYSICS LABORATORY (Calculus)**

A laboratory demonstrating key concepts of the course, hands on experience, and verifying the fundamental concepts. **Co-requisite: PY 217.**

**PY 218            3-0-3    GENERAL PHYSICS (Calculus)**

Basic principles of electricity, magnetism, and light using calculus.

**PY 218L            0-2-1    GENERAL PHYSICS LABORATORY (Calculus)**

A laboratory demonstrating key concepts of the course, hands on experience, and verifying the fundamental concepts. **Co-requisite: PY 218.**

**PY 221            2-0-2    MECHANICS**

Differential equation form of Newton's Laws; rotational motion; central forces, vibrational motion; selected problems in advanced mechanics. **Pre-requisites: PY 218 and MA 348 or permission by instructor.**

**PY 222            2-0-2    MECHANICS**

Continuation of PY 221.

**PY 223            2-0-2    MATHEMATICS FOR PHYSICS**

Solution of equations important to the physical sciences. **Pre-requisites: PY 218 and MA 226.**

**PY 224            2-0-2    MATHEMATICS FOR PHYSICS**

Continuation of PY 223. **Pre-requisite: PY 223.**

**PY 300            2-0-2    THERMODYNAMICS**

A study of the laws of thermodynamics with their applications including introductory statistical thermodynamics, properties, and temperature. **Pre-requisite: PY 218 or permission by instructor.**

**PY 301            THERMODYNAMICS II**

A specialized treatise on the thermodynamics of solids, liquids and gases. **Pre-requisite: PY 300.**

**PY 310            2-2-3    GEOMETRIC AND PHYSICAL OPTICS**

Refraction, optical instruments, coherence, interference, diffraction, and polarization. **Co-requisite: PY 310L. Pre-requisites: PY 218, PY 218L.**

**PY 315            2-2-3    INTERMEDIATE ELECTRICITY AND MAGNETISM  
ELECTROMAGNETIC THEORY OF LIGHT**

Kirchoff's Laws; circuits with capacitance, resistance, and inductance calculations of capacitance and inductance from fields and potentials; dielectrics and ferromagnetic materials; magnetic force and induced EMF. **Pre-requisites: PY 218, PY 218L or permission of instructor. Co-requisite: 315L.**

**PY 315L            0-2-1    INTERMEDIATE ELECTRICITY AND MAGNETISM LABORATORY**

A laboratory demonstrating key concepts of the course, hands on experience, and verifying the fundamental concepts. **Pre-requisites: PY 218, PY 218L. Co-requisite: PY 315.**

**PY 317            2-3-3    ELECTRONICS FOR SCIENTISTS**

An introduction to electronics. To include components, transistors, diodes, amplifiers, operational amplifiers, detectors, transducers, control circuits, and applications. **Pre-requisites: PY 218, PY 218L. Co-requisite: PY 317L.**

**PY 317L            0-2-1    ELECTRONICS FOR SCIENTISTS LABORATORY**

Laboratory demonstrating key concepts of the course, hands on experience, and verifying the fundamental concepts. **Pre-requisites: PY 218, PY 218L. Co-requisite: PY 317.**

**PY 318            2-3-3    ANALOG AND DIGITAL ELECTRONICS**

An introduction of digital techniques, logic circuits, and microprocessor interfacing. **Pre-requisites: PY 317, PY 317L. Co-requisite: PY 318L.**



**PY 318L            0-2-1    ANALOG AND DIGITAL ELECTRONICS LABORATORY**

Laboratory demonstrating key concepts of the course, hands on experience, and verifying the fundamental concepts. **Pre-requisites: PY 317, PY 317L. Co-requisite: PY 318.**

**PY 325            2-2-3    MODERN PHYSICS**

Special theory of relativity; atomic physics; topics in quantum mechanics and nuclear physics.

**Pre-requisite: PY 218 or permission of instructor.**

**PY 402            3-0-3    STATICS**

Elements of statics in two and three dimensions. **Pre-requisites: PY 218, MA 325.**

**PY 403            3-0-3    DYNAMICS**

Kinematics and kinetics of rigid bodies in plane motion. **Pre-requisite: PY 402.**

**PY 410+           3-0-3    ADVANCED ELECTRICITY AND MAGNETISM**

Electrostatic field and potentials; magnetic fields and inductance; complex analysis of AC circuits; transformation of integral forms of field equations to Maxwell's Equation: electromagnetic waves. **Pre-requisites: PY 315 and MA 401 or permission of instructor.**

**PY 430+           3-0-3    QUANTUM MECHANICS**

Basic Concepts. Solutions of Schrodinger's Equation: topics in atomic and nuclear physics.

**Pre-requisites: PY 325 and MA 348 or permission of instructor.**

**PY 440+           2-0-2    SPECIAL PROBLEMS IN PHYSICS**

**Pre-requisite: Permission of instructor.**

**PY 441+           2-0-2    SPECIAL PROBLEMS IN PHYSICS**

**Pre-requisite: Permission of instructor.**

**PY 450+           0-3-1    ADVANCED PHYSICS LABORATORY I**

Open to students in 400 level physics courses only.

**+ These courses are available only by special request.**

## **Department of English, Languages, and Mass Communication**

*Cynthia Scurria, Ph.D., Chairperson*

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*Telephone: (601) 877-6401*

### **MISSION OF ENGLISH DEGREE**

Our mission is to teach students to appreciate, understand, and interpret the human experience as it is expressed through the written and spoken word. To achieve these ends, the curricula provide opportunities for the student (1) to gain mastery of language, especially the forms of Standard American English, (2) to develop skills and techniques of effective writing, (3) to cultivate an appreciation for literature from a variety of cultures, (4) to cultivate skills in interpreting literature, (5) to develop and broaden problem-solving and analytical skills, and (6) to develop intellectual curiosity.

These skills—analytical reading, effective writing, and critical thinking—are invaluable in any professional field. Therefore, our curricula prepare our majors to enter the work force in a variety of occupations, including teaching, writing and editing, business and sales, public relations, and government service with local, state, and federal agencies, as well as to enter graduate or professional programs in such fields as literature, linguistics, communications, law, library science, and business administration. For further details on these professional options, contact the department, 133 Lanier Hall, (601) 877-6400, or email the chair at [cscurria@alcorn.edu](mailto:cscurria@alcorn.edu). To read about the professional fields our alumni have chosen, please view the Alumni Profiles tab at <http://www.alcorn.edu/academics/schools/school-of-arts-and-science/english-and-foreign-languages/index.aspx>.

We offer a foreign language to serve students who wish to fulfill the language requirements of their major fields or broaden their cultural background. We also offer honors courses in composition and literature to stimulate the intellectual and personal growth of students with outstanding ability in English.

### **MAJORS IN ENGLISH**

Students majoring in English may select either a major in literature, which is designed for those interested in graduate school, professional writing, and college teaching; or a major in teaching, which is designed for those interested in secondary school teaching. In addition to the required courses in these two majors, we offer a broad range of language and literature electives designed to enhance the general education of all students, regardless of major.

### **CONCENTRATIONS IN ENGLISH**

Students majoring in Elementary Education can choose a concentration in Language Arts by taking selected English courses. Students majoring in English Literature can choose a concentration in Professional Writing. In addition, the English Literature major includes 15 hours of upper-level English electives. In consultation with the chair, students may substitute upper-level courses in other disciplines when such courses are relevant to a student's career or educational goals.

We also offer an endorsement in English for the Master of Science in Education degree in Secondary Education. For course requirements, see the *Graduate Studies Catalog*.

### **LITERATURE CURRICULUM**

The 120-hour literature curriculum consists of thirty-three hours of general education courses including EN 111, EN 112, and EN 213; twelve hours of a foreign language; nine hours of free electives; fifty-one hours of required upper-level English courses, and fifteen hours of upper-level English electives. Students choosing the Professional Writing concentration should take 12 hours of their English electives in writing courses designated by the chair.

The following courses comprise the fifty-one hours of required upper-level English courses:

EN 303	Literary Theory and Criticism I	3 hrs.
EN 305	American Literature I	3 hrs.
EN 306	American Literature II	3 hrs.
EN 307	The British Novel	3 hrs.
EN 308	The American Novel	3 hrs.
EN 311	British Literature I	3 hrs.
EN 312	British Literature II	3 hrs.
EN 315	Introduction to Linguistics	3 hrs.
EN 316	Advanced Composition	3 hrs.
EN 317 or 318	Global Literature I or II	3 hrs.
EN 352	Research Writing	3 hrs.
EN 403	Literary Theory and Criticism II	3 hrs.
EN 480	Senior Seminar	3 hrs.
	Early Period Courses (consult with chair)	6 hrs.
	Late Period Courses (consult with chair)	6 hrs.

To be eligible for graduation, all students must earn a C or above in each upper-level English course. In addition, all students must pass a Senior Exit Examination administered by English faculty.

### **B.A. in English, Literature Major Curriculum Guide (120 Credit Hours)**

The following course sequence is strongly recommended. Students should be aware that not every course below can be offered every academic year. It is therefore essential that students remain in contact with their department chair.

#### **Freshman Year (30)**

<b>First Semester</b>		<b>Hrs</b>	<b>Second Semester</b>		<b>Hrs</b>
EN 111	Composition I	<input type="text"/> 3	EN 112	Composition II	<input type="text"/> 3
SP 111	Spanish I	<input type="text"/> 3	SP 112	Spanish II	<input type="text"/> 3
HI 111	World Civilization I*	<input type="text"/> 3	HI 112	World Civilization II*	<input type="text"/> 3
MA 121	College Algebra	<input type="text"/> 3	PY 111	Physical Science I	<input type="text"/> 3
BI 111	General Biology	<input type="text"/> 3	PE 100	Physical Education I	<input type="text"/> 1
				or	
			MS 101	Fund. of Leadership & Mgt. I	<input type="text"/> 1
UL 101	University Life	<input type="text"/> 1	ND 101	Health Wellness	<input type="text"/> 1
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>14</b>

#### **Sophomore Year (30)**

EN 213	Studies in Literature	<input type="text"/> 3	EN 214	Special Topics in Lit**	<input type="text"/> 3
HU 201	Humanities**	<input type="text"/> 3	EN 316	Advanced Composition	<input type="text"/> 3
EN 315	Introduction to Linguistics	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
_____	Elective	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
SP 213	Spanish III***	<input type="text"/> 3	SP 214	Spanish IV***	<input type="text"/> 3
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>15</b>

#### **Junior Year (30)**

EN 305	American Literature I	<input type="text"/> 3	EN 306	American Literature II	<input type="text"/> 3
EN 311	British Literature I	<input type="text"/> 3	EN 312	British Literature II	<input type="text"/> 3
EN_____	Early Period Course	<input type="text"/> 3	EN_____	Late Period Course	<input type="text"/> 3
EN 307	The British Novel	<input type="text"/> 3	EN 308	The American Novel	<input type="text"/> 3
EN_____	English Elective****	<input type="text"/> 3	EN 352	Research Writing	<input type="text"/> 3
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>15</b>

## Senior Year (30)

EN ____	Early Period Course	<input type="checkbox"/>	3
EN 303	Literary Theory and Criticism I	<input type="checkbox"/>	3
EN ____	Global Lit I or II	<input type="checkbox"/>	3
_____	English Elective****	<input type="checkbox"/>	3
_____	English Elective****	<input type="checkbox"/>	3
	<b>Total</b>	<input type="checkbox"/>	<b>15</b>

EN ____	Late Period Course	<input type="checkbox"/>	3
EN 403	Literary Theory and Criticism II	<input type="checkbox"/>	3
EN 480	Senior Seminar	<input type="checkbox"/>	3
_____	English Elective****	<input type="checkbox"/>	3
_____	English Elective****	<input type="checkbox"/>	3
	<b>Total</b>	<input type="checkbox"/>	<b>15</b>

\* **Or other approved Social Science course**

\*\* **Or other approved Creative Art course**

\*\*\* **Or restricted elective at discretion of department chair**

\*\*\*\* **At the discretion of the department chair, English electives may be substituted for other courses relevant to student's career plans.**

## EDUCATION CURRICULUM

The 120-hour education curriculum consists of thirty-six hours of general education courses including EN 111, EN 112, and EN 213; nine hours of upper-level Psychology courses; twelve hours of upper-level Education courses; fifty-one hours of required upper-level English courses, and twelve hours of Directed Teaching.

The following courses comprise the fifty-one hours of required upper-level English courses:

EN 303	Literary Theory and Criticism I	3 hrs.
EN 305	American Literature I	3 hrs.
EN 306	American Literature II	3 hrs.
EN 307	The British Novel	3 hrs.
EN 308	The American Novel	3 hrs.
EN 311	British Literature I	3 hrs.
EN 312	British Literature II	3 hrs.
EN 315	Introduction to Linguistics	3 hrs.
EN 316	Advanced Composition	3 hrs.
EN 317 or 318	Global Literature I or II	3 hrs.
EN 391	Best Practices in Teaching English I	3 hrs.
EN 403	Literary Theory and Criticism II	3 hrs.
EN 406	Adolescent Literature	3 hrs.
EN 480	Senior Seminar	3 hrs.
EN 485	Best Practices in Teaching English II	3 hrs.
	Early Period Course (consult with chair)	3 hrs.
	Late Period Course (consult with chair)	3 hrs.

To enter the English Education program, students must take and pass PRAXIS Core Academic Skills for Educators and apply for admission to the teacher education program. Additionally, the student must complete 44 semester hours of course work with a cumulative GPA of 2.75 on a 4.0 system. Only after entrance into the teacher education program, students are allowed to enroll in the following restricted courses: ED 302, ED 348, ED 351, and EN 485. Only after passing Praxis II, Principles of Learning and Teaching (Test Code 5624) and English Language, Literature, Composition and Content Knowledge (Test Code 5038), may students enroll in ED 468, Directed Teaching.

To be eligible for graduation, all students must earn a C or above in each upper-level English course. In addition, all students must successfully complete eight assessments as mandated by accreditation bodies. To complete these assessments, students should get in contact with the department chair when they enroll in their first upper-level English course.

### Language Arts Concentration for Elementary Education Majors

Students majoring in Elementary Education can choose Language Arts as an area of concentration. This concentration is made up of 18 hours of upper-level English courses. These 18 hours are as follows:

EN 315	Introduction to Linguistics
EN 316	Advanced Composition
EN 406	Adolescent Literature
EN 305 or 306	American Literature I or II
EN 311 or 312	English Literature I or II
EN _____	Upper-level English course

### **B.A. in English, Secondary Education Major Curriculum Guide (120 credit hours)**

The following course sequence is strongly recommended. Students should be aware that not every course below can be offered every academic year. It is therefore essential that students remain in contact with their department chair.

#### **Freshman Year (30)**

<b>First Semester</b>		<b>Hrs.</b>	<b>Second Semester</b>		<b>Hrs.</b>
EN 111	Composition I	<input type="text"/>	EN 112	Composition II	<input type="text"/>
PH 132	General Psychology**	<input type="text"/>	PY 111	Physical Science I	<input type="text"/>
BI 111	General Biology	<input type="text"/>	ED 200	Social Studies/Multicultural Ed.**	<input type="text"/>
MA 121	College Algebra	<input type="text"/>	SA 223	Oral Communication	<input type="text"/>
PE 100	Physical Education I	<input type="text"/>	PE 122	Health	<input type="text"/>
	or				
MS 101	Fund. of Leadership & Mgt. I	<input type="text"/>			
CS 100	Info. Tech. Proficiency	<input type="text"/>			
UL 101	University Life	<input type="text"/>			
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>15</b>

#### **Sophomore Year (30)**

EN 213	Studies in Literature	<input type="text"/>	EN 214	Special Topics in Lit***	<input type="text"/>
PH 347	Measurement Evaluation	<input type="text"/>	EN 316	Advanced Composition	<input type="text"/>
EN 315	Introduction to Linguistics	<input type="text"/>	EN 406	Adolescent Literature	<input type="text"/>
EN ____	Global Literature I or II	<input type="text"/>	ED 348	Foundations of Education	<input type="text"/>
EN 391	Best Practices in EN I	<input type="text"/>	PH 326	Psychology of the Excep. Child	<input type="text"/>
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>15</b>

#### **Junior Year (33)**

EN 305	American Literature I	<input type="text"/>	EN 306	American Literature II	<input type="text"/>
EN 311	British Literature I	<input type="text"/>	EN 312	British Literature II	<input type="text"/>
EN 303	Literary Theory and Criticism I	<input type="text"/>	EN 403	Literary Theory and Criticism II	<input type="text"/>
EN 307	The British Novel	<input type="text"/>	EN 308	The American Novel	<input type="text"/>
EN ____	Early Period Course	<input type="text"/>	EN 480	Senior Seminar	<input type="text"/>
ED 351	Managing Classroom Beh.*	<input type="text"/>	<b>Total</b>		<b>15</b>
<b>Total</b>		<b>18</b>			

#### **Senior Year (27)**

ED 498	Reading in the Secondary School*	<input type="text"/>	ED 468	Directed Teaching*	<input type="text"/>
EN ____	Late Period Course	<input type="text"/>			<input type="text"/>
ED 302	Teaching Practicum/Technology*	<input type="text"/>			<input type="text"/>
PH 336	Educational Psychology	<input type="text"/>			<input type="text"/>
EN 485	Best Practices in Teaching English II *	<input type="text"/>			<input type="text"/>
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>12</b>

- \* **Restricted Course in School of Education**
- \*\* **Required Social Science courses in Education**
- \*\*\* **Or other approved Creative Art course**

## **COURSE DESCRIPTIONS IN ENGLISH (EN)**

### **EN 105            3-0-3    INTERMEDIATE COMPOSITION**

A course for students who exhibit marginal skills in English but are not prepared for college composition. The emphasis is on exhibiting standard usage in students' writing. Upon successful completion of EN 105, students are prepared to enter EN 111.

### **EN 111            3-0-3    COMPOSITION I**

A course that aims to develop proficiency in the related skills of reading, writing, and discussion through the use of innovative and creative techniques. An emphasis is placed on standard usage through intensive study of sentence construction, paragraph building, essay structures, and grammar. **Pre-requisite:** Placement as determined by entrance examination, or EN 105.

### **EN 112            3-0-3    COMPOSITION II**

A study of the principles of grammar, rhetoric, and composition with attention given to expository and argumentative prose through the use of innovative and creative methods and techniques. An additional emphasis is placed on the methods of research and the preparation of research essays. **Pre-requisite: EN 111.**

### **EN 191            3-0-3    HONORS ENGLISH**

A course in reading and writing designed to improve written expression and to introduce the student to types of literature. Emphasis is given to disciplined thinking, productive conversation, and critical insight.

**Pre-requisite: Honors Standing.**

### **EN 192            3-0-3    HONORS ENGLISH**

A continuation of EN 191 with attention given to research writing techniques.

**Pre-requisites: Honors standing and either EN 111 or EN 191.**

### **EN 213            3-0-3    STUDIES IN LITERATURE**

An introductory course in literature with variable content. The nature of major genres and important literary terms will be emphasized. **Pre-requisite: EN 112.**

### **EN 214            3-0-3    SPECIAL TOPICS IN LITERATURE**

A course with variable content, emphasizing the careful study of a selected topic or theme. Typical offerings include topics such as multicultural literature, African American literature, women in literature, and Southern literature. **Pre-requisite: EN 213.**

### **EN 231            3-0-3    VOCABULARY DEVELOPMENT**

A course designed to enable the student to develop a wider and more effective vocabulary through study of word origins, synonyms, and current usage. Includes practice in the proper use of the dictionary and other semantic resources. **Pre-requisite: EN 111.**

### **EN 301            3-0-3    ANCIENT LITERATURE**

A study of selected Greek, Roman, and Hebrew authors against the background of Mediterranean and Indo-European mythology. **Pre-requisite: EN 213.**

### **EN 302            3-0-3    MEDIEVAL LITERATURE**

A study in selected works and genres from the European Middle Ages including Old English literature, medieval lyrics and ballads, European romances and Arthurian legends, writings by medieval women, Chaucer's *Troilus and Cressida*, and the emergence of drama in the later Middle Ages. Emphasis is placed on how the works reveal an evolving medieval culture and outlook. **Pre-requisite: EN 213.**

**EN 303            3-0-3    LITERARY THEORY AND CRITICISM I**

A survey course of major developments in Western critical thought, focusing on key figures and texts from the Classical through the Neo-Classical periods. This course provides a solid historical overview of critical theory. **Pre-requisites: EN 213 and junior standing.**

**EN 305            3-0-3    AMERICAN LITERATURE I**

A survey course of the major literature in the United States from colonial times through the romanticism movement of the mid-nineteenth century. Historical and cultural trends are studied in relationship to the literary selections. **Pre-requisite: EN 213.**

**EN 306            3-0-3    AMERICAN LITERATURE II**

A continuation of EN 305, from the realism movement to the present, emphasizing the studies of twentieth-century socio-cultural themes and trends relevant to the literary selections, including the literatures of minority groups. **Pre-requisite: EN 213.**

**EN 307            3-0-3    THE BRITISH NOVEL**

A study of several classic British novels selected from various literary eras from the inception of the novel to the present. Social, cultural, historic, and aesthetic factors are considered in the analysis of texts. The effects of literary periods on the novel are examined. **Pre-requisite: EN 213.**

**EN 308            3-0-3    THE AMERICAN NOVEL**

A study of major American novelists and the various social, literary, and psychological influences that helped shape the genre. Major emphasis is placed on the various literary movements and forces that span the novel, from its initial introduction to more contemporary novelists. **Pre-requisite: EN 213**

**EN 309            3-0-3    EARLY BLACK WRITERS**

A study of the literature of Black people in America from its beginning through the World War II period. The writers and their works are studied in relation to the evolution of cultural, historical, political, and social perspectives in the United States. **Pre-requisite: EN 213.**

**EN 310            3-0-3    MODERN BLACK WRITERS**

A study of the contemporary literature of Black people in America from the post-World War period through the present times, with emphasis on the socio-cultural and political changes reflected in the literature of the period. **Pre-requisite: EN 213.**

**EN 311            3-0-3    BRITISH LITERATURE I**

A general survey of British literature from its beginnings through eighteenth-century Neo-Classicism. Emphasis is placed on the historical, cultural, and intellectual settings of the works. **Pre-requisite: EN 213.**

**EN 312            3-0-3    BRITISH LITERATURE II**

A continuation of EN 311, the course surveys the pre-Romantic writers through contemporary English writers, emphasizing relevant cultural, historical, and intellectual changes and their effects on the concerns and styles of the literature of the period. **Pre-requisite: EN 213.**

**EN 315            3-0-3    INTRODUCTION TO LINGUISTICS**

A course which concentrates on American linguistics, including individual sounds (phonemes) used by speakers of the language, the categories of meaning units made up of sound combinations (morphemes), and the systems of combining these units to communicate complex ideas and experiences (syntax). Introductions to transformational grammar and dialectal variation are included. **Pre-requisite: EN 112.**

**EN 316            3-0-3    ADVANCED COMPOSITION**

An advanced course in effective written communication, emphasizing the reasoning process in argumentation and persuasion. Attention is focused on rational organization of written and oral compositions and on the avoidance of common logical fallacies. **Pre-requisite: EN 112.**

**EN 317            3-0-3    GLOBAL LITERATURE I**

An analysis of selected literary works from a range of nationalities and cultures. The course explores cultural, historical, and theoretical contexts. **Pre-requisite: EN 213.**

**EN 318            3-0-3    GLOBAL LITERATURE II**

A study of international authors and their fiction after World War I. The course will explore literature (in translation) from a specific region or writer for whom English is not a first language and the cultural, historical/political, and theoretical contexts for both writers and texts. **Pre-requisite: EN 213.**

**EN 320            3-0-3    INTRODUCTION TO FILM AS LITERATURE**

An examination of both foreign and domestic film using the language, theories, and interpretive techniques applied to literature. Students will learn various methods of analyzing the literary aspects of film. **Pre-requisite: EN 213.**

**EN 324            3-0-3    RENAISSANCE LITERATURE**

A reading of selected works from the English and European Renaissance, designed to illustrate some of the major concerns, themes, and conventions of Renaissance writers. **Pre-requisite: EN 213.**

**EN 325            3-0-3    SHAKESPEARE**

A study of representative works by William Shakespeare, including poetry, tragedies, comedies, and histories. Close reading of a text is emphasized to illustrate the artistic merits and thematic concerns of each work. An historical and social understanding of the Elizabethan period and the settings of individual works are stressed. **Pre-requisite: EN 213.**

**EN 326            3-0-3    SEVENTEENTH-CENTURY ENGLISH LITERATURE**

A study of the major writers of the century, emphasizing the metaphysical poets and the works of John Milton. **Pre-requisite: EN 213.**

**EN 327            3-0-3    NEO-CLASSICAL LITERATURE**

An investigation of the neo-classical movement in European literature of the 17th and 18th centuries. **Pre-requisite: EN 213.**

**EN 328            3-0-3    THE ROMANTIC MOVEMENT**

A study of selected writers of the Romantic period. **Pre-requisite: EN 213.**

**EN 329            3-0-3    NINETEENTH-CENTURY LITERATURE**

Prose and poetry of the 19th century, excluding the Romantics. Attention is paid to the historical and cultural background affecting the literature of the period. **Pre-requisite: EN 213.**

**EN 330            3-0-3    CONTEMPORARY LITERATURE**

A course of variable content which explores selected literary works, trends, and influences on both sides of the Atlantic since approximately 1950. **Pre-requisite: EN 213.**

**EN 331            3-0-3    STUDIES IN DRAMA**

An exploration of drama as a genre, emphasizing the types of drama associated with various periods and cultures. **Pre-requisite: EN 213**

**EN 332            3-0-3    STUDIES IN POETRY**

An exploration of poetry as a genre, emphasizing a wide variety of types and styles. **Pre-requisite: EN 213.**

**EN 333            3-0-3    STUDIES IN THE SHORT STORY**

An exploration of the short story as a genre. **Pre-requisite: EN 213.**

**EN 343            3-0-3    EARLY AMERICAN LITERATURE**

A survey of American literature and thought from its beginning to the adoption of the Constitution. Includes representative works such as travel and exploration reports, captivity narrative diaries, journals, autobiographies, sermons and poetry. **Pre-requisite: EN 213.**

**EN 345            3-0-3    AMERICAN ROMANTICISM**

A study of the literature and thought of American Romanticism, tracing its development and distinguishing it from the Neo-Classical period which preceded it and from the period of Literary Realism which followed. The course places Romanticism in its cultural context, correlating Romantic attitudes with the growing national self-awareness of the period. **Pre-requisite: EN 213.**



**EN 346            3-0-3    AMERICAN REALISM AND NATURALISM**

An examination of Literary Realism and Naturalism in American literature. The course explores the ways in which art and social conscience intersect in American literature at the end of the nineteenth and beginning of the twentieth centuries, paying particular attention to the ferment of contemporary issues to which the literature of the period responds. **Pre-requisite: EN 213.**

**EN 347            3-0-3    SOUTHERN LITERATURE**

A survey of Southern Literature from the colonial period through the present day. Emphasis is on major Southern writers and the culture that shaped their work. **Pre-requisite: EN 213.**

**EN 348            3-0-3    AMERICAN MODERNISM**

A study in the works of a number of American writers involved in experimentation and innovation in poetry and prose fiction from approximately 1910 through 1950s. The course emphasizes representative literary texts but also explores the influence of earlier writers and thinkers and the artistic and intellectual milieu of the period in an effort to define what, precisely, modernism is and why certain writers are classified as modernist.

**Pre-requisite: EN 213.**

**EN 351            3-0-3    TECHNICAL WRITING**

A course designed for students majoring in the sciences, business, vocational, and technical fields, or for students interested in professional writing. Using a workshop approach, the course teaches the fundamentals of effective writing within the student's chosen field. **Pre-requisite: EN 112.**

**EN 352            3-0-3    RESEARCH WRITING**

Provides a survey of basic bibliographic tools in addition to extensive practice in the design and execution of research projects. **Pre-requisite: EN 112.**

**EN 391            3-0-3    BEST PRACTICES IN TEACHING ENGLISH I**

An introduction to best practices in teaching English in the secondary schools. Designed to prepare students to teach effectively, the course focuses on pedagogical theory and best practices in the discipline. **Pre-requisite: EN 112.**

**EN 403            3-0-3    LITERARY THEORY AND CRITICISM II**

A continuation of EN 303, this survey course examines the profound shifts of Western critical thought during the last 150 years by focusing on key figures and texts. This course provides a solid historical overview of critical theory. **Pre-requisite: EN 303.**

**EN 406            3-0-3    ADOLESCENT LITERATURE**

A course introducing English Education majors to literature appropriate for adolescents of varying cultures. **Pre-requisite: EN 213.**

**EN 407            3-0-3    HISTORY OF THE ENGLISH LANGUAGE**

A study of the development of the English language from its beginnings to the present, with attention to the social context of the language and the varieties of English worldwide. **Pre-requisite: EN 112.**

**EN 457            3-0-3    CREATIVE WRITING**

A laboratory approach to imaginative writing in which students create short stories, poems, and short plays. An emphasis will be placed on drafting and revision. Class time will largely be spent in readings and critiques.

**Pre-requisite: EN 213.**

**EN 480            3-0-3    SEMINAR**

A course in which senior English majors explore a selected topic in close collaboration with a faculty member. **Pre-requisites: English major and senior standing for literature majors; English major and junior standing for education majors.**

**EN 485            3-0-3    BEST PRACTICES IN TEACHING ENGLISH II**

A continuation of EN 391, this course extends the student's understanding and incorporation of best practices in teaching English in the secondary schools. **Pre-requisites: EN 391 and Teacher Ed card. Restricted course.**

## **COURSE DESCRIPTIONS IN SPANISH (SP)**

### **SP 111            3-0-3    SPANISH I**

Essentials of the language. Systematic training in phonology. A study of the spoken elements of the language with emphasis on the audio-lingual approach.

### **SP 112            3-0-3    SPANISH II**

A continuation of SP 111. **Pre-requisite: SP 111.**

### **SP 213            3-0-3    SPANISH III**

A continuation of SP 112. Review of essentials and intensive reading of contemporary texts. Outside reading assignments. Conducted mainly in Spanish. **Pre-requisite: SP 112.**

### **SP 214            3-0-3    SPANISH IV**

A continuation of SP 213. Compositions on assigned themes. Intensive drill on the idiomatic use of the language. Conducted mainly in Spanish. **Pre-requisite: SP 213.**

### **SP 223            3-0-3    SPANISH CIVILIZATION**

An outline study of the physical, racial, historical and artistic influences which have molded Spanish culture. Lectures, reading, oral and written reports. **Pre-requisite: SP 214.**

### **SP 225            3-0-3    CONVERSATION AND COMPOSITION**

Practice in idiomatic Spanish. Prepared and impromptu conversations and discussions on current events. Exercises in composition. **Pre-requisite: SP 223.**

### **SP 315            3-0-3    SURVEY OF SPANISH LITERATURE**

A general outline course in the history of Spanish literature up to the Golden Age. Lectures, readings, oral and written reports. **Pre-requisite: SP 225.**

### **SP 316            3-0-3    SURVEY OF SPANISH LITERATURE**

A general outline course in the history of the literature of the Golden Age and the eighteenth century. Study of the most significant aspects of modern and contemporary literature in Spain. Lectures in Spanish. **Pre-requisite: SP 315.**

## **MISSION OF MASS COMMUNICATION DEGREE**

The mission of the Mass Communication degree is 1) to prepare students to become successful media practitioners; 2) to foster students' critical thinking skills, especially regarding Mass Communication issues on local, regional, and national levels; 3) to prepare students for entrance into professional or graduate school; and 4) to teach students the skills necessary to operate across a wide variety of media platforms using state-of-the-art technologies.

In addition, students majoring in Mass Communication will experience

1. print media by writing, editing, and publishing a bi-monthly student run online newspaper, *The Campus Chronicle*;
2. television broadcast media by participating in a regular television newscast as producers, assignment reporters, videographers, and anchors;
3. radio broadcast media by participating in a regular one hour radio show where vocal delivery skills can be developed and enhanced.

Students will obtain these real-word hands-on professional experiences via our professionally managed 3,000 watt FM broadcast radio station, WPRL 91.7 FM, and our University wide cable television center, ASU TV-13. These broadcast media are operated by professional staff personnel.

## MASS COMMUNICATION CURRICULUM

The 120-hour Mass Communication curriculum consists of thirty-six hours of general education courses including CO 100, CO 103, and SA 223; six hours of a foreign language; six hours of free electives; six hours of upper-level free electives; fifty-seven hours of required upper-level Mass Communication courses, and nine hours of upper-level Mass Communication electives.

The following courses comprise the fifty-seven hours of required upper-level Mass Communication courses:

CO 203	Mass Media Writing	3 hrs.
CO 218	Broadcast Announcing	3 hrs.
CO 231	Broadcast News Writing and Reporting	3 hrs.
CO 241	Public Relations Principles and Practices	3 hrs.
CO 252	Basic Copy Editing	3 hrs.
CO 257	Current Issues in Journalism	3 hrs.
CO 312	Alternative Media in a Diverse Society	3 hrs.
CO 333	Mass Communication Law Ethics	3 hrs.
CO 338	Basic Video Editing Techniques	3 hrs.
CO 348	Television Production	3 hrs.
CO 351	Feature Writing	3 hrs.
CO 354	Investigative Reporting	3 hrs.
CO 358	Advanced Television Production	3 hrs.
CO 368	Radio Production Lab	3 hrs.
CO 370	Publications Design	3 hrs.
CO 410	Workshop in Mass Communication	3 hrs.
CO 417	Introduction to Mass Comm Research Methods	3 hrs.
CO 470	Multimedia Reporting	3 hrs.
CO 495	Internship in Mass Communication	3 hrs.

To be eligible for graduation, all students must earn a C or above in each upper-level Mass Communication course. In addition, all students must pass a Senior Exit Examination administered by Mass Communication faculty.

## B.A. Curriculum in Mass Communication Curriculum Guide (120 credit hours)

The following course sequence is strongly recommended, in particular because many courses serve as **Pre-requisites** for later courses. Students should be aware that not every course below can be offered every academic year. It is therefore essential that students remain in contact with their departmental advisors and chair.

### Freshman Year (30)

First Semester		Hrs.	Second Semester		Hrs.
EN 111	Composition I	<input type="checkbox"/> 3	EN 112	Composition II	<input type="checkbox"/> 3
HI 225	United States History I*	<input type="checkbox"/> 3	HI 226	United States History II*	<input type="checkbox"/> 3
BI 111	General Biology	<input type="checkbox"/> 3	PY 111	Physical Science I	<input type="checkbox"/> 3
MA 121	College Algebra	<input type="checkbox"/> 3	CO 100	Introduction to Mass Communication	<input type="checkbox"/> 3
ND 101	Health Wellness	<input type="checkbox"/> 1	CO 103	Introduction to Social Media	<input type="checkbox"/> 3
CS 100	Info. Tech. Proficiency	<input type="checkbox"/> 1			<input type="checkbox"/>
UL 101	University Life	<input type="checkbox"/> 1			<input type="checkbox"/>
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>15</b>

### Sophomore Year (30)

EN 213	Studies in Literature	<input type="checkbox"/> 3	CO 231	Broadcast News Writing Reporting	<input type="checkbox"/> 3
SP 111	Spanish I	<input type="checkbox"/> 3	SP 112	Spanish II	<input type="checkbox"/> 3
CO 203	Mass Media Writing	<input type="checkbox"/> 3	CO 312	Alternative Media in a Diverse Society	<input type="checkbox"/> 3
SA 223	Oral Communication	<input type="checkbox"/> 3	CO 218	Broadcast Announcing	<input type="checkbox"/> 3
_____	Elective	<input type="checkbox"/> 3	_____	Elective	<input type="checkbox"/> 3
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>15</b>

### Junior Year (30)

CO 252	Basic Copy Editing	<input type="checkbox"/>	3
CO 333	Mass Comm Law Ethics	<input type="checkbox"/>	3
CO 338	Basic Video Editing Tech	<input type="checkbox"/>	3
_____	Mass Communication Elective	<input type="checkbox"/>	3
_____	Upper-level Elective	<input type="checkbox"/>	3
	<b>Total</b>	<input type="checkbox"/>	<b>15</b>

CO 241	Public Relations Principles	<input type="checkbox"/>	3
CO 257	Current Issues in Journalism	<input type="checkbox"/>	3
CO 348	Television Production	<input type="checkbox"/>	3
CO 351	Feature Writing	<input type="checkbox"/>	3
CO 368	Radio Production Lab	<input type="checkbox"/>	3
	<b>Total</b>	<input type="checkbox"/>	<b>15</b>

### Senior Year (30)

CO 358	Advanced TV Production	<input type="checkbox"/>	3
CO 370	Publications Design	<input type="checkbox"/>	3
CO 410	Workshop in Mass Comm	<input type="checkbox"/>	3
CO 354	Investigative Reporting	<input type="checkbox"/>	3
_____	Mass Comm Elective	<input type="checkbox"/>	3
	<b>Total</b>	<input type="checkbox"/>	<b>15</b>

CO 417	Intro. Mass Comm. Research Methods	<input type="checkbox"/>	3
CO 470	Multimedia Reporting	<input type="checkbox"/>	3
CO 495	Internship in Mass Comm	<input type="checkbox"/>	3
_____	Mass Comm Elective	<input type="checkbox"/>	3
_____	Upper-level Elective	<input type="checkbox"/>	3
	<b>Total</b>	<input type="checkbox"/>	<b>15</b>

**\* Or other approved Social Science course**

## COURSE DESCRIPTIONS IN MASS COMMUNICATION (CO)

### CO 100 3-0-3 INTRODUCTION TO MASS COMMUNICATION

This course studies the Mass Communication systems that exist within the United States. While studying this foundation course, students will have an opportunity to determine a specific area of emphasis in which they might want to concentrate, such as Public Relations, Broadcasting, Print Journalism, or Advertising.

### CO 103 3-0-3 INTRODUCTION TO SOCIAL MEDIA

This course provides students with an introduction to the history, theory, technology, and uses of social media. Students will explore the possibilities and limitations of social media and will have hands-on experience with several forms of social media technology. Those who complete this course will know how to use social media productively, and have a framework for understanding and evaluating new tools and platforms.

### CO 203 3-0-3 MASS MEDIA WRITING

This course focuses on the fundamental principles of information gathering, writing, editing, and reporting. Students are given practical assignments to enhance their knowledge and skills in various areas of Mass Communication. **Pre-requisite:** CO 100.

### CO 218 3-0-3 BROADCAST ANNOUNCING

Students will study the principles of articulation, and practice vocal delivery to develop a range of announcing skills for radio and television news presentation, interviewing skills, entertainment delivery, panel moderation, and persuasive message delivery. This course will enhance skills in oral and nonverbal communications as applied to the diverse field of broadcast performance, including ad-libbing, news reporting, delivering commercials, play-by-play, sports announcing, working with equipment, and articulating sounds. **Pre-requisites:** CO 100 and CO 203.

### CO 231 3-0-3 BROADCAST NEWS WRITING AND REPORTING

This course provides an overview of the structure and functions of commercial radio and television news departments, and the theoretical and technical application of program delivery associated with radio and television stations. Students will study the techniques of newsgathering, writing, editing, and delivery. **Pre-requisites:** CO 100 and CO 203.

### CO 241 3-0-3 PUBLIC RELATIONS PRINCIPLES AND PRACTICES

This course introduces students to the origins, functions, defining issues, planning and practices of public relations, including its fundamental concepts and theories. It also focuses on historical development and current issues. **Pre-requisites:** CO 100 and CO 203.

### CO 242 3-0-3 PUBLIC OPINION AND PROPAGANDA

This course exposes students to historical uses of persuasive communication. Students learn how to communicate persuasively.

**CO 252            3-0-3    BASIC COPY EDITING**

This course is designed to study the fundamental principles of information gathering, writing, editing, and reporting for the mass media in print and broadcast. The different styles and approaches to writing and copy editing for the media will be examined with emphasis on practical assignments. **Pre-requisites:** CO 100 and CO 203.

**CO 253            3-0-3    PUBLIC AFFAIRS REPORTING**

This course examines the reporting of public institutions, programs and other public concerns such as local government, public schools, courts, crime, and social services. Students will learn how to cover legislative sessions, town government and school board meetings, trials, and the police beat. **Pre-requisites:** CO 100 and CO 203.

**CO 257            3-0-3    CURRENT ISSUES IN JOURNALISM**

This course is a study of recent, critical problems faced by mass media with exploration of the complexities that cause them. Students will learn to think more critically about the coverage of current events and trends in the mass media profession.

**CO 301            3-0-3    MASS MEDIA AND MINORITIES**

This course examines the representations of minority groups, such as African American, Asian American, Latinos and Native Americans, in U.S. news and entertainment mass media. Historical, social, political, economic and other factors influencing the mass mediated depictions of minorities will be explored.

**CO 312            3-0-3    ALTERNATIVE MEDIA IN A DIVERSE SOCIETY**

This course is designed to acquaint students with the historical context of the mass media and its relationship with minorities and women in advertising, entertainment, broadcasting, and public relations campaigns. The course is designed to encourage a departure from stereotypical attitudes and biases concerning the role of minorities and women in the broadcast industry. **Pre-requisites:** CO 100 and CO 203.

**CO 333            3-0-3    MASS COMMUNICATION LAW AND ETHICS**

This course examines how the law treats the gathering and publications of news events with particular reference to the First Amendment and the extent to which it protects the gathering and publication of news. **Pre-requisites:** CO 100 and CO 203.

**CO 338            3-0-3    BASIC VIDEO EDITING TECHNIQUES**

Students study the techniques and disciplines of camera and video equipment. Special emphasis is placed on electronic newsgathering and field production. The course provides practical applications of various techniques associated with online and offline editing. **Pre-requisite:** CO 218.

**CO 348            3-0-3    TELEVISION PRODUCTION**

This course teaches students the theoretical and practical uses of television control room and studio production. Emphasis is placed on set/stage design, lighting, in studio camera operations, graphics, and videotaping. Also included is the study of various formats used for directing full facility projects using switcher operation with special digital effects. **Pre-requisite:** CO 338.

**CO 351            3-0-3    FEATURE WRITING**

This course provides an advanced study in the techniques of writing feature articles for magazines and newspapers. Students are encouraged to publish in the college newspaper any feature story that may be of interest to the public it serves, such as the surrounding communities, faculty, staff, and students. **Pre-requisite:** CO 100, CO 203.

**CO 354            3-0-3    INVESTIGATIVE REPORTING**

This course will provide students with the essential tools necessary to find and provide accurate, detailed information concerning hard news events that require trained and sophisticated research methods. **Pre-requisites:** CO 100, CO 203.

**CO 358            3-0-3    ADVANCED TELEVISION PRODUCTION**

Students continue to study the application and practical use of the television control room and the studio with emphasis on set design, lighting, camera operations, graphics, and switcher operations with special electronic and digital effects. Students taking this course are required to participate in a live weekly newscast production. **Pre-requisites:** CO 338 and CO 348.

**CO 361            3-0-3    INTRODUCTION TO PHOTOGRAPHY**

Students learn the beginning techniques of camera use, including exposing, film processing and printing, and how to transition from traditional photography to digital image gathering, printing, and processing. **Pre-requisites** CO 100 and CO 203.

**CO 368            3-0-3    RADIO PRODUCTION LAB**

This course provides an introduction to scripting, recording, editing, and mixing radio production. Students learn to operate control room equipment in the campus radio station. **Pre-requisite:** CO 218.

**CO 370            3-0-3    PUBLICATIONS DESIGN**

Students are introduced to layout and design using the latest page design software. This course provides students with a professional working knowledge of design techniques, grid theory, page layout, and image integration related to publication design applications. **Pre-requisite:** CO 100 and CO 203.

**CO 371            3-0-3    ADVANCED PHOTOGRAPHY**

This course is designed for students working on photographic projects where they explore personal, aesthetic and technical interests through the development of an individualized photographic series. **Pre-requisite:** CO 361.

**CO 410            3-0-3    WORKSHOP IN MASS COMMUNICATION**

This course provides students the opportunity to work in the television center, radio station, or on the school newspaper and receive extra hands-on experience and training. This course allows students to create portfolios and resume tapes to obtain professional or internship opportunities. **Pre-requisites:** CO 231, CO 338, CO 348, CO 368, and advisor's approval.

**CO 417            3-0-3    INTRODUCTION TO MASS COMMUNICATION RESEARCH  
METHODS**

This introductory research course teaches students to conduct content analysis along with quantitative and qualitative studies to heighten their awareness concerning specific areas of the mass media. **Pre-requisite:** CO 100 and CO 203.

**CO 461            3-0-3    PUBLIC RELATIONS MANAGEMENT AND CAMPAIGNS**

This course examines problems that public relations practitioners encounter in the area of business, education, religion, and nonprofit organizations. Students also examine successful and unsuccessful campaigns. **Pre-requisites:** CO 100 and CO 203.

**CO 462            3-0-3    PRINCIPLES OF ADVERTISING**

An introduction to integrated marketing communications elements, including advertising, direct response, sales promotion, and marketing public relations, along with how they function in today's communication environment. This course explores research, media, and message elements involved in the creation of a campaign and governmental regulations, as well as social and economic considerations. **Pre-requisites:** CO 100 and CO 203.

**CO 467            3-0-3    CREATING ADVERTISING MESSAGES**

This course examines the development of persuasive message strategies as well as the writing and design of messages for media advertising, direct response, sales promotion, marketing, public relations, and oral presentations of advertising materials. **Pre-requisite:** CO 462.

**CO 470            3-0-3    MULTIMEDIA REPORTING**

This course teaches students the importance of multimedia reporting and how to add audio and visual content to their stories. Students will learn the history of multimedia journalism, the importance of multimedia content in news organizations, and the ways to present this content. **Pre-requisite:** CO 231.

**CO 485            3-0-3        DIRECTING FOR FILM/VIDEO**

Students review classic and contemporary film and video directing skills in all phases of production including script breakdown, scene preparation, behaviors of characters, budget, offset leadership skills and practices. Students will be responsible for making and participating in a full-length video documentary. **Pre-requisites:** CO 338, CO 348, and CO 358.

**CO 495            3-0-3        INTERNSHIP IN MASS COMMUNICATION**

This internship course provides Mass Communication majors the opportunity to receive practical experience in a professional setting. Students will work as interns at various newspapers, radio or television stations, public relations firms, advertising agencies, or graphic design studios. This course must be approved by the internship coordinator. This course should be taken during the student's senior year. **Pre-requisites:** CO 410 and advisor's approval.

## **Department of Fine Arts**

*Lawrence Konecky, D.M.Ed., Chairperson*

*Fine Arts Bldg, #101*

*Telephone: (601) 877-6261*

*Fax: (601) 877-6262*

The Department of Fine Arts has as its purpose the provision of curricular and cultural offerings which contribute to the student's acquisition of a broad base of knowledge and skill in the areas of art, humanities, music, and speech and theater. To this end, the department offers the Bachelor of Music degree with majors in Music Education and Music Performance, and the Bachelor of Arts in Music degree. In addition, the department provides service courses in the areas of Art, Humanities, and Speech and Theater. In the spirit of the University's emphasis on the "Communiversality" concept, the department's purpose in the area of service is to provide expertise in the arts, and offer opportunities to participate in cultural events for the University community, the communities in southwest Mississippi, and in other venues around the state, region, and nation.

### **ART**

Service courses in the art area focus on the general education of all students with the goal of enhancing their understanding of mankind, increasing their vocabulary through writing and speaking about art, and introducing them to drawing and design as a means of communication.

### **HUMANITIES**

Service courses in humanities are designed to explore the values and mores of humanity through the study of significant cultural development in art, literature, philosophy, music, and religion. Emphasis is placed on the interrelationships of these areas and on how they meld to form various movements and epochs.

### **SPEECH AND THEATER**

Service courses in speech and theater are offered for students interested in speech and theater either as an enhancement of their academic program, or as a means of enriching their leisure time activity. The Oral Communication course is designed to help students improve their ability to express thoughts more clearly in front of audiences. Courses in theater are designed to provide students with both practical experience in the production of plays, and historical and critical insight into the theater as a medium of communication of ideas and emotion.

### **MUSIC CURRICULUM**

The department offers the Bachelor of Music degree, with majors in Music Education and Music Performance and the Bachelor of Arts in Music degree. The Bachelor of Music curriculum is designed to provide the music major with basic skills, techniques, pedagogical concepts, and perspectives requisite to success in the field of music. Upon completion of the degree, graduates may engage in graduate study, perform as an artist, teach music on the elementary and secondary levels or pursue other interests related to music. A student handbook for music majors is available on the Department of Fine Arts web-site.

### **AUDITIONS**

Every student enrolled as a full-time degree candidate must study a major instrument, e.g. piano, voice, trumpet, and saxophone and must audition on the chosen instrument. Students enrolled in music education who wish to change to the music performance major must audition prior to being admitted to the performance major program, and prior to the beginning of the junior year. Contact the Department of Fine Arts office to schedule auditions and for more information about audition guidelines.



## **ENTRANCE EXAMINATIONS**

Entrance examinations are required for the purpose of placement in music theory and piano class. Entrance examinations are administered during freshman orientation in the fall and at the beginning of the spring semester. Preparation materials for the music theory test are available on the department web pages at: <http://musictheory.alcorn.edu/entrance.htm> and <http://musictheory.alcorn.edu/>. Students should contact the department office for information concerning entrance examinations and scheduling.

## **PROFICIENCY EXAMINATIONS**

Proficiency examinations on the applied instrument and in basic musicianship must be passed before advancing as a major. Advanced standing in music is contingent on satisfactory demonstrations of skills at the end of the sophomore year. Proficiency examinations are required of all transfer students, as well as currently enrolled Alcorn State University Music majors who take courses in music theory or music history at other institutions of higher learning. These students must demonstrate competency in each level of music theory or music history before continuing on to the next higher level. All music majors are required to pass the piano proficiency examination. This examination is normally scheduled at the conclusion of the sophomore year.

As a requirement for admission to the Teacher Education program, music education majors must successfully pass Praxis Core Academic Skills for Educators and complete admission requirements for the Teacher Education program. PRAXIS II Principles of Learning and Teaching and the PRAXUS II music content area test must be completed prior to admission to Directed Teaching.

## **JURIES AND RECITALS**

All applied music students (except MU121/123) must take a jury examination at the end of each semester. The jury consists of a performance session before a faculty committee with a brief period of faculty inquiry. Students will be exempted from the jury examinations only when they have performed a senior recital meeting partial degree requirements during that semester. The performance jury is the equivalent of a final exam for the applied area of semester study. Juries are held during the week preceding final exams.

All music majors are required to register for and pass eight semesters of MU 052 (Recital). The recital hour is a forum for student performances and a time when the faculty and students can consider issues of academic and musical importance. Music students are not only interested in their own performance, but also recognize the value of listening to the performances of others and learning about the various performing media. Attendance at all student recitals is required and attendance at additional concerts, recitals, and special events sponsored by the Department of Fine Arts is expected. Music education majors are exempt from the recital attendance requirement during the semester in which they are enrolled in student teaching. Attendance records are kept and a grade is awarded for each recital class on a pass or fail basis.

Freshman music performance majors are required to perform on one recital during the first semester and twice during the second semester. Thereafter, all performance majors are required to appear twice each semester. Freshman music education majors are required to perform on one recital during the second semester. Thereafter, all music education majors are required to appear once during the fall semester and twice during the spring semester. Attendance at all student recitals is mandatory.

In addition to routine appearances on student recital programs, all music majors will present a full length recital during their senior year. Music performance majors must also present a half-hour recital during their junior year. These recitals are considered a partial fulfillment of the requirements for the graduation.

## **ENSEMBLES**

Every full-time music major (12 credit hours or more) must perform in a major ensemble each semester. Students in the music education degree programs are exempt from ensemble participation during the semester in which they are enrolled in student teaching. Only one ensemble credit per semester counts toward the ensemble requirement.

The **Concert Band** is open to all students by audition and is offered during the spring semester.

The **Concert Choir** is open to all students by audition. This organization demands a high caliber of performance. Voice majors are required to sing in this organization. All styles of music will be performed.

The **Jazz Ensemble** is open to all students subject to the approval of the director. The ensemble provides performance experience in various jazz idioms.

The **Marching Band** is open to all University students and is offered during the fall semester. Placement is determined by audition results and needs of the ensemble.

The **Wind Ensemble** is open to all University students by audition and is offered during the spring semester. Placement is determined by audition results and needs of the ensemble.

In addition to the major ensembles listed above, **Chamber ensembles** are open to students on a selective basis. Participation in a chamber ensemble does not exempt a student from participation in a major ensemble.

## **ATTENDANCE**

### **Classes**

Students are expected to attend all classes, recitals, and laboratory sessions. In addition, students are expected to be prompt and on time for all classes and appointments. It is the responsibility of students to abide by attendance rules that instructors prescribe and should clear absences with individual instructors.

### **Applied Lessons**

The ASU policy on class attendance applies to applied lessons as well. The highly specialized nature of individualized instruction and professional etiquette requires that the instructor be notified in advance of any absence. Make-up lessons are given at the discretion of the instructor and only for bona fide reasons, such as certifiable illness. Please check with the individual instructor regarding any additional stipulations. Applied lessons are offered in the following areas: piano, organ, voice, violin, viola, cello, string bass, guitar, flute, oboe, clarinet, bassoon, saxophone, trumpet, French horn, trombone, euphonium, tuba, and percussion. The following sequence of applied courses are for Music Education Majors: MU 121, MU 122, MU 221, MU 222, MU 321, MU 322, and MU 421-Senior Recital. The following sequence of applied courses are for Music Performance Majors: MU 121, MU 122, MU 221, MU 222, MU 323, MU 324-Junior Recital, MU 423, and MU 424-Senior Recital.

**Non music majors must receive permission of the instructor before enrolling in an applied course.**  
**Ensembles**

As with lessons, the ASU policy on attendance applies to ensembles. Since participation in a rehearsal cannot be “made-up,” and professional ethics dictate professional behavior in the discipline, ensemble directors expect attendance at **all** rehearsals and performances.

## **ACADEMIC ADVISING AND COURSE SEQUENCE**

Students are required to see their advisors regarding registration and other activities related to academic matters. They must have appropriate approval including an advisor’s signature before registering for courses. Students should consult with their advisor regularly, especially during pre-registration and during the general registration period each semester. Students must always consult with their advisors when making any kind of a course or registration change. **It is important to follow the sequence of courses as outlined in the curriculum.**

**The suggested sequences of courses for music majors are available on the Department of Fine Arts web site. Courses should be scheduled as prescribed for each semester. A music major must have no grade less than “C” in all required music courses. Music education majors must follow the policies and procedures for admission to teacher education and admission to student teaching as stated by the School of Education and Psychology.**

**Curriculum Requirements for the  
Bachelor of Music with a Major in Music Education  
(Piano, Instrumental, or Vocal)**

		<b>Credit Hours</b>
<b>General Education Core</b>		
SA 223	Oral Communication	3
UL 101	University Life	1
EN 111-112 EN 213	Composition I-II Studies in Literature	9
PE 122	Health	3
MA 121	College Algebra	3
BI, CH, or PY	Science Electives	6
ED 200	Social Studies/Multicultural Ed.	3
PH 132	General Psychology	<u>3</u>
	<b>Subtotal</b>	<b>31</b>
<b>Professional Education</b>		
ED 348	Foundations of Education	3
PH 326 336	Psychology of the Excep. Child	6
	Educational Psychology	
ED 302*	Teaching Practicum/Technology	3
MU 337 339*	Systemic Approaches to Music	6
ED 351*	Managing Classroom Beh.	3
ED 498*	Reading in the Secondary School	3
ED 468*	Directed Teaching	<u>12</u>
	<b>Subtotal</b>	<b>36</b>
<b>Basic Musicianship Performance</b>		
MU 01-18	Ensembles (7 semesters)	0
MU 052	Student Recital (7 semesters)	0
MU 101-102 MU 201-202	Aural Skills ( Sight Singing)	4
MU 111-112, 211-212 311-312	Theory Musicianship	18
MU 121-421	Applied Instr. ( Senior Recital)	14
MU 151-152 253-254	Piano Class ( Piano Proficiency)	4
MU 114, 315 316	Intro. to Music Lit., Music History I II	8
MU 272	Jazz Improvisation I	2
MU 332	Conducting	<u>3</u>
	<b>Subtotal</b>	<b>53</b>
<b>Piano</b>		
MU 205	Survey of Instruments	2
MU 375 341	Piano Pedagogy Piano Literature	4
MU 252	Voice Class	2
MU 347	Accompanying	2
Piano Class not required		<u>-4</u>
	<b>Subtotal Piano</b>	<b>6</b>
<b>Instrumental</b>		
MU 215 216	Instrument Classes I II	4
MU 252	Voice Class	2
MU 461	Band Techniques	<u>2</u>
	<b>Subtotal Instrumental</b>	<b>8</b>
<b>Vocal</b>		
MU 205	Survey of Instruments	2

MU 373	Vocal Pedagogy Practicum	2
MU 348	Diction I	2
MU 121	Applied Piano	2
Jazz Improvisation not required		<u>-2</u>
	<b>Subtotal Vocal</b>	<b>6</b>
	<b>Total Piano Vocal</b>	<b>126</b>
	<b>Total Instrumental</b>	<b>128</b>

### Ensembles

Marching Band - Fall Semester Only (2 semesters required for Instrumental Majors)  
Wind Ensemble or Concert Band - Spring Semester Only (1 semester required for Instrumental Majors)  
Jazz Lab Band (1 semester required for Instrumental Majors)  
Concert Choir (Required for Vocal Majors)

### Special Notes

\*Requires completion of PRAXIS I Core Academic Skills for Educators and formal admittance to Teacher Education

\*\*Requires completion of PRAXIS II and formal admittance to Student Teaching

### Curriculum Requirements for the Bachelor of Music with a Major in Performance (Piano, Instrumental, or Vocal)

General Education Core		Credit Hours
PE 100 (Vocal Piano) MU 11A (Instr.)		1
UL 101	University Life	1
EN 111-112 EN 213	Composition I-II Studies in Literature	9
SA 223	Oral Communication	3
ND 101	Health Wellness	1
MA 121	College Algebra	3
BI, CH, or PY	Science Electives	6
HI, SS, GT, SY, or EC	Social Science Elective	3
PH 132	General Psychology	<u>3</u>
	<b>Subtotal</b>	<b>30</b>
<b>Major Area</b>		
MU 052	Student Recital (8 semesters)	0
MU 121-323 423	Applied Instrument (Voice)	14
MU 324, 424	Junior Senior Recital	6
MU 371, 373, or 375	Pedagogy Practicum (Applied Area)	2
MU 340, 341, or 342	Applied Area Literature	<u>2</u>
	<b>Subtotal</b>	<b>24</b>
<b>Supportive Courses in Music</b>		
MU 101-102 MU 201-202	Aural Skills ( Sight Singing Proficiency)	4
MU 111-112,211-212, 311- 312	Theory Musicianship	18
MU 272	Jazz Improvisation I	2
MU 151-152 253-254	Piano Class ( Piano Proficiency)	4
MU 114, 315 316	Intro. to Music Lit., Music History I II	8
MU 332	Conducting	<u>3</u>
	<b>Subtotal</b>	<b>39</b>

<b>Piano Major Only</b>		
Ensembles		5
Piano Class not required		-4
MU 347 (two semesters)	Accompanying	4
Music Electives	Music Elective	10
Free Electives		<u>12</u>
	<b>Subtotal Piano</b>	<b>27</b>
<b>Instrumental Major Only</b>		
Ensembles		7
MU 346	Chamber Music	2
MU Electives	Music Electives	9
Free Electives		<u>9</u>
	<b>Subtotal Instrumental</b>	<b>27</b>
<b>Vocal Major Only</b>		
Ensembles		5
FR or SP 111 112	Spanish	6
MU 348 349	Diction I II	4
Free Electives		<u>12</u>
	<b>Subtotal Vocal</b>	<b>27</b>
	<b>Total</b>	<b>120</b>

**Ensembles (PARTICIPATION IS REQUIRED EACH SEMESTER)**

Marching Band (Fall Semester) and Wind Ensemble or Concert Band (Spring Semester)

Jazz Lab Band (2 Semesters Required of Piano Majors)

Concert Choir (Required of Vocal Majors)

<b>Music Electives</b>		
MU 121-422	Applied Secondary Instrument	2 - 16
MU 210	Opera Musical Theatre Workshop	1 - 8
MU 317	Music in the Romantic Period	2
MU 318	Music in the Renaissance Period	2
MU 346	Chamber Music	2
MU 347	Accompanying	2
MU 319	Music in the Baroque Period	2
MU 320	Music in the Twentieth Century	2
MU 326	Music in the Classical Period	2
MU 403	Independent Study	2
MU 432	Opera	2
MU 273	Jazz Improvisation	2
MU 327	Jazz History	3
MU 231-232	Jazz Theory I II	3 - 6
MU 031	Jazz Combo	1 - 8

**Curriculum Requirements for the  
Bachelor of Arts in Music**

<b>General Studies</b>		
PE 100-200 or MS 101-102	PE or Military Science or Marching Band	1
UL 101	University Life	1
EN 111-112	Composition	6
EN 213	Studies in Literature	3
SA 223	Oral Communication	3
ND 101	Health and Wellness	1

MA 121	College Algebra	3
AR 214 or HU 201	Art Appreciation or Humanities	3
BI, CH or PY	Science Electives	6
SS, or HI	Social Science Electives	6
SP 111 and 112	Spanish I and II	6
PH 132	General Psychology	<u>3</u>
	<b>Subtotal</b>	<b>42</b>

#### Basic Musicianship and Performance

MU 11-18	Ensembles (8 semesters)	8
MU 052	Student Recital (8 semesters)	0
MU 121-421	Applied Instrument or Voice	14
MU 101-102 and MU 201	Aural Skills (and Sight Singing)	3
MU 111-112,211-212	Theory and Musicianship	12
MU 114	Intro to Music Literature	2
MU 151-152 and 253-254	Piano Class (and Piano Proficiency)	4
MU 315 and 316	Music History	6
MU	Music Elective I and II	3
MU 403	Independent Study	<u>2</u>
	<b>Subtotal</b>	<b>54</b>

<b>Concentration</b>	<b>21</b>
<b>Elective</b>	<b>3</b>

<b>Total</b>	<b>120</b>
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### Bachelor of Music (Instrumental Music Education Major) (128 Credit Hours)

#### Freshman Year (33)

First Semester		Hrs.	Second Semester		Hrs.
MU 001A	Marching Band	<input type="text"/> 0	MU 002E	Wind Ensemble	<input type="text"/> 0
MU 101	Aural Skills	<input type="text"/> 1	MU 102	Aural Skills	<input type="text"/> 1
MU 111	Theory and Musicianship	<input type="text"/> 3	MU 112	Theory and Musicianship	<input type="text"/> 3
MU 121	Applied Instrument	<input type="text"/> 2	MU 122	Applied Instrument	<input type="text"/> 2
MU 151	Piano Class I	<input type="text"/> 1	MU 152	Piano Class	<input type="text"/> 1
MU 052	Recital	<input type="text"/> 0	MU 052	Recital	<input type="text"/> 0
EN 111	Composition I	<input type="text"/> 3	EN 112	Composition II	<input type="text"/> 3
UL 101	University Life	<input type="text"/> 1	PE 122	Health	<input type="text"/> 3
MA 121	College Algebra	<input type="text"/> 3	PH 132	General Psychology	<input type="text"/> <u>3</u>
_____	Science Elective	<input type="text"/> <u>3</u>			
	<b>Total</b>	<b>17</b>	<b>Total</b>		<b>16</b>

#### Sophomore Year (31)

MU 003A	Marching Band	<input type="text"/> 0	MU 004E	Wind Ensemble	<input type="text"/> 0
MU 201	Aural Skills	<input type="text"/> 1	MU 202	Aural Skills	<input type="text"/> 1
MU 211	Theory and Musicianship	<input type="text"/> 3	MU 212	Theory and Musicianship	<input type="text"/> 3
MU 221	Applied Instrument	<input type="text"/> 2	MU 222	Applied Instrument	<input type="text"/> 2
MU 253	Piano Class III	<input type="text"/> 1	MU 254	Piano Class IV	<input type="text"/> 1
MU 052	Recital	<input type="text"/> 0	MU 052	Recital	<input type="text"/> 0
MU 114	Intro to Music Lit.	<input type="text"/> 2	SA 223	Oral Communication	<input type="text"/> 3
_____	Science Elective	<input type="text"/> 3	PH 326	Psychology of the Excep. Child	<input type="text"/> 3
ED 200	Social Studies/Multicultural Ed.	<input type="text"/> <u>3</u>	EN 213	Studies in Literature	<input type="text"/> <u>3</u>
	<b>Total</b>	<b>15</b>	<b>Total</b>		<b>16</b>

### Junior Year (36)

MU 005A	Marching Band	<input type="text"/>	0
MU 215	Instrument Class I	<input type="text"/>	2
MU 311	Theory and Musicianship	<input type="text"/>	3
MU 315	Music History I	<input type="text"/>	3
MU 321	Applied Instrument	<input type="text"/>	2
MU 337	Sys. App. to Elem. Music	<input type="text"/>	3
MU 052	Recital	<input type="text"/>	0
ED 348	Foundations of Ed.	<input type="text"/>	3
MU 272	Jazz Improvisation I	<input type="text"/>	2
	<b>Total</b>	<input type="text"/>	<b>18</b>

MU 006E	Wind Ensemble	<input type="text"/>	0
MU 216	Instrument Class II	<input type="text"/>	2
MU 252	Voice Class	<input type="text"/>	2
MU 312	Theory and Musicianship	<input type="text"/>	3
MU 316	Music History II	<input type="text"/>	3
MU 322	Applied Instrument	<input type="text"/>	2
MU 332	Conducting	<input type="text"/>	3
MU 339*	Sys App. to Sec. Music	<input type="text"/>	3
MU 052	Recital	<input type="text"/>	0
	<b>Total</b>	<input type="text"/>	<b>18</b>

### Senior Year (28)

MU 007A	Marching Band	<input type="text"/>	0
MU 421	Applied Ins. (Sr. Rec.)	<input type="text"/>	2
MU 461	Band Techniques	<input type="text"/>	2
MU 052	Recital	<input type="text"/>	0
PH 336	Educational Psychology	<input type="text"/>	3
ED 351*	Managing Classroom Beh.	<input type="text"/>	3
ED 302	Teaching	<input type="text"/>	3
	Practicum/Technology	<input type="text"/>	
ED 498*	Reading in the Secondary School	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>16</b>

ED 468**	Directed Teaching	<input type="text"/>	12
		<input type="text"/>	
		<input type="text"/>	
		<input type="text"/>	
		<input type="text"/>	
		<input type="text"/>	
		<input type="text"/>	
		<input type="text"/>	
	<b>Total</b>	<input type="text"/>	<b>12</b>

### Bachelor of Music (Instrumental Performance Major) (120 Credit Hours)

#### Freshman Year (33)

First Semester		Hrs.
MU 001A	Marching Band	<input type="text"/> 1
MU 101	Aural Skills	<input type="text"/> 1
MU 111	Theory and Musicianship	<input type="text"/> 3
MU 121	Applied Instrument	<input type="text"/> 2
MU 151	Piano Class	<input type="text"/> 1
MU 052	Recital	<input type="text"/> 0
EN 111	Composition I	<input type="text"/> 3
MA 121	College Algebra	<input type="text"/> 3
UL 101	University Life	<input type="text"/> 1
		<input type="text"/>
	<b>Total</b>	<input type="text"/> <b>15</b>

Second Semester		Hrs.
MU 012E	Wind Ensemble	<div></div> 1
MU 102	Aural Skills	<div></div> 1
MU 112	Theory and Musicianship	<div></div> 3
MU 122	Applied Instrument	<div></div> 2
MU 152	Piano Class II	<div></div> 1
MU 052	Recital	<div></div> 0
EN 112	Composition II	<div></div> 3
ND 101	Health Wellness	<div></div> 1
PH 132	General Psychology	<div></div> 3
_____	Science Elective	<div></div> 3
Total		<div></div> 18

#### Sophomore Year (30)

MU 003A	Marching Band	<input type="text"/>	1
MU 201	Aural Skills	<input type="text"/>	1
MU 211	Theory and Musicianship	<input type="text"/>	3
MU 253	Piano Class III	<input type="text"/>	1
MU 221	Applied Instrument	<input type="text"/>	2
MU 052	Recital	<input type="text"/>	0
MU 114	Intro to Music Lit.	<input type="text"/>	2
	Social Science Elective	<input type="text"/>	3
EN 213	Studies in Literature	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>16</b>

MU 014E	Wind Ensemble	<input type="text"/>	1
MU 202	Aural Skills	<input type="text"/>	1
MU 212	Theory and Musicianship	<input type="text"/>	3
MU 254	Piano Class IV	<input type="text"/>	1
MU 222	Applied Instrument	<input type="text"/>	2
MU 052	Recital	<input type="text"/>	0
SA 223	Oral Communication	<input type="text"/>	3
	Science Elective	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>14</b>

#### Junior Year (30)

MU 015A	Marching Band	<input type="text"/>	1
MU 323	Applied Instrument	<input type="text"/>	3
MU 311	Theory and Musicianship	<input type="text"/>	3

MU 016E	Wind Ensemble	<input type="text"/>	1
MU 312	Theory and Musicianship	<input type="text"/>	3
MU 316	Music History II	<input type="text"/>	3

MU 315	Music History I	<input type="text"/>	3
	Music Elective	<input type="text"/>	3
MU 052	Recital	<input type="text"/>	0
MU 272	Jazz Improvisation I	<input type="text"/>	2
	<b>Total</b>	<input type="text"/>	<b>15</b>

MU 324	Junior Recital	<input type="text"/>	3
MU 332	Conducting	<input type="text"/>	3
MU 371	Instrumental Ped and Pract.	<input type="text"/>	2
MU 052	Recital	<input type="text"/>	0
	<b>Total</b>	<input type="text"/>	<b>15</b>

### Senior Year (27)

MU 017A	Marching Band	<input type="text"/>	1
MU	Music Elective	<input type="text"/>	2
MU	Music Elective	<input type="text"/>	2
MU 346	Chamber Music	<input type="text"/>	2
MU 423	Applied Instrument	<input type="text"/>	3
MU 052	Recital	<input type="text"/>	0
	Elective	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>13</b>

MU 018E	Wind Ensemble	<input type="text"/>	1
MU	Music Elective	<input type="text"/>	2
MU 340	Instrumental Literature	<input type="text"/>	2
MU 424	Senior Recital	<input type="text"/>	3
MU 052	Recital	<input type="text"/>	0
	Elective	<input type="text"/>	3
	Elective	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>14</b>

## Bachelor of Music (Vocal Music Education Major) (126 Credit Hours)

### Freshman Year (33)

First Semester		Hrs.
MU 001B	Concert Choir	<input type="text"/> 0
MU 101	Aural Skills	<input type="text"/> 1
MU 111	Theory and Musicianship	<input type="text"/> 3
MU 121C	Applied Voice	<input type="text"/> 2
MU 151	Piano Class I	<input type="text"/> 1
EN 111	Composition I	<input type="text"/> 3
	Science Elective	<input type="text"/> 3
MA 121	College Algebra	<input type="text"/> 3
MU 052	Recital	<input type="text"/> 0
UL 101	University Life	<input type="text"/> 1
	<b>Total</b>	<input type="text"/> <b>17</b>

Second Semester		Hrs.
MU 002B	Concert Choir	<input type="text"/> 0
MU 102	Aural Skills	<input type="text"/> 1
MU 112	Theory and Musicianship	<input type="text"/> 3
MU 122C	Applied Voice	<input type="text"/> 2
MU 152	Piano Class II	<input type="text"/> 1
MU 052	Recital	<input type="text"/> 0
EN 112	Composition II	<input type="text"/> 3
PE 122	Health	<input type="text"/> 3
PH 132	General Psychology	<input type="text"/> 3
Total		<input type="text"/> 16

### Sophomore Year (33)

MU 003B	Concert Choir	<input type="text"/>	0
MU 201	Aural Skills	<input type="text"/>	1
MU 211	Theory and Musicianship	<input type="text"/>	3
MU 221C	Applied Voice	<input type="text"/>	2
MU 253	Piano Class III	<input type="text"/>	1
MU 052	Recital	<input type="text"/>	0
MU 205	Survey of Instruments	<input type="text"/>	2
MU 114	Intro to Music Lit.	<input type="text"/>	2
ED 200	Social Studies/Multicultural Ed.	<input type="text"/>	3
	Science Elective	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>17</b>

MU 004B	Concert Choir	<input type="text"/>	0
MU 202	Aural Skills	<input type="text"/>	1
MU 212	Theory and Musicianship	<input type="text"/>	3
MU 222C	Applied Voice	<input type="text"/>	2
MU 254	Piano Class IV	<input type="text"/>	1
MU 052	Recital	<input type="text"/>	0
SA 223	Oral Communication	<input type="text"/>	3
PH 326	Psychology of the Excep. Child	<input type="text"/>	3
EN 213	Studies in Literature	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>16</b>

### Junior Year (34)

MU 005B	Concert Choir	<input type="text"/>	0
MU 348	Diction I	<input type="text"/>	2
MU 311	Theory and Musicianship	<input type="text"/>	3
MU 315	Music History I	<input type="text"/>	3
MU 321C	Applied Voice	<input type="text"/>	2
MU 337	Sys. App. to Elem. Music	<input type="text"/>	3
MU 052	Recital	<input type="text"/>	0
ED 348	Found. of Education	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>16</b>

MU 006B	Concert Choir	<input type="text"/>	0
MU 121A	Applied Piano	<input type="text"/>	2
MU 312	Theory and Musicianship	<input type="text"/>	3
MU 316	Music History II	<input type="text"/>	3
MU 322C	Applied Voice	<input type="text"/>	2
MU 332	Conducting	<input type="text"/>	3
MU 339*	Sys App. to Sec. Music	<input type="text"/>	3
MU 373	Vocal Ped. and Practicum	<input type="text"/>	2
MU 052	Recital	<input type="text"/>	0
	<b>Total</b>	<input type="text"/>	<b>18</b>



### Senior Year (26)

MU 007B	Concert Choir	<input type="text"/>	0	ED 468**	Directed Teaching	<input type="text"/>	12
MU 421C	Applied Voice (Senior R.)	<input type="text"/>	2			<input type="text"/>	
MU 052	Recital	<input type="text"/>	0			<input type="text"/>	
PH 336	Educational Psychology	<input type="text"/>	3			<input type="text"/>	
ED 351*	Managing Classroom Beh.	<input type="text"/>	3			<input type="text"/>	
ED 302	Teaching	<input type="text"/>	3			<input type="text"/>	
	Practicum/Technology	<input type="text"/>				<input type="text"/>	
ED 498*	Reading in the Secondary School	<input type="text"/>	3			<input type="text"/>	
	<b>Total</b>	<input type="text"/>	14		<b>Total</b>	<input type="text"/>	12

### Bachelor of Music (Vocal Performance Major) (120 Credit Hours)

#### Freshman Year (33)

First Semester			Hrs.	Second Semester			Hrs.
MU 001B	Concert Choir	<input type="text"/>	1	MU 002B	Concert Choir	<input type="text"/>	0
MU 101	Aural Skills	<input type="text"/>	1	MU 102	Aural Skills	<input type="text"/>	1
MU 111	Theory and Musicianship	<input type="text"/>	3	MU 112	Theory and Musicianship	<input type="text"/>	3
MU 121C	Applied Voice	<input type="text"/>	2	MU 122C	Applied Voice	<input type="text"/>	2
MU 151	Piano Class	<input type="text"/>	1	MU 152	Piano Class II	<input type="text"/>	1
MU 052	Recital	<input type="text"/>	0	MU 052	Recital	<input type="text"/>	0
EN 111	Composition I	<input type="text"/>	3	EN 112	Composition II	<input type="text"/>	3
MA 121	College Algebra	<input type="text"/>	3	PH 132	General Psychology	<input type="text"/>	3
UL 101	University Life	<input type="text"/>	1	ND 101	Health Wellness	<input type="text"/>	1
PE 100	Physical Education I	<input type="text"/>	1		Science Elective	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	16		<b>Total</b>	<input type="text"/>	17

#### Sophomore Year (30)

MU 003B	Concert Choir	<input type="text"/>	1	MU 014B	Concert Choir	<input type="text"/>	1
MU 201	Aural Skills	<input type="text"/>	1	MU 202	Aural Skills	<input type="text"/>	1
MU 211	Theory and Musicianship	<input type="text"/>	3	MU 212	Theory and Musicianship	<input type="text"/>	3
MU 253	Piano Class III	<input type="text"/>	1	MU 254	Piano Class IV	<input type="text"/>	1
MU 221C	Applied Voice	<input type="text"/>	2	MU 222C	Applied Voice	<input type="text"/>	2
MU 052	Recital	<input type="text"/>	0	MU 052	Recital	<input type="text"/>	0
MU 114	Intro to Music Lit.	<input type="text"/>	2	SA 223	Oral Communication	<input type="text"/>	3
	Social Science Elective	<input type="text"/>	3		Science Elective	<input type="text"/>	3
EN 213	Studies in Literature	<input type="text"/>	3			<input type="text"/>	
	<b>Total</b>	<input type="text"/>	16		<b>Total</b>	<input type="text"/>	14

#### Junior Year (28)

MU 015B	Concert Choir	<input type="text"/>	0	MU 016B	Concert Choir	<input type="text"/>	0
MU 323C	Applied Voice	<input type="text"/>	3	MU 312	Theory and Musicianship	<input type="text"/>	3
MU 311	Theory and Musicianship	<input type="text"/>	3	MU 320	Music in the Twentieth Century	<input type="text"/>	3
MU 315	Music History I	<input type="text"/>	3	MU 324C	Junior Recital	<input type="text"/>	3
MU 348	Diction I	<input type="text"/>	2	MU 349	Diction II	<input type="text"/>	2
MU 052	Recital	<input type="text"/>	0	MU 052	Recital	<input type="text"/>	0
SP 111	Spanish	<input type="text"/>	3	SP 112	Spanish	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	14		<b>Total</b>	<input type="text"/>	14

#### Senior Year (29)

MU 017	Concert Choir	<input type="text"/>	1	MU 008	Concert Choir	<input type="text"/>	1
	Elective	<input type="text"/>	3	MU 332	Conducting	<input type="text"/>	3
MU 373	Vocal Ped. and Practicum	<input type="text"/>	2	MU 342	Vocal Literature	<input type="text"/>	2
MU 423C	Applied Voice	<input type="text"/>	3		Elective	<input type="text"/>	3

MU 052	Recital	<input type="text"/>	0
	Elective	<input type="text"/>	3
MU 272	Jazz Improvisation I	<input type="text"/>	2
	<b>Total</b>	<input type="text"/>	<b>14</b>

MU 424C	Senior Recital	<input type="text"/>	3
MU 052	Recital	<input type="text"/>	0
	Elective	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>15</b>

**Bachelor of Music  
(Piano Music Education Major)  
(126 Credit Hours)**

**Freshman Year (31)**

First Semester		Hrs.
MU 001	Concert Choir or Band	<input type="text"/> 0
MU 101	Aural Skills	<input type="text"/> 1
MU 111	Theory and Musicianship	<input type="text"/> 3
MU 121A	Applied Piano	<input type="text"/> 2
MU 052	Recital	<input type="text"/> 0
EN 111	Composition I	<input type="text"/> 3
	Science Elective	<input type="text"/> 3
MA 121	College Algebra	<input type="text"/> 3
UL 101	University Life	<input type="text"/> 1
	<b>Total</b>	<input type="text"/> <b>16</b>

Second Semester		Hrs.
MU 002	Concert Choir or Band	<input type="text"/> 0
MU 102	Aural Skills	<input type="text"/> 1
MU 112	Theory and Musicianship	<input type="text"/> 3
MU 122A	Applied Piano	<input type="text"/> 2
MU 052	Recital	<input type="text"/> 0
EN 112	Composition II	<input type="text"/> 3
PE 122	Health	<input type="text"/> 3
PH 132	General Psychology	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> <b>15</b>

**Sophomore Year (33)**

MU 003	Concert Choir or Band	<input type="text"/> 0
MU 201	Aural Skills	<input type="text"/> 1
MU 211	Theory and Musicianship	<input type="text"/> 3
MU 221A	Applied Piano	<input type="text"/> 2
MU 205	Survey of Instruments	<input type="text"/> 2
MU 052	Recital	<input type="text"/> 0
MU 114	Intro to Music Lit.	<input type="text"/> 2
	Science Elective	<input type="text"/> 3
ED 200	Social Studies/Multicultural Ed.	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> <b>16</b>

MU 004	Concert Choir or Band	<input type="text"/> 0
MU 202	Aural Skills	<input type="text"/> 1
MU 212	Theory and Musicianship	<input type="text"/> 3
MU 222A	Applied Piano	<input type="text"/> 2
MU 252	Voice Class	<input type="text"/> 2
MU 052	Recital	<input type="text"/> 0
PH 326	Psychology of the Excep. Child	<input type="text"/> 3
EN 213	Studies in Literature	<input type="text"/> 3
SA 223	Oral Communication	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> <b>17</b>

**Junior Year (36)**

MU 005	Concert Choir or Band	<input type="text"/> 0
MU 321A	Applied Piano	<input type="text"/> 2
MU 311	Theory and Musicianship	<input type="text"/> 3
MU 315	Music History I	<input type="text"/> 3
MU 347	Accompanying	<input type="text"/> 2
MU 337	Sys. App. To El. Music	<input type="text"/> 3
MU 052	Recital	<input type="text"/> 0
ED 348	Foundations of Ed.	<input type="text"/> 3
MU 272	Jazz Improvisation I	<input type="text"/> 2
	<b>Total</b>	<input type="text"/> <b>18</b>

MU 006	Concert Choir or Band	<input type="text"/> 0
MU 322A	Applied Piano	<input type="text"/> 2
MU 312	Theory and Musicianship	<input type="text"/> 3
MU 316	Music History II	<input type="text"/> 3
MU 332	Conducting	<input type="text"/> 3
MU 339*	Sys App. to Sec. Music	<input type="text"/> 3
MU 341	Piano Literature	<input type="text"/> 2
MU 375	Piano Pedagogy and Pract.	<input type="text"/> 2
MU 052	Recital	<input type="text"/> 0
	<b>Total</b>	<input type="text"/> <b>18</b>

**Senior Year (26)**

MU 007	Concert Choir or Band	<input type="text"/> 0
MU 421A	Applied Piano (Sr. Rec.)	<input type="text"/> 2
MU 052	Recital	<input type="text"/> 0
PH 336	Educational Psychology	<input type="text"/> 3
ED 351*	Managing Classroom Beh.	<input type="text"/> 3
ED 302	Teaching	<input type="text"/> 3
	Practicum/Technology	<input type="text"/>
ED 498*	Reading in the Secondary School	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> <b>14</b>

ED 468**	Directed Teaching	<input type="text"/> 12
		<input type="text"/>
		<input type="text"/>
		<input type="text"/>
		<input type="text"/>
		<input type="text"/>
		<input type="text"/>
	<b>Total</b>	<input type="text"/> <b>12</b>

**Bachelor of Music**  
**(Piano Performance Major)**  
**(120 Credit Hours)**

**Freshman Year (31)**

First Semester		Hrs.	Second Semester		Hrs.
MU 011	Concert Choir or Band	<input type="text"/>	MU 012	Concert Choir or Band	<input type="text"/>
MU 101	Aural Skills	<input type="text"/>	MU 102	Aural Skills	<input type="text"/>
MU 111	Theory and Musicianship	<input type="text"/>	MU 112	Theory and Musicianship	<input type="text"/>
MU 121A	Applied Piano	<input type="text"/>	MU 122A	Applied Piano	<input type="text"/>
MU 052	Recital	<input type="text"/>	MU 052	Recital	<input type="text"/>
EN 111	Composition I	<input type="text"/>	EN 112	Composition II	<input type="text"/>
MA 121	College Algebra	<input type="text"/>	_____	Science Elective	<input type="text"/>
UL 101	University Life	<input type="text"/>	ND 101	Health Wellness	<input type="text"/>
PE 100	Physical Education I	<input type="text"/>	PH 132	General Psychology	<input type="text"/>
<b>Total</b>		<input type="text"/>	<b>Total</b>		<input type="text"/>

**Sophomore Year (28)**

MU 013	Concert Choir or Band	<input type="text"/>	MU 014	Concert Choir or Band	<input type="text"/>
MU 201	Aural Skills	<input type="text"/>	MU 202	Aural Skills	<input type="text"/>
MU 211	Theory and Musicianship	<input type="text"/>	MU 212	Theory and Musicianship	<input type="text"/>
MU 114	Intro to Music Lit.	<input type="text"/>	_____	_____	<input type="text"/>
MU 221A	Applied Piano	<input type="text"/>	MU 222A	Applied Piano	<input type="text"/>
MU 052	Recital	<input type="text"/>	MU 052	Recital	<input type="text"/>
_____	Social Science Elective	<input type="text"/>	_____	Science Elective	<input type="text"/>
EN 213	Studies in Literature	<input type="text"/>	SA 223	Oral Communication	<input type="text"/>
<b>Total</b>		<input type="text"/>	<b>Total</b>		<input type="text"/>

**Junior Year (32)**

MU 015	Concert Choir or Band	<input type="text"/>	MU 016	Concert Choir or Band	<input type="text"/>
MU 311	Theory and Musicianship	<input type="text"/>	MU 312	Theory and Musicianship	<input type="text"/>
MU 315	Music History I	<input type="text"/>	MU 316	Music History II	<input type="text"/>
MU 323A	Applied Piano	<input type="text"/>	MU 324A	Junior Recital	<input type="text"/>
MU	Music Elective	<input type="text"/>	MU 332	Conducting	<input type="text"/>
MU 052	Recital	<input type="text"/>	MU 375	Piano Pedagogy and Pract.	<input type="text"/>
_____	Elective	<input type="text"/>	MU 052	Recital	<input type="text"/>
MU 272	Jazz Improvisation I	<input type="text"/>	_____	_____	<input type="text"/>
<b>Total</b>		<input type="text"/>	<b>Total</b>		<input type="text"/>

**Senior Year (29)**

MU 007	Concert Choir or Band	<input type="text"/>	MU 008	Concert Choir or Band	<input type="text"/>
MU	Music Elective	<input type="text"/>	MU	Music Elective	<input type="text"/>
MU	Music Elective	<input type="text"/>	MU	Music Elective	<input type="text"/>
MU 347	Accompanying	<input type="text"/>	MU 341	Piano Literature	<input type="text"/>
MU 423A	Applied Piano	<input type="text"/>	_____	Elective	<input type="text"/>
MU 052	Recital	<input type="text"/>	MU 424A	Senior Recital	<input type="text"/>
_____	Elective	<input type="text"/>	MU 052	Recital	<input type="text"/>
_____	Elective	<input type="text"/>	MU 347	Accompanying	<input type="text"/>
<b>Total</b>		<input type="text"/>	<b>Total</b>		<input type="text"/>

**Bachelor of Arts in Music**  
**(120 Credit Hours)**

**Freshman Year (31)**

First Semester		Hrs.	Second Semester		Hrs.
MU 011	Ensemble Elective	<input type="text"/>	MU 012	Ensemble Elective	<input type="text"/>
MU 101	Aural Skills	<input type="text"/>	MU 102	Aural Skills	<input type="text"/>
MU 111	Theory and Musicianship	<input type="text"/>	MU 112	Theory and Musicianship	<input type="text"/>

	2
	0
	3
	3
	1
	<u>1</u>
	<b>15</b>

	2
	0
	1
	3
	1
	3
	<u>1</u>
	<b>16</b>

MU 014	Ensemble Elective		1
MU 254	Piano Class IV		1
MU 212	Theory and Musicianship		3
MU 222	Applied		2
MU 052	Recital		0
PH 132	General Psychology		3
_____	Social Science Elective		3
_____	Science Elective		3
	<b>Total</b>		<b>16</b>

MU 016	Ensemble Elective	<input type="text"/>	1
MU 322	Applied	<input type="text"/>	2
MU 316	Music History II	<input type="text"/>	3
MU 052	Recital	<input type="text"/>	0
_____	Concentration	<input type="text"/>	3
_____	Concentration	<input type="text"/>	3
SP 112	Spanish II	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>15</b>

MU 018	Ensemble Elective		1
MU 403	Independent Study		2
MU 052	Recital		0
_____	Music Elective		3
_____	Concentration		3
_____			
_____	Elective		3
	<b>Total</b>		<b>12</b>

Students taking applied piano as their major instrument will take 4 hours of music electives in place of piano class.

12 hrs Biology Electives (300 and 400 level courses)

**Mass Communication**

- 3 hrs CO 100 Introduction to Mass Communication
- 3 hrs CO 218 Broadcast Announcing or CO 232 Basic News Reporting
- 3 hrs CO 333 Mass Comm Law and Ethics
- 9 hrs Communication Electives (300 and 400 level courses)
- 3 hrs CO 495 Internship in Mass Comm. or CO 410 Workshop in Mass Comm.

**English**

- 3 hrs EN 214 Special Topics in Literature
- 3 hrs EN 316 Advanced Composition
- 15 hrs English Electives (300 and 400 level courses)

**Math**

- 8 hrs MA 181 and 182 Calculus
- 3 hrs MA 203 Foundations of Math
- 9 hrs Math Electives (300 and 400 level courses)

**Computer Science**

- 9 hrs CS 202, 203 and 251 Programming in C++
- 3 hrs CS 321 Data Structures and Financial Accounting
- 9 hrs Computer Science Electives (300 and 400 level courses)

**Pre-Law**

- 6 hrs GT 101 and GT 102 American Government
- 6 hrs GT 322 and 332 Constitutional Law
- 9 hrs Political Science Electives (300 and 400 level courses)

**Business**

- 6 hrs EC 201 and 202 Principles of Economics I and II (To be taken as Social Science Electives in General Ed Core)
- 6 hrs AC 213 and 214 Principles of Financial/Managerial Accounting
- 3 hrs BA 237 Legal Environment of Business
- 3 hrs MG 301 Principles of Management
- 3 hrs MK 301 Principles of Marketing
- 6 hrs Business Electives (BA, MG, or MK, 300 and 400 level courses)

**Education and Psychology**

- 3 hrs ED 200 Social Studies/Multicultural Ed. (Taken as Social Science Elective in General Ed Core)
- 3 hrs ED 348 Foundations of Education
- 3 hrs PH 325 Adolescent Psychology
- 3 hrs PH 326 Psychology of the Exceptional Child
- 12 hrs Education and Psychology Electives (300 and 400 level courses)

**COURSE DESCRIPTIONS IN MUSIC (MU)****Music Ensemble****MU 001-008 0-4-0 ENSEMBLE**

The various performing groups include marching band, wind ensemble, concert band, and concert choir. These ensembles are designed to provide laboratory experience for music and non-music majors by learning effective rehearsal processes and producing polished performances.

**MU 011-018 0-4-1 ENSEMBLE**

The various performing groups include marching band, wind ensemble, concert band, University choir, and concert choir. These ensembles are designed to provide laboratory experience for music and non-music majors through arranging, composing, conducting, and performing.

**MU 022-028    0-3-1    JAZZ ENSEMBLE**

A performance oriented ensemble designed to provide experience for instrumentalists and vocalists.

**MU 031            0-3-1    JAZZ COMBO**

A performance oriented class designed to provide improvisational experience in various jazz styles in small ensemble settings. **Pre-requisite:** Permission of instructor.

**Music Theory**

**MU 100            3-0-3    INTRODUCTION TO MUSIC**

A course designed to give basic training in the fundamentals of music and elementary theory. Emphasis is placed on scales, key signatures, intervals, triads, sight-singing, and ear-training exercises. (Not counted toward a music major.)

**MU 101-102    1-1-1    AURAL SKILLS**

The development of sight-singing and ear training skills with emphasis on melodic, rhythmic, and harmonic dictation.

**MU 111            3-1-3    THEORY AND MUSICIANSHIP**

A study of intervals, triads, figured bass, four-part harmony in the style of Bach, elements of form, simple piano accompaniment patterns.

**MU 112            3-1-3    THEORY AND MUSICIANSHIP**

A study of inversions of triads, non-chord tones, development of motives into phrases and periods, simple binary and ternary form, analysis of representative works. **Pre-requisite:** MU 111.

**MU 201-201    0-2-1    AURAL SKILLS**

The advanced study of sight-singing and ear training skills.

**MU 211            3-0-3    THEORY AND MUSICIANSHIP**

A study of seventh chords and their inversions, ninth chords, secondary dominant and leading tone chords, and common chord modulations. **Pre-requisite:** MU 112.

**MU 212            3-0-3    THEORY AND MUSICIANSHIP**

A study of Neapolitan chords, augmented sixth chords, chromatic harmony, original compositions in given styles and forms, analysis of music from the Romantic period. **Pre-requisite:** MU 211.

**MU 231            3-0-3    JAZZ THEORY I**

A study of scales, chords, cadences, secondary dominants, common chord progressions, substitute dominants and dominant seventh chord scales, analysis and non-functional harmony as practiced in the jazz idiom. **Pre-requisite:** MU 112 or permission of instructor.

**MU 232            3-0-3    JAZZ THEORY II**

A study of major chords substitutions, minor key harmony, modulation, reharmonization, analysis and contemporary techniques as practiced in the jazz idiom. **Pre-requisite:** MU 231 or permission of instructor.

**MU 272            2-0-2    JAZZ IMPROVISATION I**

The development of jazz improvisation skills with emphasis on studying complex harmonic jazz progressions and jazz compositions. **Pre-requisite:** MU 112 or permission of the instructor.

**MU 273            2-0-2    JAZZ IMPROVISATION**

The development of jazz improvisation skills with emphasis on studying complex harmonic jazz progressions and jazz compositions. **Pre-requisite:** MU 272 or permission of the instructor.

**MU 311            3-0-3    THEORY AND MUSICIANSHIP**

The techniques of counterpoint and form and analysis practically applied to creative works. **Pre-requisite:** MU 212.

**MU 312            3-0-3    THEORY AND MUSICIANSHIP**

The techniques of orchestration and twentieth century composition practically applied to creative works. **Pre-requisite:** MU 212.

**Music History and Literature**

**MU 114            2-1-2    INTRODUCTION TO MUSIC LITERATURE**

A survey of music literature from Baroque to present day with emphasis on the development of musical styles.

**MU 213            3-0-3    MUSIC APPRECIATION**

A cultural course in the application of music, planned to develop listening and individual understanding of the composer's musical message.

**MU 315            3-0-3    MUSIC HISTORY I**

An analysis of Western civilization music from antiquity to 1750 with emphasis on the development of musical forms and styles. **Pre-requisite:** MU 212.

**MU 316            3-0-3    MUSIC HISTORY II**

An analysis of music from 1750 to the present with emphasis on musical forms and styles and music of diverse cultures. **Pre-requisite:** MU 212.

**MU 317            2-0-2    MUSIC IN THE ROMANTIC PERIOD**

An historical and stylistic study of major composers and their works during the Romantic period. **Pre-requisite:** MU 112.

**MU 327            3-1-3    JAZZ HISTORY**

A study of the music and major composers and performers in jazz from its origins through the present. Emphasis on gaining an analytical and aural understanding of the major techniques used in each of the stylistic periods of the music. **Pre-requisites:** MU 212 or permission of instructor.

**MU 318            2-0-2    MUSIC IN THE RENAISSANCE PERIOD**

Music in the Renaissance Period provides a basic introduction to the beginnings of music and its development up to the Baroque period. Composers, music techniques, and writing samples will all be explored. Political climates will be taken into account in regards to how art reflected what was going on politically and socially. Students will be expected to do an ample amount of listening and thus be able to recognize and identify specific styles and composers. **Pre-requisite:** MU 112.

**MU 319            2-0-2    MUSIC IN THE BAROQUE PERIOD**

Music in the Baroque Period provides an understanding of the Baroque period and its various forms. Composers, musical form and new vocal and instrumental approaches will all be explored. Political climates will be taken into account in regards to how art reflected what was going on politically and socially. Students will be expected to do an ample amount of listening and thus be able to recognize and identify specific styles and composers. **Pre-requisite:** MU 112.

**MU 320            2-0-2    MUSIC IN THE TWENTIETH CENTURY**

Music in the Twentieth Century explores contemporary classical music, jazz, and popular music genres. New ideas in theory, structure, and interpretation/usage of instruments will be addressed. Political climates will be taken into account in regards to how art reflected what was going on politically and socially. Students will be expected to do an ample amount of listening and thus be able to recognize and identify specific styles and composers. **Pre-requisite:** MU 112.

**MU 326            2-0-2    MUSIC IN THE CLASSICAL PERIOD**

Music in the Classical Period provides an understanding of the Classical through the Romantic periods and their various forms. Composers, musical form and new vocal and instrumental approaches will all be explored. Political climates will be taken into account in regards to how art reflected what was going on politically and socially. Students will be expected to do an ample amount of listening and thus be able to recognize and identify specific styles and composers. **Pre-requisite:** MU 112.

**MU 340            2-0-2    INSTRUMENTAL LITERATURE**

A study of instrumental literature from the pre-Baroque to the twentieth century, along with analysis and performance techniques. **Pre-requisite:** MU 112.

**MU 341            2-0-2    PIANO LITERATURE**

A study of keyboard literature from the pre-Baroque to the twentieth century, along with analysis and performance techniques. **Pre-requisite:** MU 112.

**MU 342            2-0-2    VOCAL LITERATURE**

A study of vocal literature from the pre-Baroque to the twentieth century along with analysis and performance techniques. **Pre-requisite:** MU 112.

**MU 346            2-0-2    CHAMBER MUSIC**

A study of the historical background, literature, media, forms, and styles of small ensemble music. It includes organization, rehearsal and performance in chamber music ensembles. **Pre-requisite:** MU 112.

**MU 403            2-0-2    INDEPENDENT STUDY**

Independent research on a topic related to the student's major instrument or some aspect of music history and/or theory. **Pre-requisite:** MU 112.

**MU 432            2-0-2    OPERA**

The history and development of opera from 1600 to the present. **Pre-requisite:** MU 112.

**Music Practicum**

**MU 102            2-1-2    BAND INSTRUMENT REPAIR**

A course designed to give music majors and non-majors instruction in the repair and maintenance of band instruments.

**MU 210            0-2-1    OPERA and MUSICAL THEATER WORKSHOP**

A performance oriented course geared to learning the basics of stage movement for singers with emphasis on: timing stage direction to music; using body and face to show emotions; dancing; singing from various positions; developing characters; and memorizing roles. The course includes performances of solo scenes, duets, trios, quartets and one act operas.

**MU 332            3-0-3    CONDUCTING**

The principles of conducting both instrumental and vocal music with emphasis on score reading, program planning, rehearsal procedures and literature. **Pre-requisite:** MU 212.

**MU 347            2-0-2    ACCOMPANYING**

Exploring the techniques of accompanying in solo and ensemble situations. Emphasis will be on preparation techniques, the demands of an accompanying career, and performing.

**MU 348            2-0-2    DICTION I**

Study of the pronunciation and articulation of English and Italian emphasizing the International Phonetics Alphabet. Students will prepare English and Italian art songs, arias, Musical Theatre and jazz selections.

**MU 349            2-0-2    DICTION II**

Study of the pronunciation and articulation of French and German emphasizing German lieder, French art songs, French and German arias, and other literature.

**MU 350            2-0-2    CLASSICAL PERFORMANCE PRACTICES**

A study of the historical and authentic performance of music up to and including the Romantic Period. Students will consult historical treatises and evidence to gain insight into the performance practices of the major historical eras including the Renaissance, Baroque, Classical, and Romantic.



**MU 352            2-0-2    CONTEMPORARY PERFORMANCE PRACTICES**

An exploration of the performance of contemporary music and expectations of modern audiences. Style, techniques and technology is explored. Students will prepare written and verbal presentations and perform music on their major applied instrument.

**MU 371            2-0-2    INSTRUMENTAL PEDAGOGY AND PRACTICUM**

Survey of teaching techniques, materials, practices, and theories for the student's major instrument. Supervised individual and group instruction of students at various levels of development.

**MU 373            2-0-2    VOCAL PEDAGOGY AND PRACTICUM**

A Study of vocal anatomy, practical application, recognition and identification of vocal problems and corrective procedures, teaching materials, observation, and supervised teaching experiences.

**MU 375            2-0-2    PIANO PEDAGOGY AND PRACTICUM**

Survey of teaching techniques, materials and practices. Observation and teaching experiences of individual and group instruction.

**MU 405            2-0-2    CAREER MANAGEMENT**

An investigation of those items which one should consider when conducting a career as a professional musician. Topics for study include but are not limited to: writing an artist bio, mastering your music, tax considerations, branding and marketing, starting a music business, copyright issues, and management issues, etc.

**MU 461            2-0-2    BAND TECHNIQUES**

The organization and administration of instrumental music programs. Included are fundamental and pedagogical approaches of marching bands, concert bands, and ensembles; supervision, programming, show planning, and special arrangements for marching bands. **Pre-requisite:** MU 212.

**Music Education**

**MU 314            3-0-3    MUSIC IN ELEMENTARY SCHOOLS**

This course is design for majors in elementary education who will teach a phase of music in relation to other subject matter. It entails a study of the principles, procedures, and objectives in school music. The various methods used in successful music teaching by elementary classroom teachers are presented through singing, playing, listening, creative, and rhythmic activities.

**MU 339            3-0-3    SYSTEMIC APPROACHES TO SECONDARY MUSIC**

The study of principles, methods, materials, objectives, and procedures appropriate for the general and specialized aspects of the music program in secondary schools. Attention is given to the practical application of tests and measurement procedures, audio-visual equipment, computer technology in the classroom, and preparation for teacher education exit exams. **Pre-requisite:** MU 112.

**MU 337            3-0-3    SYSTEMIC APPROACHES TO ELEMENTARY MUSIC**

The study of principles, methods, materials, objectives, and procedures appropriate for the general and specialized aspects of the music program in elementary schools. Attention is given to the practical application of tests and measurement procedures, audio-visual equipment, computer technology in the classroom, and preparation for teacher education exit exams. **Pre-requisite:** MU 112.

**MU 401            2-0-2    FOUNDATION AND PRINCIPLES OF MUSIC EDUCATION**

A study of historical, philosophical, and administrative aspects of music education. Attention is given to major historical movements and practices, as well as current trends in music education. **Pre-requisite:** MU 311.

**Applied Music**

**MU 121-424      1-0-(2-3)**

Applied lessons offered in the following areas: piano, organ, voice, violin, viola, cello, string bass, guitar, flute, oboe clarinet, bassoon, saxophone, trumpet, French horn, trombone, euphonium, tuba, and percussion. MU 121, MU 122, MU 221, MU 222, MU 321, MU322, MU421, MU422, (Music Education); MU 123, MU 124, MU 223, MU 224, MU 323, MU 324, MU 423, MU424 (Music Performance). **Non music majors must have permission of the instructor before enrolling in an applied course.**

**MU 051            1-2-0    APPLIED MUSIC**

Designed for music majors without adequate preparation on applied instrument. Admitted to MU 121 by successful audition.

**MU 151            1-1-1    PIANO CLASS I**

A course designed to introduce the keyboard to those students without previous experience at the piano.

**MU 152            1-1-1    PIANO CLASS II**

Continuation of MU 151.

**MU 161            2-0-2    VOICE CLASS**

An introduction to the basic principles of singing which will include special emphasis upon posture, breath support, ease, naturalness, free tone, pure vowels, and style orientation through listening and singing. Open to non-majors.

**MU 162            2-0-2    VOICE CLASS**

A continuation of MU 161.

**MU 163            2-0-2    VOICE CLASS**

Continued emphasis upon breath support, ease naturalness, free tone and pure vowels. Additionally, diphthong, articulation, enunciation, resonance, legato and sostenuto singing will be emphasized as a basis for future progress.

**MU 164            2-0-2    VOICE CLASS**

A continuation of MU 163.

**MU 202            2-0-2    GUITAR CLASS**

A practical study of the guitar with particular emphasis on its use in secondary schools.

**MU 203            1-1-1    STRING CLASS I**

Principles of teaching string instruments and elementary playing as a practical introduction to the technical problems involved. Instruments taught include violin, viola, cello, double bass, and guitar.

**MU 204            2-0-2    STRING CLASS II**

Continued study of major and minor scales, chromatic scales and arpeggios, advanced articulation and bowing, second and third position fingering. Students are required to perform in representative string ensembles.

**MU 205            2-0-2    SURVEY OF INSTRUMENTS**

Practical laboratory study of instruments (winds, string, fretted, and percussion) designed to develop a functional knowledge for non-instrumental music education majors.

**MU 206            2-0-2    WOODWIND CLASS**

The study of oboe, clarinet, flute, saxophone, and bassoon with related problems of embouchure, diatonic and chromatic fingerings, technique and vibrato. Emphasis on regular maintenance. A survey of beginning to advanced instruction books. The student is expected to attain a level of proficiency on at least two woodwind instruments (excluding saxophone).

**MU 208            2-0-2    BRASS CLASS**

The principles of teaching brass wind instruments and elementary playing as a practical introduction to the technical problems involved.

**MU 209            2-0-2    PERCUSSION CLASS**

The principles of teaching percussion instruments and elementary playing. Instruments taught include snare, bass, tympani, chimes, marimba, vibraphone, xylophone and other percussion instruments that are frequently employed.

**MU 252            2-0-2    VOICE CLASS**

Laboratory course for elementary vocal instruction combined with methods and procedures for choral use of the voice. This course is designed for instrumental majors.

**MU 253            1-1-1    PIANO CLASS III**

Continuation of Piano Class II.

**MU 254            1-1-1    PIANO CLASS IV**

Continuation of Piano Class III.

**ART (AR)**

**AR 214            3-0-3    ART APPRECIATION**

An introductory course in art designed to assist students in gaining a broad understanding of the visual arts. Material is presented in a slide/lecture format with informal discussions. The aim is to increase awareness of and responsiveness to visual art in order to integrate this knowledge into everyday life.

**AR 231            0-4-3    DRAWING**

Beginning drawing as a foundation course with emphasis on the figure or still life depending on the background of the student and/or the special needs of his/her major.

**AR 232            0-4-3    DRAWING**

A continuation of AR 231 with emphasis on objects and figures arranged in exterior and interior environments using linear perspective. **Pre-requisites: AR 231.**

**AR 310            0-4-3    THREE-DIMENSIONAL DESIGN**

Exploration of a variety of techniques and materials - both conventional and unconventional - which lead to a fuller understanding of form and design.

**AR 311            0-4-3    CERAMICS**

An introduction of clay emphasizing three-dimensional form and design.

**AR 327            3-0-3    ART FOR TEACHERS**

An introduction of the foundations of art through drawing and design application to the elementary school programs.

**AR 341            0-4-3    PAINTING**

An introduction to painting styles and color theory.

**AR 422            0-4-3    CRAFTS**

Gain practical experience by using a variety of craft material and processes. See, study, feel, and make art and craft projects.

**HUMANITIES (HU)**

**HU 201            3-0-3    HUMANITIES**

The arts reveal values and patterns of people who have made significant contributions to our histories. An examination of those values and whether they are meaningful to us in today's world is the subject of this course. **Pre-requisite: EN 112.**

**HU 202            3-0-3    HUMANITIES: BLACK CULTURAL HERITAGE**

A study of the achievement and contribution of African Americans in the United States in art, literature, and music. **Pre-requisite: EN 112.**

**COURSE DESCRIPTIONS IN SPEECH AND THEATRE (SA)**

**SA 207            0-3-1    SPEECH-THEATRE LABORATORY**

Practical work in theatre production or forensic activities. Credit will be given upon satisfactory completion of specific projects agreed upon in advance by the student and the supervising instructor. Course may be repeated.

**SA 214            3-0-3    INTRODUCTION TO THEATRE**

A course designed to increase the student's appreciation of the theatre and its importance in Western Civilization.

**SA 223                    3-0-3    ORAL COMMUNICATION**

A course in the principles and practice of oral communication. Attention is given to problems of informal and formal patterns of effective speech, appropriate body expression and basic articulation. The course is designed to help the student to perform acceptably, not only in public address, but in private and informal situations as well. **Pre-requisites : EN 111 and EN 112.**

**SA 245                    3-0-3    ACTING**

In this course, students will participate in group exercises related to the development of basic acting skills and will work on monologues and multi-actor scenes. Exercises will deal with developing abilities in self-awareness, sensitivity to emotions, and textual analysis.

**SA 325                    3-1-3    PLAY PRODUCTION**

A general survey of the various elements that go into putting on a play, from the selection of the play and cast to the final performance. Students are required to learn the elementary fundamentals of directing, lighting, and scenery design and construction.

**SA 351                    3-0-3    ORAL INTERPRETATION**

This course places emphasis on the dynamics involved in the oral approach to the study of literature. All genres of literature will be covered. The course is especially appropriate for those planning to teach literature at any level. **Pre-requisite: SA 223.**

**SA 361                    3-0-3    PUBLIC ADDRESS**

A study of the theory and practice of speech delivery. Emphasis will be placed on major speeches. Skills to be developed will be those appropriate at political rallies, in the courtroom, the classroom, and behind the pulpit. **Pre-requisite: SA 223.**

**SA 362                    3-0-3    DISCUSSION, ARGUMENTATION, AND DEBATE**

An intensive study of various speech skills. Emphasis will be placed on cooperative participation in discussion, structural aspects of argumentation, and the role of debate in society. **Pre-requisite: SA 223.**

**SA 423                    3-0-3    HISTORY OF THEATRE**

A study of the development of the theatre from the Greeks to the present, its place in the history of civilization and its changing relations to social conditions.

## **Department of Mathematics and Computer Science**

*Ping Zhang, Ph.D., Interim Chairperson*

*Math and Science Bldg., #101*

*Telephone: (601) 877-6430*

*Fax: (601) 877-3989*

### **Mission and Objectives**

The mission of the Department of Mathematics and Computer Science is to provide high quality instruction in mathematics and computer science and to pursue research. The objectives of the department are:

1. Offer undergraduate courses and organize research activities to prepare students for leadership, scholarship, and service in applied mathematics and computer science;
2. Provide undergraduate math and computer courses that accommodate the needs of students in all disciplines.
3. Equip students with adequate math and computational skills to take major courses, go to graduate school, and perform competently in their career.
4. Further develop students' research skills by providing graduate programs in Math Education and Computer and Information Science.

### **Degree Programs:**

1. Baccalaureate in Science (B.S.) degree in **Computer Science**
2. Baccalaureate in Science (B.S.) degree in **Mathematics**
3. Baccalaureate in Science (B.S.) degree in **Math Education**
4. Master of Science (MS) degree in **Computer and Information Science**
5. Master of Science (MS) degree in **Secondary Education with an Endorsement in Mathematics**

In addition, the department offers mathematics instruction to undergraduate students in all disciplines and computer science courses to students in majors that require computer skills.

### **Occupational Outlook and Employment**

The record of the job placement of this department's graduates demonstrates the quality of the programs and the tremendous demand of the job market for computer science and mathematics. Prospective students are encouraged to visit the website of the Occupational Outlook Handbook edited by the US Department of Labor (<http://www.bls.gov/ooh/>) and query Occupation Groups in Computer and Information Technology or Math.

Our graduates have been and may work in the fields such as Computer Network Architects, Programmers, System Analysts, Database Administrators, Network Administrators, Web Developers, Math Teachers, and Operations Research Analysts, and Mathematicians. The outlook of many of these careers shows growth that is much faster than the average.

The department reaches out to create opportunities for our students. The department keeps relationship with the Division of Information Technology of the Engineer Research and Development Center (ERDC). The department joins a University program to team with Mobile Collaborative Education Consulting to give our students firsthand experience to work on the state of art mainframe computers. The program trains and prepares our students for the jobs in Fortune 500 companies. The department encourages and helps our students to do internship in local business.

### **Scholarship**

The Department of Mathematics and Computer Science has special assistantship/scholarship for our students majoring in computer science, math, and math education. Since 2005, the department has received over 1.6 million dollars of grant. Part of the grant is used to provide tuition assistantship for our graduate students in the Master of Science program in Computer and Information Science and the Master of Science program in Math Education. Part of the grant is used to provide student assistantship for our undergraduate students to work in the Math Center.

The department also receives special scholarship from business. For example, C-Spire provides a special scholarship for two Computer Science Majors who are Mississippi residents every year. C-Spire also invites the recipients to have internship in the company. Prospective students may contact the department office to get detailed information. In addition to these special scholarship and employment opportunities, students can also get financial aid from the University.

### Accreditation

The BS program in Math Education is accredited by CAEP (former NCATE, Council for the Accreditation of Educator Preparation)

### Graduation Requirement

A minimum grade of “C” is required in all major courses. All the electives should be 200 level or above unless mentioned otherwise. The student’s advisor must approve **in advance** all the electives in the Department of Math and Computer Science. Each student needs to pass an Exit Exam in the senior year to graduate.

### Computer Science Curriculum (120 Credit Hours)

#### Freshman Year (30)

First Semester		Hrs.	Second Semester		Hrs.
CS 202	Programming in C++ I	<input type="text"/> 3	CS 203	Programming in C++ II	<input type="text"/> 3
EN 111	Composition I	<input type="text"/> 3	PY 111	Physical Science I	<input type="text"/> 3
SS 111	Social Institutions	<input type="text"/> 3	EN 112	Composition II	<input type="text"/> 3
MA 121	College Algebra	<input type="text"/> 3	MA 181	Calculus I w/Ana. Geom.	<input type="text"/> 4
CS 100	Info. Tech. Proficiency	<input type="text"/> 1	HI 111	World Civilization I	<input type="text"/> 3
UL 101	University Life	<input type="text"/> 1			<input type="text"/>
<b>Total</b>		<b>14</b>	<b>Total</b>		<b>16</b>

#### Sophomore Year (30)

CS 251	Object Oriented Programming	<input type="text"/> 3	EN 213	Studies in Literature	<input type="text"/> 3
AR 214	Art Appreciation	<input type="text"/> 3	SA 223	Oral Communication	<input type="text"/> 3
MA 182	Calculus II w/Ana. Geom.	<input type="text"/> 4	CS 321	Data Structures and Algorithms	<input type="text"/> 3
PY 217	General Physics (Calculus)	<input type="text"/> 3	MA 304	Discrete Math	<input type="text"/> 3
PY 217L	General Physics (Calculus) Lab	<input type="text"/> 1	_____	Elective (Software Engineering)	<input type="text"/> 3
ND 101	Health Wellness	<input type="text"/> 1			<input type="text"/>
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>15</b>

#### Junior Year (30)

CS 370	Unix Programming I	<input type="text"/> 3	CS 401	PC Architecture Logic Design	<input type="text"/> 3
CS 350	Operating Systems	<input type="text"/> 3	CS 410	Computer Org. and Assembly Lang.	<input type="text"/> 3
MA 367	Probability	<input type="text"/> 3	CS 427	Unix Programming II	<input type="text"/> 3
CS 470	VB Programming	<input type="text"/> 3	CS 454	Web Application and E-Commerce	<input type="text"/> 3
_____	Elective (Computer Graphics)	<input type="text"/> 3	_____	Elective (Networking Security)	<input type="text"/> 3
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>15</b>

#### Senior Year (30)

CS 420	Database Systems	<input type="text"/> 3	CS 441	Computer Net. Telecom II	<input type="text"/> 3
CS 440	Computer Net. Telecom Network I	<input type="text"/> 3	CS 460	Program. Languages Compilers	<input type="text"/> 3
CS 445	Scientific Computation	<input type="text"/> 3	CS 480	JAVA Programming	<input type="text"/> 3
CS 490	Senior Project in Computer Science	<input type="text"/> 3	_____	Elective (CS485 Fundamentals of Cyber Security)	<input type="text"/> 3
_____	Elective (CS 442 Introduction to Wireless and Mobile Networks)	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>15</b>

## Mathematics Curriculum (120 Credit Hours)

### Freshman Year (28)

First Semester			Hrs.	Second Semester			Hrs.
EN 111	Composition I	<input type="text"/>	3	EN 112	Composition II	<input type="text"/>	3
AR 214	Art Appreciation	<input type="text"/>	3	PY 111	Physical Science 1	<input type="text"/>	3
MA 181	Calculus I w/Ana. Geom.	<input type="text"/>	4	MA 182	Calculus II w/Ana. Geom.	<input type="text"/>	4
SS 111	Social Institutions	<input type="text"/>	3	CS 202	Programming in C++ I	<input type="text"/>	3
CS 100	Info. Tech. Proficiency	<input type="text"/>	1			<input type="text"/>	
UL 101	University Life	<input type="text"/>	1			<input type="text"/>	
Total		<input type="text"/>	15	Total		<input type="text"/>	13

### Sophomore Year (32)

CS 203	Programming in C++ II	<input type="text"/>	3	MA 220	Number Theory	<input type="text"/>	3
PY 215	General Physics (Non-Calculus)	<input type="text"/>	3	EN 213	Studies in Literature	<input type="text"/>	3
	or						
PY 215 L	General Physics (Non-Calculus) Lab	<input type="text"/>	1	SA 223	Oral Communication	<input type="text"/>	3
PY 217	General Physics (Calculus)	<input type="text"/>	3	HI 111	World Civilization I	<input type="text"/>	3
PY 217L	General Physics (Calculus)	<input type="text"/>	1	_____	Elective	<input type="text"/>	3
MA 203	Foundations of Math	<input type="text"/>	3			<input type="text"/>	
MA 283	Calculus III	<input type="text"/>	3			<input type="text"/>	
EC 201	Principles of Economics I	<input type="text"/>	3			<input type="text"/>	
ND 101	Health Wellness	<input type="text"/>	1			<input type="text"/>	
<b>Total</b>		<input type="text"/>	17	<b>Total</b>		<input type="text"/>	15

### Junior Year (30)

MA 336	Math Modeling	<input type="text"/>	3	MA 304	Discrete Math	<input type="text"/>	3
MA 348	Differential Equations	<input type="text"/>	3	MA 346	Linear Algebra	<input type="text"/>	3
MA 367	Probability	<input type="text"/>	3	MA 368	Math Statistics	<input type="text"/>	3
MA 334	College Geometry	<input type="text"/>	3	_____	Elective (MA 335)	<input type="text"/>	3
_____	Elective	<input type="text"/>	3	_____	Elective	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	15	<b>Total</b>		<input type="text"/>	15

### Senior Year (30)

MA 401	Vector Analysis	<input type="text"/>	3	MA 408	Advanced Calculus	<input type="text"/>	3
MA 412	Complex Variables	<input type="text"/>	3	MA 444	Numerical Analysis	<input type="text"/>	3
MA 443	Modern Algebra	<input type="text"/>	3	MA 471	Research Project II	<input type="text"/>	3
_____	Elective	<input type="text"/>	3	_____	Elective	<input type="text"/>	3
MA 470	Research Project I	<input type="text"/>	3	_____	Elective	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	15	<b>Total</b>		<input type="text"/>	15

## Mathematics Education Curriculum (120 Credit Hours)

### Freshman Year (30)

First Semester			Hrs.	Second Semester			Hrs.
EN 111	Composition I	<input type="text"/>	3	EN 112	Composition II	<input type="text"/>	3
HI 111	World Civilization I	<input type="text"/>	3	MA 182	Calculus II w/Ana. Geom.	<input type="text"/>	4
MA 181	Calculus I w/Ana. Geom.	<input type="text"/>	4	PH 132	General Psychology	<input type="text"/>	3
CS 201	Intro. to Comp. Prog. in Visual Basic	<input type="text"/>	3	PY 111	Physical Science I	<input type="text"/>	3
UL101	University Life	<input type="text"/>	1	ED 200	Social Studies/Multicultural Ed.	<input type="text"/>	3
CS 100	Info. Tech. Proficiency	<input type="text"/>	1			<input type="text"/>	
Total		<input type="text"/>	15	Total		<input type="text"/>	15

### Sophomore Year (29)

PY 217	General Physics (Calculus)	<input type="text"/>	3	CS 202	Programming in C++ I	<input type="text"/>	3
PY 217	General Physics (Calculus) Lab	<input type="text"/>	1	MA 220	Number Theory	<input type="text"/>	3
EN 213	Studies in Literature	<input type="text"/>	3	MA 304	Discrete Math	<input type="text"/>	3
MA 283	Calculus III	<input type="text"/>	3	PH 325	Adolescent Psychology	<input type="text"/>	3
MA 203	Foundations of Math	<input type="text"/>	3	SA 223	Oral Communication	<input type="text"/>	3
ND 101	Health Wellness	<input type="text"/>	1			<input type="text"/>	
	<b>Total</b>	<input type="text"/>	<b>14</b>		<b>Total</b>	<input type="text"/>	<b>15</b>

### Junior Year (30)

ED 302	Teaching Practicum/Technology	<input type="text"/>	3	ED 348	Foundations of Education	<input type="text"/>	3
MA 336	Math Modeling	<input type="text"/>	3	MA 335	History of Math	<input type="text"/>	3
MA 334	College Geometry	<input type="text"/>	3	MA 346	Linear Algebra	<input type="text"/>	3
MA 367	Probability	<input type="text"/>	3	MA 377	Statistics I	<input type="text"/>	3
PH 336	Educational Psychology	<input type="text"/>	3	AR214	Art Appreciation	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>15</b>		<b>Total</b>	<input type="text"/>	<b>15</b>

### Senior Year (30)

ED 351	Managing Classroom Beh.	<input type="text"/>	3	ED 468	Directed Teaching	<input type="text"/>	12
ED 498	Reading in the Secondary School	<input type="text"/>	3			<input type="text"/>	
MA 443	Modern Algebra	<input type="text"/>	3			<input type="text"/>	
MA 485	Teaching Math in the Secondary School	<input type="text"/>	3			<input type="text"/>	
PH 347	Measure Evaluation	<input type="text"/>	3			<input type="text"/>	
	Elective	<input type="text"/>	3			<input type="text"/>	
	<b>Total</b>	<input type="text"/>	<b>18</b>		<b>Total</b>	<input type="text"/>	<b>12</b>

## COURSE DESCRIPTIONS IN COMPUTER SCIENCE (CS)

### CS 100 0-2-1 INFORMATION TECHNOLOGY PROFICIENCY

This Course introduces the students with little or no computer skills to the basic concepts of a computer system, Black Board, Internet and computer applications .It focuses on word processing, electronic spreadsheets, database management and graphics using Microsoft Office Suit Application Software like Word, Excel, PowerPoint, Access and FrontPage.

### CS 201 3-0-3 INTRODUCTION OF COMPUTER PROGRAMMING IN VISUAL BASIC

This course gives an introduction to the problem solving skills of programing using BASIC language. The topics included are: computer system, computer languages, salient features of algorithm, operators and expressions, branching and loop as well as arrays and their applications. This course is for beginner programmers and is not a part of computer science majors. **Pre-requisite: Computer Literacy Course or equivalent.**

### CS 202 3-0-3 PROGRAMMING IN C++ I

Introduction to C++ language. Basic principles of computer programming. Topics include types, operators, and expressions; control flow; I/O; functions and program structure; software design techniques.

### CS 203 3-0-3 PROGRAMMING IN C++ II

This course continues the development of programming and problem solving skills and focusing on object oriented programming. Utilizing functions, array, and derived data types to build applications and solve small real world problems. **Pre-requisite: CS 202 or special permission from the Department.**

### CS 251 3-0-3 OBJECT ORIENTED PROGRAMMING

This course introduces object-oriented programming techniques. Topics include abstract data type, constructors, operator overloading, pointers, dynamic storage allocation, template function and template class, as well as popular data structures such as bag, string, and linked list. **Pre-requisite: CS203 or special permission from the department.**



**CS 321            3-0-3    DATA STRUCTURES AND ALGORITHMS**

Definition, use, and implementation of data structures using a modern programming language. Classical algorithms such as searching, sorting, and string processing. **Pre-requisite: CS 251 or special permission from the department.**

**CS 350            3-0-3    OPERATING SYSTEMS**

This course introduces the fundamental knowledge of operating systems: concurrent communicating processes, threads, CPU scheduling, synchronization, semaphores, deadlock prevention and detection, memory management and I/O management. **Pre-requisite: CS 321 or equivalent.**

**CS 360            3-0-3    SOFTWARE ENGINEERING PRINCIPLES**

This course introduces the following topics: Concept of software and software engineering, software engineering modeling, requirements, architectural design, user interface design, software quality management, software programming, software testing strategies, software verification and validation, the trend of the future of software engineering. Pre-requisite: none.

**CS 370            3-0-3    UNIX PROGRAMMING I**

Introduction to UNIX user commands, system calls, UNIX utilities, Shell programming, C/C++ multi-threaded programming, Parallel architectures and introduction to parallel programming with MPI and Open MP libraries **Pre-requisite: CS 251.**

**CS 390            3-0-3    INTRODUCTION TO ENTERPRISE COMPUTING**

This course covers concepts and features of the enterprise operating system, including hardware, data management, job control, programming language compilation and execution, and other functions of the enterprise system. Pre-requisite: none.

**CS 401            3-0-3    PC ARCHITECTURE AND LOGIC DESIGN**

This course is designed to introduce students the basics knowledge of digital logic design and PC architecture. It will cover the following aspects: number representations, digital logic (Boolean algebra, the gates of digital logic circuits, combinational circuit), computer systems and functions, cache memory, internal memory, external memory, input/output modules and interrupt and system buses. **Pre-requisite: none**

**CS 410            3-0-3    COMPUTER ORGANIZATION AND ASSEMBLY LANGUAGE**

This course introduces student basic PC computer Interface and Intel-based assembly language. The course will cover the following contents: basic feature of PC computer; the concept of instruction addressing and execution; requirements for coding in assembly language; assembling, linking, and executing assembly programs; instruction and assembly language grammars; some typical examples, such as video and keyboard operations, advanced data operations, etc. will be discussed.

**CS 420            3-0-3    DATABASE SYSTEMS**

Theory of Relational databases; relational database management systems, SQL; Normal forms and Normalization of tables, database design, ER diagrams **Pre-requisite: CS 321.**

**CS 427            3-0-3    UNIX PROGRAMMING II**

Advanced parallel programming with MPI and Open MP libraries, Use of GNU MP and other libraries, Topics in High Performance Computation **Pre-requisite: CS 370**

**CS 440            3-0-3    COMPUTER NETWORKS AND TELECOM I**

This course introduces a broad overview of computer networking and the Internet (terminology and concepts), conceptual and implementation aspects of network applications, relationship between the transport and network layers, controlling the transmission rate of transport layer entities, causes and consequences of congestion, as well as commonly used congestion-control techniques, TCP's approach to congestion control, and exactly how the network layer implements the host-to-host communication service. **Pre-requisite: MA 181 or any programming course or special permission from the department.**

**CS 441            3-0-3    COMPUTER NETWORKS AND TELECOM II**

This course introduces exactly how the network layer implements the host-to-host communication service, explore several important link-layer concepts, dive deeper into error detection and correction (a topic touched on briefly in CS 440 or CS 545), mobile users, wireless links, networks, and their relationship to the larger (typically wired) networks to which they connect. How multimedia applications, multimedia application can be classified as streaming stored audio/video, conversational voice/video-over-IP, or streaming live audio/video. **Pre-requisite: CS 440.**

**CS 442            3-0-3    INTRODUCTION TO WIRELESS AND MOBILE NETWORKS**

Wireless networking is one of the fastest growing segments of the computer industry. The many advantages of cell phones are evident to all—anywhere, anytime, untethered access to the global telephone network via a highly portable lightweight device. This course will remove the mystery and give students a thorough understanding of this fascinating and lucrative technology. Prerequisite: none.

**CS 445            3-0-3    SCIENTIFIC COMPUTATION**

Study of numerical algorithms, Mathematical models, their implementations in C++, MATLAB, implementation on parallel machines, application of these methods in Science and Engineering problems. **Pre-requisite: CS 321.**

**CS 454            3-0-3    WEB APPLICATION AND E-COMMERCE**

An overview of Internet, technology and information services. Emphasis on Web design, development, and scripting. Students will learn the latest tools and techniques for building dynamic and interactive Web pages and sites. HTML, Dynamic webpage construction, introduction to scripting languages, internet Database Operations and E-commerce applications. **Pre-requisite: none.**

**CS 460            3-0-3    PROGRAMMING LANGUAGES AND COMPILERS**

This course introduces the design and implementation of programming languages. It studies the syntax semantics and the logic of programming language. The course will study present and past programming languages and focus on the difference between programming languages. It covers programming features such as variables, data types, data abstraction, and exception handling. **Pre-requisites: CS321 or special permission from the department.**

**CS 470            3-0-3    VB PROGRAMMING**

Window programming environment for rapid application development, including access database, API and active X controls. Using Microsoft's Visual Basic (VB.NET) Object Oriented Programming. **Pre-requisite: CS 321 or special permission from the department.**

**CS 480            3-0-3    JAVA PROGRAMMING**

This course introduces advanced features of the Java programming language. It covers how to use inheritance, interfaces, exception handling, and file operation. The course also teaches how to incorporate graphical user interfaces (GUIs) into their programming applications and how to apply object-oriented design and programming principles to their programs. **Pre-requisite: CS321 or special permission from the department.**

**CS 485            3-0-3    FUNDAMENTALS OF SYBER SECURITY**

This course is advanced undergraduate course. The course describes basic topics in cyber security. The course contents build up the operating systems and computer networks. The topic covers cyber security attributes, access control, access authentication, network security, database security, operating system security, Cryptography, Cryptographic mechanisms, Window security, Unix system security. This course can be used for selective course for Advanced Technologies department. Pre-requisite: senior students in computer science, IT, and engineering or approved by the department.

**CS 490            3-0-3    SENIOR PROJECT IN COMPUTER SCIENCE**

This course is designed to improve senior students' programming and project implementation skills. The students will be required to implement one project related to computer science. Through this project, students can obtain hands-on experiences in the field. **Pre-requisite: computer science senior students or special permission from the department.**

## COURSE DESCRIPTIONS IN MATHEMATICS (MA)

### **MA 111      3-0-0    INTERMEDIATE ALGEBRA**

This course is designed to introduce the student to basic concepts beyond arithmetic. This course together with College Algebra (MA 121) will also serve as preparation towards the GRE in Mathematics. The topics covered are: Number systems and fundamental concepts of numbers; Linear and inequalities in one variable; quadratic equations; Cartesian coordinate system; linear equations and linear inequalities in two variables.

### **MA 121      4-0-4    COLLEGE ALGEBRA**

This course is designed to introduce the student to the concept of a function and the study of functions. The course also includes study of basic geometry and coordinate geometry. This course together with Basic Mathematics (MA 111) will also serve as preparations towards the GRE in Mathematics. Topics covered are: Relations, functions and their graphs; polynomial equations, their graphs and zeros; fundamental theorems of algebra; rational functions and rational inequalities; circle, parabola, and ellipse; systems of linear equations; areas and volumes; angles and their properties; similarity and congruence of triangles. **Pre-requisite: MA 111 with letter grade "C" or better or permission from advisors from general college or departmental consent.**

### **MA 132      3-0-3    TRIGONOMETRY**

Functions of angles and their applications to the solutions of right and oblique triangles. **Pre-requisite: MA 121 or departmental permission.**

### **MA 135      4-0-4    PRE-CALCULUS**

This one semester course is designed to introduce the student to those topics in mathematics necessary for the successful study of calculus. Emphasis is put on developing the student's mathematical reasoning and problem solving abilities rather than the memorization of formulas, knowledge of techniques or computational skill. It is assumed that the student has already mastered College Algebra. **Pre-requisite: MA 121 or permission from the department.**

### **MA 135      4-0-4    PRE-CALCULUS**

This one semester course is designed to introduce the student to those topics in mathematics necessary for the successful study of calculus. Emphasis is put on developing the student's mathematical reasoning and problem solving abilities rather than the memorization of formulas, knowledge of techniques or computational skill. It is assumed that the student has already mastered College Algebra. **Pre-requisite: MA 121 or permission from the department.**

### **MA 181      4-0-4    CALCULUS I WITH ANALYTICAL GEOMETRY**

Limits, continuity, derivatives and their applications; anti-derivatives and simple differential equations.

**Pre-requisite: MA 121 if the student's major in Computer Science/Mathematics or MA135/MA191 or department consent if the student has taken calculus in high school.**

### **MA 182      4-0-4    CALCULUS II WITH ANALYTICAL GEOMETRY**

Riemann sum, Fundamental Theorem of Calculus, techniques of integration, Sequence and finite series, and applications to plane areas. **Pre-requisite: MA 181.**

### **MA 191      3-0-3    HONORS MATHEMATICS**

This course is designed for freshman honor students. It gives the student practice in the many topics of elementary college mathematics. Major emphasis is placed on individual student activities.

### **MA 192      3-0-3    HONORS MATHEMATICS**

This course is a continuation of MA 191. It gives the student practice in the many topics and skills that are a step higher than college algebra and trigonometry. Major emphasis is placed on individual student activities.

**Pre-requisites: MA191 or consent of the Honors Program.**

### **MA 203      3-0-3    FOUNDATION OF MATHEMATICS**

A study of logic, set theory, relations and functions. Basic counting theory: Venn diagrams, power sets, numbers of injection (permutations) and combinations. A study of proofs involving sets and relations.

**Pre-requisite: Sophomore standing.**

**MA 220            3-0-3    NUMBER THEORY**

Number theory is the mathematical treatment of questions related to the integers. Elementary number theory is that part of number theory not dependent on advanced mathematics, such as the theory of complex variables, abstract algebra, or algebraic geometry. This course covers common topics including congruencies, multiplicative functions, primitive roots, quadratic residues, and continued fractions. **Pre-requisite: MA 203.**

**MA 223            3-0-3    INTRODUCTION TO ANALYSIS WITH APPLICATIONS**

Arithmetic and geometric progressions. Functions, relations, and graphs. Matrix algebra, linear, quadratic, and exponential models, linear systems and linear programming. Differentiation and integration with applications. **Pre-requisite: MA 121.**

**MA 283            3-0-3    CALCULUS III**

Functions of several variables, partial derivatives, polar coordinates, double and triple integrals; applications to surfaces, areas, volumes, centroid and other physical problems, infinite series **Pre-requisite: MA 182.**

**MA 304            3-0-3    DISCRETE MATHEMATICS**

Advanced study of combinations: Application of: inclusion-exclusion rules, counting multi-sets, derangements, and Bell Numbers (partitions). A study of graph theory, partially ordered sets, trees (directed and undirected). **Pre-requisite: MA203 with letter grade “C” or better or MA182 or permission from the department.**

**MA 306            3-0-3    THE REAL NUMBER SYSTEM**

Careful attention is given to the development of the number system and to various algorithms that represent the fundamental operation of arithmetic. Emphasis on problem solving and number systems. **Pre-requisite: MA 121.**

**MA 307            3-0-3    INFORMAL GEOMETRY, PROBABILITY, STATISTICS, AND  
RELATED TOPICS**

Emphasis on geometry, probability, statistics and use of computers; the development of basic concepts, definitions, constructions and related concepts. **Pre-requisite: MA 306.**

**MA 334            3-0-3    COLLEGE GEOMETRY**

Extension of Euclidean geometry to theorems not usually included in a high school plane geometry course. Geometry of the triangles, nine-point circle, homothetic figures, harmonic ranges and pencils, inversion, poles and polars, orthogonal circles, radical axis, cross ratio. **Pre-requisite: MA 203 or departmental consent.**

**MA 335            3-0-3    HISTORY OF MATHEMATICS**

Numerical systems, Agricultural Revolution, Babylonian and Egyptian period (3000- 525 BC), Pythagorean Mathematics, Greek problems of Antiquity (600-300 BC), Dawn of Modern Mathematics (Mathematicians of seventh century). Impact of calculus, Prominent Women Mathematicians, Prominent African American Mathematicians. **Pre-requisites: MA 182, MA 304.**

**MA 336            3-0-3    MATHEMATICAL MODELING**

Modeling process, modeling of discrete dynamical systems, Modeling using proportionality and geometric similarity, modeling with differential equations. Simulation modeling, Modeling Linear Programming. **Pre-requisite: MA 182.**

**MA 346            3-0-3    LINEAR ALGEBRA**

Matrix Algebra, Systems of linear equations, Cramer’s method, Gauss-Jordan method, Linear models in Business, Science, and Engineering, Eigen values, Cayley Hamilton theorem, Definition of a vector space, Euclidian spaces, and Matrix representation of geometrical transformations. **Pre-requisite: MA 203.**

**MA 348            3-0-3    DIFFERENTIAL EQUATIONS**

Differential equations of the first, second, and third order, and their application to the problems relating to science and higher mathematics. **Pre-requisite: MA 182 with letter grade “C” or better.**

**MA 367            3-0-3    PROBABILITY**

This course is designed to acquaint students with the basic concepts of probability. Special emphasis is placed on counting theory, basic properties of probability, Bernoulli’s Method and Discrete Random Variables. **Pre-requisite: MA 203 with letter grade “C” or better or MA304.**

**MA 368      3-0-3    MATHEMATICAL STATISTICS**

This course is designed to acquaint students with basic concepts of statistics. Special emphasis is placed on mathematical models with the application of calculus and probability. **Pre-requisites: MA 367 and MA 182.**

**MA 377      3-0-3    STATISTICS I**

Graphic representations, measure of central tendency and variability, correlation, index numbers, normal probability and sampling distribution. **Pre-requisite: MA 121.**

**MA 378      3-0-3    STATISTICS II**

Fundamental principles of experimental designs, randomized blocks, Latin squares, linear regression, linear correlation, components of variance, factorial, confounding, split pot, covariance. **Pre-requisite: MA 377.**

**MA 401      3-0-3    VECTOR ANALYSIS**

Vector algebra, linear functions, geometry of lines and planes. Curves, tangents and velocity, surfaces and calculus of functions of several variables, vector fields. Line, surface and multiple integrals. Applications.

**Pre-requisites: MA 283 and MA 203.**

**MA 408      3-0-3    ADVANCED CALCULUS**

Real number systems, sets, sequences, series limits, continuity and differentiability, mean value theorems, integration and differentiation. **Pre-requisites: MA 182 and MA 203.**

**MA 412      3-0-3    COMPLEX VARIABLES**

Complex numbers and their geometry. Functions of complex variable and their limit, continuity and derivability. Analytic functions. Differentiation, and integration of functions of complex variables. **Pre-requisites: MA 283 and MA 203.**

**MA 443      3-0-3    MODERN ABSTRACT ALGEBRA**

Definition, examples and elementary properties of groups, Cyclic groups, Symmetric groups, Subgroups, Class equation, Normal subgroups, Quotient groups and homomorphism of groups, Cayley theorem. Rings and Ideals. **Pre-requisite: MA 203, MA 220, and MA 346.**

**MA 444      3-0-3    NUMERICAL ANALYSIS**

Numerical solutions of linear and non-linear equations, errors in numerical computations, polynomial approximations and finite differences, least square and cubic spline interpolation, numerical integration and numerical solution of ordinary differential equations. **Pre-requisite: MA 182.**

**MA 449      3-0-3    GENERAL TOPOLOGY**

Set theory, metric spaces, topological spaces, limits, continuity, connectedness, compactness and convergence. **Pre-requisite: MA 408.**

**MA 470      3-0-3    RESEARCH PROJECT PART I**

Student will conduct literature research, including journals and also Internet research on a math topic or research problem assigned by the advisor, and will study the researched materials. The research materials will be critically studied.

**MA 471      3-0-3    RESEARCH PROJECT PART II**

Student will do critical research of the topic/problem of study in Part I (MA 471) and write a research article. The research will be presented to the department and defended in front of research committee of the department.

**MA 485      3-0-3    TEACHING MATHEMATICS IN THE SECONDARY SCHOOL**

This course presents methods in the secondary school, placing emphasis upon the integration of individual living in a democracy. It seeks to provide experiences leading to the creation of dynamic classroom conditions for effective teaching. Essentially a special methods course dealing with techniques and procedures on the high school level. Students will be required to prepare teaching units, lesson plans and examinations and to observe classroom teaching in nearby schools.

**MA 491      1-0-3    DEPARTMENTAL HONORS**

A course that provides honor students with an opportunity to do independent study on some carefully chosen topic in mathematics with the guidance of an advisor. **Pre-requisites: Senior standing and approval of department.**

**MA 492      1-0-3      DEPARTMENTAL HONORS**

A course that provides honor students with an opportunity to do independent study on some carefully chosen topic in mathematics with the guidance of an advisor. **Pre-requisites: Senior standing and approval of department. Pre-requisite: MA 491.**

**MA 501      3-0-3      INTRODUCTION TO ANALYSIS I**

Point set theory, sequences, continuity, uniform continuity, and properties of continuous functions, limits. Riemann integration.

**MA 502      3-0-3      LOGIC, SETS, AND FOUNDATIONS OF MATHEMATICS**

This course serves as an introduction to the foundations of mathematics and includes study of functions, relations, partially ordered sets, the axiom of choice, finite and infinite sets.

**MA 503      3-0-3      ABSTRACT ALGEBRA I**

Fundamental Theorems of homomorphism and isomorphism for group, class equation, Sylow Theorems, Structure of finite abelian groups.

**MA 504      3-0-3      AXIOMATIC GEOMETRY**

A rigorous introduction to the axiomatic structure of Euclidean and non-Euclidean geometry.

**MA 511      3-0-3      INTRODUCTION TO ANALYSIS II**

Taylor's Theorem, improper integrals, infinite series, uniform convergence, directional derivatives, partial derivatives.

**MA 512      3-0-3      COMPLEX VARIABLES**

Rigorous introduction to the theory of complex variables.

**MA 513      3-0-3      ABSTRACT ALGEBRA II**

Rings, ideals, integral domains. Quotient Rings, prime and maximal Ideals, Fundamental Theorem of Homomorphism and Isomorphism. Quotient field, field, finite field, division ring. Field extensions: finite, infinite and algebraic.

**MA 514      3-0-3      SYNTHETIC PROJECTIVE GEOMETRY**

Elementary treatment, without the use of coordinates, of fundamental propositions of projective geometry.

**MA 515      3-0-3      GENERAL TOPOLOGY**

Set theory, metric spaces, topological spaces, limits, continuity, connectedness, compactness, and convergence.

**MA 560      (1-3)-0-(1-3)      MODERN TOPICS IN MATHEMATICS**

A study of modern topics taken from the literature and current research.

**MA 561      3-0-3      DISCRETE MATHEMATICS FOR SECONDARY TEACHERS**

Discrete mathematics is the total in science of mathematics connections, provides a setting for problem solving with real world applications, capitalizing on technological setting, and fosters critical thinking and mathematical reasoning.

**MA 570      6-0-6      THESIS**

This course will require the student to initiate and carry to completion a research project under the supervision of a faculty member.

**MA 585      3-0-3      MODERN METHODS OF TEACHING**

A methods course taught by faculty from the various areas of endorsement in secondary education.

## **Department of Military Science**

***MAJ Andrell J. Hardy, Chairperson***

***Industrial Technology Bldg.***

***Telephone: (601) 877-6442***

***Fax: (601) 877-6371***

The Department of Military Science offers students an opportunity to obtain a Presidential Appointment as a Commissioned Officer, Second Lieutenant (2LT), in the United States Army or United States Army Reserve through enrollment in the Army Reserve Officers' Training Corps (ROTC) Program, concurrent with the pursuit of an academic degree. Army ROTC is not a college major; rather, it is a series of courses taken in conjunction with courses in the students' undergraduate or graduate degree programs. All ROTC textbooks and essential materials are furnished at no cost. Completion of the Army ROTC Program prepares students for one of many professional careers (i.e., Human Resource Management, Communications and Electronics, Fiscal Management, Veterinary, Aviation, Law Enforcement, etc.) in the Active Army (full-time employment), the US Army Reserve / Army National Guard (part-time employment) or in Corporate America.

Program Objectives: to produce the future officer corps of the United States Army; to develop students' leadership and managerial potential that will facilitate their future performance in positions of responsibility in the Armed Forces or in Corporate America; and to develop the students' abilities to think creatively, and to speak and write effectively. The Program of Instruction also includes developing self-discipline, physical stamina, and other qualities that are symbolic cornerstones of leadership.

Traditionally, Army ROTC is a Four-Year Program that consists of a two year Basic Course (freshman and sophomore classes), a two year Advanced Course (junior and senior classes), and a 30 day paid Summer Internship at the Cadet Leadership Course at Fort Knox, Kentucky. The Program is available to all students who are enrolled full-time in the University. A Two-Year Program is also available to academic juniors or graduate students who meet the academic requisite for enrollment into the Advanced Course, or prior military service of any branch of the Armed Forces, or attend and complete the five-week Cadet Initial Entry Training (CIET) at Fort Knox, Kentucky. ROTC courses count as general electives in all academic majors, and they also fulfill the University's academic requirements for four semester hours of General Physical Education courses.

The Basic Course is available to all students who are enrolled full-time in the University. The program of instruction includes physical fitness sessions, lecture classes and leadership laboratory classes. Subjects taught include customs and courtesies, principles of management, leadership development, basic soldiering skills, etiquette, map reading, first aid, written and oral communication and ethics. Additionally, students learn the concepts of initiative, influence, planning and organization, time management, problem analysis decisiveness, and teamwork. The Basic Course imposes NO MILITARY OBLIGATION on the part of students, and they may withdraw at any time.

The Advanced Course is available to academic juniors and/or graduate students who are U.S. citizens, can meet the physical qualifications for contracting, have a minimum 22 ACT/1030 SAT/110 GT score, have two full years of school remaining at the time of enrollment, and have completed the Basic Course, have prior military experience or have completed CIET. The program of instruction prepares students for the rigors and challenges of an Army Officer through lecture classes, leadership laboratory, field training exercises, and attendance at the Cadet Leadership Course (CLC).

Subjects taught in lecture and leadership laboratory classes include leadership principles, assertiveness and self-evaluation, advanced drill and ceremony, counseling techniques, etiquette, written and oral communication, ethics, physical fitness, individual and squad tactics, advanced map reading and orienteering, small organization administration, personnel management, staff procedures and military justice. Students are also taught problem solving techniques, functions of the chain-of-command, and officer/enlisted relationships. Qualified students receive up to \$500.00 per month stipend during the academic year.

Two-year scholarships are available to college sophomores (payable in their junior year) and three-year scholarships are available to college freshmen with a 22 or above ACT / 1030 SAT and a 2.7 or above GPA (payable in their sophomore year). Each scholarship pays tuition and fees, and \$350, \$450, \$500 per month spending allowance to the students. The Military Science Department provides a room and board stipend to all ROTC scholarship winners in addition to the contracted stipend.

## BASIC COURSE CURRICULUM

First Semester		Hrs.	Second Semester		Hrs.
MS 101	Fund. of Leadership & Mgt. I	<input type="text" value="2"/>	MS 102	Fund. of Leadership Mgt. II	<input type="text" value="2"/>
MS 101L	Leadership Lab	<input type="text" value="1"/>	MS 102L	Fund. of Leadership Mgt. II Lab	<input type="text" value="1"/>
<b>Total</b>		<input type="text" value="3"/>	<b>Total</b>		<input type="text" value="3"/>

First Semester		Hrs.	Second Semester		Hrs.
MS 201	Applied Leadership Management I	<input type="text" value="2"/>	MS 202	Applied Leadership Management II	<input type="text" value="2"/>
MS 201L	Fund. of Leadership Mgt. I Lab	<input type="text" value="1"/>	MS 202L	Fund. of Leadership Mgt. II Lab	<input type="text" value="1"/>
<b>Total</b>		<input type="text" value="3"/>	<b>Total</b>		<input type="text" value="3"/>

## ADVANCED COURSE CURRICULUM (Must have Basic Course Pre-requisites or MS 200 equivalent to enroll)

First Semester		Hrs.	Second Semester		Hrs.
MS 301	Adv. Leadership Management I	<input type="text" value="3"/>	MS 3021	Adv. Leadership Management II	<input type="text" value="3"/>
MS 301L	Seminar Lab	<input type="text" value="1"/>	MS 302L	Adv. Leadership Management II Lab	<input type="text" value="1"/>
<b>Total</b>		<input type="text" value="4"/>	MS 303	Military History	<input type="text" value="3"/>
			<b>Total</b>		<input type="text" value="7"/>

Summer Training		Hrs.
MS 401	Cadet Leadership Challenge (CLC)	<input type="text" value="3"/>
<b>Total</b>		<input type="text" value="3"/>

First Semester		Hrs.	Second Semester		Hrs.
MS 401	Seminar in Leadership Management I	<input type="text" value="3"/>	MS 402	Seminar in Leadership Management II	<input type="text" value="3"/>
MS 401L	Seminar in Leadership Lab Management I Lab	<input type="text" value="1"/>	MS 402L	Seminar in Leadership Mgt. II Lab	<input type="text" value="1"/>
<b>Total</b>		<input type="text" value="4"/>	<b>Total</b>		<input type="text" value="4"/>

## COURSE DESCRIPTIONS IN PROFESSIONAL MILITARY EDUCATION (PME)

Professional Military Education (PME) is a requirement for all students seeking to become a commissioned officer through the ROTC Program. It is designed to provide the cadet with the type of academic foundation necessary to support his or her continued intellectual growth as an officer in the United States Army.

Students seeking a commission in the United States Army must obtain a baccalaureate degree and complete at least one undergraduate course from each of the following designated fields of study: American military history, communication (oral and written), computer literacy, and awareness of Joint Force structure, capabilities and organizations.

A list of courses currently available at Alcorn State University which fulfill the PME requirements, by designated field of studies, is as follows:



**Communication**

Advanced Composition	EN 316
Journalism	CO 347
Technical Writing	EN 351
Research Writing	EN 352

Communication Management	BA 376
Advanced Reporting and Editing	CO 447
Vocabulary Development	EN 231
Oral Communication	SA 223

**Computer Literacy**

Programming in C++ I	CS 202
Basic Programming Computer Literacy	CS 511

**American Military History**

Military History	MS 303
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**Non-Commission Participants**

Other students who wish to participate in the ARMY ROTC program in a non-commission capacity may do so by completing the following list of courses:

Course		Hrs.
MS 101/102	Fund. of Leadership & Management I II	4
MS 101L/102L	Fund of Leadership & Management I II Lab	4
MS 201/202	Applied Leadership & Management I II	4
MS 201L/202L	Applied Leadership & Management I II Lab	<u>4</u>
<b>Total</b>		<b>16</b>

**COURSE DESCRIPTIONS IN MILITARY SCIENCE (MS)****MS 101 2-0-2 FUNDAMENTALS OF LEADERSHIP AND MANAGEMENT I**

An introductory course in leadership theory and principles, and the Army Profession. Course of instructions include purpose and organization of the Army; customs and traditions of the Army; the Army values; problem solving techniques; critical thinking; self-discipline; leadership traits; time-management; physical health and fitness; decision-making techniques; and study habits. The objectives of the course are to provide students with an accurate insight into the Army Profession and the officer's role within the Army, and to develop student's leadership potential that will facilitate their future performance as college students and as leaders.

**MS 101 1-0-1 FUNDAMENTALS OF LEADERSHIP AND MANAGEMENT I LAB**

Lab introduces the practical application of skills learned in MS101. The course will consist of understanding, training and confidence building in subjects such as day and night land navigation/orienteering, military weapons familiarization, public speaking/briefing, tactical movements in a field environment, physical training, wear/appearance of Army uniform and other related subjects.

**MS 101 2-0-2 FUNDAMENTALS OF LEADERSHIP AND MANAGEMENT II**

This course builds upon the skills and traits introduced in MS 101. Additional course of instructions include basic map reading; basic land navigation skills; first-aid; group interaction; physical fitness; goal settings; and feedback mechanisms. Students will learn the foundation of officership, the role of the officer within the Army, and understanding the leadership process.

**MS 201 2-0-2 APPLIED LEADERSHIP AND MANAGEMENT I**

Course is designed to develop cadets' self-confidence and their individual leadership skills. Through physical fitness, experiential learning activities, cadets develop problem solving and critical thinking skills, and apply communication, feedback and conflict resolution skills.

Course of instructions include the role of an officer and the non-commissioned officer; branches of the Army; writing military correspondence; how to organize and present information briefings; the dynamics of effective leadership principles; traits; and dimensions; the functions of staff officers; and drill and ceremonies.

#### **MS 202            2-0-2    APPLIED LEADERSHIP AND MANAGEMENT II**

This course builds on the foundations of the MS 201 course above with the focus on self-development and group processes. Experiential learning activities are designed to challenge cadets' current beliefs, knowledge and skills. Instructions will include basic tactical principles; Army values and ethics; and land navigation. Oral and written communication as well as physical fitness are required; cadets will learn how to write and present military operations orders.

#### **MS 200            2-0-2    CADET INITIAL ENTRY TRAINING (CIET)**

Cadet Initial Entry Training (CIET). **Pre-requisites:** Students must have a minimum of 2 years of college credits and currently do not meet the **Pre-requisites** to enter the Advanced Leadership and Management Course at their junior year. Course is an approximately one month, paid summer internship at Fort Knox, Kentucky. Students must sign a contractual letter of intent of attendance to qualify for the internship and they must enroll in the ROTC Advanced Program after completing his/her internship. Students are taught the fundamental leadership, and military skills and techniques that are taught in the MS 100 and MS 200 level courses and qualifies students to enroll in the MS 300 level course.

#### **MS 301            3-0-3    ADVANCED LEADERSHIP AND MANAGEMENT I**

Course prepares students for the rigors and challenges of becoming an Army Officer. Includes assertiveness training and self-evaluation, advanced drill and ceremony, physical fitness training, individual tactical training, and advanced map reading and land navigation. Students will be introduced to the Leader Development Program that will be used to evaluate their leadership performance and provide them developmental feedback for the rest of their cadet years. Students will be taught how to plan and conduct individual and small unit training as well as basic tactical principles, Army troop leading procedures, and conduct case studies in officership. **Pre-requisites:** All MS 100 and MS 200 Level courses, MS 200 course or prior military service (active or reserve).

#### **MS 302            3-0-3    ADVANCED LEADERSHIP AND MANAGEMENT II**

Course instructions and training is a continuation of MS 301 level course in the execution of the Leader Development Program and the Army troop leading procedures. **Pre-requisites:** MS 302

#### **MS 303            3-0-3    MILITARY HISTORY**

This course is a humanities discipline within the scope of general historical recording of armed conflict in the history of humanity, and its impact on the societies, their cultures, economies and changing intra and international relationships. Professional historians normally focus on military affairs that had a major impact on the societies involved as well as the aftermath of conflicts, while amateur historians and hobbyists often take a larger interest in the details of battles, equipment and uniforms in use. The essential subjects of military history study are the causes of war, the social and cultural foundations, military doctrine on each side, the logistics, leadership, technology, strategy, and tactics used, and how these changed over time.

#### **MS 350            3-0-3    CADET LEADERSHIP COURSE (CLC)**

Leadership Development Assessment Course is a paid internship conducted at Fort Knox, Kentucky. Students are assigned various missions and are evaluated on their performance in planning, directing and executing assigned tasks. Students must successfully complete the CLC internship in order to enroll in the last year of the Army ROTC Program. **Pre-requisites:** MS 301 and MS 302.

#### **MS 401            3-0-3    SEMINAR IN LEADERSHIP AND MANAGEMENT I**

**Pre-requisites:** MS 302 Course instructions include various lessons on Army operations and training management, communications and leadership skills and support the beginning of the final transition from cadet to lieutenant. The course enables cadets to attain knowledge and proficiency in several critical areas that are needed to operate effectively as a cadet officer within the ROTC battalion and as an Army officer upon completion of the ROTC Program. Critical skills include the Army training management system, officer and non-commissioned officer evaluation systems, conducting information and decision briefings, coordinating activities with staffs and counseling skills.

**MS 402****3-0-3 SEMINAR IN LEADERSHIP AND MANAGEMENT II**

This is the final phase of military science for senior cadets prior to commissioning. The course is a continuation of MS 401 level course and includes additional instructions in ethics and professionalism, basic logistical procedures, personnel management and performance counseling techniques, staff meetings procedures, basic concepts of the Uniform Code of Military Justice and the Manual for Court-Martial. At the end of this course of study, cadets will possess the fundamental skills, attributes, and abilities to operate as competent leaders and shoulder the responsibilities that will be entrusted to them. **Pre-requisites: MS 401.**

**Department of Social Sciences**  
*Dickson A. Idusuyi, Ph.D., Chairperson*  
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The primary aim of the Department of Social Sciences is to provide a broad education for students preparing for teaching, research, and service. Through its various curricula, the department seeks to achieve the following specific objectives:

1. to expose students to an historical knowledge of great issues and institutions, past and present, to culture and society from the viewpoint of their dynamics, structure, and organization;
2. to develop within students a sharpened sensitivity to the socio-cultural, economic, and political problems confronting the American democracy in a global society;
3. to prepare students to teach the Social Sciences in elementary and secondary schools in the state and nation;
4. to create within students the competence for gainful employment within the Social Sciences and allied fields;
5. to prepare students to continue their education in graduate and professional studies.

The aim and objectives have been formulated in harmony with the functions and purposes of Alcorn State University. All students majoring in a Department of Social Sciences program will arrange their course sequence in consultation with a departmental advisor and/or the Chairperson of the Department.

**Departmental Exit Exam:** An exit examination, to be conducted in the student's senior year, is required of all social sciences majors. To be eligible for graduation, a student must pass the departmental exit examination with a grade of 70 or better out of a total of 100 points. The exam is given in November and March of the academic calendar year.

**Degree Programs:** The Department of Social Sciences offers baccalaureate degrees in four curricula areas: (1) Criminal Justice; (2) History; (3) Political Sciences/Pre-Law; (4) Sociology. Courses are required to be taken in sequence as listed in the degree programs. Summer school is designed for program catch-up providing needed courses are offered.

**Special Features:** In addition to offering a bachelor's degree in four curricula areas, the Department of Social Sciences seeks to address individualized academic interests by providing for the following:

1. **An Internship Program:** Internship programs are offered by the Department of Social Sciences for capable and interested majors. The student is screened through a preparatory process and placed in an internship in federal, state, and local government agencies or public and private agencies and organizations. The internship is part of degree requirements for majors in criminal justice and sociology. Other students may select the internship program as an elective credit course.

2. **Areas of Concentration:** For the social science student who wishes to have a more specialized knowledge base within a broad curriculum degree program, the Department of Social Sciences offers concentrations in the following areas: history, pre-law, sociology, political science, and criminal justice.

**Graduation Requirements:** To receive the bachelor's degree, candidates must (1) complete the semester hours required for graduation as identified per curricula area, (2) successfully pass all specified concentration courses with a grade of "C" or better, included among those courses are SS 307, SS 375 and SS 476, (3) pass the departmental exit examination with a score of 70 or better (out of a total of 100 points), and (4) meet general University requirements for graduation.

The four major curricula are: (1) Criminal Justice; (2) History; (3) Political Science/Pre-Law; (4) Sociology

## MAJOR IN CRIMINAL JUSTICE

The purpose of the Criminal Justice undergraduate program is to provide students interested in law enforcement, criminal law, corrections and the criminal court system with a broad educational background emphasizing the social sciences, and, at the same time providing basic knowledge in the criminal justice field to the extent of specialization compatible with general University and school requirements. The curriculum leads to a Bachelor of Science degree.

### DEGREE REQUIREMENTS

The Bachelor of Science in Criminal Justice will be awarded to a student who has successfully completed the following:

1. A maximum of 120 semester hours of course work is required for graduation. A minimum of twenty-seven (27) of these hours must be taken in the Criminal Justice (CJ) course sequence, twelve (12) of the hours must be taken in the Political Science (GT) course sequence, and fifteen (15) hours in the Sociology (SY) course sequence. There are fifty (50) hours of core courses, and an additional fifteen (15) hours of Social Sciences, and six (6) hours of electives in the Social Sciences or psychology.
2. The satisfactory completion of each of the 27 hours of Criminal Justice courses, 6 hours of Political Science courses, and 3 hours of Sociology courses with a 3.0 (B) or better grade is a basic requirement. These specific course requirements include: CJ 200–Introduction to Criminal Justice; CJ 230– Introduction to Law Enforcement; CJ 350–Courts and Criminal Justice; CJ 370– Corrections; CJ 393–Criminal Law; CJ 330–Criminal Investigation; CJ 411– Deviant Behavior; CJ 415–Criminal Justice Procedure and Evidence; CJ 470–Public and Private Security; GT 332– Constitutional Law II; GT 327–The Judicial Process; SY 365–Racial and Cultural Minorities. Also, the student must successfully complete SS 473–Social Science Internship and the six (6) hours of electives with a 2.0 or better grade.
3. A minimum cumulative (overall) average of 2.5 is required for graduation.
4. Students must notify the Coordinator of the Criminal Justice Program of their intention to graduate at least one semester in advance of the expected date of graduation.

### Criminal Justice Major (120 Credit Hours)

#### Freshman Year (33)

Fall Semester		Hrs.	Second Semester		Hrs.
EN 111	Composition I	<input type="text"/>	EN 112	Composition II	<input type="text"/>
GT 101	American Government	<input type="text"/>	GT 102	American Government	<input type="text"/>
BI 111	Intro. to Biology I	<input type="text"/>	BI 113	Biology	<input type="text"/>
CS 100	Info. Tech. Proficiency	<input type="text"/>	BI 113L	Biology Lab	<input type="text"/>
ND 101	Health Wellness	<input type="text"/>	MA 121	College Algebra	<input type="text"/>
PE 101	Physical Education or	<input type="text"/>	SP 112	Spanish II	<input type="text"/>
MS 101	Fund. of Leadership Mgt. I	<input type="text"/>	PE 200	Physical Education	<input type="text"/>
			or		
UL 101	University Life	<input type="text"/>	MS 102	Fund. of Leadership Mgt. II	<input type="text"/>
SP 111	Spanish I	<input type="text"/>			
	<b>Total</b>	<input type="text"/>		<b>Total</b>	<input type="text"/>

### Sophomore Year (30)

HI 225	United States History I	<input type="checkbox"/>	3	MA 213	Music Appreciation	<input type="checkbox"/>	3
CJ 200	Intro. to Criminal Justice	<input type="checkbox"/>	3	HI 226	United States History	<input type="checkbox"/>	3
EN 213	Studies in Literature	<input type="checkbox"/>	3	CJ 230	The Police	<input type="checkbox"/>	3
EC 201	Principles of Economics I	<input type="checkbox"/>	3	SA 223	Oral Communication	<input type="checkbox"/>	3
SY 235	General Sociology	<input type="checkbox"/>	3	EC 202	Principles of Economics II	<input type="checkbox"/>	3
<b>Total</b>		<input type="checkbox"/>	<b>15</b>	<b>Total</b>		<input type="checkbox"/>	<b>15</b>

### Junior Year (30)

CJ 370	Corrections	<input type="checkbox"/>	3	CJ 330	Criminal Investigation	<input type="checkbox"/>	3
SS 307	Statistical Methods	<input type="checkbox"/>	3	SY 330	Social Psychology	<input type="checkbox"/>	3
SY 335	Juvenile Delinquency	<input type="checkbox"/>	3	GT 327	Judicial Process	<input type="checkbox"/>	3
SY 365	Racial Cultural Minorities	<input type="checkbox"/>	3	GT 332	Constitutional Law II	<input type="checkbox"/>	3
SS 375	Research Methods	<input type="checkbox"/>	3	SS 397	Ethics	<input type="checkbox"/>	3
<b>Total</b>		<input type="checkbox"/>	<b>15</b>	<b>Total</b>		<input type="checkbox"/>	<b>15</b>

### Senior Year (27)

CJ 411	Deviant Behavior	<input type="checkbox"/>	3	SY 419	Criminology	<input type="checkbox"/>	3
CJ 415	Criminal Justice Pro.	<input type="checkbox"/>	3	CJ 470	Private Securities Systems	<input type="checkbox"/>	3
CJ 350	Courts Crim. Justice	<input type="checkbox"/>	3	SS 473	Internship	<input type="checkbox"/>	3
_____	Elective	<input type="checkbox"/>	3	CJ 393	Criminal Law	<input type="checkbox"/>	3
<b>Total</b>		<input type="checkbox"/>	<b>12</b>	SS 476	Social Sciences Seminar	<input type="checkbox"/>	3
		<input type="checkbox"/>		<b>Total</b>		<input type="checkbox"/>	<b>15</b>

### Suggested Electives

PH 132	General Psychology	SY 301	Rural Sociology
SS 333	Introduction to Logic	SY 408	The Family
SS 347	Organizational Theory Analysis		
GT 423	Public Policy		

### COURSE DESCRIPTIONS IN CRIMINAL JUSTICE (CJ)

#### CJ 200 3-0-3 INTRODUCTION TO CRIMINAL JUSTICE

An examination of the history, organization, and function of the various local and federal agencies that make up the criminal justice system. The survey is organized around three major components of the criminal justice system: police, courts, and corrections.

#### CJ 230 3-0-3 INTRODUCTION TO LAW ENFORCEMENT

An in-depth examination of the law enforcement sub-system of the criminal justice system. Includes historical precedents to American systems, the diversity of agencies and their roles, the internal components of agencies, and their interrelationships with other system components and other social and legal agents and agencies.

#### CJ 330 3-0-3 CRIMINAL INVESTIGATION

An in-depth study of the principles, concepts, and theories applicable to the investigation procedures used by law enforcement agents and agencies. Analysis of case law affecting criminal investigations. The course is designed to familiarize the student with the mechanics of investigative evidence-processing techniques.

**Pre-requisite: CJ 230, or approval of the department head.**

#### CJ 350 3-0-3 COURTS AND CRIMINAL JUSTICE

Examination of the court component of the criminal justice system. Emphasis is placed on structure, rules, and functions of courts and their relationship to other systems components and social institutions.

**Pre-requisite: CJ 200 or approval of the department chairperson.**

**CJ 370            3-0-3    CORRECTIONS**

An in-depth examination of the corrections component of the criminal justice system. Fundamentals of correctional practices and philosophy, historically and systematically studied including law, sentencing, and appellate review as each relates to the correctional process. Survey of correctional components: community-based programs, institutions, administration, offender categories, classification, and treatment.

**Pre-requisite: A major in Criminal Justice and CJ 200 or approval of department head.**

**CJ 393            3-0-3    CRIMINAL LAW**

Examination of substantive criminal law with emphasis on history theory, classification and elements of crimes, elements of proof, and other issues related to criminal law. **Pre-requisite: CJ 200 or approval of department head.**

**CJ 411            3-0-3    DEVIANT BEHAVIOR**

Introduction to the social and cultural factors related to human deviance. Special attention will be given to the study of various theories of deviance. **Pre-requisite: SY 235 or consent of instructor.**

**CJ 415            3-0-3    CRIMINAL JUSTICE PROCEDURE**

Analysis of procedural law related to due process. Evidence and rules of law related to evidence are examined. **Pre-requisite: CJ 393 or approval of department head.**

**CJ 470            3-0-3    PRIVATE SECURITIES SYSTEMS**

An overview of the major topics of private security. The topics examine the basic problems, procedures, and needs in the field of security work. A comparison of private agencies, hotels, retail, and industrial enterprises that handle their own security with private and public security organizations. Emphasis is given to the role of private, industrial, and business security systems and their relationship to the criminal justice system.

**Pre-requisite: Junior standing plus CJ 200.**

## **History**

The Department of Social Sciences offers courses and majors in the realm of History and the teaching of the Social Sciences at the secondary education level. There are two areas of concentration for History Majors – teaching and non-teaching. The purpose of the department's course offerings in History are to 1) prepare History majors for graduate school or other related fields of employment, 2) prepare students wishing to receive a standard educator license to teach social sciences at the secondary education level. Each major offers required coursework which provides a sufficient background in specialized courses within the history curriculum and in the various social science disciplines to achieve success in either field of endeavor. Also, in conjunction with the Department of Education, and in compliance with the National Council of Social Studies Guidelines, the curriculum offers instruction in the teaching concentration with various pedagogical theories and their application to learning and materials that are used in the teaching of the social sciences.

After successfully completing a minimum of 44 semester hours, all majors wishing to pursue a license to teach social sciences at the secondary level must apply for admission to the University's Teacher Education program. Students wishing to obtain a license to teach social science at the secondary education level are advised that they are expected to pass the following courses in the teaching concentration of the History Program with a "C" or better in EN 111, EN 112, SA 223, and PH 132, and have an overall grade point average (G.P.A.) of 2.50. In addition, students must also successfully complete all social science courses with a grade of "C" or better, meet the requirements of the Department of Social Sciences, and pass the Social Sciences Exit Examination, Praxis I, and Praxis II examinations. Students are encouraged to follow the sequential arrangement of the curriculum for both the teaching and non-teaching concentrations of the History/Social Science Education majors.

The course sequences listed are suggested because not every class listed can be offered each academic year. Consequently, students are strongly encouraged to remain in close contact with their departmental program advisor.

## Courses

The following courses are required of all Social Science Education and History majors:

HI 112 or HI 192 (Honors)	World Civilization II	3 hrs.
HI 112 or HI 192 (Honors)	World Civilization II	3 hrs.
HI 225	United States History I	3 hrs.
HI 226	United States History II	3 hrs.
GR 318	World Geography	3 hrs.
SS 375	Research Methods	3 hrs.
SS 476	Social Science Seminar	3 hrs.

The following courses are required of all Social Science Education majors:

ED 302	Teaching Practicum/Technology	3 hrs.
ED 348	Foundations of Education	3 hrs.
ED 351	Managing Classroom Beh.	3 hrs.
ED 498	Reading in the Secondary School	3 hrs.
PH 326	Psychology of the Exceptional Child	3 hrs.
PH 336	Educational Psychology	3 hrs.
PH 347	Measurement Evaluation	3 hrs.
SS 485	Systemic Strategies in Social Science	3 hrs.
HI 328	Mississippi History	3 hrs.
HI 371 or 372	Afro-American History I or II	3 hrs.
HI 448	History of Africa II	3 hrs.
HI 460	Twentieth Century World History	3 hrs.

A minimum of twenty-four (24) credit hours of history electives from the following list are required of all non-teaching History majors:

HI 304	Colonial American History	3 hrs.
HI 305	Age of Jefferson and Jackson	3 hrs.
HI 326	The Old South	3 hrs.
HI 328	Mississippi History	3 hrs.
HI 329	The New South	3 hrs.
HI 347	Civil War and Reconstruction	3 hrs.
HI 348	U.S. History 1877-1917	3 hrs.
HI 371	Afro-American History Before 1865	3 hrs.
HI 372	Afro-American History Since 1865	3 hrs.
HI 422	*Historiography	3 hrs.
HI 430	Recent American History	3 hrs.
HI 432	History of Europe I	3 hrs.
HI 433	History of Europe II	3 hrs.
HI 447	History of Africa I	3 hrs.
HI 448	History of Africa II	3 hrs.
HI 460	Twentieth Century World	3 hrs.
HI 506	Afro-American History	3 hrs.

\*All non-teaching History majors are required to take HI 422, Historiography during their junior or senior year. It is suggested that non-teaching History majors take additional courses from the above list beyond the required 24 credit hours as unspecified electives.



**Social Science Education Major  
(120 Credit Hours)**

**Freshman Year (30)**

Fall Semester		Hrs.	Second Semester		Hrs.
EN 111	Composition I	<input type="text"/> 3	EN 112	Composition II	<input type="text"/> 3
BI 111	Intro to Biology I	<input type="text"/> 3	PY 111	Physical Science I	<input type="text"/> 3
HI 111	World Civilization I	<input type="text"/> 3	HI 112	World Civilization II	<input type="text"/> 3
MA 121	College Algebra	<input type="text"/> 3	GT 102	American Government	<input type="text"/> 3
UL 101	University Life	<input type="text"/> 1	CS 100	Info. Tech. Proficiency	<input type="text"/> 1
ND 101	Health Wellness	<input type="text"/> 1	AR 214	Art Appreciation	<input type="text"/> 3
<b>Total</b>		<b>14</b>	<b>Total</b>		<b>16</b>

**Sophomore Year (33)**

EN 213	Studies in Literature	<input type="text"/> 3	HU 201	Humanities	<input type="text"/> 3
HI 225	United States History I	<input type="text"/> 3	HI 226	United States History II	<input type="text"/> 3
EC 201	Principles of Economics I	<input type="text"/> 3	ED 351	Managing Classroom and Beh..	<input type="text"/> 3
SA 223	Oral Communication	<input type="text"/> 3	ED 200	Social Studies/Multicultural Ed.	<input type="text"/> 3
PH 132	General Psychology	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
_____	Elective	<input type="text"/> 3			<input type="text"/>
<b>Total</b>		<b>18</b>	<b>Total</b>		<b>15</b>

**Junior Year (30)**

ED 302	Teaching Practicum/Technology	<input type="text"/> 3	PH 336	Educational Psychology	<input type="text"/> 3
ED 348	Foundations of Education	<input type="text"/> 3	HI 328	Mississippi History	<input type="text"/> 3
PH 347	Measurement Evaluation	<input type="text"/> 3	PH 326	Psychology of the Except. Child	<input type="text"/> 3
HI 371	Afro American Hist. I	<input type="text"/> 3	GR 318	World Geography	<input type="text"/> 3
	or				
HI 372	Afro American Hist. II	<input type="text"/> 3	HI 448	History of Africa II	<input type="text"/> 3
SS 375	Research Methods	<input type="text"/> 3			<input type="text"/>
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>15</b>

**Senior Year (27)**

HI 460	Twentieth Century World History	<input type="text"/> 3	ED 468	Directed Teaching	<input type="text"/> 12
ED 498	Reading in the Secondary School	<input type="text"/> 3			<input type="text"/>
SS 485	Syst. Strat in the Social Science	<input type="text"/> 3			<input type="text"/>
SS 476	Social Science Seminar	<input type="text"/> 3			<input type="text"/>
_____	Elective	<input type="text"/> 3			<input type="text"/>
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>12</b>

It is suggested, but not required, that Social Science Education majors choose electives from the courses listed below:

HI 422	Historiography	HI 430	Recent American History
HI 432	History of Europe Part I	HI 433	History of Europe Part II
SY 408	The Family	SS 333	Introduction to Logic
SP 111	Spanish I	SP 112	Spanish II

The specific requirements for a non-teaching concentration in history include the successful completion of twelve (12) hours of history core courses and twenty-four (24) hours of 300-400 level history courses with a grade of "C" or better. These courses are identified below with the "HI" code appearing before "History Elective." (See "Courses" lit or "Description of Courses at the end of this section. Students must also complete all specified social sciences courses with a grade of "C" or better to meet the requirements of the Department of Social Sciences and pass the Social Sciences Exit Examination. Students are encouraged to follow the sequential arrangement of the curriculum for a major with a non-teaching emphasis if possible.

## History Major (120 Credit Hours)

### Freshman Year (30)

First Semester		Hrs.	Second Semester		Hrs.
EN 111	Composition I	<input type="text"/> 3	EN 112	Composition II	<input type="text"/> 3
BI 111	Intro to Biology I	<input type="text"/> 3	PY 111	Physical Science I	<input type="text"/> 3
HI 111	World Civilization I	<input type="text"/> 3	HI 112	World Civilization II	<input type="text"/> 3
MA 121	College Algebra	<input type="text"/> 3	GT 102	American Government	<input type="text"/> 3
PE 100	Physical Education I	<input type="text"/> 1	CS 100	Info. Tech. Proficiency	<input type="text"/> 1
	or				
MS 101	Fund. of Leadership Mgt. I	<input type="text"/> 1	PE 200	Physical Education	<input type="text"/> 1
UL 101	University Life	<input type="text"/> 1	_____	Elective	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> 14		<b>Total</b>	<input type="text"/> 16

### Sophomore Year (30)

EN 213	Studies in Literature	<input type="text"/> 3	HU 201	Humanities	<input type="text"/> 3
SP 111	Spanish I	<input type="text"/> 3	SP 112	Spanish II	<input type="text"/> 3
HI 225	United States History I	<input type="text"/> 3	HI 226	United States History II	<input type="text"/> 3
EC 201	Principles of Economics I	<input type="text"/> 3	SY 235	General Sociology	<input type="text"/> 3
SA 223	Oral Communication	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> 15		<b>Total</b>	<input type="text"/> 15

### Junior Year (30)

HI _____	History Elective	<input type="text"/> 3	HI _____	History Elective	<input type="text"/> 3
HI _____	History Elective	<input type="text"/> 3	HI _____	History Elective	<input type="text"/> 3
SS 375	Research Methods	<input type="text"/> 3	GR 318	World Geography	<input type="text"/> 3
_____	Elective	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
_____	Elective	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> 15		<b>Total</b>	<input type="text"/> 15

### Senior Year (30)

HI _____	History Elective	<input type="text"/> 3	HI _____	History Elective	<input type="text"/> 3
HI _____	History Elective	<input type="text"/> 3	HI _____	History Elective	<input type="text"/> 3
_____	Elective	<input type="text"/> 3	SS 476	Social Science Seminar	<input type="text"/> 3
_____	Elective	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
_____	Elective	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> 15		<b>Total</b>	<input type="text"/> 15

The department requires that at least nine credit hours (9 hrs.) of electives be drawn from the list below:

GT 101	American Government	GT 445	International Relations
GT 400	Politics of Afro-Americans	SS 333	Introduction to Logic
GT 421	Congress and the Presidency	EN 352	Research Writing

## COURSE DESCRIPTIONS IN HISTORY (HI)

### HI 225 3-0-3 UNITED STATES HISTORY I

This course serves as an introduction to the history of the United States from the Age of Discovery to the end of the American Civil War. This will encompass the flow of events and conditions that shape American society, politics, and culture, including the colonization and colonial society, the institution of slavery, the American Revolution, the development of the American nation and the emergence of the market society, expansion, and the division of the nation leading to civil war.

**HI 226                    3-0-3    UNITED STATES HISTORY II**

This course serves as an introduction to the history of the United States from Reconstruction to the present. This will encompass the flow of events and conditions that shape American society, politics, and culture, including Reconstruction and the emergence of Segregation, western expansion, industrialization and modernization, political reform, the Great Depression, World Wars and the emergence of America as a superpower, and the era of Civil Rights and technological explosion in the modern era.

**HI 304                    3-0-3    COLONIAL AMERICAN HISTORY**

This course traces the development of the colonial societies in North America and the economic, political, and social forces which formed the character of the future American nation leading up to the era of the American Revolution. This course explores the motivations for colonization and the institutions formed in the colonial era, the nature of colonial life and challenges of the American wilderness, the interactions with native Americans and the role of free and enslaved Africans, imperial competition and colonial warfare, and the rising ideals and resistance leading up to the American Revolution. **Pre-requisite: HI 225 or consent of instructor.**

**HI 305                    3-0-3    AGE OF JEFFERSON AND JACKSON**

This course examines the development of American society from the ratification of the United States Constitution through the Mexican War. This course explores the many changes that occur in the era, including the emergence of the modern American democracy and political parties, large scale land acquisition, British invasion and the War of 1812, westward expansion and Manifest Destiny, emerging American industrialization, the beginnings of sectional conflict and the entrenchment of American slavery, the rise Andrew Jackson and Indian removal, and the Mexican-American War of 1848. Civil War. **Pre-requisite: HI 225 or consent of instructor.**

**HI 326                    3-0-3    THE OLD SOUTH**

This course examines the development and persistence of the unique social hierarchy, racial regime, political struggle and intellectual isolation in the antebellum South. This course explores the trajectory of southern development and the development of slavery in the South, and why Southerners stubbornly held on to this institution long after it had been abandoned by the north, even when it restricted their economic growth. This course focuses on how slavery interacted with other factors to make a distinct society in the South, and why the South would choose to leave the union to preserve their system. **Pre-requisite: HI 225 or consent of instructor.**

**HI 328                    3-0-3    MISSISSIPPI HISTORY**

This course traces the history of Mississippi from its discovery and early settlement period through the modern period. This course explores the social, economic, and political factors that formed Mississippi, including Mississippi's colonial founding and early settlement, the native Americans and their removal, the rise of plantation agriculture and the entrenchment of slavery, the Reconstruction era and rise of the Jim Crow racial regime, the effects of the Great Migration and the Great Depression, changes wrought by World War, the Civil Rights era, and the emerging new southern conservatism. **Pre-requisite: HI 226 or consent of instructor.**

**HI 329                    3-0-3    THE NEW SOUTH**

This course traces the history of the Southern States or "New South" from the conclusion of the Civil War through the modern period. This course explores the trajectory of southern development in the wake of the defeat in the Civil War, including Reconstruction, the emerging free black population, continued racial tensions, transformation of agriculture, industrialization and economic growth, urbanization, new political movements, southern poverty, Black Migration, the impact of war and technology, the Civil Rights Movement, and the emerging new southern conservatism. **Pre-requisite: HI 226 or consent of instructor.**

**HI 347                    3-0-3    CIVIL WAR AND RECONSTRUCTION**

This course explores the Civil War (1861-1865) and the Reconstruction Period (1865-1876). Conceptualized as an intensive readings course, students will explore the contestation over slavery in the 1850's, Southern secession, the social, political, economic and cultural implications of the Civil War, including discussions of the Confederate States of America, Presidential and Congressional Reconstruction, African American emancipation and citizenship, and the factors underlying the collapse of Reconstruction in 1876. **Pre-requisite: HI 226 or Permission of Instructor**

**HI 348                    3-0-3    U. S. HISTORY 1877-1917**

This course examines the conditions that shape the development of the United States from 1877 to 1917. America rose from essentially a developing nation in 1877 to an emerging economic and global power by 1917, and topics include the continued racial tensions and the emergence of Segregation, expansion, industrialization and economic growth, Native Americans, new technology, business and labor, new political movements (Populism and Progressivism), immigration, and emergence of the American empire, and the conditions that drive the United States into participation in World War I. **Pre-requisite: HI 226 or consent of instructor.**

**HI 371                    3-0-3    AFRO-AMERICAN HISTORY BEFORE 1865**

This course explores the evolution of the African American experience beginning with the African past up to 1865. Topics in the course include an Introduction to African American historiography, the African Past and Kingdom Formation in West Africa, The Atlantic Slave Trade, African Americans in the Colonial Period, Black participation in the American Revolution, the Domestic Slave trade and the Rise of the Cotton Kingdom, the formation of free African American communities in the North, the Antislavery War in the 1850's and African American participation in the Civil War.

**HI 372                    3-0-3    AFRO-AMERICAN HISTORY SINCE 1865**

This course explores the evolution of the African American experience from 1865 up to the 21<sup>st</sup> century. Topics in the course include an Introduction to African American historiography, African Americans and Reconstruction, Black Organizational and Communal life in the late 19<sup>th</sup> century, the Great Migration, The Harlem Renaissance, the Great Depression and WWII, The Civil Rights Movement, Black Power, African American political empowerment in the 1970's, Ronald Reagan and Black Conservatism in the 1980's, Clinton and Democratic Centrism in the 1990's, The Resurgence of Conservatism in the Bush Era and the Obama Presidency in the 21<sup>st</sup> century.

**HI 422                    3-0-3    HISTORIOGRAPHY**

This course is viewed as a capstone course for History Majors in their Junior and Senior years. Students are exposed to the development of history as a field of intellectual inquiry through an examination of approaches to the writing and study of history from classical antiquity to our current postmodern moment. Substantial attention is given to interpretative and methodological problems and approaches in the practice and writing of history. **Pre-requisite: HI 225 and 226 or Permission of Instructor**

**HI 430                    3-0-3    RECENT AMERICAN HISTORY**

This course examines central themes in the development of American history in the twentieth century beginning with the Great Depression and the New Deal in the 1930's. Other topics include World War II and the Emergence of a Bipolar World, The Cold War, Civil Rights and the Great Society, Vietnam and the Postcolonial World, Richard Nixon and the Imperial Presidency, Reagan and the Conservative Revolution, Clinton and the Roaring Nineties, Bush and the War on Terror and the Obama Presidency. **Pre-requisite: HI 226 or Permission of Instructor**

**HI 506                    3-0-3    AFRO-AMERICAN HISTORY**

This graduate course taught in a seminar format is designed for advanced undergraduates and graduate students who wish to explore various special topics related to the African American past. Students are exposed to the historiography, methodological and interpretative issues confronted by scholars in the selected topical area. Students are expected to engage the literature through intensive reading and discussion of the material and to produce an extensive historiographical paper. **Pre-requisites: HI 371 and 372, and HI 422 or Permission of Instructor.**

## **COURSE DESCRIPTIONS IN WORLD HISTORY (HI)**

### **HI 111 3-0-3 WORLD CIVILIZATION I**

This course serves as an introduction to the history of humankind up to 1450. It explores the evolution of civilization in Africa, the Near East, Asia, Europe and North America. The course also provides a basic outline of the major, social, political, economic, political and cultural and intellectual developments in world history.

### **HI 112 3-0-3 WORLD CIVILIZATION II**

An exploration of world history from the European Age of Exploration up to the present. Students are exposed to the social, political, economic, religious and cultural forces shaping the modern world. Europe's rise and decline is discussed in relationship to Asia, Africa, Latin American and North America. Topics in the course include exploration, scientific and commercial revolutions, imperialism, colonization, hemispheric domination, global war, decolonization and anti-colonization, multi-polarism and the resurgence of the developing world.

### **HI 191 3-0-3 HONORS WORLD CIVILIZATION I**

Designed for honors students, this course provides an introduction to the evolution of humankind up to 1450. Students are exposed to the major civilizations in Africa, Asia and the Near East as well as the civilizations of classical antiquity (Greece and Rome) and pre-modern and early modern Europe. Students are encouraged to think about the complexity and diversity of human civilizations and the social, political, economic, cultural and religious interplay between earlier and later civilizations.

### **HI 192 3-0-3 HONORS WORLD CIVILIZATION II**

Designed for honor students, this course explores world history from the European Age of Exploration in the 15<sup>th</sup> century to the present. The course explores the complex interplay between various religious, ethnic and racial groups and their reactive and proactive to the rise of Europe. Europe's rise is placed in tension with Asian, African, Latin American and Native American realities. Topics include the rise of the Atlantic World, trans-Atlantic slavery, empire formation, the commercial, scientific and intellectual revolutions in Europe, the rise of revolutionary ideology, and industrialization, imperialism and colonization. The course explores the First and Second World wars and anti-colonial and anti-imperialist movements, the Cold War and the creation of a multipolar world by the end of the twentieth and beginning of the 21<sup>st</sup> century. The reconfiguration of geopolitical realities in Latin America, Asia and Africa in the contemporary period is explored as well.

### **HI 432 3-0-3 HISTORY OF EUROPE I**

This course examines the conditions and factors that shape the development of Europe from its origins to the age of Renaissance and Exploration. This course explores the social, economic, and political factors that drove European history, including early European culture, life under the Roman empire and its decline, the rise of Christianity and the formation of the Church, Germanic migrations and the emerging European kingdoms, the feudal system, Barbarian invasions, the emergence of the Middle Ages and crusades, and black death leading to the regeneration of the Renaissance era. **Pre-requisite: HI 111 or consent of instructor.**

### **HI 433 3-0-3 HISTORY OF EUROPE II**

This course examines the conditions and factors that shape the development of Europe from the age of Renaissance and Exploration to the present. This course explores the social, economic, and political factors that drove European history, including the age of Renaissance and exploration, the Reformation and religious wars, the Scientific Revolution and Enlightenment, the rise of Russia, the French Revolution and the Napoleonic wars, the Industrial revolution, Unification and emerging nation states, rising imperialism, depression and world wars, the rebuilding of Europe, the fall of Communism, and emergence of the European Union.. **Pre-requisite: HI 112 or consent of instructor.**

**HI 447                    3-0-3    HISTORY OF AFRICA I**

This course traces the African history from the evolution of mankind up 1830. Due to the large expanse of time under investigation in the course, it utilizes a thematic rather than chronological approach to the subject matter. Topics include an introduction to human evolution, Africa in the Iron Age and social organization, State formation in North, Northeast, Central and West Africa, the impact of Islam and Christianity on African societies, Early European interaction with Africa, the Atlantic Slave Trade and European settlement in Southern Africa. The course concludes by looking at the dynamic nature of African societies before the Era of Free Trade. **Pre-requisite: HI 371 or Permission of Instructor**

**HI 448                    3-0-3    HISTORY OF AFRICA II**

This course examines the History of Africa from the beginning of the Era of Free Trade in 1830 up to the present. Topics include the Advent of Colonialism and the Era of Free Trade, the Scramble and Partition of Africa, the African Response to Colonialism on African Societies, Africans and the African Diaspora, The Colonial System, the Rise of African nationalism and the Decolonization process. The course concludes with an analysis of post-independence political and economic developments and the contemporary challenges and successes of African nations. **Pre-requisite: HI 372 or Permission of Instructor**

**HI 460                    3-0-3    TWENTIETH CENTURY WORLD HISTORY**

This course examines the conditions and factors that shape world development and history from the turn-of-the twentieth century to the present. Topics include the age of imperialism and colonization, the arms race and World War I, the Versailles settlement and the depression era, the rise of totalitarianism and Communism, World War II and the reconfiguration of power and political structure, the Cold War and nuclear age, the end of colonialism and the age of independence, the superpowers and balance of power, the fall of Communism and the rise of China, Globalization and advent of terrorism in the modern age. **Pre-requisite: HI 111 or consent of instructor.**

**COURSE DESCRIPTIONS IN GEOGRAPHY (GR)****GR 315                    3-0-3    INTRODUCTION TO GEOGRAPHY**

This course is concerned with the principles and theories of geography, with emphasis upon socio-cultural and political geography. The central focus will be on the relationship of climate, terrain, and natural resources to national and human resources available in various geographic regions.

**GR 318                    3-0-3    WORLD GEOGRAPHY**

A study of an explanatory geographic survey of eight major regions. Emphasizing both human and physical geography, this course surveys each region as to location, component countries, world roles, distinctive physical and cultural characteristics, relocation to other world areas, and major problems. Major attention is given to important individual countries and groups of countries within each world region. **Pre-requisite: Junior standing.**

**ECONOMICS (EC)****EC 201                    3-0-3    PRINCIPLES OF ECONOMICS I**

An introduction to Micro- economics. Studies of demand and supply, elasticities, market price determination, market structure, and the theory of maximum profit.

**EC 202                    3-0-3    PRINCIPLES OF ECONOMICS II**

An introduction of macro-economics. Studies of national income accounts and measurements, income determination, banking systems, and monetary and fiscal policies.

**POLITICAL SCIENCE**

The Political Science's curriculum is designed for students who seek the Bachelor of Arts degree with a major in political science. It serves the student who wishes to acquire an organized body of knowledge about government and politics before entering various fields of employment such as government service, law, teaching, mass media, and private enterprises.

Students majoring in political science must complete 122 semester hours of course work in the field with a grade of "C" or better to graduate. A minimum of twenty-seven (27) hours in political science (GT) and nine (9) hours in social science (SS 375, SS 446, and SS 476) must be taken. It is the students' responsibility to take these courses in sequence. In addition, students majoring in political science must pass the Exit Examination that is offered by the department in \*November and/or March. The examination has two parts: Part I consists of standardized questions.

It tests the student's knowledge of the various areas of his/her studies, namely, Government, American History and World Civilizations, General Sociology, and Economics. Part II contains essay questions that test the student's mastery of his/her major field. Passing grade is seventy (70) points out of one hundred (100).

\*Dates of examination will be announced by the Department of Social Sciences.

### Political Science Major (120 Credit Hours)

#### Freshman (30)

First Semester		Hrs.	Second Semester		Hrs.
EN 111	Composition I	<input type="text"/> 3	EN 112	Composition II	<input type="text"/> 3
BI 111	Intro to Biology I	<input type="text"/> 3	PY 111	Physical Science I	<input type="text"/> 3
GT 101	American Government	<input type="text"/> 3	GT 102	American Government	<input type="text"/> 3
HI 111	World Civilization I	<input type="text"/> 3	HI 112	World Civilization II	<input type="text"/> 3
MA 121	College Algebra	<input type="text"/> 3	CS 100	Info. Tech. Proficiency	<input type="text"/> 1
UL 101	University Life	<input type="text"/> 1	PE 200	Physical Education	<input type="text"/> 1
		<input type="text"/>		or	<input type="text"/>
		<input type="text"/>	MS 102	Fund. of Leadership Mgt. II	<input type="text"/> 1
<b>Total</b>		<b>16</b>	<b>Total</b>		<b>14</b>

#### Sophomore Year (30)

EN 213	Studies in Literature	<input type="text"/> 3	AR 214	Art Appreciation	<input type="text"/> 3
EC 201	Principles of Economics I	<input type="text"/> 3	EN 316	Advanced Composition	<input type="text"/> 3
BA 223	Business Comp. App.	<input type="text"/> 3	SY 235	General Sociology	<input type="text"/> 3
SP 111	Spanish I	<input type="text"/> 3	SP 112	Spanish II	<input type="text"/> 3
HI 225	United States History I	<input type="text"/> 3	SA 223	Oral Communication	<input type="text"/> 3
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>15</b>

#### Junior Year (30)

GT 313	State Local Govt.	<input type="text"/> 3	GT 323	Public Policy Analysis	<input type="text"/> 3
GT 347	Political Theory	<input type="text"/> 3	GT 420	Problems in American Politics	<input type="text"/> 3
GT 322	Constitutional Law I	<input type="text"/> 3	GT 327	Judicial Process	<input type="text"/> 3
SS 333	Intro to Logic	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
SS 307	Statistical Methods	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>15</b>

#### Senior Year (30)

GT 421	Congress the Presidency	<input type="text"/> 3	GT 400	Politics of Afro.-Americans	<input type="text"/> 3
GT 422	Public Administration	<input type="text"/> 3	GT 442	Intro. to International Law	<input type="text"/> 3
GT 445	International Relations	<input type="text"/> 3	GT 318	Comparative Government	<input type="text"/> 3
SS 375	Research Methods	<input type="text"/> 3	SS 476	Social Science Seminar	<input type="text"/> 3
_____	Elective	<input type="text"/> 3	SS 446	Organizational Theory	<input type="text"/> 3
<b>Total</b>		<b>15</b>	<b>Total</b>		<b>15</b>

## Suggested Electives

SS 397	Ethics	CJ 415	Criminal Justice Procedure
SS 473	Social Science Internship	CJ 418	Law and Society
SY 335	Juvenile Delinquency		

## PRE-LAW

Students concentrating in pre-law with a major in Political Science must complete 122 semester hours of course work in the field with a grade of “C” or better are required to complete the following courses: GT 327 Judicial Process, GT 340 Pre-Law Seminar, GT 332 Constitutional Law II, GT 442 Introduction to International Law, and EN 316 Advance Composition to graduate. In addition, they are required to complete the following program of study.

### Pre-Law Major (120 Credit Hours)

#### Freshman Year (29)

First Semester		Hrs.	Second Semester		Hrs.
EN 111	Composition I	<input type="text"/> 3	EN 112	Composition II	<input type="text"/> 3
HI 111	World Civilization I	<input type="text"/> 3	HI 112	World Civilization II	<input type="text"/> 3
BI 111	General Biology	<input type="text"/> 3	PY 111	Physical Science I	<input type="text"/> 3
GT 101	American Government	<input type="text"/> 3	GT 102	American Government	<input type="text"/> 3
MA 121	College Algebra	<input type="text"/> 3	ND 101	Health Wellness	<input type="text"/> 1
UL 101	University Life	<input type="text"/> 1			<input type="text"/>
<b>Total</b>		<input type="text"/> 16	<b>Total</b>		<input type="text"/> 13

#### Sophomore Year (31)

EN 213	Studies in Literature	<input type="text"/> 3	AR 214	Art Appreciation	<input type="text"/> 3
HI 225	United States History I	<input type="text"/> 3	EN 316	Advanced Composition	<input type="text"/> 3
EC 201	Principles of Economics I	<input type="text"/> 3	SY 235	General Sociology	<input type="text"/> 3
BA 223	Business Comp. App.	<input type="text"/> 3	CS 100	Info. Tech. Proficiency	<input type="text"/> 1
SP 111	Spanish I	<input type="text"/> 3	SP 112	Spanish II	<input type="text"/> 3
		<input type="text"/> 3	SA 223	Oral Communication	<input type="text"/> 3
<b>Total</b>		<input type="text"/> 15	<b>Total</b>		<input type="text"/> 16

#### Junior Year (30)

GT 322	Constitutional Law I	<input type="text"/> 3	GT 332	Constitutional Law II	<input type="text"/> 3
GT 347	Political Theory	<input type="text"/> 3	GT 327	Judicial Process	<input type="text"/> 3
GT 313	State Local Govt.	<input type="text"/> 3	GT 340	Pre-Law Seminar	<input type="text"/> 3
SS 333	Intro to Logic	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
SS 307	Statistical Methods	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
<b>Total</b>		<input type="text"/> 15	<b>Total</b>		<input type="text"/> 15

#### Senior Year (30)

GT 445	International Relations	<input type="text"/> 3	GT 446	Organizational Theory	<input type="text"/> 3
GT 421	Congress the Presidency	<input type="text"/> 3	GT 422	Public Administration	<input type="text"/> 3
GT 400	Politics of African Americans	<input type="text"/> 3	SS 476	Social Science Seminar	<input type="text"/> 3
SS 375	Research Methods	<input type="text"/> 3	GT 442	Intro. to International Law	<input type="text"/> 3
_____	Elective	<input type="text"/> 3	GT 318	Comparative Government	<input type="text"/> 3
<b>Total</b>		<input type="text"/> 15	<b>Total</b>		<input type="text"/> 15

## Suggested Elective Courses

CJ 415	Criminal Justice Procedure	SS 397	Ethics
CJ 418	Law and Society	SS 473	Social Science Internship
GT 323	Public Policy	SY 335	Juvenile Delinquency



## **COURSE DESCRIPTIONS IN POLITICAL SCIENCE (GT)**

### **GT 101            3-0-3    AMERICAN GOVERNMENT**

Introduction to the scope and contents of the American system of government and to the methods of analysis used by Political Scientists, plus an examination of the theory and practice of politics. This course is designed to give the student a solid foundation in the discipline to support his more advanced work.

### **GT 102            3-0-3    AMERICAN GOVERNMENT**

A study of the American system of government, with emphasis on the historical factors which influence the uniqueness of the Constitution, the democratic process, the pattern of national government, with its separation of powers, and the philosophy that guides domestic policies and international affairs. Special attention is given to the functions at a national level of the legislative, executive, and judicial branches of government.

### **GT 313            3-0-3    STATE AND LOCAL GOVERNMENT**

Constitutional relationships between the state and the federal government, and including the relationship between states; the organization and functions of the executive, legislative and judicial branches at the state and local levels. **Pre-requisites:** GT 101 and 102.

### **GT 321            3-0-3    PUBLIC ADMINISTRATION**

A study of management of the public sector including personnel administration, communication, decision-making, budgeting, and public employee union-management relations. **Pre-requisites:** GT 101 and 102.

### **GT 322            3-0-3    CONSTITUTIONAL LAW I**

An examination of constitutional law in the United States with special emphasis on cases dealing with the framework, powers, and functions of the federal system. **Pre-requisites:** GT 101 and 102.

### **GT 327            3-0-3    JUDICIAL PROCESS**

A study of American courts as political subsystems with special emphasis on judicial decision making, the development of public policy through the judicial process, and theories of law and jurisprudence. **Pre-requisites:** GT 101, 102, and 322.

### **GT 332            3-0-3    CONSTITUTIONAL LAW II**

A continuation of Constitutional Law I with emphasis on individual rights and liberties. **Pre-requisite:** GT 322.

### **GT 340            3-0-3    PRE-LAW SEMINAR**

This course is designed to prepare prospective students for law school through refinement of essential communications, analytical and methodological skills. **Pre-requisites:** GT 101, 102, and 322.

### **GT 400            3-0-3    POLITICS OF AFRO-AMERICANS**

The historical and contemporary role played by Black people in the political process, and their efforts to reform and modify race and nationality group relations within American society. Discussion of external forces which impact upon the Afro-Americans, such as the relationship of the Afro-America to Africa. **Pre-requisites:** GT 101 and 102.

### **GT 420            3-0-3    PROBLEMS IN AMERICAN POLITICS**

Various topics as scheduled, e.g. the presidency and foreign policy; politics of the budgetary process; the politics of organization; peace politics; political campaigning; communications as politics; federalism; comparative state politics; civil rights; and civil liberties. **Pre-requisite:** GT 101, 102, 322.

### **GT 421            3-0-3    CONGRESS AND THE PRESIDENCY**

The role of the national, legislative and executive branches in the policy making process. **Pre-requisites:** GT 101 and 102.

### **GT 423            3-0-3    PUBLIC POLICY**

Methods of policy research and analysis, and substantive issues in health, welfare, education, regulatory, agriculture, transportation, environmental, and other policies. **Pre-requisites:** GT 101 and 102.

**GT347            3-0-3    ORGANIZATION THEORY AND ANALYSIS**

Theories, of the goal, structure, and process of organization in relation to group behavior, technology, and external environment. **Pre-requisites:** GT 101 and 102.

**GT 347            3-0-3    POLITICAL THEORY**

Political thinkers, theorists, and movements from the Greeks, through the Middle Ages. **Pre-requisites:** GT 101 and 102.

**GT 318            3-0-3    COMPARATIVE GOVERNMENT**

A systematic examination of the similarities and differences of political experiences by a wide variety of political systems in the modern world with emphasis on historical and social impacts on political settings, political developments and changes, structure and performance of political systems, citizen participation, and public policy and its impacts. **Pre-requisites:** GT 101 and 102.

**GT 445            3-0-3    IN INTERNATIONAL RELATIONS**

Examination of selected problems such as financing, international administration, economic and social development, political-military actions. Prospects and problems of development. **Pre-requisite:** GT 340.

**GT 442            3-0-3    INTRODUCTION TO INTERNATIONAL LAW**

Development and theoretical foundations of international law of peace, war and neutrality; treaty law; recognition, war crimes, law enforcement, state responsibility, and diplomatic immunities under the United Nations. **Pre-requisites:** GT 101, 102 and 340.

**GT 445            3-0-3    INTERNATIONAL RELATIONS**

Analysis of general literature of international relations, levels of international political systems, international conflicts and co-operations, current political problems. **Pre-requisites:** GT 101 and 102.

**GT 400            3-0-3    POLITICS OF AMERICAN AMERICA**

A review and analysis of the role and position of Blacks in American politics from earliest times to the present. Special attention will be given to the "Civil Rights Era."

**GT 442            3-0-3    PUBLIC ADMINISTRATION**

Advanced study in leadership, communication, planning, policy analysis, and program evaluation; directed research in selected substantive policy areas.

**GT 318            3-0-3    COMPARATIVE GOVERNMENT**

A systemic examination of the similarities and differences of political experiences by a wide variety of political systems in the modern world with emphasis on historical and social impacts on political settings, political developments and changes, structure and performance of political systems, citizen participation, and public policy and its impacts.

## **SOCIOLOGY**

A student who completes the sociology program will be able to pursue a wide range of occupations in different institutional settings. These include such jobs as researcher, child-care worker, juvenile delinquent counselor, probation officer, substance abuse counselor, mental health worker, and group home worker, etc. The student is required to complete all major courses with a grade of "C" or better. These courses are identified by the SY, SW, or SS code. In order to be placed in an internship, it is important that students complete all requirements through the first semester of the senior year as presented in the curriculum.

**Sociology  
(120 Credit Hours)**

**Freshman Year (30)**

First Semester		Hrs.	Second Semester		Hrs.
EN 111	Composition I	<input type="text"/> 3	EN 112	Composition II	<input type="text"/> 3
BI 111	Intro to Biology I	<input type="text"/> 3	BI 113	Intro. to Environ. Biology	<input type="text"/> 3
CS 100	Info. Tech. Proficiency	<input type="text"/> 1	BI 113L	Intro. to Environ. Biology	<input type="text"/> 1
GT 101	American Government	<input type="text"/> 3	AR 214	Art Appreciation	<input type="text"/> 3
SY 235	General Sociology	<input type="text"/> 3	MA 121	College Algebra	<input type="text"/> 3
PE 101	Physical Education or	<input type="text"/> 1	PE 101	Physical Education	<input type="text"/> 1
			or		
MS 101	Fund. of Leadership Mgt. I	<input type="text"/> 1	MS 102	Fund. of Leadership Mgt. II	<input type="text"/> 1
UL 101	University Life	<input type="text"/> 1	ND 101	Health Wellness	<input type="text"/> 1
	<b>Total</b>	<input type="text"/> 15		<b>Total</b>	<input type="text"/> 15

**Sophomore Year (33)**

SA 223	Oral Communication	<input type="text"/> 3	EN 213	Studies in Lit	<input type="text"/> 3
SP 111	Spanish I	<input type="text"/> 3	SP 112	Spanish II	<input type="text"/> 3
EC 201	Principles of Economics I	<input type="text"/> 3	SY 330	Social Psychology	<input type="text"/> 3
SY 335	Juvenile Delinquency	<input type="text"/> 3	HI 226	United States History II	<input type="text"/> 3
_____	Elective	<input type="text"/> 3	SY 301	Rural Sociology	<input type="text"/> 3
			_____	Elective	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> 15		<b>Total</b>	<input type="text"/> 18

**Junior Year (30)**

SS 375	Research Methods	<input type="text"/> 3	SY 399	Sociological Theory	<input type="text"/> 3
_____	Elective	<input type="text"/> 3	SY 419	Criminology	<input type="text"/> 3
SY 349	Sociology of Poverty	<input type="text"/> 3	SY 417	Modern Social Problems	<input type="text"/> 3
SS 307	Statistics	<input type="text"/> 3	SY 408	The Family	<input type="text"/> 3
	Elective	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
	<b>Total</b>	<input type="text"/> 15		<b>Total</b>	<input type="text"/> 15

**Senior Year (27)**

SW 348	Child Welfare	<input type="text"/> 3	SS 476	Social Science Seminar	<input type="text"/> 3
SY 346	Aging and Society	<input type="text"/> 3	SS 473	Social Science Internship	<input type="text"/> 6
SY 365	Racial and Cultural Min	<input type="text"/> 3	_____	Elective	<input type="text"/> 3
SY 429	Afro-American Family	<input type="text"/> 3			<input type="text"/>
GT 323	Public Policy	<input type="text"/> 3			<input type="text"/>
	<b>Total</b>	<input type="text"/> 15		<b>Total</b>	<input type="text"/> 12

**Suggested Electives**

SY 361	Cultural Anthropology	PH 371	Abnormal Psychology
SY 367	Drugs, Alcohol, and Society	PH 132	General Psychology

**COURSE DESCRIPTIONS IN SOCIAL SCIENCE (SS)**

**SS 111 3-0-3 SOCIAL INSTITUTIONS: THEIR NATURE AND CHANGE**

An interdisciplinary course designed to provide a comprehensive introduction to the social sciences. Students are exposed to central concepts and issues in the social sciences. Key topics pursued in this course include: the nature of science, the cultural system, socialization and personality, and society and its subsystems (i.e., family, religion, and education).

**SS 112 3-0-3 SOCIAL INSTITUTIONS: THEIR NATURE AND CHANGE**

A continuation of SS 111. The primary focus of SS 112 is economic and political systems, both domestic and international. Attention is given to identifying and defining key conceptual terms that provide for effective utilization of theoretical and analytical frameworks for understanding economic and political systems.

**SS 307                    3-0-3    STATISTICAL METHODS**

This course is designed to provide students with the basic statistical techniques and methods commonly demanded of college graduates in the today's job markets and in the first year advanced studies. Topics include: data organization, processing and presentation; techniques of quantifying information, scaling and indexing; analytical methods of central tendency and dispersion; various distributions, their major properties applications; regression correlation analysis; and methods of hypothesis testing.

**SS 333                    3-0-3    INTRODUCTION TO LOGIC**

This course is designed to explore the rules of correct thinking in both deductive and inductive logic. The main body of the course is a study of Aristotelian logic and an introduction to modern or symbolic logic.

**SS 347                    3-0-3    ORGANIZATIONAL THEORY AND ANALYSES**

A detailed study of the major social institutions in American society, with special emphasis on their structure, function, interrelationship, in an evolving social order.

**SS 375                    3-0-3    RESEARCH METHODS IN SOCIAL SCIENCES**

Orientation of research, major steps in different types of research, their frame of reference and decision models discussed; related and appropriate statistical methods, mathematical programming and econometric models introduced and evaluated. **Pre-requisite:** Junior Status.

**SS 396                    3-0-3    INTRODUCTION TO PHILOSOPHY**

A survey course of the various fields of philosophical inquiry, including a brief historical sketch of philosophy from its beginning to modern times, and some of the main issues from the various branches of Philosophy (cosmology, psychology, ethics, epistemology, theory, and metaphysics).

**SS 397                    3-0-3    ETHICS**

A study of classical and contemporary moral theory and the implications of these theories for current ethical issues in the area of politics, sociology, medicine, business, and other related fields.

**SS 473                    3-0-3    INTERNSHIP**

A supervised field placement that allows the student to receive on-the-job training with an identified public or private agency. Placement must be arranged with the sanction of the Department of Social Sciences. Application must be made one semester in advance of the internship. A student will be placed in internship based on an evaluation of their readiness per the requirements and **Pre-requisites** of their majors. Student must have exited Academic Support Center and complete all academic requirements through the first semester of their senior year. Student must generate 12 placement hours per week for 3 credit hours. This course is required for Criminal Justice majors. The student must provide own transportation and purchase liability insurance (if required).

**SS 473A                6-0-6    INTERNSHIP**

See description for internship provided in SS 473 above. Application and academic requirements as **Pre-requisites** are the same as identified in SS 473, as are requirements related to transportation and liability insurance. Students must generate 24 placement hours per week for 6 hours credit. This course is required for students with a concentration in Sociology.

**SS 476                    3-0-3    SOCIAL SCIENCE SEMINAR**

A capstone course in the Social Sciences designed for seniors only. It provides a broad holistic understanding of the basic principles and assumptions of social science disciplines. The seminar covers a substantive, reflective and sound examination of the key elements in the America's social, political, and economic process.

**Pre-requisites:** Completion of General Education requirements and graduating senior status. For non-graduating seniors consent of curriculum coordinator or chairperson of the department is required for enrollment.

**SS 485                    3-0-3    SYSTEMIC STRATEGIES IN SOCIAL SCIENCE**

This course provides a pedagogical basis and strategies for classroom instruction in the field of Social Science Education.

## **COURSE DESCRIPTIONS IN SOCIOLOGY (SY)**

### **SY 235            3-0-3    GENERAL SOCIOLOGY**

A course designed to give the basic concepts and generalizations in the field of Sociology with a special emphasis placed on societal beliefs and behavior, culture and socialization, personal growth and development, and a general analysis of major social institutions.

### **SY 302            3-0-3    RURAL SOCIOLOGY**

A study of the structure, population trends, and the changing social institutions of rural America. Special attention will be given to community and economic development of distressed rural communities.

### **SY 330            3-0-3    SOCIAL PSYCHOLOGY**

An introduction to the study of the psychological factors influencing the behavior of persons within group situations, as well as an analysis of the social environment upon personal attitudes, sentiments, values, and action. **Pre-requisite:** SY 235.

### **SY 335            3-0-3    JUVENILE DELINQUENCY**

This course is designed to evaluate some significant causative factors of Juvenile Delinquency as outlined in the literature. Functions of relevant agencies will be examined. **Pre-requisite:** SY 235.

### **SY 346            3-0-3    AGING AND SOCIETY**

A systematic presentation of the field concerning the demographic, health and cultural factors in aging. This course will examine social adjustments of individuals in later stages of the life cycle, including family and associational relationships; the impact of aging in social, economic, and political structures of society; and political measures to promote and support the health and well-being of the senior citizen. **Pre-requisite:** SY 235.

### **SY 349            3-0-3    SOCIOLOGY OF POVERTY**

This course will focus on the nature of poverty and poverty programs in the United States, particularly since the 1960s. Attention will be given to sociological theories that attempt to explain poverty. Key topics include the dimensions of poverty and inequality, the causes of poverty, and policy options addressing the needs of the poor. **Pre-requisite:** SY 235.

### **SY 361            3-0-3    CULTURAL ANTHROPOLOGY**

A survey of the theories of cultural anthropology. A systematic and synoptic study of the major historical contribution of anthropologists. Special attention will be given to concepts of culture, personality, law, order, and social control. **Pre-requisite:** SY 235.

### **SY 365            3-0-3    RACIAL AND CULTURAL MINORITIES**

Origins of minority group and racial attitudes. Biological and cultural concepts of race and minority groups; problems of adjustment in interracial and multiethnic societies. **Pre-requisite:** SY 235.

### **SY 367            3-0-3    DRUGS, ALCOHOL, AND SOCIETY**

This course intends to explore in-depth some aspects of the abuse and misuse of alcohol and the drugs in our society with special emphasis on prevention, treatment, and rehabilitation.

### **SY 399            3-0-3    SOCIOLOGICAL THEORY**

A survey of the growth and development of sociological theory with emphasis on extensive readings of outstanding writers in the field. **Pre-requisite:** SY 235, and at least nine more credit hours in Sociology.

### **SY 408            3-0-3    THE FAMILY**

A course designed to provide an understanding of the origin, foundations and functions of marriage and the family, as well as insights into significant factors influencing the processes and trends in courtship, companionship, marriage and family patterns. **Pre-requisite:** SY 235.

**SY 417                    3-0-3    MODERN SOCIAL PROBLEMS**

The course consists of two parts, (1) current social problems mainly in the United States, and (2) a survey of ideas in social theory for applicability to problems. The theoretical conclusions are discussed as affording guidance in the search for solutions to problems. **Pre-requisite:** SY 235.

**SY 419                    3-0-3    CRIMINOLOGY**

An investigation of the social nature of criminal and delinquent behavior, with particular reference to modern theories of causation, and methods of prevention and treatment. A field trip to a nearby correctional institution is anticipated. **Pre-requisite:** SY 235.

**SY 428                    3-0-3    THE COMMUNITY**

A study of all types of communities - rural and urban, agricultural and industrial - with emphasis on the influence of size, occupation, and culture, upon the structural and functional patterns of community life.

**SY 428                    3-0-3    THE COMMUNITY**

A study of all types of communities - rural and urban, agricultural and industrial - with emphasis on the influence of size, occupation, and culture, upon the structural and functional patterns of community life.

**SY 429                    3-0-3    THE AFRO-AMERICAN FAMILY**

This course is designed to explore many of the socio-cultural and socio-environmental factors that impact African American family life. It examines how the structural and functional characteristics of the larger society directly and indirectly influence what happens in African American families within the context of family as a social institution. It is a course designed to acquaint students with empirical research based on quantitative and qualitative analysis, using simple statistical methods. Extensive written and oral activities are required.

**SY 502                    3-0-3    COMPARATIVE FAMILY SYSTEMS**

This course is designed to acquaint the students with the cross-cultural patterns of family life; the importance and significance of the family and the social interaction involved at various social levels.

**SY 504                    3-0-3    ADVANCED CULTURAL ANTHROPOLOGY**

An analysis and study of the contemporary anthropological theories of culture; a comparison of economic, political, religious, and kinship structure of various societies of the world.

**SY 516                    3-0-3    SOCIAL FOUNDATION OF PERSONALITY**

The impact of social and cultural factors on the growth and development of personality; with emphasis on social status, norms, roles, and social interaction as discussed in various theories of personality development.

**SY 567                    3-0-3    RACIAL AND CULTURAL MINORITIES**

This course will examine and explore race and ethnic relations in American society. It will delve into the historical and cultural heritage of the diverse ethnic groups found in America and around the world. Particular attention will focus on the present day sociological, economic, religious, and political issues and problems that evolve racial relationships across the U.S. Particular attention will be given to recent immigrants and resulting immigration policies and legislation. A deep examination will be conducted that looks at conflicts and issues that arise between ethnic minorities because of competition for resources and differential treatment by the prevailing dominant group.

## Department of Social Work

*Dorothy A. Idleburg, Ph.D., Chairperson*

*Dumas Hall, #204*

*Telephone: (601) 877- 6337*

### SOCIAL WORK

The Department of Social Work is designed to prepare students for entry level social work positions as generalist practitioners as well as make them ready for graduate programs. The Social Work curriculum includes one hundred twenty (120) semester credit hours of course work and field practicum. The curriculum consists of general education requirements, scheduled generally in the freshman and sophomore years; and the major courses, completed in the junior and senior years of study.

The curriculum consists of forty-four (44) hours of general education core requirements. The professional curriculum consists of seventy-six (76) semester credit hours in eight basic Social Work curricular content areas: Social Work Values and Ethics; Diversity; Social and Economic Justice; Populations-at- Risk; Human Behavior in the Social Environment; Social Welfare Policy and Services; Social Work Practice; and Research. The Program is accredited by the Council on Social Work Education. The Department of Social Work does not grant academic credit for life experience(s) or previous employment (including volunteer services).

### Admission Requirements

1. Declaration of social work as a major,
2. Complete forty-four (44) credit hours in the general core curriculum;
3. A minimum cumulative GPA of 2.00 on a scale of 4.00;
4. Completion of SW 230, Introduction to Social Work;
5. Demonstration of an interest in and an aptitude for a career in social work;
6. Submission of social work admission application along with a personal statement of goals, two reference letters and completion of a successful interview with the social work admission committee and;
7. Background Check.
8. TB test

### Graduation Requirements

A student pursuing a degree in the Social Work Curriculum must be accepted into the social work program; complete all major courses with a grade of "C" or better; meet the requirements of the Department of Social Work, pass the Social Work Comprehensive Examination, and Social Work Internship. Students are encouraged to follow the sequential arrangement of the curriculum for a major in social work. Consequently, students are strongly encouraged to remain in close contact with their departmental program advisor. The minimum number of hours required for graduation for a Bachelor of Social Work degree is 120 credit hours.

### Social Work

(120 credit hours)

#### Freshman Year (30)

First Semester		Hrs.	Second Semester		Hrs.
EN 111	Composition I	<input type="checkbox"/> 3	EN 112	Composition II	<input type="checkbox"/> 3
BI 111	Intro to Biology I	<input type="checkbox"/> 3	BI 113	Intro to Environ. Biology	<input type="checkbox"/> 3
		<input type="checkbox"/>	BI 113L	Intro to Environ. Biology Lab	<input type="checkbox"/> 1
GT 101	American Government	<input type="checkbox"/> 3	HI 112	World Civilization II	<input type="checkbox"/> 3
MA 121	College Algebra	<input type="checkbox"/> 3	AR 214	Art Appreciation	<input type="checkbox"/> 3

PE 101	Physical Education or	<input type="checkbox"/>	1	PE 102	Physical Education of	<input type="checkbox"/>	1
MS 101	Fund. of Leadership & Mgt. I	<input type="checkbox"/>	1	MS 102	Fund. of Leadership & Mgt. II	<input type="checkbox"/>	1
UL 101	University Life	<input type="checkbox"/>	<u>1</u>	CS 100	Info. Tech. Proficiency	<input type="checkbox"/>	1
		<input type="checkbox"/>		ND 101	Health Wellness	<input type="checkbox"/>	<u>1</u>
	<b>Total</b>	<input type="checkbox"/>	<b>14</b>		<b>Total</b>	<input type="checkbox"/>	<b>16</b>

### Sophomore Year (30)

EN 213	Studies in Literature	<input type="checkbox"/>	3	SP 112	Spanish II	<input type="checkbox"/>	3
SP 111	Spanish I	<input type="checkbox"/>	3	SY 235	General Sociology	<input type="checkbox"/>	3
SW 230	Intro to Social Work	<input type="checkbox"/>	3	EC 202	Principles of Economics II	<input type="checkbox"/>	3
HI 226	United States History II	<input type="checkbox"/>	3	SW 302	Basic Issues in Mental Health	<input type="checkbox"/>	3
SA 223	Oral Communication	<input type="checkbox"/>	<u>3</u>		Elective	<input type="checkbox"/>	<u>3</u>
	<b>Total</b>	<input type="checkbox"/>	<b>15</b>		<b>Total</b>	<input type="checkbox"/>	<b>15</b>

### Junior Year (33)

SW 375	Research Methods in SW	<input type="checkbox"/>	3	SW 408	Marriage The Family	<input type="checkbox"/>	3
SW 351	Social Work Practice I	<input type="checkbox"/>	3	SW 352	Social Work Practice II	<input type="checkbox"/>	3
SW 365	Cultural Diversity	<input type="checkbox"/>	3	SW 405	Social Welfare Policy Services	<input type="checkbox"/>	3
SW 319	Human Behavior- The Social Environment I	<input type="checkbox"/>	3	SW 362	Skills in Interviewing	<input type="checkbox"/>	3
SS 307	Statistical Methods	<input type="checkbox"/>	<u>3</u>	SW 319	Human Behavior and Social Environment I	<input type="checkbox"/>	3
		<input type="checkbox"/>		SW 360	Community Social Work Practice	<input type="checkbox"/>	<u>3</u>
	<b>Total</b>	<input type="checkbox"/>	<b>15</b>		<b>Total</b>	<input type="checkbox"/>	<b>18</b>

### Senior Year (27)

SW 346	Social Work for the Aging	<input type="checkbox"/>	3	SW 448	Special Topics Professional Development in SW	<input type="checkbox"/>	3
SW 397	Ethics and the Social Work Profession	<input type="checkbox"/>	3	SW 475	Social Work Field Practice Seminar	<input type="checkbox"/>	3
SW 348	Child Welfare	<input type="checkbox"/>	3	SW 473	Social Work Internship	<input type="checkbox"/>	<u>3</u>
SW 412	Case Management	<input type="checkbox"/>	3			<input type="checkbox"/>	
	Elective	<input type="checkbox"/>	<u>3</u>			<input type="checkbox"/>	
	<b>Total</b>	<input type="checkbox"/>	<b>15</b>		<b>Total</b>	<input type="checkbox"/>	<b>12</b>

### Suggested Electives

SW 349	Child Welfare Worker and Court	SY 301	Rural Sociology
SW 409	Mental Health Seminar	SW 367	Drugs, Alcohol, and Society
SW 419	Social Work in Corrections	PH 417	Abnormal Psychology
		SW 429	Social Work Practice with Black Family

### COURSE DESCRIPTIONS IN SOCIAL WORK (SW)

#### SW 230 3-0-3 INTRODUCTION TO SOCIAL WORK

Introductory course dealing with a systematic survey of the historical development of social work from "charity" to definite principles and theories.

#### SW 302 3-0-3 BASIC ISSUES IN MENTAL HEALTH

This course will examine basic issues in the mental health service delivery system. Emphasis will be placed on client rights, mental health laws, goals of mental health systems, and areas of specialization.



**SW 319            3-0-3    HUMAN BEHAVIOR AND SOCIAL ENVIRONMENT I**

Provides the student with current research and knowledge of relationships among human biological, social, psychological, and cultural systems as they affect or are affected by human behavior. **Pre-requisite:** SW 230.

**SW 320            3-0-3    HUMAN BEHAVIOR AND SOCIAL ENVIRONMENT II**

This course uses the person-in-environment focus as it explores relevant issues in life-span development. **Pre-requisite:** SW 319.

**SW 346            3-0-3    SOCIAL WORK FOR THE AGING**

Provides a systematic study of social work approaches to providing services to the aging; current policies, services, and models of practice. **Pre-requisite:** SW 230.

**SW 348            3-0-3    CHILD WELFARE**

This course provides an evaluation of current development in programs for meeting the needs of children. **Pre-requisite:** SW 230 or SY 235 or PH 132

**SW 349            3-0-3    CHILD WELFARE WORKER AND COURT**

This course explores the skills and techniques utilized by social workers who must gather evidence and provide testimony in areas of child abuse and neglect. **Pre-requisite:** SW 230 and SW 319.

**SW 351            3-0-3    SOCIAL WORK PRACTICE I**

This course focuses on problem solving techniques and strategies in case work, group work, and community organization. **Pre-requisite:** SW 230.

**SW 352            3-0-3    SOCIAL WORK PRACTICE II**

Stress on specific therapy techniques used in one-to-one counseling and group therapy. **Pre-requisite:** SW 351.

**SW 360            3-0-3    COMMUNITY SOCIAL WORK PRACTICE**

Introduce students to basic knowledge and skills for stimulating and assisting communities to evaluate, plan and coordinate its efforts to provide for its health, wellness, and recreational needs. **Pre-requisite:** SW 351 and SW 352.

**SW 362            3-0-3    SKILLS IN INTERVIEWING**

This course is designed to help individuals develop skills in conducting a social history, a diagnostic interview and a therapeutic interview. **Pre-requisite:** SW 230 SW 351.

**SW 365            3-0-3    CULTURAL DIVERSITY**

This course prepares students to understand and appreciate client cultural systems, the nature of cultural identity, group membership access to resources, strategies to combat discrimination, oppression and economic deprivation and to promote social and economic justice.

The focus of the course is to present human diversity and population-at-risk content for the academic curriculum at the undergraduate level of social work. **Pre-requisite:** SW 230, SY 235 or junior status.

**SW 367            3-0-3    DRUGS, ALCOHOL AND SOCIETY**

This course focuses on the major issues involved in the prevention, treatment and rehabilitation of substance misuse and abuse in society. **Pre-requisite:** SW 230 or SY 235.

**SW 375            3-0-3    RESEARCH METHODS IN SOCIAL WORK**

This course is designed to introduce students to Social Work values, the research process, problem formulation and conceptualization, measurement, research design and inference, single subject design and practice evaluation, sampling, alternative data gathering techniques and analyses, and uses of research in social work. **Pre-requisite:** SW 230 or SY 235.

**SW 397            3-0-3    ETHICS AND THE SOCIAL WORK PROFESSION**

This course focuses on the moral imagination of social work students, and prepare them for competent and compassionate ethical practice as social work professionals. **Pre-requisite:** SW 230, junior status.

**SW 405            3-0-3    SOCIAL WELFARE POLICY AND SERVICES**

A policy course that introduces students to basic problems of economic insecurity and social welfare in our society with special references to low-income and minorities. **Pre-requisite:** SW 230, junior status.

**SW 408            3-0-3    MARRIAGE AND THE FAMILY**

This course is designed to provide an understanding of the origin, foundations and functions of marriage and the family, as well as insights into significant factors influencing the processes and trends in courtship, companionship, marriage and family patterns. **Pre-requisite:** SW 230 or SY 235.

**SW 409            3-0-3    MENTAL HEALTH SEMINAR**

This course is an interdisciplinary seminar on mental Health. It is designed to prepare students for entry-level professional practice by providing a knowledge base for working with the mentally ill. Attention is given to analysis of theories, methods and techniques for practice. Also addressed are contemporary mental health and professional ethics. **Pre-requisites:** SW 230 or SW 302.

**SW 412            3-0-3    CASE MANAGEMENT**

This course introduces students to skills and techniques for developing, implementing, and monitoring a social service plan to meet the needs of various client populations. **Pre-requisite:** SW 351 or enrolled in SW 473.

**SW 419            3-0-3    SOCIAL WORK IN CORRECTIONS**

This course is designed to prepare social work students for practice in the criminal justice system. The course presents an overview of the criminal justice system while exploring the network of systems which comprise it. **Pre-requisite** SW 230.

**SW 429            3-0-3    SOCIAL WORK PRACTICE WITH BLACK FACULTY**

This course provides a framework for understanding the needs of black families and identifies culturally relevant approaches. **Pre-requisite** SW 230 and SY 235.

**SW 448            3-0-3    SPECIAL TOPICS PROFESSIONAL DEVELOPMENT IN SW**

This course prepares students for generalist social work practice by focusing on the integration and application of social work knowledge, skills, values and ethics. **Pre-requisite:** SW 230, SW 352 and Junior/senior status.

**SW 473            6-0-6    SOCIAL WORK INTERNSHIP**

The Social Work internship provides a supervised field placement with an approved public or private entity. **Pre-requisite:** senior status and permission of the instructor. Graduating Senior Only.

**SW 475            3-0-3    SOCIAL WORK FIELD PRACTICE SEMINAR**

Field Practice Seminar provides a forum for the discussion of the integration of the of the BSW foundation courses into the students' practice in the field. **Pre-requisite:** senior status and permission of the instructor. Approval for Internship and Graduating Senior.



***School of Business***

## **SCHOOL OF BUSINESS**

*Donna M. Williams, Ph.D., Interim Dean*

*Chair-Undergraduate Programs*

*School of Business - Lorman Campus*

*Telephone: (601) 877-6450*

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The School of Business offers the undergraduate Bachelor of Science degree in both Accounting and Business Administration. The School also offers the Master of Business Administration (MBA) degree. All programs of the School of Business are accredited by the Accreditation Council for Business Schools and Programs (ACBSP). The details of the MBA program are contained in the School of Graduate Studies section of this catalog.

### **Mission**

The School of Business strives to prepare graduates who will be well-rounded future leaders of high character who will be competitive in the global marketplace of the 21<sup>st</sup> century.

### **Program Goals**

- Students completing the Undergraduate program will be:
- Knowledgeable in functional areas of business
- Effective communicators (oral and written)
- Critical analytical thinkers
- Integrative thinkers

### **Student Activities**

Business students with junior standing and an overall GPA above 3.25 are eligible for membership in Delta Mu Delta National Honor Society. Other organizations that students may participate are Entrepreneurial Action in Us (ENACTUS), the National Association of Black Accountants (NABA), and student membership in the Institute of Management Accountants.

### **School of Business Undergraduate Program Information**

Students declaring a major in one of the undergraduate degrees offered by the Alcorn School of Business (ASB) are assigned an ASB faculty advisor upon initial enrollment in the University. Declared ASB majors are required to receive formal academic advising from their assigned ASB advisor prior to registering for any course in any subsequent semester. To assure each student's successful academic performance as well as progress towards degree, ASB implements mandatory, faculty-student academic advising. Thus, early meaningful contact between ASB students and ASB faculty are important established systems to ensure the building of rich faculty-student relationships, rigorous course completion, and robust retention.

Prior to enrolling in any upper division business course (300 and 400 level), students pursuing a degree offered by the School of Business must complete the following requirements:

- Must complete all University College requirements,
- Must be advised by the University College advisor,
- Must have a minimum overall grade point average of 2.00, and
- Must have a minimum grade of "C" in each of the following courses:

English 111, English 112, Math 121, Math 223, Accounting 213, Accounting 214, Principles of Economics I 201, Principles of Economics II 202, and Speech Arts 223. Students not yet released from the University College who wish to enroll in any upper division business course must have the written permission of the Chair for undergraduate programs or their academic advisor.

## Requirements for School of Business Degree

	<b>Accounting</b>	<b>Bus. Admin.</b>
1. Complete the University's General Education Core	32 hrs.	32 hrs.
2. Unrestricted electives <sup>1</sup>	6 hrs.	6 hrs.
3. Restricted Business Core	46 hrs.	46 hrs.
4. Complete the School of Business Degree Specific Courses	<u>36 hrs.</u>	<u>36 hrs.</u>
5. Maximum Total Semester Hours Required for Graduation	120 hrs.	120 hrs.
6. At least 50 percent of the business credit hours required for the business degree must be earned at Alcorn State University		
7. Student must earn a "C" in all business core and major courses		

<sup>1</sup>Unrestricted electives should be completed in the lower division, i.e., at the 100 or 200 level. All electives must be approved by the student's ASB faculty advisor.

### School of Business Core Courses — 46 Semester Hours

<b>Course</b>	<b>Hrs.</b>	<b>Course</b>	<b>Hrs.</b>
AC 213 Principles of Financial Accounting	3	BA 499 Seminar in Business (2)	1
AC 214 Principles of Managerial Accounting	3	EN 351 Technical Writing	3
BA 233 Business Computer Applications I	3	FI 301 Principles of Finance	3
BA 237 Legal Environment of Business	3	MA 223 Intro. to Analysis w/App.	3
BA 239 Business Ethics	3	MG 301 Principles of Management	3
BA 303 International Business	3	MG 496 Strategic Management (2)	3
BA 376 Business Communications	3	MK 301 Principles of Marketing	3
BA 433 Business Information Systems (1)	3	SS 307 Statistical Methods	3

- Accounting majors should take AC 338 Accounting Information Systems in lieu of BA 433.
- MG 496 and BA 499 must be taken in the student's last semester to receive credit towards graduation.

Students who pursue a double "major" in Accounting and Business Administration must fulfill requirements for both majors (entire curriculum), without using the same classes for 'major' requirements.

### University General Education Core

Refer to the General Catalog section entitled "General Education Core" contained in the chapter entitled "Academic Regulations and Procedures: Undergraduate" for details.

Students pursuing a degree offered by the ASB are required to complete the following courses in the University General Education Core:

- English (6 hours) EN 111 EN 112 or EN 191 EN 192
- Creative Arts (9 hours) SA 223 and EN 213 and other listed course
- Social Sciences (6 hours) EC 201 and EC 202
- Natural/Physical Sciences (6 hours) PY 111 plus any other listed course
- Mathematics (3 hours) MA 121
- Health Wellness (1 hour) any listed course
- University Life (1 hour) any listed course

### First and Second Year Schedules

Students planning to obtain a degree from the School of Business should take the following courses in the sequence shown. Deviations from this schedule can result in delayed release from the University College, delays in taking upper division business courses, and ultimately delayed graduation.

## Freshman Year

First Semester		Hrs.	Second Semester		Hrs.
PY 111	Physical Science I	<input type="text"/>	3	BI 111 <sup>1</sup>	<input type="text"/>
AR 214	Art Appreciation	<input type="text"/>	3	100/200	<input type="text"/>
	or			HI, SS, SY, PH	<input type="text"/>
MU 213	Music Appreciation	<input type="text"/>	3	MA 121	<input type="text"/>
100/200	HI, SS, SY, PH	<input type="text"/>	3	EN 112	<input type="text"/>
EN 111	Composition I	<input type="text"/>	3	BA 133	<input type="text"/>
UL 101	University Life	<input type="text"/>	1	Bus. Computer Appl. I	<input type="text"/>
ND 101	Health Wellness	<input type="text"/>	1		<input type="text"/>
	<b>Total</b>	<input type="text"/>	<b>14</b>	<b>Total</b>	<input type="text"/>
					<b>15</b>

## Sophomore Year

AC 213	Principles of Financial Accounting	<input type="text"/>	3	AC 214	Principles of Management Accounting	<input type="text"/>	3
EC 201	Principles of Economics I	<input type="text"/>	3	EC 202	Principles of Economics II	<input type="text"/>	3
BA 237	Legal Environment of Business	<input type="text"/>	3	BA 239	Business Ethics	<input type="text"/>	3
MA 223	Intro. to Analysis w/App.	<input type="text"/>	3	SA 223	Oral Communication	<input type="text"/>	3
BA 233	Business Computer Applications	<input type="text"/>	3	EN 213	Studies in Literature	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>15</b>	<b>Total</b>		<input type="text"/>	<b>15</b>

## Bachelor of Business Administration

### Junior Year

EN 351	Technical Writing	<input type="text"/>	3	BA 376	Business Communication	<input type="text"/>	3
SS 307	Statistical Methods	<input type="text"/>	3	FI 301	Principles of Finance	<input type="text"/>	3
MK 301	Principles of Marketing	<input type="text"/>	3	MG 378	Entrepreneurship	<input type="text"/>	3
MG 301	Principles of Management	<input type="text"/>	3	300/400	Business Elective II	<input type="text"/>	3
300/400	Business Elective I	<input type="text"/>	3	300/400	Business Elective III	<input type="text"/>	3
	<b>Total</b>	<input type="text"/>	<b>15</b>	<b>Total</b>		<input type="text"/>	<b>15</b>

### Senior Year

BA 303	International Business	<input type="text"/>	3	BA 499	Business Adm. Seminar	<input type="text"/>	1
FI 409	Financial Management	<input type="text"/>	3	MG 496	Strategic Management	<input type="text"/>	3
MG 320	Organizational Behavior	<input type="text"/>	3	MG 401	Operations Management	<input type="text"/>	3
MK 483	Consumer Behavior	<input type="text"/>	3	BA 433	Business Information System	<input type="text"/>	3
300/400	Business Elective IV	<input type="text"/>	3	300/400	Business Elective V	<input type="text"/>	3
		<input type="text"/>		Business Elective VI	<input type="text"/>	3	
	<b>Total</b>	<input type="text"/>	<b>15</b>	<b>Total</b>		<input type="text"/>	<b>16</b>

<sup>1</sup>Transfer students may complete the science requirement with a minimum of two (2) three-credit hour science courses.

<sup>2</sup>Students must select restricted non-business electives in conjunction with their School of Business Advisor. Electives taken without School of Business approval may not be applied towards graduation requirements at the discretion of the Advisor and Chair.

The pace of business, both nationally and globally, creates an unprecedented demand for well- prepared business school graduates. The competition among employers for highly skilled graduates is intense and increasing. However, business employers demand a wider range of knowledge, skills and abilities from today's graduates. Employers expect today's business school graduates to make immediate and valuable contributions to their companies. In addition to technical competence in the traditional areas of business, students today must possess leadership ability, the ability to work in and lead multi-functional teams, high-level oral and written communication proficiency, and a high level of competence in a broad range of information technology skills.

The business administration degree prepares graduates to enter the fast paced, technology-driven workplace at the appropriate level of competency, responsibility, and compensation, or to continue their education in graduate or professional school. The breadth of Business Electives in the curriculum allows students wide latitude in customizing a business degree tailored to meet their specific career goals and objectives. Early meaningful contact between BSBA students and School of Business faculty is an important element of timely graduation and career goal fulfillment.

Students pursuing a degree in Business Administration are required to complete the following 33 hours of course work in addition to meeting other School of Business requirements.

MG 378	Entrepreneurship	3 hrs.
MG 320	Organizational Behavior	3 hrs.
MG 401	Operations Management	3 hrs.
FI 409	Financial Management	3 hrs.
MK 483	Consumer Behavior	3 hrs.
	Business Electives	<u>18 hrs.</u>
	<b>Total Semester Hours</b>	<b>33 hrs.</b>

All electives taken by the student, both business and unrestricted, require prior approval by the student's assigned School of Business faculty advisor. The student's advising record must indicate such approval. Failure to obtain advisor approval of electives may result in appropriate action.

<sup>1</sup>Students focusing on Business Analytics may take 300/400 Computer Science level courses in the place of two (2) Restricted Business Electives.

### **Bachelor of Science in Accounting**

Continued expansion at companies nationwide is creating strong demand for properly prepared accounting graduates. Businesses are seeking accountants at all levels that can provide the support and analysis required to accomplish their firms' strategic initiatives. Accountants are becoming more involved in project teams throughout their organizations, from groups that help determine new technology requirements to those focused on cost-cutting measures. This trend has intensified the need for not only a solid foundation in accounting, but also strong leadership, problem-solving, and written and verbal communication skills.

Competition between businesses for accounting graduates is intense and increasing. Career progression to senior level positions such as Chief Financial Officer, Vice President of Finance, Chief Executive Officer, Treasurer and Corporate Controller can be achieved. The purpose of the undergraduate professional accounting program is to prepare our students for entry level professional positions in either the public or private sectors. A graduate degree has become increasingly important for entry into or progression beyond most entry level accounting positions. Accordingly, the accounting degree program places strong emphasis on preparing our students for graduate school.

While our accounting graduates are prepared for the many available entry-level professional positions in both industry and government, our curriculum's primary emphasis is on preparing graduates for entry into the public accounting profession via graduate education. Students pursuing a degree in Accounting are required to meet all other School of Business requirements and to complete 30 semester hours in the accounting as follows:

AC 315	Intermediate Accounting I	(Fall)	3 hrs.
AC 316	Intermediate Accounting II	(Spring)	3 hrs.
AC 338	Accounting Information Systems		3 hrs.
AC 355	Cost/Managerial Accounting	(Spring)	3 hrs.
AC 356	Non-Profit Org. Accounting	(Spring)	3 hrs.
AC 385	Income Tax Accounting I	(Fall)	3 hrs.
AC 427	Advanced Accounting I	(Fall)	3 hrs.

AC 428	Advanced Accounting II	(Spring)	3 hrs.
AC 478	Auditing	(Spring)	3 hrs.
BA 437	Business Law		<u>3 hrs.</u>
<b>Total Semester Hours</b>			<b>30 hrs.</b>

### Junior Year

First Semester		Hrs.	Second Semester		Hrs.
AC 315	Intermediate Accounting I	<input type="checkbox"/> 3	AC 316	Intermediate Accounting II	<input type="checkbox"/> 3
AC 385	Income Tax Accounting I	<input type="checkbox"/> 3	AC 355	Cost/Managerial Accounting	<input type="checkbox"/> 3
SS 307	Statistical Methods	<input type="checkbox"/> 3	AC 356	Non-Profit Org. Accounting	<input type="checkbox"/> 3
MK 301	Principles of Marketing	<input type="checkbox"/> 3	BA 376	Business Communication	<input type="checkbox"/> 3
MG 301	Principles of Management	<input type="checkbox"/> <u>3</u>	FI 301	Principles of Finance	<input type="checkbox"/> <u>3</u>
<b>Total</b>		<input type="checkbox"/> <b>15</b>	<b>Total</b>		<input type="checkbox"/> <b>15</b>

### Senior Year

EN 351	Technical Writing	<input type="checkbox"/> 3	BA 499	Seminar in Business	<input type="checkbox"/> 1
BA 303	International Business	<input type="checkbox"/> 3	MG 496	Strategic Management	<input type="checkbox"/> 3
AC 338	Accounting Information Systems	<input type="checkbox"/> 3	AC 428	Advanced Accounting II	<input type="checkbox"/> 3
AC 427	Advanced Accounting I	<input type="checkbox"/> 3	AC 478	Auditing	<input type="checkbox"/> 3
300/400	Restricted Acc/Bus Elective	<input type="checkbox"/> <u>3</u>	BA 437	Business Law	<input type="checkbox"/> 3
<b>Total</b>		<input type="checkbox"/> <b>15</b>	300/400	Restricted Bus. Elective	<input type="checkbox"/> <u>3</u>
			<b>Total</b>		<input type="checkbox"/> <b>16</b>

## COURSE DESCRIPTIONS IN ACCOUNTING (AC)

### AC 212 3-0-3 ACCOUNTING SURVEY

The purpose of this course is to provide the student with basic financial and managerial accounting skills, knowledge and abilities that will enable the student to effectively use general purpose financial statements prepared in conformity with Generally Accepted Accounting Principles as a fundamental element in the students business management decision making process. Emphasis is on understanding the meaning and value of the balance sheet, income statement, statement of cash flows, budget and cost concepts. **Pre-requisite:** open enrollment

### AC 213 3-0-3 PRINCIPLES OF FINANCIAL ACCOUNTING

The purpose of this course is to provide the student with the basic financial accounting skills, knowledge, and abilities that will enable him/her to effectively use general purpose financial statements prepared in conformity with Generally Accepted Accounting Principles as a fundamental element in the student's business management decision making process. Emphasis is on understanding the meaning and value of the balance sheet, income statement, and statement of cash flows, **Pre-requisite:** open enrollment

### AC 214 3-0-3 PRINCIPLES OF MANAGERIAL ACCOUNTING

The purpose of this course is to provide the student with the basic managerial accounting skills, knowledge, and abilities that will enable him/her to use managerial accounting information as a basic element in the student's business management decision-making process. **Pre-requisite:** AC 213.

### AC 315 3-0-3 INTERMEDIATE ACCOUNTING I

Intermediate Accounting I is the first of a two course sequence in accounting. The purpose of the course is to provide the student with the advanced level of knowledge, skills, and abilities needed to effectively apply Generally Accepted Accounting Principles to the process of preparing and presenting general-purpose financial statements Students must concurrently enroll in AC 338 Accounting Information Systems.

**Pre-requisite:** AC 214.



**AC 316            3-0-3    INTERMEDIATE ACCOUNTING II**

Intermediate Accounting II is the second of a two-course sequence in accounting. The purpose of the course is to provide the student with the advanced level of knowledge, skills, and abilities needed to effectively apply Generally Accepted Accounting Principles to the process of preparing and presenting general purpose financial statements **Pre-requisite: AC 315.**

**AC 338            3-0-3    ACCOUNTING INFORMATION SYSTEMS  
(Required for Accounting Majors)**

This course examines the capture, processing, storage, and retrieval of financial transactions and reporting through the accounting cycle. Relational data structures and computerized accounting systems are explored through the use of desktop database applications. The course also enumerates financial control mechanisms and practices in accounting information systems. **Pre-requisite: AC 214.**

**AC 355            3-0-3    COST/MANAGERIAL ACCOUNTING**

The purpose of this course is to provide students with the level of knowledge and skills needed to apply cost/managerial accounting principles in the process of preparing, presenting, and interpreting management reports and behavioral issues. This course deals with topics in corporate financial management, working capital, strategic issues in corporate financing, planning, and control, and performance evaluation. **Pre-requisite: AC 214.**

**AC 356            3-0-3    NON-PROFIT ORGANIZATION ACCOUNTING**

This course provides a basic knowledge in the theory and practice of accounting as it relates to state and local governments, colleges and universities, health care providers, and other not-for-profit entities. **Pre-requisite: AC 214.**

**AC 385            3-0-3    INCOME TAX ACCOUNTING I**

The purpose of this course is to provide the student with the level of knowledge of Federal Income Tax laws and regulations needed to effectively assess the effect of those laws and regulations in the process of solving complex, multidimensional business management problems. **Pre-requisite: AC 214.**

**AC 386            3-0-3    INCOME TAX ACCOUNTING II**

Studies in federal tax laws and related issues concerning the tax treatment of partnerships, limited liability companies (L.L.C.), corporations, gifts, estates, and trusts. **Pre-requisite: AC 385.**

**AC 427            3-0-3    ADVANCED ACCOUNTING I**

The course covers advanced topics in financial accounting including dilutive securities and earnings per share, theory of revenue recognition, income taxes, pensions and post-retirement benefits, leases, changes and error analysis, cash flows, and full disclosure in financial reporting. **Pre-requisite: AC 316.**

**AC 428            3-0-3    ADVANCED ACCOUNTING II**

The course covers formation, operations, termination and liquidation of partnerships; accounting for investments; consolidated financial reporting; and, reporting foreign currency transactions and hedging foreign exchange risk exposure. **Pre-requisite: AC 427.**

**AC 478            3-0-3    AUDITING**

The purpose of this course is to provide the student with the basic level of knowledge, skills, and abilities needed to effectively apply Generally Accepted Auditing Standards to the process of auditing and reporting on general-purpose financial statements. **Pre-requisite: AC 316.**

**AC 480            3-0-3    SEMINAR IN MANAGERIAL ACCOUNTING/FINANCE**

The purpose of this course is to ensure that students majoring in Accounting develop appropriate knowledge, skill, and abilities in innovative managerial accounting/finance trends and techniques that are not covered elsewhere in the accounting curriculum due to the time lag between implementation of "best practices" in managerial accounting/finance and subsequent textbook coverage. **Pre-requisite: Senior standing, Pre-requisite: AC 316, AC 338, AC 355, AC 427. Must be taken during the last semester.**

## **COURSE DESCRIPTIONS IN BUSINESS ADMINISTRATION (BA)**

### **BA 133            3-0-3    INTRODUCTION TO BUSINESS COMPUTER APPLICATIONS**

A hands-on course where students will learn and practice the four most popular programs within the Microsoft Office Suite (Word, Excel, Access, and PowerPoint). Upon successful completion, students will be an intermediate level user of the Microsoft Office Suite. **Pre-requisite:** open enrollment

### **BA 233            3-0-3    BUSINESS COMPUTER APPLICATIONS I**

This course is to provide students with the knowledge and skills needed to use microcomputers in the process of solving complex problems encountered in a network business setting. This course is restricted to business students.

### **BA 226            3-0-3    INTRODUCTION TO SMALL BUSINESS DEVELOPMENT**

This is a practical hands-on business course designed for students interested in starting their own business. This course is offered for non-business majors to provide overviews of the key foundational areas such as accounting, economics, management, marketing, strategy, etc. The course focuses on the steps necessary to create, maintain, modify and market the new business from a small business owner perspective. Students will develop a business plan, find ways to secure financing and learn marketing techniques. The course will utilize Microsoft Office (MS Excel, PowerPoint and Word) to create a business plan. **Pre-requisite:** open enrollment.

### **BA 237            3-0-3    LEGAL ENVIRONMENT OF BUSINESS**

This course introduces the legal environment and provides a study of the interaction between the business community and the legal environment through a systematic analysis, including cases, of the procedural and substantive rules of law with special emphasis placed on the jurisprudence governing commercial law, criminal law, agency law, torts, and property. Business ethics are also considered. **Pre-requisite:** open enrollment.

### **BA 239            3-0-3    BUSINESS ETHICS**

This course will focus on ethical decision making within organizations and is designed to increase sensitivity to ethical issues in business. Decision making on the individual and organizational level will be included. How businesses can alter their organizational culture to encourage ethical behavior on all levels in the organization will be discussed. The importance of business ethics to the stability and profitability of business organizations will be examined. **Pre-requisite:** open enrollment

### **BA 303            3-0-3    INTERNATIONAL BUSINESS**

The purpose of this course is to provide students with knowledge, skills, related to the global business environment needed to function effectively as a decision maker in a modern international business enterprise. **Pre-requisites:** MK 301 and MG 301, junior classification.

### **BA 376            3-0-3    COMMUNICATION MANAGEMENT**

This course is designed to concentrate on the interpersonal communication process between managers and employees, especially in a global society. This course will also concentrate on the oral presentation and written communication skills. **Pre-requisite:** EN 111, EN 113.

### **BA 390            3-0-3    BUSINESS INTERNSHIP I**

The purpose of this course is to improve the student's understanding of business operations by learning the applicability and relevance of the knowledge, skills, and abilities developed in the classroom through appropriate work experience. The work experience must be pre-approved by the Associate Dean, must meet criteria established by the faculty, School of Business and must include a minimum of 200 work hours. **Pre-requisite:** Junior Standing, Consent of the Instructor. **Pre-requisite:** Junior or declared business major

### **BA 433            3-0-3    BUSINESS INFORMATION SYSTEMS**

The purpose of this course is to provide the student with the appropriate level of knowledge, skills, and abilities required to apply business computer information systems to the process of solving complex, multi-dimensional business management problems. **Pre-requisites:** BA 233, and Junior classification.

**BA 437            3-0-3    BUSINESS LAW**

Property law, advanced contracts law, Uniform Commercial Code topics including sales, negotiable instruments/commercial paper, and secured transactions. Students who have taken BA 237 Legal Environment of Business may not substitute it for BA 437 Business Law. **Pre-requisite:** BA 237

**BA 439            3-0-3    SPORTS AND ENTERTAINMENT LAW**

Sports and entertainment laws and their attendant legal issues relating to the operation and regulation of the sport and entertainment industry are analyzed. An overview of relevant legal principles and business models and rules governing the sports industry are considered. Thus, laws and internal regulations of professionals, contracts law, antitrust and labor laws, personal injury and risk management, and intellectual property, namely national copyright and trademarks are reviewed. **Pre-requisite:** Junior or Senior Standing.

**BA 490            3-0-3    BUSINESS INTERNSHIP II**

The purpose of this course is to improve the student's understanding of business operations by learning the applicability and relevance of the knowledge, skills and abilities developed in the classroom through appropriate work experience. The work experience must be pre-approved by the Associate Dean, must meet criteria established by the faculty, School of Business and must include a minimum of 200 work hours. **Pre-requisite:** BA 390, Junior or declared business major

**BA 491            3-0-3    INDEPENDENT RESEARCH**

This course provides an opportunity to investigate an area of specialty under the supervision of a designated faculty member. **Pre-requisites:** Junior classification, and the consent of instructor.

**BA 492            3-0-3    CURRENT ISSUES IN BUSINESS**

This course offers discussions of current issues in Business dealing with important issues pertaining to efficient management of organizations. Issues dealing with the development of leadership skills are to be addressed. Specific topics are to be selected by the instructor and may vary each semester. **Pre-requisite:** MG 301, junior classification.

**BA 496            3-0-3    BUSINESS POLICY**

Students play the role of top management in formulating business policy using cases drawn from situations in business and industry. It is intended to give students an opportunity to integrate knowledge acquired in the functional areas of business. **Pre-requisite:** Senior standing or consent of instructor.

**BA 499            1-0-1    BUSINESS ADMINISTRATION COMPREHENSIVE SEMINAR**

Required of all school of business majors in their last semester. The course is an intensive review of a wide range of business topics representative of the business core. The course is designed to prepare the student for the mandatory exit exam given during the student's final semester. Co-requisite: MG 496.

**COURSE DESCRIPTIONS IN FINANCE (FI)****FI 200            3-0-3    PERSONAL FINANCE**

This course introduces students to issues affecting financial behaviors and attitudes of individuals. Emphasis is on the fundamentals of personal financial planning and basic financial activities- borrowing sources/costs: financial aid, auto, property, life insurance, home ownership financing, personal investments and retirement strategy and long-range personal financial planning. **Pre-requisites:** Freshman, and Sophomore standing.

**FI 301            3-0-3    PRINCIPLES OF FINANCE**

This course will introduce students to basic concepts of finance. Topics such as ratio analysis, risk and return, time-value of money, stocks and bonds valuation, cost of capital, cash flow estimation, capital budgeting, capital structure, dividend policy, financial forecasting, and hybrid financing are covered in this course. **Pre-requisites:** MA 121, EC 201 or 202, AC 213 or 214.

**FI 305                    3-0-3    FINANCIAL INSTITUTION AND MARKETS**

This course will offer a study of Federal Reserve System, various financial institutions and markets, their sources and uses of funds with emphasis on the analysis of the nature of their credits and their role on economic activity. The course will also offer analysis of relationships or interactions between the United States financial systems and those of other nations. **Pre-requisite:** FI 301.

**FI 321                    3-0-3    INTERNATIONAL FINANCIAL MANAGEMENT**

This course is a study of principles and practices guiding financial management of the multinational entities. Emphasis is placed on factors that differentiate multinational enterprises from domestic financial management. **Pre-requisite:** FI 301.

**FI 409                    3-0-3    FINANCIAL MANAGEMENT**

Financial management study includes logical framework for blending theory and practice- the acquisition, management, and financing of resources including theories and tools utilized by financial manager both in domestic and international environment. Review of the field of finance will be revisited. Topics covered include financial analysis, forecasting and budgeting, time value of money, sources and uses of capital, corporate financial policies and strategies, financial structure, and financial conditions in management decision making. **Pre-requisite:** FI 301

**FI 425                    3-0-3    INVESTMENTS**

A study to provide students with an understanding of investment environments in the United States and international security markets, knowledge of valuations of various investment instruments, including stocks, bonds, options, and futures. Other topics discussed in this course include efficient market hypothesis, asset pricing theory, portfolio management, asset valuation, fundamental and technical analysis, performance evaluation, and international diversification. **Pre-requisite:** FI 301

**FI 451                    3-0-3    INSURANCE AND RISK MANAGEMENT**

A study of the field of insurance and risk management as it applies to individuals and businesses. The needs and purposes of insurance and risk management are emphasized. **Pre-requisite:** FI 301.

**FI 468                    3-0-3    REAL ESTATE FINANCE**

A study of the principles and procedures applied in the operation of the real estate business. The topics discussed include: real estate brokerage, advertising, selling, deeds, titles, mortgages, liens, leases, taxes, contact, valuations, financing and investments. **Pre-requisite:** FI 301.

**FI 475                    3-0-3    INCOME PROPERTY VALUATION**

A study of principles and methods of financing real estate, sources of funds and analytical techniques for making investment decisions. **Pre-requisite:** FI 468.

**FI 478                    3-0-3    REAL ESTATE VALUATION AND APPRAISAL OF RESIDENTIAL PROPERTY**

A study of the theory and practice as applied to residential property. FI 468 or consent of instructor.

**FI 480                    3-0-3    FINANCIAL STATEMENT ANALYSIS**

A comprehensive study of financial statements to aid in the financial decision making process. The strategy of financial statement analysis will also be covered. **Pre-requisite:** FI 301.

**FI 492                    3-0-3    FINANCIAL DERIVATIVES- FUTURES, OPTIONS, SWAPS, ETC.**

A study of concepts, products, management, and markets for financial derivatives. Strategies of risk management and the construction of derivative securities will also be covered. **Pre-requisite:** FI 301.

**FI 495                    3-0-3    SPECIAL TOPICS IN FINANCE**

A study of contemporary issues in the field of finance. **Pre-requisite:** Senior standing and permission of the instructor.

## **COURSE DESCRIPTIONS IN MANAGEMENT (MG)**

### **MG 301            3-0-3    PRINCIPLES OF MANAGEMENT**

Course familiarizes students with current management concepts and practices as they apply to today's business world and examines the manager's role within the organization and the current business environment. **Pre-requisite:** EN 111 and 112, Junior Standing

### **MG 320            3-0-3    ORGANIZATIONAL BEHAVIOR**

Course examines individual, group, and organizational level behavioral concepts, techniques, and applications required of effective managers within all types of organizations. **Pre-requisite:** MG 301.

### **MG 378            3-0-3    ENTREPRENEURSHIP**

Entrepreneurship identifies the management skills necessary for starting, buying, or working for a business with high growth potential. Areas address include the positives and negatives of starting a business, researching, and developing a business concept; investigating market factors; and planning financial strategies. Student will evaluate business ideas and develop a written feasibility plan. **Pre-requisite:** MG 301.

### **MG 388            3-0-3    HUMAN RESOURCE MANAGEMENT**

Course presents a broad introduction to the nature, policies, and practices of personnel administration by examining the organization's internal and external environment. **Pre-requisite:** MG 301.

### **MG 401            3-0-3    OPERATIONS MANAGEMENT**

An introduction to various components of the production and operations functions in both manufacturing and service organizations. Operations management is viewed as a system, as an organizational function, and as a decision-making support system. **Pre-requisite:** MG 301, MA223, Junior Standing.

### **MG 409            3-0-3    MANAGEMENT SCIENCE**

The purpose of this course is to equip the student with the appropriate level of knowledge, skills and abilities in management science. Students are expected to demonstrate competence in topics as linear programming, transportation and assignment algorithms, PERT and Gantt, inventory models, decision theory, markov models, queuing theory and simulation. **Pre-requisite:** MA 223, SS 307.

### **MG 421            3-0-3    ORGANIZATIONAL STRUCTURE AND DESIGN**

This course is designed for the student to understand the variety of ways in organizing companies in various environments. Theories of organizational design will be summarized. The application, strengths, and weaknesses of different organizational structures will be studied. **Pre-requisite:** MG 301.

### **MG 457            3-0-3    SMALL BUSINESS MANAGEMENT**

The purpose of this course is to provide the student with appropriate knowledge, skill, and abilities needed to effectively create and operate a small business entity. **Pre-requisite:** Senior Standing, MG 301.

### **MG 496            3-0-3    STRATEGIC MANAGEMENT**

The capstone course for all School of Business majors, this course requires the student to demonstrate competency in the ability to apply the knowledge skills and abilities developed in prior course work to the analysis of company and industry performance and in formulating business policy. Note: This course will count towards graduation requirements of the School of Business Only if taken in the last semester of course work. **Pre-requisite:** Senior Standing; Co-requisite: BA 499.

## **COURSE DESCRIPTIONS IN MARKETING (MK)**

### **MK 301            3-0-3    PRINCIPLES OF MARKETING**

An introductory course in marketing and marketing strategy designed to provide instruction in the basic elements of the marketing including: principles and operations, macro-marketing, societal marketing, marketing ethics, the marketing concept and orientation, marketing environments, marketing strategy, the elements of the marketing mix, segmentation, target marketing and international issues. **Pre-requisite:** EN 111 and 112, Junior Standing.

### **MK 303            3-0-3    INTERNATIONAL MARKETING**

The theory, policy and practice of International trade including the strategic and tactical implications applied to cross-national differences in cultures, social processes, political processes, and economic systems. An emphasis is placed on approaches to initiating and expanding international trade and the challenges of managing cross-national and multinational marketing programs. **Pre-requisite:** MK 301.

### **MK 315            3-0-3    RETAILING**

Practical issues in retailing and the application of retailing theory to the management and administration of retail organization are studied. Some of these issues include market segmentation of retail customers, retail strategy, types of retail outlets, store atmospherics, design and layout, store location, consumer retail shopping behavior, customer relationship management, Yield management, merchandise planning and management, marketing communications, customer service and budgeting. **Pre-requisite:** MK 301.

### **MK 325            3-0-3    SALESMANSHIP**

This course addresses the various theories of sales and selling, opportunities in personnel selling. The course examines the traditional tasks of prospecting, lead generation, pre-approach, approach, presentation, handling objections and closing techniques, account management, and time management. The course explores the principles of sales force management including sales force planning, job qualifications, compensation systems, recruitment, selection, training, motivation, quotas, organization of the sales force, matching to customers, linking sales efforts to organizational goals, and accountability. **Pre-requisite:** MK 301.

### **MK 477            3-0-3    MARKETING MANAGEMENT**

The course covers an application of marketing functions using strategic planning techniques to affect market change. It includes a SWOT analysis and the development of a marketing plan. This course generally involves a major project. **Pre-requisites:** MK 301, Senior standing.

### **MK 483            3-0-3    CONSUMER BEHAVIOR**

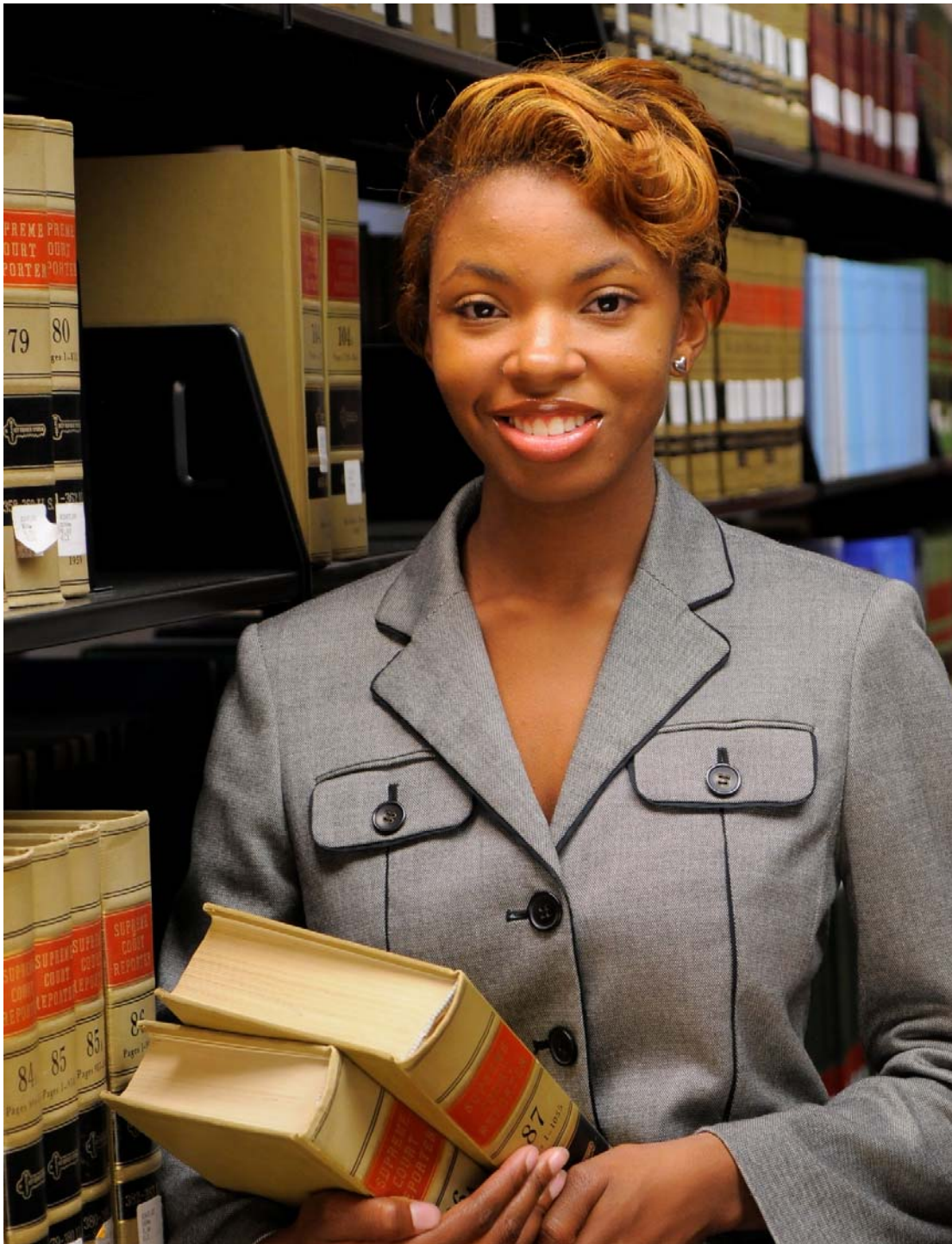
Consumer Behavior analyzes and studies the decision processes and acts of people involved in buying and using products including: why consumers make the purchases that they make, what factors influence consumer purchases, the changing factors in our society. A firm needs to analyze buying behavior for: Buyers reactions to a firms marketing strategy has a great impact on the firms' success. The marketing concept stresses that a firm should create a Marketing Mix (MM) that satisfies (gives utility to) customers, therefore need to analyze the what, where, when and how consumers buy. Marketers can better predict how consumers will respond to marketing strategies. **Pre-requisite:** MK 301.

### **MK 490            3-0-3    MARKET RESEARCH**

This course includes the study of basic research methods and techniques and their applications to marketing situation and issues. They include the acquisition and use of primary and secondary data, the primary research techniques of participant and non-participant observation, field and laboratory experiments, structured and unstructured interviews, questionnaires, sampling, and basic statistical data analysis, and research report writing and presentations. **Pre-requisite:** MK 301.

### **MK 495            3-0-3    MARKETING SEMINAR**

A study of marketing theory as it relates to the sports industry, based on an examination of basic marketing principles as they apply to a variety of sports organizations. The course content will include the sports marketing mix, segmenting the sports market, positioning teams and individual athletes, sponsorships, endorsements, licensing, legal and ethical issues. Examples will cover a wide range of sports including baseball, football, basketball, soccer, tennis, racing, golf and extreme sports. This course is designed for business and non-business majors. **Pre-requisite:** MK 301.



# *School of Education*

# **SCHOOL OF EDUCATION AND PSYCHOLOGY**

*Robert Z. Carr, Ed.D., Dean*

*Walter Washington Administration/Classroom Bldg. #409*

*Telephone: (601) 877-6141*

*Fax: (601) 877-6319*

## **PURPOSE**

The School of Education and Psychology holds as its primary commitment the preparation of highly qualified, proficient, and effective communiversity, elementary, and secondary school teachers and other educational personnel for the public schools of Mississippi and the nation. This broad responsibility is conceived and implemented in harmony with the over-all purposes and functions of the University. The School of Education and Psychology is accredited by the Council for the Accreditation of Educator Preparation (CAEP).

## **OBJECTIVES OF THE SCHOOL OF EDUCATION AND PSYCHOLOGY**

Through its various curricula and services, the School endeavors to achieve these specific objectives:

1. to identify and attract young men and women of intellectual and moral integrity;
2. to promote content competency and sound scholarship through a series of specialized courses and experiences that will prepare a proficient and effective communiversity teacher (APECT);
3. to develop in prospective teachers a broad understanding of the learner and the teaching-learning process;
4. to guide and supervise teacher candidates through a series of professional laboratory experiences culminating with directed teaching;
5. to provide teacher education students and non-teaching students with formal and informal educational experiences that will enable them to develop a meaningful philosophy of education;
6. to ensure that the teacher education candidate exits the professional education unit highly qualified as Alcorn's proficient and effective communiversity teacher.

## **ORGANIZATION**

The School of Education and Psychology consists of two distinct degree-granting departments. They are the Department of Education and Psychology and the Department of Health, Physical Education, and Recreation. In addition, the school is responsible for administering and coordinating professional laboratory experiences and directed teaching for the University.

## **DEGREE OFFERINGS**

The school offers instruction leading to the Bachelor of Science degree in the following areas: Elementary Education; Recreation; Physical Education; Psychology; and the Bachelor of Arts degree in General Studies. The school also offers instructions leading to the Master's degree in School Counseling, Elementary Education, Secondary Education, Sport Management and the Educational Specialist in Elementary Education.

## **POLICIES AND PROCEDURES FOR ADMISSION TO TEACHER EDUCATION**

All students desiring to enter a professional teacher education program at Alcorn State University must take and pass PRAXIS Core Academic Skills for Educators and make formal application to be admitted to the teacher education program. Additionally, the student must have completed 44 semester hours of course work with a cumulative GPA of 2.75 on a 4.0 system.

Registration forms for the Praxis Exams may be initiated in the Counseling and Testing Center. An application for admission into teacher education must be submitted to the Teacher Education Office before the applicable deadlines. The application must be accompanied by letters of recommendation from the student's advisor and departmental chairperson with a current transcript.

The Teacher Education Committee will take formal action on applications upon receiving evidence that the student has met the application deadlines and criteria for admission.



### **Regular Students**

An application for admission to the Teacher Education Program should be filed no later than the fourth week of the semester in which the student will have earned at least 44 hours at Alcorn State University. Admission will be granted to those applicants meeting the following standards:

The applicant must successfully pass PRAXIS CORE (Reading, Writing and Math) or have a minimum ACT score of 21 (subject to change based on MDE policies) SAT score of 990.

The applicant has earned a cumulative grade point average of 2.75 in 44 semester hours of course work.

The applicant has earned no grade less than “C” in EN 111, EN 112, SA 223, and PH 132.

The applicant has been recommended by two faculty members.

### **Transfer Students**

Transfer students from another institution who have earned less than 44 hours at that institution must meet the standards set for regular students.

Transfer students who have earned 44 or more hours of coursework at another institution and who make application to Teacher Education upon admission to Alcorn State University may be admitted provided that they have passed PRAXIS Core or other options and have met all other admission to teacher education requirements.

Students who present evidence of admission and are in good standing in an NCATE/CAEP approved Teacher Education Program at another institution may be granted admission to Teacher Education at Alcorn State University.

Students who do not make the required score(s) may retake the appropriate test(s). Students may not enroll in any of the following professional education courses until they have been officially admitted to teacher education.

### **SECONDARY MAJORS — ED 498; ED 302, ED 351, ED 457, ED 468**

MU 401 (Music majors only)

Major course for each discipline

Student Teaching; ED 468

ELEMENTARY EDUCATION MAJORS: ED 302; ED 317, ED 351, ED 452, ED 458.

SPECIAL EDUCATION MAJORS: ED 302, ED 317, ED 351, ED 356, ED 458.

Students enrolled in Teacher Education who have failed to maintain a cumulative average of 2.75 will be placed on probation for one semester. If at the end of the probationary semester, the student’s cumulative average is still below 2.75, the student will be dropped from the Teacher Education Program. During the probationary semester the student may not enroll in ED 458 or ED 468 Directed Teaching or in any other professional education courses except those previously completed with a grade of less than “C.”

### **ADMISSION TO STUDENT TEACHING**

Student teaching is an integral part of the teacher education program at Alcorn State University and is the culmination of the teacher preparation experiences at the University. All students pursuing a degree leading to teacher certification must enroll for student teaching experiences during their final semester at Alcorn State University. Students must pass all required parts of PRAXIS II before admission. Participation in these experiences is limited to those students who apply and are admitted to student teaching. The student must submit an application to the Office of Admissions and Student Advisement no later than July 15<sup>th</sup> for fall and Oct. 15<sup>th</sup> for spring. Applicants for admission to student teaching are screened for eligibility on the basis of the following criteria:

Full admission to teacher education (students on probation within teacher education may not enroll in Student Teaching); recommendation of department chairperson;

1. completion of all general education requirements;
2. completion of at least one semester residence at Alcorn State University;
3. an earned grade point average of 2.75 on all work (transfer students must have a 2.75 average on all transferred work and on all work earned at Alcorn State University);

4. completion of at least 95% of the major field requirements with a GPA of 2.75 or above (see departmental
5. offerings for specific courses which must be completed prior to student teaching);
6. completion of professional education requirements with no grade less than "C;" and passing of PRAXIS II (Principles of Learning and Teaching and the Specialty Area.)

## **Department of Education and Psychology**

*Helen J. Wyatt Ed.D., Chairperson*

*Walter Washington Administration/Classroom Bldg. #216*

*Telephone: (601) 877-6200*

*Fax: (601) 877-6211*

The Department of Education and Psychology administers a curriculum for undergraduate majors in elementary education, general studies, and psychology. Additionally, the department offers courses for secondary teacher education majors that will meet the state requirements for certification in the various teaching areas on the secondary levels. The department also offers a graduate degree in teacher education and guidance education and holds as its primary objectives the following:

1. to prepare highly qualified, well-trained teaching and non-teaching professionals to work in the educational and professional environments in Mississippi, the nation, and the world;
2. to guide candidates through a series of professional laboratory experiences that will enable them to become competent in their field of study;
3. to encourage and attract diversified talented students as well as those students who may also suffer under the handicaps of socio-economic and cultural deprivation; and,
4. to prepare graduates to demonstrate the competencies needed for continuing their education in graduate and/or other professional schools.

The elementary education curriculum at Alcorn State University consists of a series of integrated and educational experiences for students preparing to teach children in elementary school systems. These experiences are obtained through core courses, specialized and professional education courses, clinical experiences, and directed teaching. All students majoring in elementary education may obtain two specific areas of concentrations by successfully completing 21 additional hours in each area. The student selects the concentration hours in consultation with his/her advisor.

The Department of Education and Psychology offers a non-teaching degree in Psychology that is designed and intended for students to pursue advanced studies in psychology and related fields. The curriculum focuses on the application of psychological principles of behavior, learning, and personality. The department also provides psychology service courses for all teacher education majors and other majors. The general studies curriculum is designed for non-traditional students and cannot be chosen by incoming freshmen unless they meet the non-traditional student status.

As a support system, the department Curriculum Resource Center (CRC) is established to (1) house professional, educational and psycho-educational materials, instructional materials, learning kits, and an extensive collection of audiovisual equipment/materials; (2) serve as a center for small group discussions and seminars and as the physical facility for open forums of educational exchange; (3) serve as a laboratory for the development of mediated instructional materials. The center is open on a daily basis to all pre-service and in-service students. Teacher education faculty is encouraged to utilize the center to provide instructional experiences as needed.

### **EDUCATIONAL PERSONNEL AND STAFF DEVELOPMENT**

The Department of Education and Psychology sponsors workshops, seminars, and mini-courses in designated areas during the academic year and the summer months. These activities are designed to supplement the regular instructional program and to provide in-service personnel with simulated opportunities to observe, examine, and study teaching/learning situations to enhance the resolution of classroom-related learning situations and events. Credits for these staff development exposures vary depending upon the length and concentration but are generally based as credit hours or continuing education units. Inquiries relative to specific workshops, seminars, or mini-courses should be addressed to the department chairperson or project leader.

**Elementary Education  
(120 Credit Hours)**

**Freshman Year (33)**

First Semester		Hrs.	Second Semester		Hrs.
EN 111	Composition I	<input type="checkbox"/> 3	EN 112	Composition II	<input type="checkbox"/> 3
PH 132	General Psychology	<input type="checkbox"/> 3	PY 111	Physical Science I	<input type="checkbox"/> 3
HI 111	World Civilization I	<input type="checkbox"/> 3	PE 122	Health	<input type="checkbox"/> 3
BI 111	Intro. to Biology I	<input type="checkbox"/> 3	PE 101	Physical Education	<input type="checkbox"/> 1
MA 121	College Algebra	<input type="checkbox"/> 3	ET 101	Educational Technology	<input type="checkbox"/> 1
UL 101	University Life	<input type="checkbox"/> 1	MA 307	Informal Geometry	<input type="checkbox"/> 3
		<input type="checkbox"/>	BI 112	General Biology II	<input type="checkbox"/> 3
<b>Total</b>		<input type="checkbox"/> <b>16</b>	<b>Total</b>		<input type="checkbox"/> <b>17</b>

**Sophomore Year (30)**

ED 200	Social Studies/Multicultural Ed.	<input type="checkbox"/> 3	ED 348	Foundations of Education	<input type="checkbox"/> 3
SA 223	Oral Communication	<input type="checkbox"/> 3	EN 231	Vocabulary Development	<input type="checkbox"/> 3
EN 213	Studies in Literature	<input type="checkbox"/> 3	PE 328	Motor Dev. Movement Ed.	<input type="checkbox"/> 3
MU 213	Music Appreciation	<input type="checkbox"/> 3	PH 326	Psy. of the Except. Child	<input type="checkbox"/> 3
AR 214	Art Appreciation	<input type="checkbox"/> 3	MA 306	The Real Number System	<input type="checkbox"/> 3
<b>Total</b>		<input type="checkbox"/> <b>15</b>	<b>Total</b>		<input type="checkbox"/> <b>15</b>

**\*Area of concentration**

**Junior Year (30)**

ED 314	Early Reading Literacy I	<input type="checkbox"/> 3	ED 302	Teaching Practicum/Technology	<input type="checkbox"/> 3
ED 345	Language Arts/Lit. (K-8)	<input type="checkbox"/> 3	ED 320	Reading Diagnosis	<input type="checkbox"/> 3
PH 336	Educational Psychology	<input type="checkbox"/> 3	ED 317	Early Reading Literacy II	<input type="checkbox"/> 3
PH 347	Measurement Evaluation	<input type="checkbox"/> 3	ED 351	Managing Classroom Beh.	<input type="checkbox"/> 3
ED ____	Elective* ED 403	<input type="checkbox"/> 3	ED ____	Elective* ED 405	<input type="checkbox"/> 3
<b>Total</b>		<input type="checkbox"/> <b>15</b>	<b>Total</b>		<input type="checkbox"/> <b>15</b>

**Senior Year (27)**

ED 416	Arithmetic for Children	<input type="checkbox"/> 3	ED 458	Directed Teaching	<input type="checkbox"/> 12
ED 435	Science for Children	<input type="checkbox"/> 3			<input type="checkbox"/>
ED 452	Elem. Curriculum (K-8)	<input type="checkbox"/> 3			<input type="checkbox"/>
ED ____	Elective* ED 482	<input type="checkbox"/> 3			<input type="checkbox"/>
PE 467	Adaptive Physical Ed.	<input type="checkbox"/> 3			<input type="checkbox"/>
<b>Total</b>		<input type="checkbox"/> <b>15</b>	<b>Total</b>		<input type="checkbox"/> <b>12</b>

**\*Area of Concentration**

**COURSE DESCRIPTIONS IN EDUCATION (ED)**

**ED 200 3-0-3 SOCIAL STUDIES/MULTICULTURAL EDUCATION**

This course is designed to promote in students analytical and evaluative abilities to confront and understand issues such as participatory democracy, racism, sexism, and parity of power. It also focuses on skills for value clarification as well as examines the dynamics of diverse cultures and linguistic variations.

**ED 302 3-0-3 TEACHING PRACTICUM/TECHNOLOGY**

This course provides opportunities for direct field experiences in the classroom. Students are required to demonstrate competencies in groups, individualized instruction, curriculum organization and classroom management, and integrating technology in the classroom.

**ED 307                    3-0-3    EDUCATION AND PSYCHOLOGY OF STUDENTS WITH EMOTIONAL DISTURBANCES**

This course considers various theoretical aspects of emotional disturbances in children and means of inducing change. It also emphasizes practical problems in schools and social situations.

**ED 308                    3-0-3    EDUCATION AND PSYCHOLOGY OF STUDENTS WITH MENTAL RETARDATION**

This course is designed to instill the basic concepts which are fundamental in the study of mental retardation. The course covers the historical development of mental retardation practices and programs in relation to medical, psychological, and educational procedures and investigations. Emphasis is placed upon diagnostic interpretations of retardation classifications, the discovery and implementation of viable educational programs.

**ED 310                    3-0-3    PSYCHOLOGY AND EDUCATION OF CHILDREN WITH LEARNING DISABILITIES**

This course emphasizes psychological diagnostic testing of children with learning disabilities and a concise study of the disorders of visual and auditory perception, language, motor coordination, equilibrium, and laterality. Relationships between diagnostic findings and remediating the child's disabilities are stressed.

**ED 314                    3-0-3    EARLY READING LITERACY I**

This course is an introduction to reading, history, overview of field and basic instructional procedures. Special emphasis is placed on word recognition comprehension and the sequence of reading skills.

**ED 317                    3-0-3    EARLY READING LITERACY II**

This course is designed to acquaint the students with techniques of diagnosing pupils' reading problems and methods of solving such problems. The course involves the use of various tests of reading and the use of certain instruments in reading improvement. Laboratory experiences are part of the students' class activities.  
**Pre-requisites:** ED 320 and ED 314.

**ED 320                    3-0-3    DIAGNOSIS AND CORRECTION OF READING DISABILITIES**

This course examines the causes of reading problems and procedures for their correction. Lectures and laboratory work are utilized in implementing the course. **Pre-requisite:** ED 314.

**ED 322                    3-0-3    COMMUNICATIVE ARTS IN EARLY CHILDHOOD EDUCATION**

Emphasis is placed on the role of language in the socialization process, contributions of literature to child development, and children's original expressions.

**ED 334                    3-0-3    SCIENCE AND NUMBER CONCEPTS**

This course emphasizes initial teaching techniques in making science and number concepts effective and creative.

**ED 344                    3-0-3    LANGUAGE DEVELOPMENT AND LITERATURE**

This course traces the history of language and literature from the beginning up to modern day. It also discusses the influences that language and literature have on early childhood education techniques and practices in today's society.

**ED 345                    3-0-3    LANGUAGE ARTS/LITERATURE (K-8)**

Techniques and methods of teaching the six language arts through the use of children's literature will be included in this course. Also, emphasis on genres, authors, illustrators, and diversity in literature as well as effective methods to promote literacy learning through the study of these aspects of literature. Skills in the language arts can be promoted through all areas of the curriculum and doing so will be a focus in this course.

**ED 348                    2-0-2    FOUNDATIONS OF EDUCATION**

This course is a study of basic educational philosophy, history, and sociology as a means of understanding contemporary trends and practices in education.

**ED 351            3-0-3    MANAGING CLASSROOM BEHAVIOR**

An in-depth study of strategies and procedures that is developmentally appropriate for classroom settings: Students will analyze facets of behavior and prescribe research-based measures to combat inappropriate behavior and encourage acceptable behavior in the classroom.

**ED 356            3-0-3    ORGANIZATIONAL PROCEDURES FOR SPECIAL EDUCATION**

This course describes philosophical and historical aspects of special education, reviewing relevant court cases, enactment of laws, development of appropriate parent-teachers-student interactions and the essential need for keeping classroom records.

**ED 394            3-0-3    WORKING WITH FAMILIES IN SPECIAL EDUCATION**

This course is designed to provide strategies for productive interactions between special educators and others such as colleagues, employers, parents, service providers, professionals, and students.

**ED 396            3-0-3    COLLABORATION AND CONSULTATION IN SPECIAL EDUCATION**

This course includes a focus on content and processes related to the practice of collaboration between general and special educators. Topics related to the content of collaboration include various models of collaboration and consultation. Classroom intervention strategies for implementation in the mainstream (e.g., cooperative learning and peer tutoring) as well as more individualized supports and specific aspects of integrating the medical model with educational settings will also be included.

**ED 398            3-0-3    ORGANIZATION, PRINCIPLES, PROCEDURES FOR EARLY CHILDHOOD EDUCATION**

This course is designed to examine educational principles and curricula matters that are relevant to pre-school and primary levels of the school program. Attention will be given to current experimental programs in the field of early childhood education.

**ED 403            3-0-3    SEMINAR IN READING**

This course is designed to discuss current instruction in reading, focusing on innovations as well as problems. Special attention will be given to relevant research in the area of reading.

**ED 404            3-0-3    TEACHING PSYCHOLOGY IN THE SECONDARY SCHOOL**

This course examines the methods of teaching psychology in the secondary school. Techniques of effective teaching, preparation of materials, and setting up classroom demonstrations using psychological laboratory apparatus are emphasized in the course. Students are required to prepare teaching units, lesson plans, class demonstrations of psychological phenomena, examinations, and observe classroom teaching.

**ED 405            3-0-3    SEMINAR IN READING**

This course is designed to discuss theories, models, and current research designed to improve language arts instruction and develop understanding of reading and writing processes. An experiential learning design will be implemented in this class to help students move from a reactive to a proactive practitioner in the classroom.

**ED 416            3-0-3    ARITHMETIC FOR CHILDREN**

This course is designed to acquaint students with the content knowledge of mathematics as well as methods, strategies, and techniques for teaching math to elementary grades.

**ED 421            3-0-3    SEMINAR IN EDUCATION (K-8)**

This seminar is essentially a survey of problems encountered by teachers and students in elementary education and consists of readings, research and discussion in the area of the individual student's interest.

**ED 430            3-0-3    SEMINAR IN EARLY CHILDHOOD EDUCATION**

This course emphasizes a study of social, emotional, physical, and intellectual problems encountered by pre-school children. Individual research projects are selected on the basis of their applicability to sound educational principles of learning and constructive curricular innovations in early childhood education.

**ED 435            3-0-3    SCIENCE FOR CHILDREN**

This course deals with objectives, methods, and materials in science instruction for elementary grades. Proper use of laboratory and field practice is stressed.

**ED 451            3-0-3    TEACHING STUDENTS WITH SEVERE AND PROFOUND  
DISABILITIES**

This course deals with characteristic, identification, incidence causes, prognosis and education of the severe and profound mentally retarded. Two field trips per semester will be made to state institutions by students who are enrolled in this course for purposes of observing the SMR.

**ED 452            3-0-3    ELEMENTARY CURRICULUM (K-8)**

This course is designed to give students a background in curriculum development, methods, techniques, and procedures appropriate for teaching the different subjects in (K-8). Special attention will be given to curriculum development, classroom and instructional re-organization such as team teaching, non-gradedness, flexible scheduling, etc. The selection and accumulation of the appropriate sequencing of subjects and teaching materials, including media, are included.

**ED 453            3-0-3    LEGAL AND LEGISLATIVE FOUNDATIONS OF SPECIAL  
EDUCATION**

This course is designed to review the practical application of laws, regulations, court decisions, and public policy relevant to the supervision of special education services and programs.

**ED 458            0-12-12 DIRECTED TEACHING (ELEMENTARY)**

Directed teaching includes eight weeks of laboratory experience, observing and teaching in one of the cooperating educational centers, and participation in a pre-seminar and post-seminar. These seminars are designed to identify and discuss practical guidelines for the directed teaching process, with special emphasis given to analysis and evaluation of on-the-field experiences.

**ED 468            0-12-12 DIRECTED TEACHING (SECONDARY)**

Description is the same as ED 458, except laboratory experiences are in secondary schools under the supervision of a supervising teacher for eight weeks.

**ED 482            3-0-3    ISSUES, TRENDS, AND INNOVATIONS IN READING**

This course focuses on recent issues, trends and innovations in reading instruction and how these can be used to better implement the entire reading process throughout disciplines.

**ED 491            3-0-3    INDEPENDENT STUDY AND RESEARCH**

Designed to provide honors students with an opportunity to do independent study and research under the direction of the faculty.

**ED 492            3-0-3    INDEPENDENT STUDY AND RESEARCH**

This course is a continuation of ED 491.

**ED 494            3-0-3    SEMINAR (HONORS)**

This course is designed to provide an opportunity for discussion and examination of timely problems and issues on education. Open to honors students only.

**ED 495            3-0-3    SEMINAR**

This course is a continuation of ED 494.

**ED 498            3-0-3    READING IN THE SECONDARY SCHOOL**

A course designed to familiarize junior and senior high school teachers with reading methods and materials. Special emphasis is placed on improving reading skills in the subject matter areas and providing suitable material for poor readers.

**Psychology**  
**(120 Credit Hours)**

**Freshman Year (31)**

First Semester		Hrs.	Second Semester		Hrs.
EN 111	Composition I	<input type="text"/> 3	EN 112	Composition II	<input type="text"/> 3
HI 111	World Civilization I	<input type="text"/> 3	MA121	College Algebra	<input type="text"/> 3
BI 111	Intro. to Biology I	<input type="text"/> 3	HU201	Humanities	<input type="text"/> 3
PH 132	General Psychology	<input type="text"/> 3	PY 111	Physical Science I	<input type="text"/> 3
UL 101	University Life	<input type="text"/> 1	_____	<b>Restricted Elective</b>	<input type="text"/> 3
_____	<b>Restricted Elective</b>	<input type="text"/> 3	_____	_____	<input type="text"/>
_____	<b>Total</b>	<input type="text"/> 16	_____	<b>Total</b>	<input type="text"/> 15

**Sophomore Year (32)**

SA223	Oral Communication	<input type="text"/> 3	PH 320	Developmental Psychology	<input type="text"/> 3
PH 231	Motivation	<input type="text"/> 3	PH 340	Cognition	<input type="text"/> 3
PH 230	Learning	<input type="text"/> 3	EN 213	Studies in Literature	<input type="text"/> 3
SP 111	Spanish I	<input type="text"/> 3	PE 102	Physical Education	<input type="text"/>
			or		
PE 122	Health	<input type="text"/> 3	MS 102	Fund. of Leadership & Mgt. II	<input type="text"/> 1
PE 101	Physical Education or	<input type="text"/> 1	_____	Restricted Electives	<input type="text"/> 3
MS 101	Fund. of Leadership & Mgt. I	<input type="text"/> 1	SY 330	Social Psychology	<input type="text"/> 3
_____	<b>Total</b>	<input type="text"/> 16	_____	<b>Total</b>	<input type="text"/> 16

**Junior Year (30)**

PH 365	Behavioral Statistics	<input type="text"/> 3	PH 330	Theories of Personality	<input type="text"/> 3
PH 403	History Systems	<input type="text"/> 3	PH 319	Computer App in Psychology	<input type="text"/> 3
PH 440	Group Dynamics	<input type="text"/> 3	PH 470	Experimental Psychology	<input type="text"/> 3
_____	<b>Restricted Elective</b>	<input type="text"/> 3	PH 332	Psychological Testing	<input type="text"/> 3
_____	<b>Restricted Elective</b>	<input type="text"/> 3	_____	<b>Restricted Elective</b>	<input type="text"/> 3
_____	<b>Total</b>	<input type="text"/> 15	_____	<b>Total</b>	<input type="text"/> 15

**Senior Year (27)**

PH 471	Abnormal Psychology	<input type="text"/> 3	PH 407	Physiological Psychology	<input type="text"/> 3
_____	<b>Restricted Elective</b>	<input type="text"/> 6	PH 483	Psychology Internship	<input type="text"/> 3
_____	<b>Free Elective</b>	<input type="text"/> 3	_____	<b>Restricted Elective</b>	<input type="text"/> 3
_____	<b>Free Elective</b>	<input type="text"/> 3	_____	<b>Free Elective</b>	<input type="text"/> 3
_____	<b>Total</b>	<input type="text"/> 15	_____	<b>Total</b>	<input type="text"/> 12

**COURSE DESCRIPTIONS IN PSYCHOLOGY (PH)**

**PH 132 3-0-3 GENERAL PSYCHOLOGY**

This course is an introduction to the basic research and theory of psychology. The course focuses on the application of psychological concepts and principles to the understanding of human behavior and cognitive processes.

**PH 192 3-0-3 HONORS GENERAL PSYCHOLOGY**

Honors General Psychology surveys the research and theories of modern psychology including history of the field, research methods, learning and memory, motivation and emotion, personality, psychopathology, social psychology, sensation and perception, human development, language, psychotherapy, and health psychology. As an honors course, emphasis is placed critical analysis of psychological issues and the potential for enhancement of human life through the application of psychological principles.

**PH 230 3-0-3 LEARNING**

This is an introduction to theory and research in the area of learning. **Pre-requisite:** PH 132.



**PH 231            3-0-3    MOTIVATION**

This is an introduction to theory and research on the psychological and biological bases of motivation. **Pre-requisite:** PH 132.

**PH 315            3-0-3    SEMINAR ON BLACK PSYCHOLOGY**

This course focuses on the academic origin and evolution of black psychology and major contributors to the field of psychology. Special attention will be directed to philosophical, behavioral, socio-cultural, economic, political, historical, educational, and theoretical perspectives on African-centric consciousness. **Pre-requisite:** PH 132 or SY 235.

**PH 319            3-2-2    COMPUTER APPLICATIONS IN PSYCHOLOGY**

This course covers the applications of computer technology in psychology. **Pre-requisites:** PH 132, CS 100.

**PH 320            3-0-3    DEVELOPMENTAL PSYCHOLOGY**

This is a survey of the changes that occur in human development from conception to death, with emphasis on the psychological events that accompany these changes. **Pre-requisite:** PH 132.

**PH 323            3-0-3    CHILD PSYCHOLOGY**

This course examines the physical, social, emotional, mental, and value development of the child from infancy to the pre-adolescent period. **Pre-requisite:** PH 132.

**PH 325            3-0-3    ADOLESCENT PSYCHOLOGY**

This course examines the physical, emotional, cognitive, and social aspects of development during adolescence. **Pre-requisite:** PH 132.

**PH 326            3-0-3    PSYCHOLOGY OF THE EXCEPTIONAL CHILD**

This course involves a detailed study of areas encompassing special education with attention paid to the study of each of the following: mental retardation, emotional disturbance, learning disabilities, and sensory impairments, the gifted and talented, and legal issues including Public Law-142. This course is required in any field of Special Education. This course is designed for the student majoring in Special Education.

**PH 330            3-0-3    THEORIES OF PERSONALITY**

This is an introduction to theories of the structure, dynamics, and development of personality. Also, research methods in personality and contemporary issues in personality research are emphasized. **Pre-requisite:** PH 132.

**PH 332            3-0-3    PSYCHOLOGICAL TESTING**

This is an introduction to theory, construction, use, and interpretation of psychological tests. The course focuses on tests of intelligence, personality, interests, and aptitudes. **Pre-requisites:** PH 132 and PH 365 or its equivalent.

**PH 336            3-0-3    EDUCATIONAL PSYCHOLOGY**

This course is designed for teachers and individuals who are concerned with directing and influencing personality development and learning in human beings. It is hoped that they will be able to apply the principles of psychology to education and the teaching-learning process. **Pre-requisite:** PH 132.

**PH 340            3-0-3    COGNITION**

Cognitive psychology is the study of all human intellectual functions. As such, study will concern the principles of human mental operations and human information processing. Subtopics surveyed will include sensation and perception, attention, memory, thinking, language, problem solving, decision-making, and knowledge structures. Basic research will be surveyed with concern for possible applications in such areas as education, human-machine interaction, language learning, and medicine. **Pre-requisite:** PH 132.

**PH 347            3-0-3    MEASUREMENT AND EVALUATION**

This course emphasizes methods designed for the measurement of intelligence and the evaluation of achievement. Students learn to improve teacher-made examinations and receive guidance in constructing, selecting, using, and interpreting educational tests. **Pre-requisite:** PH 132.

**PH 365            3-0-3    BEHAVIORAL STATISTICS**

An introduction to research design and quantitative analysis as applied to psychological data. Students enrolled in the course are expected to become proficient in the organization, analysis, and interpretation of research data using fundamental descriptive and inferential statistics. **Pre-requisite:** PH 132.

**PH 401            1-6        PSYCHOLOGY COLLOQUIUM**

This is an opportunity for advanced students to pursue a research project or field experience under the supervision of a faculty member. Enrollment is limited to advanced students and permission of the supervising faculty member is required. **Pre-requisites:** PH 132, PH 365, PH 470.

**PH 402            3-0-3    COMMUNITY MENTAL HEALTH MANAGEMENT**

This course is designed to provide practical experience in community mental health programs. Emphasis is placed on case management procedures, administrative practices, interviewing techniques, methods of therapy, psychological record-keeping, and report writing. **Pre-requisites:** PH 132, PH 332, PH 471.

**PH 403            3-0-3    HISTORY AND SYSTEMS OF PSYCHOLOGY**

This course is an examination of the origin and evolution of the philosophical and scientific treatments of psychological issues. The emphasis of the course is on the contributions of early philosophical, theoretical, and experimental schools of psychology to modern psychology. **Pre-requisite:** PH 132.

**PH 407            3-0-3    PHYSIOLOGICAL PSYCHOLOGY**

This course examines the structural and functional relationships between biological systems and behavior. Emphasis is placed on the nervous system, sensory-motor processes, motivational mechanisms, sexual behavior, sleep and arousal, learning and memory, stress, abnormal behavior, thought, and language. **Pre-requisites:** PH 132, BI 111.

**PH 420            3-0-3    INDUSTRIAL AND ORGANIZATIONAL PSYCHOLOGY**

This course is an introduction to the study of human behavior in workplace and in the marketplace. The course focuses on the selection and training of employees, improving working conditions and productivity, conflict management, and market research. **Pre-requisites:** PH 132, PH 332, PH 440 or SY 330.

**PH 440            3-0-3    GROUP DYNAMICS**

This course is the examination of small group behavior through a review of research, film, and experiential learning. Group formation, communication within the group, establishment of group norms, the role of leadership, and the mechanisms of member influence are discussed. Group models such as adolescent peer pressure, workplace units, and jury deliberations are used to illustrate these processes. **Pre-requisite:** PH 132.

**PH 465            3-0-3    ADVANCED BEHAVIORAL STATISTICS**

This course instructs students in the uses of factorial ANOVAs, multiple regression, and multivariate statistics for the analysis and interpretation of data. **Pre-requisites:** PH 132, PH 365, and at least 12 hours of psychology course work.

**PH 470            2-2-3    EXPERIMENTAL PSYCHOLOGY**

This is an introduction to experimental methodology in psychology. The principles of scientific investigation and research design are applied to psychological problems. The laboratory portion of the course includes opportunities for students to conduct experiments in psychology. **Pre-requisites:** PH 132, PH 365.

**PH 471            3-0-3    ABNORMAL PSYCHOLOGY**

This is an examination of research and theory dealing with the etiology, symptomatology, and treatment of abnormalities of behavior. **Pre-requisites:** PH 132, PH 330, PH 365 or its equivalent.

**PH 483                    1-2-3    PSYCHOLOGY INTERNSHIP**

This course provides students with field experiences under the supervision of professional mental health workers. The experiences allow students to observe and participate in the diagnosis and care of individuals experiencing behavioral and emotional difficulties. **Pre-requisites:** PH 132, PH 320, PH 332, PH 471.

**PH 490                    3-0-3    SENIOR SEMINAR IN SELECTED TOPICS**

Each seminar will focus on a central topic in psychology and provide students with an opportunity to apply and integrate knowledge and skills acquired from various courses in the study of that topic. **Pre-requisite:** Senior standing in psychology.

**General Studies**

- I. Incoming freshmen cannot choose **General Studies** as a major unless they meet the requirements for non-traditional student status.

- A. The **General Studies** program is designed for non-traditional students with diverse interests. Pertinent courses are offered across the curriculum in the Department of Education and Psychology at Alcorn State University. The chosen concentration areas are consistent with students' intended educational development and career goals. The program provides non-traditional students with opportunities for continuing their education, which are consistent with the **communiversity** concept.
- B. All students desiring to enter the General Studies program must have met regular admission requirements for Alcorn State University and have achieved upper division status.
- C. Advisement for the General Studies program is housed in and administered through the Department of Education and Psychology.

**II. Non-traditional Students**

- A. Any student who is at least 21 years of age upon initial enrollment meets the requirement for Non-traditional status. Any student who has been admitted to the University based on GED, work experience, or professional experience can also be classified as Non-traditional.
- B. Any student who is categorized or termed "**Non-traditional**" will be permitted to enroll in or be admitted to the **General Studies** program at any point during matriculation.

**III. Curriculum**

Core requirements: The total number of hours required for graduation is 120 hours.

- A. Upper Division Courses
  - 1. Of the ten (10) required upper division courses at the 300 level and above, none of these courses can be taken at the graduate level.

**IV. Concentration Area(s)**

- A. Each student is required to complete two different twenty-one (21) hour concentrations.
- B. Each course within the two different twenty-one hour concentrations must be taken in the same or related discipline.

**V. Exit Requirements**

- A. Each student must pass the standard University technology exam.
- B. Each student must successfully pass the multi-skilled Departmental **General Studies** Exit Exam.

## **B.A. General Studies Curriculum**

Freshmen and sophomore studies	<b>60 hrs.</b>
Upper division studies	<b>18 hrs.</b>
Specialized content	<b><u>42</u></b>
<b>Total Hours</b>	<b>120</b>

### **60 Hours Freshman and Sophomore Studies**

<b>Course Content</b>	<b>Hrs.</b>
English Composition	6
Creative Arts	9
Oral Communication	3
Social and Behavioral Science	12
Natural Science and Mathematics	15
Health	3
Computer Science	6
Orientation	1
PE, MU or MS	2
Elective	3

18 hours of Upper Division Courses

*Note: All electives courses taken should be 300 level or above.*

42 hours of electives in Specialized Content (Upper Division Concentration)

*Note: Each student must choose two twenty-one (21) hr. concentrations with the consent and Approval of the General Studies Advisor or Department Chairperson.*

**Total Hours Required: 120 Hours**

## Department of Health, Physical Education, and Recreation

*Johnny Thomas, Ed. D., Chairperson*

*Davey Whitney Complex Ste. B*

*Telephone: (601) 877-6506 or 6507*

*Fax: (601) 877-3821*

The primary responsibility of The Department of Health, Physical Education, and Recreation (HPER) is to prepare its majors to become highly qualified proficient community leaders for the global marketplace. The department aims to provide disciplinary curricula that are relevant, diverse, and comprehensive for acquiring a holistic knowledge base; for learning capable and situational leadership approaches; and for garnering scholarly, professional, and occupational skills. It also aims to provide opportunities for overall personal and intellectual development and growth by offering contemporary curricula and by offering a variety of instructional and methodical techniques and procedures in the course offerings of its respective degree programs. Furthermore, the department offers undergraduate and graduate degree programs with state, professional, and national accreditations. Possessing such accreditations of these individual degree programs enables the department to offer existing and prospective majors - locally, statewide, nationally, and internationally - a chance to achieve their individually disciplinary goals and degrees in the department, and to ensure that their respective degrees have recognizable merit and approval both in the world of higher education and in the world of work. Thus, majors and prospective majors of the undergraduate and graduate degree programs in the department must have a responsive personality, be resourceful, have functional physical abilities, and be intellectually thirsty.

The undergraduate degrees in the Department of HPER are the Bachelor's of Science Degree in Recreation and the Bachelor's of Science Degree in Sport Management, and the endorsement degrees are the Bachelor's of Science Degree in Physical Education with an endorsement in Health or only an endorsement in Physical Education. Students interested in pursuing a Recreation Degree or Sport Management Degree (1) have to be admitted by Alcorn State University (ASU); (2) have to declare Recreation or Sport Management as their major; (3) have to complete all academic requirements of the general education core; (4) have to earn a "C" (2.00 above) in all 300 and 400 level courses of the Recreation or Sport Management curriculum; (5) have to be a member of the department's HPER Club; (6) and have to pass the Recreation or Sport Management Comprehensive Examination. Additionally, students interested in pursuing a degree with an endorsement in Physical Education and Health or in only Physical Education (1) have to be admitted by ASU; (2) have to declare Physical Education and Health or only Physical Education as their endorsement; (3) have to complete all academic requirements of the general education core; (4) have to earn a "C" (2.00 above) in all 300 and 400 level courses of the Physical Education or Health curriculum; (5) have to pass Praxis I and II; (6) have to take 18 hours of health courses (only majors interested in both the Physical Education and Health endorsement) (7) have to be a member of the department's HPER Club; (8) have to fulfill the requirements of the teacher education program; (9) and have to pass the physical education and Health or Physical Education comprehensive examination.

The Department of HPER offers the Master's of Science Degree in Education with an emphasis in Physical Education, the Master's of Science Degree in Education with an emphasis in Athletic Administration and Coaching Teaching, and the Master's of Science Degree in Education with an emphasis in Athletic Administration and Coaching Non-Teaching. Importantly, students can earn **the Mississippi Department of Education educator licensure** in the department's Athletic Administration and Coaching Teaching graduate degree program. Students interested in pursuing the Master's of Science Degree in Education with an emphasis in Physical Education (1) must have an undergraduate degree with a cumulative grade point average (GPA) of a "B" (3.00 above); (2) must have satisfied all admission requirements of the graduate school; (3) must have a valid, permanent teacher license or have documentation of passing both Praxis I and II; (4) must maintain a cumulative GPA 3.00 in the curriculum of the degree program; (5) and must pass the Core Education and Physical Education Comprehensive Examinations.

Moreover, students interested in pursuing the Master's of Science in Education with an emphasis in Athletic Administration and Coaching Teaching with educator licensure (1) must have earned an undergraduate degree with a cumulative GPA of 3.00 or above in their respective undergraduate curriculums; (2) must have satisfied all admission requirements of the graduate school; (3) must have a valid, permanent teacher license or have documentation of having passed both Praxis I and II; (4) must maintain a cumulative GPA of 3.00 in the degree program; (5) and must pass the Core Education, and Athletic Administration and Coaching Comprehensive Examinations.

Conversely, students without teacher licensure and are interested in pursuing the Master's of Science in Education with an emphasis in Athletic Administration and Coaching Non-Teaching (1) must have earned an undergraduate degree with a cumulative GPA of 3.00 or above; (2) must have satisfied all admission requirements of the graduate school; (3) must sign a written statement to corroborate that they understand they are pursuing a **Non-Certification** degree; (4) must maintain a cumulative GPA of 3.00 in the degree program; (5) must have taken the GRE, (6) and must pass the Core Education and Athletic Administration and Coaching Comprehensive Examinations.

The Department of HPER offers undergraduate and graduate degree programs that continuously evolve to satisfy the continually updated accreditation standards of the accredited bodies for both the undergraduate and graduate degree programs, and its curricula are consistently and continuously evaluated and revised to fulfill the contemporary, diverse, and holistic academic needs of all students, including majors and non-majors and those locally, statewide, nationally, and internationally. A description of each undergraduate and graduate degree program and undergraduate component of the Department of HPER is as follows:

The undergraduate degree programs of the department of HPER are **Recreation** and **Sport Management**. The curriculum of **recreation** whole thrust is to provide majors with a variety of extensive, contemporary, and probing theoretical, practical, and research opportunities. Providing majors with such curricular experiences enables them to acquire competencies in recreation through pertinent knowledge, experiential growth, and professional development and enables them to be capable in providing individuals with knowledge and skills in recreational, leisure time, and/or lifelong activities. And the curriculum of recreation ensures that major attain a relevant, holistic, and diverse knowledge base that equips them with proficient skills to be successful in graduate school and in the world of work in any professional and/or related areas of recreation. The **Sport Management** program offers a variously essential and contemporary knowledge base underlying sport management. It focuses on developing future Sport Management Professionals' (SMPs) competencies in volition and problem solving; skills in organizing, planning, collaborating, delegating, and leading; expertise in budget data interpretation, analysis, and application; and familiarity in technology software and application. It also stresses the importance of commitment, diversity, integrity, service, accreditation, and professionalism. Specific emphasis of the program is on the graduation of SMPs with diverse backgrounds in the subsequent decades not only to satisfy the numerous employment needs of the constantly changing and growing sport industry but also to produce competent leaders for the marketing of sports entities, either nationally or internationally, with resounding public lure, and for the effective leadership of an athletic and/or a sport program on any athletic, professional, and and/or non-athletic hierarchy.

The undergraduate, disciplinary endorsements and teacher education components of the Department of HPER is **Health** and **Physical Education**. Both endorsements prepare majors to teach and/or coach students in grades from K thru 12. They ensure (a) that majors acquire an overall, extensive learning of the knowledge base of **Health** and **Physical Education**; (b) that majors master instructional, methodological, and technological techniques specific to **Health** and **Physical Education**; (c) that majors understand and are able to execute the instruction, application, and adaptation of physical and health activities and skills not only with able body individuals but also with those with disabled bodies; (d) that majors know and can apply appropriate theoretical, practical, and spontaneous classroom approaches as physical educators or as health educators; (e) and that majors know and can apply as well leadership managerial approaches as coaches, as health care providers, and/or as administrators. Lastly, the teacher education component of **Health** and **Physical Education** prepares majors to succeed in higher education, particularly whenever they attempt to pursue advanced degrees in Physical Education, Health, and/or related disciplines.

The department of HPER offers health, physical activity, sport-relate skill, and fitness courses to support **the General Education Core Curriculum**.

These courses instill in students a familiarity of the many different enhancers and detractors that can influence their psyche, attitude, knowledge, health, fitness, and lifelong engagement in executing a reasonably conscientious style of living healthy. Moreover, the goal of these courses is to impart on the consciousness of students the necessity of knowing (1) how the body responds to disease and exercise, (2) how it responds positively and negatively to individual and environmental factors, (3) how it reacts to engaging and not engaging in a healthy life style, and (4) how learning healthy lifestyle practices can enable them to be energetically persistent not only in an academic and/or a professional endeavor but also in sustaining a quality professional and a personal long life span of wholesome exuberance.

The **HPER CLUB** is an entity of the department designed to engage majors in the processes of organizing, planning, marketing, community service, team work, and leadership. Because the **Club** is majors-centered, the department's chairperson and faculty serve only in an advisory role. The majors are solely responsible for creating the vision and mission statements of the club; recruiting majors who are not members of the club; electing the officers for the club; determining the procedural operations, campus and community service functions, and fund-raising events of the club; and participating in the department's research, professional, and academic development.

The department offers three individual graduate degree programs: **The Master's of Science Degree in Education with an Emphasis in Physical Education**, **the Master's of Science Degree in Education with an Emphasis in Athletic Administration and Coaching with educator licensure**, and **the Master's of Science Degree in Education with an Emphasis in Athletic Administration and Coaching Non-Teaching**. The **Master's of Science Degree in Education with an emphasis in Physical Education** provides an interestingly and a rigorously diverse, contemporary curricular offering with the intent to excite the graduates in the degree program to engage studiously in a painstaking and an investigating inquisition and research endeavor of the advanced theoretical, practical, experiential, and empirical knowledge prevalent in physical education.

The **Master's of Science Degree in Education with an emphasis in Athletic Administration and Coaching with educator licensure** offers a curriculum requiring graduates in the degree program to engage in a profound and comprehensive exploration, examination, and study of the various administrative, scientific, injurious, and coaching models and offers theories, approaches, techniques, and methodologies for the effective management, administration, operation, and leadership of an athletic and/or a sport program on any athletic and/or non-athletic hierarchy. The **Masters of Science Degree in Education with an emphasis in Athletic Administration and Coaching Non-Teaching** offers graduates a similar degree curriculum as that mentioned above but with a slightly different course offering.

Lastly, the department of HPER, as such, performs indeed the vital roles of nurturing, advising, leading, and empowering not only able-body students but also those with special needs of the diverse population of the University. In light of these roles, the department structures its overall operational processes, academic degrees, and components to have a personal, an advisory, and a professional link with these students and those with special needs.

#### **Course Electives:**

Majors' course electives must be selected and taken sequentially, must fortify their knowledge based in their primary and/or secondary discipline, and must provide them with the knowledge based that enable them to secure successfully a professional or an academic position in the various fields of HPERSM and/or related areas.

The **ongoing goals** of the Department of HPER are as follow:

1. To attract both national and international students with diverse backgrounds and with the academic competence to excel as majors in the department.

2. To engage majors as proactive participants in the follow through of not only the vision, mission, and goals of the University but also those of the department.
3. To provide students with far-reaching, diverse, contemporary, and disciplinary departmental requisites that enable them to be scholars and leaders in the world of their chosen individual disciplines or professions.
4. To offer undergraduate and graduate disciplinary degrees and endorsements that provide a rigorous and sufficient curricula that meaningfully and individually challenge majors to acquire a knowledge base and the practical and experiential experiences effective for not only the passage of professional licensure but also for the ease in continuing professional or graduate school.
5. To provide the public of Alcorn and that of the surrounding areas with health-related information and screenings through courses, conferences, events, grants, and workshops.
6. To be a staunch advocate and contributor in the promotion of the prevention and cure of obesity.
7. To implement disciplinary degree programs that can satisfactorily address and fulfill societal needs with adequate graduation of majors in such programs;
8. To have a HPER CLUB (a) that provides chances for majors to execute managerial and administrative skills in an organization; (b) that causes an understand of majors to realize the importance of displaying flexibility and teamwork in working with individuals from diverse backgrounds; (c) that encourages majors to participate in volunteering and/or create service learning projects for those in need; (d) that focuses on majors gaining experience on marketing and fundraising for specific enhancements of the club; (e) and that convinces majors to exercise, realize, and experience the theoretical and practical approaches for the learning of non-effective and/or effective leadership skills as the leader of an organization.

**\*Health, Physical Education Major  
(120 Credit Hours)**

**Freshman Year (34)**

First Semester		Hrs.	Second Semester		Hrs.
EN 111	Composition I	<input type="text"/>	EN 112	Composition II	<input type="text"/>
HI 111	World Civilization I	<input type="text"/>	SS 111	Social Institutions	<input type="text"/>
BI 111	Intro to Biology I	<input type="text"/>	BI 112	General Biology	<input type="text"/>
PE 122	Health	<input type="text"/>	MA 121	College Algebra	<input type="text"/>
PE 101	Physical Education	<input type="text"/>	CS 100	Info. Tech. Proficiency	<input type="text"/>
PH 132	General Psychology	<input type="text"/>	HI 112	World Civilization II	<input type="text"/>
UL 101	University Life	<input type="text"/>	PE 100	Physical Education I	<input type="text"/>
<b>Total</b>		<input type="text"/>	<b>Total</b>		<input type="text"/>

**Sophomore Year (28)**

PE 201	Phys. Ed. Activity	<input type="text"/>	PH 326	Psy of the Except. Child	<input type="text"/>
PE 237	Elementary Dance	<input type="text"/>	PE 336	Hist/Principles of Phy. Ed.	<input type="text"/>
SA 223	Oral Communication	<input type="text"/>	EN 231	Vocabulary Development	<input type="text"/>
EN 213	Studies in Literature	<input type="text"/>	ED 200	Social Studies/Multicultural Ed.	<input type="text"/>
PE 226	Consumer Health	<input type="text"/>			<input type="text"/>
PE 245	First Aid Safety	<input type="text"/>			<input type="text"/>
<b>Total</b>		<input type="text"/>	<b>Total</b>		<input type="text"/>

**Junior Year (34)**

BI 335	Human Anatomy/Phys.	<input type="text"/>	<b>PE 346**</b>	Methods Materials in P.E. Secondary	<input type="text"/>
BI 335L	Human Anatomy/Phys.	<input type="text"/>			<input type="text"/>
PE 356	Measurement/Eval.	<input type="text"/>	<b>ED 302**</b>	Teaching Practicum/Technology	<input type="text"/>
PH 336	Educational Psychology	<input type="text"/>	<b>ED 351**</b>	Managing Classroom Beh.	<input type="text"/>
PE 327	Coaching/Officiating	<input type="text"/>	<b>ED 348**</b>	Foundations of Education	<input type="text"/>



PE 328	Motor Dev. Movement Ed.	<input type="text"/>	3
		<input type="text"/>	
<b>Total</b>		<input type="text"/>	<b>16</b>

PE 468	Kinesiology	<input type="text"/>	3
PE 417**	Teaching Practicum	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>18</b>

### Senior Year (21)

PE 427	Org/Admin. of Phy Ed.	<input type="text"/>	3
PE 467	Adapted Physical Ed.	<input type="text"/>	3
ED 498**	Reading in the Secondary School	<input type="text"/>	3
<b>Total</b>		<input type="text"/>	<b>9</b>

ED 468***	Directed Teaching	<input type="text"/>	12
		<input type="text"/>	
<b>Total</b>		<input type="text"/>	<b>12</b>

Note: Teacher certification requirements will vary as State Licensure mandates are revised or updated.

\* **Nine additional Health courses are required to obtain certification in Health.**

\*\* **Restricted Courses Must pass Praxis I before taking these courses.**

\*\*\* **ED 468 must pass Praxis II before taking this course.**

### Recreation Major (120 Credit Hours)

#### Freshman Year (34)

First Semester		Hrs.
EN 111	Composition I	<input type="text"/> 3
HI 111	World Civilization I	<input type="text"/> 3
BI 111	General Biology	<input type="text"/> 3
PE 122	Health	<input type="text"/> 3
PY 111	Physical Science I	<input type="text"/> 3
PE 101	Physical Education	<input type="text"/> 1
UL 101	University Life	<input type="text"/> 1
<b>Total</b>		<input type="text"/> <b>17</b>

Second Semester		Hrs.
EN 112	Composition II	<input type="text"/> 3
BI 112	Biology	<input type="text"/> 3
HI 112	World Civilization II	<input type="text"/> 3
MA 121	College Algebra	<input type="text"/> 3
PH 132	General Psychology	<input type="text"/> 3
PE 100	Physical Education I	<input type="text"/> 1
CS 100	Info. Tech. Proficiency	<input type="text"/> 1
<b>Total</b>		<input type="text"/> <b>17</b>

#### Sophomore Year (28)

SS 111	Social Institutions	<input type="text"/> 3
PE 237	Elementary Dance	<input type="text"/> 3
AR 214	Art Appreciation	<input type="text"/> 3
EN 213	Studies in Literature	<input type="text"/> 3
	Technology Elective	<input type="text"/> 3
PE 201	Phys. Ed. Activity	<input type="text"/> 1
<b>Total</b>		<input type="text"/> <b>16</b>

PE 245	First Aid Safety	<input type="text"/> 3
PH 320	Developmental Psychology	<input type="text"/> 3
MU 213	Music Appreciation	<input type="text"/> 3
SA 223	Oral Communication	<input type="text"/> 3
		<input type="text"/>
<b>Total</b>		<input type="text"/> <b>12</b>

#### Junior Year (31)

BI 335	Human Anatomy/Phys.	<input type="text"/> 3
BI 335	Human Anatomy/Phys.	<input type="text"/> 1
PE 327	Coaching/Officiating	<input type="text"/> 3
RC 316	Intro. to Recreation	<input type="text"/> 3
RC 358	Recreation for the Aging	<input type="text"/> 3
PE 336	History and Principles	<input type="text"/> 3
<b>Total</b>		<input type="text"/> <b>16</b>

RC 354*	Practicum in Recreation	<input type="text"/> 3
RC 347	Meth/Mtls in Leisure Prog.	<input type="text"/> 3
RC 417	Camp Counseling	<input type="text"/> 3
SY 330	Social Psychology	<input type="text"/> 3
RC 458	Outdoor Recreation	<input type="text"/> 3
<b>Total</b>		<input type="text"/> <b>15</b>

### Senior Year (27)

RC 429	Org. Adm. of Rec.	<input type="text"/>	3	RC 428*	Fieldwork	<input type="text"/>	6
RC 437	Recreational Leadership	<input type="text"/>	3	RC 478	Leisure Counseling	<input type="text"/>	3
RC 457	Community Recreation	<input type="text"/>	3	PE 491	Independent Study	<input type="text"/>	<u>3</u>
PE 467	Adapted Physical Ed.	<input type="text"/>	3			<input type="text"/>	
RC 477	Areas and Facilities	<input type="text"/>	<u>3</u>			<input type="text"/>	
	<b>Total</b>	<input type="text"/>	<b>15</b>		<b>Total</b>	<input type="text"/>	<b>12</b>

\* **Restricted Courses**

\* **PE 491 will not be offered during the summer, only the fall and spring semesters.**

### Sport Management (120 Credit Hours)

#### Freshman Year (34)

First Semester			Hrs.	Second Semester			Hrs.
EN 111	Composition I	<input type="text"/>	3	EN 112	Composition II	<input type="text"/>	3
SS 111	Social Institutions	<input type="text"/>	3	SS 112	Social Institutions	<input type="text"/>	3
BI 111	General Biology	<input type="text"/>	3	PY 111	Physical Science I	<input type="text"/>	3
PE 122	Health	<input type="text"/>	3	MA 121	College Algebra	<input type="text"/>	3
PE 100	Physical Education I	<input type="text"/>	1	CS 100	Info. Tech. Proficiency	<input type="text"/>	1
PH 132	General Psychology	<input type="text"/>	3	BI 113	Intro. Env. Bio/Ecology	<input type="text"/>	<u>4</u>
UL 101	University Life	<input type="text"/>	<u>1</u>			<input type="text"/>	
	<b>Total</b>	<input type="text"/>	<b>17</b>		<b>Total</b>	<input type="text"/>	<b>17</b>

#### Sophomore Year (32)

PE 200	Physical Education	<input type="text"/>	1	CS 201	Intro. to Comp. Prog. in Visual Basic	<input type="text"/>	3
EC 201	Principles of Economics I	<input type="text"/>	3	AC 213	Principles of Financial Accounting	<input type="text"/>	3
HU 201	Humanities	<input type="text"/>	3	EN 231	Vocabulary Development	<input type="text"/>	3
SA 223	Oral Communication	<input type="text"/>	3	SM 201	Direct Sport Recreation	<input type="text"/>	3
EN 213	Studies in Literature	<input type="text"/>	3	ED 200	Social Studies/Multicultural Ed.	<input type="text"/>	3
*SM 200	Intro Sport Management	<input type="text"/>	<u>3</u>	PE 200	Physical Education	<input type="text"/>	<u>1</u>
	<b>Total</b>	<input type="text"/>	<b>16</b>		<b>Total</b>	<input type="text"/>	<b>16</b>

#### Junior Year (30)

SM 300	Liability Safety Sport	<input type="text"/>	3	SM 303	Facility Management	<input type="text"/>	3
SM 301	Sports Ethics	<input type="text"/>	3	SM 304	Sport Law, Contracts Compliance*	<input type="text"/>	3
MG 301	Principles of Management	<input type="text"/>	3	SM 305	Trends, Issues, Challenges of Sport Management	<input type="text"/>	3
MK 301	Principles of Marketing	<input type="text"/>	3	SM 306	Essentials of Strength Conditioning	<input type="text"/>	3
SM 302	Fundraising Promotion	<input type="text"/>	<u>3</u>	PE 356	Measurement Evaluation in Physical Education Sport	<input type="text"/>	<u>3</u>
	<b>Total</b>	<input type="text"/>	<b>15</b>		<b>Total</b>	<input type="text"/>	<b>15</b>

#### Senior Year (24)

MK 477	Marketing Management	<input type="text"/>	3	SM 403	Sport Internship**	<input type="text"/>	<u>12</u>
PE 491	Independent Research	<input type="text"/>	3			<input type="text"/>	
SM 401	Psychology of Sport	<input type="text"/>	3			<input type="text"/>	
SM 402	Sport Marketing	<input type="text"/>	<u>3</u>			<input type="text"/>	
	<b>Total</b>	<input type="text"/>	<b>12</b>		<b>Total</b>	<input type="text"/>	<b>12</b>

**PE 491 will not be offered during the summer, only the fall and spring semesters.**

\* **Pre-requisite SM 200 before taking other 200, 300, and 400 level courses.**

\*\* **Pre-requisites: all 300 and 400 level courses.**

## **COURSE DESCRIPTIONS IN HEALTH, PHYSICAL EDUCATION**

### **PE 101-109      1-0-1**

These courses attempt to increase cardiovascular and musculoskeletal fitness; to encourage sociability, cooperation, and teamwork; to improve organic and neuromuscular functioning; to provide knowledge on the history, rules and regulations, and equipment; and to provide an opportunity to learn and execute skills. The overall intent of these courses is to instill an understanding and an appreciation of the importance of establishing a positive attitude toward a frequent habit of regular participation in a lifetime of wholesome, healthful activity. PE 101, PE 102, PE 103, PE 104, PE 105, PE 106, PE 107, PE 108, PE 109.

### **PE 110            1-0-1      PHYSICAL EDUCATION: RESTRICTED**

This course meets the special needs and abilities of students who are atypical and are unable to participate in regular physical education activity courses.

### **PE 111            PHYSICAL EDUCATION: RESTRICTED**

Continuation of PE 110.

### **PE 122            3-0-3      HEALTH**

This course encompasses the basis nutritional health concepts and principles; provides the basis for wholesome family life relations; reveals the nature and scope of mental health problems; supplies knowledge on the effects of alcohol, tobacco, and narcotics on the human body; and presents the basis for control of communicable and non-communicable diseases.

### **PE 201            1-0-1      PHYSICAL EDUCATION ACTIVITY**

A continuation of PE 101.

### **PE 202            1-01      BOWLING AND ARCHERY**

A continuation of PE 102.

### **PE 203            1-0-1      TENNIS, BADMINTON, AND TABLE TENNIS**

A continuation of PE 103.

### **PE 204            1-0-1      SELF TESTING, TUMBLING, AND GYMNASTICS**

A continuation of PE 104.

### **PE 205            1-0-1      SWIMMING I (Advanced)**

A continuation of PE 105.

### **PE 206            1-0-1      SOCCER AND VOLLEYBALL**

A continuation of PE 106.

### **PE 207            1-0-1      BASKETBALL AND SOCCER**

A continuation of PE 107.

### **PE 208            1-0-1      COMBATIVE AND SELF-DEFENSE**

A continuation of PE 108.

### **PE 209            1-0-1      JOGGING, TRACK, AND FIELD, AND HANDBALL**

A continuation of PE 109.

### **PE 210            1-0-1**

Continuation of PE 110.

### **PE 211            1-0-1**

Continuation of PE 111.

## **COURSE DESCRIPTIONS IN FITNESS TRAINING (FT)**

### **FT 200            2-0-2    BEGINNING SPIN CYCLE FITNESS**

This class is the beginner phase of spin cycling. It will introduce the parts and the functionality of the cycle and will walk the students through all the particulars and safety associated with riding the cycle. This class is designed to improve the students' endurance and stamina and to facilitate and enhance weight loss and fitness by starting at their individual baselines pertaining to their body weight, skill set, and fitness level and by providing an incrementally and a strategically progressive timeframe and resistance for cycling.

### **FT 201            2-0-2    BEGINNING CARDIO FITNESS AND TONING**

This class is the beginner phase of cardio-fitness and toning. It will introduce the parts and the functionality of the cardio-machines and will walk the students through all the particulars and safety associated with the machines before actually participating on them. This class is designed to improve the students' cardio-endurance and toning and to enhance weight loss and fitness by starting at their individual baselines pertaining to their body weight, skill set, and fitness and by providing an incrementally and a strategically progressive timeframe and resistance for effective work outs on the cardio-machines.

### **FT 202            2-0-2    BEGINNING STRENGTH TRAINING**

This class is the beginner phase of strength training. It will introduce the various equipment, weights, and machines of strength training and the functionality of such apparatus and will walk the students through all the particulars and safety associated with strength training before actually executing any lifts. This class is designed to increase the students' muscular strength, to reduce bodily adipose tissues, to fortify the skeletal system, to transform the body's physique, and to foster self-esteem and concept, and it is to facilitate and enhance weight loss and fitness by starting at the students' individual baselines pertaining to their strength level and skill set and by providing an incrementally and a strategically progressive timeframe for increases in the addition of weight according to their progression on lifts underlying their prescribed regimen.

### **FT 203            2-0-2    AEROBIC ACTIVITIES**

This class is to engage students in meticulously planned, energetic, contemporary, and various aerobic activities that encompass aerobic dances, cardio conditioning exercises, muscular toning exercises (lower and upper body), and continually choreographed activities. It is to increase the students' stamina, flexibility, balance, agility, and strength. The focus of this class is encouraging, facilitating, and enabling weight loss; reducing bodily adipose tissue; fostering self-esteem, self-concept, and perceived confidence; and a thoughtfulness to physical appearance. It promotes awareness for lifelong physical activity, conscientiousness for maintaining a healthy lifestyle, and a commitment to avoiding being overweight or obese.

### **FT 204            2-0-2    BEGINNING PLYOMETRIC TRAINING**

This beginning class is to introduce the different drills underlying plyometric. It is to instruct and engage students in minimally lower and upper body plyometric drills. This class is to augment the students' stamina, flexibility, balance, agility, and strength, and it promotes awareness for lifelong physical activity, conscientiousness for maintaining a healthy lifestyle, and a commitment to avoiding being overweight or obese.

### **FT 300            2-0-2    INTERMEDIATE SPIN CYCLE FITNESS**

This class is the intermediate phase of spin cycling. It requires students to exert considerable or sub-maximal energy and effort on the spin cycle by trying to master at least between level 2 or 3 resistances on it within a specified timeframe - 30 to 60 minutes. It also improves the students' mental toughness, confidence, endurance, stamina, and lower leg strength; facilitates and enhances their ability for weight lost and improves their overall individual fitness; and promotes an awareness for lifelong physical activity, a conscientiousness for maintaining a healthy lifestyle, and a commitment to avoiding being overweight or obese

**FT 302                    2-0-2    INTERMEDIATE STRENGTH TRAINING**

This class is the immediate phase of strength training. It provides students with a thoughtfully schematic work-out regimen that serves as the blueprint that enables them to acquire form, techniques, and strength to be lifting weights at their sub-maximal muscular capacity throughout or by the end of the class session.

This class is designed to increase the students' muscular strength and power, to reduce bodily adipose tissues, to fortify the skeletal system, to transform the body's physique, and to foster self-esteem, self-concept, and perceived confidence, and it is to facilitate and enhance weight loss, lean muscular mass and overall physical appearance and muscular fitness.

**FT 304                    2-0-2    INTERMEDIATE PLYOMETRIC TRAINING**

This class is immediate plyometric training. It is to instruct and engage students in sub-maximal execution, exertion, and stringent plyometric exercises and resistance of the lower and upper body. This class is to augment the students' stamina, flexibility, balance, agility, and strength, and it promotes awareness for lifelong physical activity, conscientiousness for maintaining a healthy lifestyle, and a commitment to avoiding being overweight or obese.

**FT 305                    2-0-2    INTERMEDIATE CARDIO FITNESS AND TONING**

This class is the intermediate phase of cardio-fitness and toning. It requires students to exert sub-maximal energy on the cardio-machines by trying to master at least walking or jogging speeds of 2.0 to 2.3 with machine elevations up to 1 to 2 degrees within a specified timeframe—30 to 60 minutes. It also improves the students' mental toughness, confidence, endurance, stamina, and lower leg strength; facilitates and enhances their ability for weight lost and improved their overall individual fitness; and promotes an awareness for lifelong physical activity, a conscientiousness for maintaining a healthy lifestyle, and a commitment to avoiding being overweight or obese.

**FT 400                    2-0-2    ADVANCED SPIN CYCLE FITNESS**

This class is the advanced phase of spin cycling. It requires students to exert maximal energy on the spin cycle by trying to master at least between level 5 or 6 resistance on it within a specified timeframe—30 to 60 minutes. It also improves the students' mental toughness, confidence, endurance, stamina, and lower leg strength; facilitates and enhances their ability for weight lost and improved their overall individual fitness; and promotes an awareness for lifelong physical activity, a conscientiousness for maintaining a healthy lifestyle, and a commitment to avoiding being overweight or obese.

**FT 402                    2-0-2    ADVANCED STRENGTH TRAINING**

This class is the advanced phase of strength training. It provides students with a thoughtfully schematic work-out regimen that serves as the blueprint that enables them to acquire form, techniques, and strength to be lifting weights at their maximal muscular capacity throughout or by the end of the class session.

This class is designed to increase the students' muscular strength and power, to reduce bodily adipose tissues, to fortify the skeletal system, to transform the body's physique, and to foster self-esteem, self-concept, and perceived confidence, and it is to facilitate and enhance weight loss, lean muscular mass and overall physical appearance and muscular fitness.

**FT 404                    2-0-2    ADVANCED PLYOMETRIC TRAINING**

This class is advanced plyometric training. It is to instruct and engage students in maximal execution, exertion, stringent, and very cumbersome plyometric exercises and resistance of the lower and upper body. This class is to augment the students' stamina, flexibility, balance, agility, and strength, and it promotes awareness for lifelong physical activity, conscientiousness for maintaining a healthy lifestyle, and commitment to avoiding being overweight or obese.

**FT 406                    2-0-2    ADVANCED CARDIO FITNESS AND TONING**

This class is the advanced phase of cardio-fitness and toning. It requires students to exert maximal energy on the cardio-machines by trying to master at least walking or jogging speeds of 2.3 to 2.6 with machine elevations up to 2 to 4 degrees within a specified timeframe—30 to 60 minutes. It also improves the students' mental toughness, confidence, endurance, stamina, and lower leg strength; facilitates and enhances their ability for weight lost and improved their overall individual fitness; and promotes an awareness for lifelong physical activity, a conscientiousness for maintaining a healthy lifestyle, and a commitment to avoiding being overweight or obese.

**PE 224                    3-0-3    LEISURE CRAFTS**

This course reveals the foundations and activities of leisure crafts. The instruction focuses on art, design, color, sculpture, crayons and oil pastels, crafts, matting and framing. Primary emphasis is placed on printing and stencils, masks and puppets, lettering and calligraphy, and resources.

**PE 226                    3-0-3    CONSUMER HEALTH**

The basis of this course is the revelation of consumer health issues - separating fact from fiction, and identifying frauds and quackeries. Advertising and other promotional activities, mental and behavioral health, and dental care are topics subjected to study in this course. Examined also in this course are the basic nutritional concepts and self-care, communication and sexuality, protecting yourself from infectious diseases, consumerism, complementary and alternative medicine and the health-care system, and governmental laws, agencies, and strategies.

**PE 237                    2-0-3    ELEMENTARY DANCE**

This course examines the history and basic concepts of a variety of cultural, traditional, and contemporary dances, explains and demonstrates the dynamics of warm-up and floor-work exercises from different types of music, illustrates the fundamental movement of which basic dance steps are made, exposes the origins of folk and square dance as they have developed in specific cultures, and teaches how the fundamental patterns of movement and creativity can be infused in dance.

**PE 238                    3-0-3    INTERMEDIATE DANCE**

This course requires 10 hours of field-based experience; it teaches sufficient verbal and motor skills in the techniques of rhythms to enable adequate execution and demonstration of such techniques when teaching them; it defines and exposes the correct form of steps, figures, terms, formations, and positions used in various intermediate dances; and it presents strategies designed to enhance students enjoyment of dance.

**PE 245                    2-0-3    FIRST AID AND SAFETY**

This course teaches the proper application of mouth-to-mouth resuscitation, the correct execution in rescuing a victim, and the appropriate methods in responding to any emergency requiring knowledgeable first aid action and care. It examines the diagnoses, signs and symptoms, care and treatment of various types of fractures, injuries, wounds, burns, poisons, and the like that might occur in medical emergencies. Also, the content of this course supports the standards according to Red Cross.

**PE 327                    3-0-3    COACHING AND OFFICIATION INDIVIDUAL AND TEAM SPORTS**

This course encompasses the acquisition of the rules, regulations, skills, and knowledge of coaching and officiating individual and team sports. It discusses the theories, principles, strategies, and techniques of coaching these sports and discusses the organization of officiating and the different officiating mechanics, signaling, and techniques associated with these sports.

**PE 328                    3-0-3    MOTOR DEVELOPMENT AND MOVEMENT EDUCATION**

This course examines the varying theories and models of development and movement. It reveals the different factors that influence the various stages of development and movement and asserts how and why development and movement occur in different developmental segments. And it explores development and movement as a continuous process beginning at conception to death.

**PE 335                    3-0-3    METHODS AND MATERIALS IN PHYSICAL EDUCATION  
ELEMENTARY**

This course includes the investigation, recognition, instruction, adaptation, and application for teaching physical education for learning on the elementary level. Unit and lesson plans, methods, materials, goals, objectives, contents, aids, and evaluations involved in teaching elementary Physical Education are integral components examined in the course.

**PE 345            3-0-3    METHODS AND MATERIALS IN HEALTH EDUCATION  
ELEMENTARY**

This course includes the investigation, recognition, instruction, adaptation, and application for teaching Health education on the elementary level. Unit and lesson plans, methods, materials, goals, objectives, contents, aids, and evaluations involved in teaching elementary Health are integral components examined in the course.

**PE 346            3-0-3    METHODS AND MATERIALS IN PHYSICAL EDUCATION  
SECONDARY**

This course analyzes the main purpose of physical education, technology in physical education, adolescents and physical activity, and adolescent growth and development. Significant attention is on effective and reflective teaching, teaching styles in physical education, creating a positive learning environment, developing curriculum, planning units and lesson plans, assessment and grading, and legal issues associated with teaching physical education for learning.

**PE 356            3-0-3    MEASUREMENT AND EVALUATION OF PHYSICAL EDUCATION**

This course provides measurement, evaluation, assessment, and statistical techniques for determining the efficacy of instruction, the achievement of student learning outcomes, and the degree of knowledge learned in health and physical education. Further stress is on the construction of knowledge tests, how to test for health-related fitness and motor fitness, how to execute anthropometric measurements and calculate body composition, and how to use the microcomputer in testing measuring and evaluating.

**PE 400            303       HUMAN SEXUALITY**

This course examines the psychological, physiological, and behavioral aspects of human sexuality, with particular emphasis on the influence of popular culture on these dimensions.

**PE 417            1-0-3    TEACHING PRACTICUM**

This course facilitates the gradual introduction of majors under the close supervision of the coordinator into the duties and responsibilities of a health educator or a physical educator. It encompasses organizing classes, organizing and electing teaching materials, the development of lesson plans, and the actual teaching of courses and/or physical activities.

**PE 423            3-0-3    COMMUNICABLE AND NON-COMMUNICABLE DISEASES**

This course provides a comprehensive study of diseases and their individual etiologies, path-physiologies, diagnoses, prognoses, and treatments in modern day society.

**PE 425            3-0-3    ORGANIZATION AND ADMINISTRATION OF HEALTH AND  
SAFETY**

This course offers principles and techniques for organizing and administering health and safety programs. Major emphases are given to liability or tort law, facility management, health promotion and care, personnel and administrative accountability and leadership.

**PE 427            3-0-3    ORGANIZATION AND ADMINISTRATION OF PHYSICAL  
EDUCATION**

This course analyzes the nature of administration and management in sport and physical education, management functions in physical education and sport, communication and motivation in sport management and physical education, and human resources in sport management and physical education. Also, it focuses on public relations, partnerships, marketing, and promotion in sport management and physical education, financial management in physical education and sport, purchasing, maintenance, and security management in sport and physical education, and law, facility and equipment planning, designing, and management in physical education and sport.

**PE 435                    3-0-3    PHYSIOLOGY OF EXERCISE**

This course examines physiology of exercise in the United States, its past and its future and examines the control of the internal environment of the body and bio-energetics. Exercise metabolism, hormonal responses to exercise, the nervous system: structure and control of movement; skeletal muscle: structure and function; circulatory responses to exercise; and respiration during exercise are the chief emphases of this course.

**PE 438                    3-0-3    SCHOOL AND COMMUNITY HEALTH**

This course focuses on school, social, behavioral, and environmental community health-related issues and the controversies that surround them.

**PE 467                    3-0-3    ADAPTED PHYSICAL EDUCATION**

This course provides information on the meaning and importance of adapted physical education, identifies developmental delays or arrested stages of performance that hinder a child's ability to be successful in executing a given task, explains the operation and management of a program for the disability, and discusses the federal and state laws that govern the education of students with disabilities. Additional instruction is on identifying the different kinds of disabilities that are associated with the disable and is on how to adapt the teaching of knowledge, skills, games, activities, and sports based on such disabilities.

**PE 468                    3-0-3    KINESIOLOGY**

This course investigates the history of kinesiology, the framework and composition of the body, the structure and function of the skeletal system, and the physiology of muscle contraction. Further study is on the neurological implication of motor control, analysis and assessment of human movement, and principles of training and development. **Pre-requisite for this course is BI 335.**

**PE 491                    (1-3)-0-(1-3)    INDEPENDENT STUDY**

The course provides an opportunity for students to address issues, problems, trends, and challenges in physical education, recreation, or sport management by engaging in the basic research process. It exposes students to the fundamental components, strategies, techniques, and literature that are essential in facilitating their researching the topic, executing the processes of the research project, and producing a quality research document. Major emphases of the course are on writing syntax in research; identifying library and internet resources; understanding, executing, and adapting the various mechanisms of the library and internet searches, and interacting with the multi-knowledge bases associated with the world of research.

**PE 492                    (1-3)-0-(1-3)    INDEPENDENT STUDY (Honors)**

A continuation of PE 491

**COURSE DESCRIPTIONS IN RECREATION (RC)**

**RC 316                    3-0-3    INTRODUCTION TO RECREATION**

This course examines the trends, issues, and challenges of parks, recreation, and leisure. It considers the historical evolution and philosophical dimensions of parks, recreation, and leisure and investigates them not only nationally and internationally but also from the perspective of public and nonprofit - commercial and therapeutic - lifetime health, fitness, and wellness - outdoor adventure - arts and culture - and as a profession.

**RC 347                    3-0-3    METHODS AND MATERIALS IN LEISURE PROGRAMS**

The emphasis of this course is on the foundations of outdoor education, preparation for teaching outdoors, and methods and delivery of outdoor education. Instruction of this course encompasses theories and foundations in outdoor education; creating the learning environment and designing lessons; physical, cognitive, and affective methods; and one's future in outdoor education.

**RC 354                    3-0-3    PRACTICUM IN RECREATION**

This course enables recreation majors to examine, observe, and participate and to be mentored in different recreational and/or related situations and activities under the supervision of and consultation with the coordinator of the recreation program. This practicum may occur on or off campus with periodically weekly seminars where majors can express their practicum experiences throughout the semester or summer. **Pre-requisites for this course are as follows: RC 316, RC 347, RC 358, and PE 327.**



**RC 358                    3-0-3    RECREATION FOR THE AGING**

This course investigates the quantity and quality of life and the individual differences of aging pertaining to the physical changes in structure, capacity, and endurance. It focuses on aging respecting motor coordination, motor control and skill, physical and psychosocial relationships, physical performance and achievement. Exploring the physical development and decline of the elderly; investigating the health, exercise, and cognitive function of the aging; and studying the physical function of older adults is also the focus of the class.

**RC 417                    3-0-3    CAMP COUNSELING**

The growth, structure, and values of organized camping, the camp counselor's role in guidance, camp activities, and camping and trail skills are the areas of focus of this course.

**RC 428                    1-0-6    FIELD WORK**

Fieldwork experience provides majors with an opportunity to observe, examine, apply, adapt, and practice the theoretical knowledge base of recreation at a recreational facility. Majors serve as an administrative assistant for the director of a recreational facility. Being in a leadership position enables them to gain direct and/or vicarious experience in the different managerial, interpersonal, and assessment approaches associated with the organization and administration, operation, and leadership of a recreational facility. **Pre-requisite: must be a senior and has earned 18 hours in Recreation.**

**RC 429                    3-0-3    ORGANIZATION AND ADMINISTRATION OF RECREATION**

This course focuses on the principles and concepts of organization, the development of an organizational plan, and the effectiveness of administrative and budgetary approaches and/or principles. This course covers the decision making process, the understanding of fiscal and physical resources, and planning for program evaluation and risk management in recreation.

**RC 437                    3-0-3    RECREATION LEADERSHIP**

This course examines the context of recreation leadership, determines who is the recreation leader, reveals why recreation leadership. It also provides methods on how the recreation leader should make decision, solve problem, communicate, lead, control, plan and on how to facilitate recreation behavior and manage participant behavior. Teaching and using resources, managing the workload according to age group and according to special abilities in recreation are taught in this course.

**RC 457                    3-0-3    COMMUNITY RECREATION**

This course covers what are the VIP action plan, the core values, vision, and mission, and key trends and opportunities of community recreation. It also examines other facets of community recreation: such as the core competencies, strategies for achieving the vision, action steps and performance measures, researching the audience, developing a communication plan, and working.

**RC 458                    3-0-3    OUTDOOR RECREATION**

This course emphasizes the fundamentals of outdoor recreation, outdoor resources, management, education, and participation in outdoor recreation, and it examines the psychology and natural environment and other outdoor recreation resources, the status, purposes, organization and administration of outdoor recreation programs for public, voluntary, and commercial agencies.

**RC 477                    3-0-3    RECREATIONAL AREAS AND FACILITIES**

This course investigates the planning principles and processes, the internal organizational planning factors, the external planning factors and conditions, and the demographics and community profiles of recreational areas and facilities. It additionally explains the concepts of supply analysis, demand analysis and public consultation, synthesis, analysis, and reporting, open space planning, and facility operation and maintenance.

**RC 478                    3-0-3    LEISURE COUNSELING**

This course introduces the basic theoretical approaches and practical applications associated with leisure counseling. The basic methods of how to utilize such approaches and how to apply them practically are the focus of this course as well.

## **COURSE DESCRIPTIONS IN SPORT MANAGEMENT (SM)**

### **SM 200            3-0-3    INTRODUCTION TO SPORT MANAGEMENT**

This course engages students in the relevance of sociological, cultural, historical, political, psychological, and legal concepts to the management of sport; the necessary professional skills and attitudes of sport managers; and ways in which the globalization of sport continues to affect sport management professions.

### **SM 201            3-0-3    DIRECT SPORT AND RECREATION**

The course examines the philosophies, goals, objectives, and purposes of organization of directing sport and recreation; it critiques the philosophic foundation of sport and recreation; it discusses the different concepts of directing sport and recreation, styles of leadership, approaches of facility management, and supervising functions of personnel; and it focuses on the different features of program development, the budgetary process, and on the variety of techniques underlying measurement and evaluation of an organization.

### **SM 300            3-0-3    LIABILITY AND SAFETY IN PHYSICAL EDUCATION AND SPORT**

This course examines the underlying knowledge base of tort law and negligence theory, negligence defenses, and supporting case law. It provides the legal duties of physical Education and sport staff and provides the miscellaneous issues associated with the legality of sport.

### **SM 301            3-0-3    SPORT ETHICS**

This course explores ethical concepts in sports, sportsmanship and gamesmanship, and gambling in sports. Specific emphases of the course are on Ethics for participants, coaches, and sports officials; ethical considerations for parents and fans; violence in sport; and the ethics of drug use and testing. Ethical considerations of race in sports - ethical duties of sport agents - women in sports – discrimination - Title IX - ethical consideration for intellectual property in sports - ethical consideration in sport media - and ethical guidelines for the sports management professional are subjected to study and research in this course.

### **SM 302            3-0-3    FUNDRAISING AND PROMOTION**

This course engages students in the fundraising and promotion for sport and recreation programs. It explores the understanding of successful fundraising, promotions and public relations in the 21<sup>st</sup> century; offers fundamental elements and resources of fundraising and promotion; provides effective strategies for successful fundraising with booster clubs and sport support groups; emphasizes the importance of planning in fundraising activities, the who, what and why of fundraising, and strategies and tactics of raising money.

### **SM 303            3-0-3    FACILITY MANAGEMENT**

This class will cover numerous issues from construction-related concerns to marketing facilities, naming rights, and concession concerns. Also covered are topics related to the facility management side of the industry with special attention on back-house operations such as water, heating, cooling, and related activities. This is a comprehensive course focused on applied rather than theoretical knowledge.

### **SM 304            3-0-3    SPORT LAW, CONTRACTS, AND COMPLIANCE**

The growth of professional and amateur sports over the last quarter century has produced a myriad of legal issues. A basic knowledge of the law governing professional and amateur sport is crucial to the work of a sport manager. Whether you work for a team, manage a facility, or organize an amateur league, the legal implications of management decisions can have daunting consequences. This class discusses and analyzes the applicable law governing the sport industry. Contracts, personal injury, risk management, labor law, intellectual property, employment, discrimination, and antitrust are major areas covered in this class.

### **SM 305            3-0-3    TRENDS, ISSUES, AND CHALLENGES OF SPORT MANAGEMENT**

This course engages students in the relevance of today's society in sports. It examines issues and historical development of sport to the present. Reviewing major changes in society and the world of sport of segregation and desegregation, overcoming racial barriers to dominance of minorities in professional and intercollegiate sports, from the Olympics to the Paralympics, women participating and coaching sports, Title IX, mental and physical disabilities, consumers and spectators' outlook, and the increasing population of people involvement in physical fitness, quality of life, and social interactions are the trends, issues, and challenges that are of study and research in this course.

**SM 306            3-0-3    ESSENTIALS OF STRENGTH TRAINING AND CONDITIONING**

This course provides the concepts and applications of the exercise sciences, test and evaluation, exercise techniques, program design, and organization and administration. It investigates the structure and function of the muscular, neuromuscular, cardiovascular, and respiratory systems and principles of test selection and administration, resistance training and spotting techniques, anaerobic exercise prescription, aerobic exercise prescription, and facility organization and risk management.

**SM 400            3-0-3    LEADERSHIP AND MANAGMENTIN ATHLETIC TRAINING**

This course introduces athletic training, the sports medicine team, fiscal and risk management. It involves program and facility management, reimbursement and revenue, and leadership and motivation. It provides leadership and management theories, leadership behaviors and management tools, legal issues and risk management, and facility design and management.

**SM 401            3-0-3    PSYCHOLOGY OF SPORT**

This course engages students in the most important and active areas of current research that recognizes the merging of individuals and socio-environmental factors in making sense of sport performance and behavior. The course includes definitions of terms, an explanation of the chapters' scope, and an outline of the sections. The course also provides a review of the available research and theory on main topics in the text and devotes significant space to future research directions.

**SM 402            3-0-3    SPORT MARKETING**

This course discusses the emergence of sports marketing, segmentation, targeting, and positioning - sports product concepts - promotion mix elements, and sponsorship programs; presents contingency framework for strategic sports marketing, research tools for understanding sports consumers, promotion concepts, and pricing concepts and strategies; and explores the understanding of participants and spectators as consumers, managing sports products, and the implementing and controlling the strategic sports marketing.

**SM 403            1-0-12    SPORT INTERNSHIP**

Through networking and on-site field experiences, student majors will gain competencies in the sport management field and applying theories learned from previous courses. The internship will allow students to complete a partial fulfillment in the sport management degree program and will provide career opportunities in the sport industries of their choice.



## *School of Nursing*

# SCHOOL OF NURSING

*Dr. Debra G. Spring, Dean*

*Cora Balmat School of Nursing – Natchez Campus*

*Telephone: (601) 304-4302*

*Fax: (601) 304-4372*

Alcorn State University School of Nursing is located on the Natchez Campus, approximately 40 miles south of the Lorman Campus. The School of Nursing was established in 1977 with an Associate Degree Nursing Program. In fall 1979, the first students were admitted to the Baccalaureate Nursing Program. In the spring 1995, the first students were admitted to the Graduate Nursing Program. Program options at the graduate level include family nurse practitioner and nurse educator with post-master's certificate options available in family nurse practitioner and nurse educator areas.

The School of Nursing is organized into two academic programs; Undergraduate and Graduate. The Undergraduate Programs consist of the Associate of Science in Nursing and the Bachelor of Science in Nursing. The Graduate Program consists of the Masters of Science in Nursing. All programs are accredited by the Board of Trustees of Institutions of Higher Learning State of Mississippi and the Accreditation Commission for Education in Nursing, Inc. (ACEN). Additional information about the programs offered can be found on the School of Nursing webpage at [www.alcorn.edu/academics/schools/SON](http://www.alcorn.edu/academics/schools/SON). In addition to the two academic programs, the School of Nursing has a nurse-managed family clinic that provides primary health care services to the local population, opportunities for faculty practice, and learning experiences for students. Upon successful completion of the program of study, undergraduate nursing students (Associate Degree and Baccalaureate) are eligible to write the National Council Licensure Examination for Registered Nurses (NCLEX-RN®) administered by the National Council of State Boards of Nursing. Graduate students who successfully complete the family nurse practitioner program option or the post-master's certificate program option are eligible to write a national family nurse practitioner certification examination.

## **Mission**

Through teaching, scholarship and service, the mission of the School of Nursing is to provide undergraduate and graduate nursing programs that are committed to excellence in the education and preparation of clinically competent, caring, nursing professionals.

## **Vision**

The vision of the School of Nursing is to achieve national prominence as a leader of excellence in nursing education, nursing practice, and nursing research.

## **Values**

Holism	Professionalism	Accountability
Integrity	Diversity	Competence
Leadership	Service	Collaboration

## **Associate of Science in Nursing Program**

*Rebecca Fairchild, Associate Dean and Interim Director, Undergraduate Programs*

*Cora S. Balmat School of Nursing*

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The Associate of Science in Nursing (ASN) curriculum is designed to prepare graduates who are competent to function as entry-level registered nurses. The graduate of the ASN Program will be proficient in a core set of competencies that will guide their practice as registered nurses. These competencies include: client-centered care, professionalism, leadership, systems-based practice, informatics and technology, communication, teamwork and collaboration, safety, quality improvement, and evidence-based practice (Mississippi Nursing Competency Model, 2012). The graduate is prepared to utilize clinical reasoning through the nursing process as a basis for clinical decision making. The graduate engages in collaborative and managed care in diverse settings.

The curriculum fulfills the educational needs of qualified applicants who desire to prepare for nursing in a relatively short period of time in a university setting. Opportunities are also provided for upward mobility of licensed practical nurses. The curriculum combines courses offered by Alcorn State University, Natchez Campus, with planned and guided learning experiences in clinical nursing in affiliating hospitals and community agencies.

Students who successfully complete the curriculum sequence are conferred the Associate of Science in Nursing degree by the University and are eligible to write the National Council Licensure Examination for Registered Nurses (NCLEX-RN)® administered by the National Council of State Boards of Nursing. Licensing of registered nurses in the State of Mississippi is regulated by the Mississippi Board of Nursing. Graduates seeking licensure in a state other than Mississippi will undergo a similar criminal history records check for that state. Conviction of a misdemeanor or felony offense may be grounds for refusal by the Board to issue a license. The number of hours required for graduation with the Associate of Science in Nursing degree is 64.

### **MISSION AND PROGRAM STUDENT LEARNING OUTCOMES**

The mission of the ASN Program is to cultivate a learning environment that facilitates the acquisition of knowledge, skills, and attitudes necessary to provide safe, competent nursing care that promotes optimal health outcomes for individuals, families, and communities. The graduate of the ASN Program possesses the knowledge, skills, and attitudes necessary to:

1. Evaluate nursing care provided to clients, families, groups, and communities across the lifespan from diverse backgrounds in a variety of settings to ensure that it is compassionate, age and culturally appropriate, and based on a client's preferences, values and needs.
2. Collaborate with members of the interprofessional health care team to manage and coordinate the provision of safe, quality care for clients, families, and groups.
3. Demonstrate use of best current evidence and clinical expertise when making clinical decisions in the provision of client-centered care.
4. Use evidence-based quality improvement processes to effect change in the delivery of client-centered care.
5. Demonstrate effective use of strategies to mitigate errors and reduce the risk of harm to clients, self, and others in healthcare, home, and community settings.
6. Use evidence-based information and client care technology to communicate relevant client information, manage care, and mitigate error in the provision of safe, quality client-centered care.
7. Assimilate integrity and accountability into practices that uphold established regulatory, legal, and ethical principles while providing client-centered, standard-based nursing care.
8. Use leadership, management, and priority-setting skills in the provision and management of safe, quality client-centered care.

9. Analyze the impact that the macrosystem has on the provision of safe, quality client-centered care in the microsystem of the work unit.
10. Use verbal and nonverbal communication strategies with clients, families, colleagues, and groups from diverse backgrounds that foster mutual respect and shared decision making to enhance client satisfaction and health outcomes.

#### **ADMISSION CRITERIA AND REQUIREMENTS:**

The applicant must:

1. be eligible for undergraduate admission to Alcorn State University;
2. submit an official high school transcript or documentation of GED;
3. have an American College Test (ACT) composite score of 18 or greater (15 or higher prior to October 1989);
4. have an American College Test (ACT) sub-score of 18 or greater in Math (15 or higher prior to October 1989);
5. have an American College Test (ACT) sub-score of 18 or greater in Reading (applicants who took the ACT prior to October 1989 must retake the ACT to obtain the Reading sub-score);
6. have a cumulative grade point average (GPA) of 2.5 or higher on a 4.0 scale on transferable college credits;
7. complete the prerequisites: BI 114: Anatomy and Physiology I, BI 114L: Anatomy and Physiology I Laboratory, BI 214: Anatomy and Physiology II, BI 214L: Anatomy and Physiology II; Laboratory; UL 101: University Life, and MA 121: College Algebra with a grade of "C" or better before admission to the first clinical course (NU 118) with an overall GPA of 2.5 on transferable college credits. The applicant can be enrolled in final prerequisites at the time of application. The applicant can be admitted into the program pending completion of final prerequisites;
8. complete an Alcorn State University Application for Undergraduate Admission; and
9. complete an Application for Admission to the Associate of Science in Nursing Program.

Satisfactory completion of prerequisite ASN course requirements does not automatically insure admission to the ASN Program. Applicants are only considered for admission for the fall semester of each year as designated on the application form. If the applicant is accepted and fails to enroll, or if the applicant is not accepted, a new application must be submitted in order to be considered for a subsequent enrollment date. The new application is reviewed according to the current admission criteria.

With the notification of admission to the first clinical nursing course, each applicant will receive a health record form, an admission agreement form, and an estimate of expenses for the year. The health record form must be completed and returned to the Associate of Science in Nursing Program.

Successful completion of a basic cardio-pulmonary resuscitation (CPR) course for health care providers is required before entering the first clinical nursing course. A satisfactory criminal history background check, a satisfactory drug screen, and documentation of current health insurance are required for all applicants who are accepted for Program admission, in addition to all continuing students.

Students who have failed two (2) or more nursing courses or who have been dismissed from any nursing program are not eligible for admission.

## PROCESS FOR SELECTION OF GENERIC STUDENTS:

1. All admission criteria must be completed by the date designated on the Application for Admission to Undergraduate Nursing Programs.
2. Individuals who have submitted all admission requirements by the specified deadline will be considered for program admission based on a rating scale (See ASN Program web page for details).
3. Applicants not selected for admission must reapply for the next fall term by submitting a new Application for Admission to Undergraduate Nursing Programs.

## TRANSFER STUDENTS

The Associate Dean for the School of Nursing will evaluate credit for transfer courses; however, only a maximum of six semester hours in nursing credits will be considered for transfer. Courses with grades less than "C" are not transferable. Nursing course work presented for transfer credit must have been completed with a grade of "C" or better and must have been completed within one year of the current request for admission. Only nursing courses from a nationally accredited nursing program will be considered.

## PROCESS FOR SELECTION OF TRANSFER STUDENTS:

1. Transfer students must meet general admission criteria and requirements and have a cumulative grade point average that is not less than 2.5 on a 4.0 scale.
2. Letter of Good Standing and a written recommendation from previous School of Nursing.
3. The Associate Dean's evaluation of credit for transfer courses.
4. Transfer students are admitted on a space available basis only.
5. Participation in orientation and skills assessment session.

## PROGRAM OF STUDY: GENERIC ASN OPTION\*

Prerequisites		Hrs.
BI 114	Anatomy and Physiology I	4
BI 214	Anatomy and Physiology II	4
MA 121	College Algebra	3
UL 101	University Life	1
Total		12

### First Year (26)

First Semester		Hrs.	Second Semester		Hrs.
NU 118	Foundations of Client-Centered Care	8	NU 128	Client-Centered Care I	8
EN 111	Composition I	3	BI 325	Microbiology with Lab	4
SY 235	General Sociology	3	Total		12
Total		14			

### Second Year (26)

First Semester		Hrs.	Second Semester		Hrs.
NU 218	Client-Centered Care II	8	NU 223	Role Transition	3
PH 320	Developmental Psychology	3	NU 229	Client-Centered Care III	9
—	Creative Arts/Humanities Elective**	3			
Total		14	Total		12



\*Effective fall 2016, all new students will follow the Program of Study outlined above. All continuing students will follow the Program of Study that was in effect during the student's initial enrollment.

\*\*Electives must be approved. UL 101 University Life is a university requirement for incoming freshmen. Nursing courses must be taken in sequence with the designated Prerequisites and Corequisites.

### **LICENSED PRACTICAL NURSE (LPN) ADVANCED PLACEMENT OPTION**

The Licensed Practical Nurse (LPN) Advanced Placement Option is designed for the Licensed Practical Nurse (LPN) who seeks to further his/her education and advance in the nursing profession. The LPN Advanced Placement Option is a three (3) semester program, which begins in the summer semester and can be completed at the end of the following spring semester, after completion of all degree requirements.

Licensed Practical Nurses who are currently practicing and have a minimum of one year practice experience are eligible for consideration for admission to the LPN Advanced Placement Option. Applicants for the LPN Advanced Placement Option must meet the general University undergraduate admission requirements and Program admission requirements. The applicant must also have a current unrestricted license to practice as a Licensed Practical Nurse.

Applicants successfully passing the mobility examination requirement of the LPN Advanced Placement Option must enter the nursing sequence during the same academic year the mobility process is completed. After passing the mobility examination and entering the LPN Advanced Placement Option, the Licensed Practical Nurse is given eight (8) semester hours credit for NU118: Foundations of Client-Centered Care and is responsible for paying the mobility fee prior to graduation.

The mobility examination may be taken twice in order to achieve the score needed for Program admission and validation credit. If the applicant is unsuccessful, he/she may apply for admission into the Generic Option.

#### **PROCESS FOR SELECTION FOR THE LPN ADVANCED PLACEMENT OPTION:**

1. All admission criteria must be completed by the date designated on the Application for Admission to Undergraduate Nursing Programs.
2. Individuals who have submitted all admission requirements by the specified deadline and who meet all admission requirements will be considered for admission.
3. Individuals meeting admission requirements will be required to take and achieve the required score for admission on a mobility examination.
4. Individuals successfully completing the mobility process will be considered for admission based on a rating scale (See ASN Program web page for Rating Scale).
5. Individuals not selected for the LPN Advanced Placement Option must reapply for consideration for admission for subsequent classes.

LPN Advanced Placement students must meet the program's progression, retention, and graduation requirements.

**PROGRAM OF STUDY: LPN ADVANCED PLACEMENT OPTION** (All LPNs admitted to the Advanced Placement for summer 2016 will follow the Program of Study outlined below)

<b>Pre-requisite</b>		<b>Hrs.</b>
BI 114	Anatomy and Physiology I	<input type="text"/> 4
BI 214	Anatomy and Physiology II	<input type="text"/> 4
MA 121	College Algebra	<input type="text"/> 3
EN 111	Composition I	<input type="text"/> 3
EN 112	Composition II	<input type="text"/> 3
PH 132	General Psychology	<input type="text"/> 3
PH 320	Developmental Psychology	<input type="text"/> 3
UL 101	University Life*	<input type="text"/> 1
<b>Total</b>		<input type="text"/> <b>24</b>
		<input type="text"/>
NU 121	Fundamentals (Credit by examination)	<input type="text"/> <b>5</b>
		<input type="text"/>
<b>Summer Semester</b>		<b>Hrs.</b>
NU 129	Essentials of Health Assessment	<input type="text"/> 2
NU 149	Nursing Seminar	<input type="text"/> 1
NU 130	Nursing of Clients with Common Healthcare needs	<input type="text"/> 5
NU 131	Care of Clients with Psychosocial Needs	<input type="text"/> 4
<b>Total</b>		<input type="text"/> <b>12</b>

### First Year (30)

<b>First Semester</b>		<b>Hrs.</b>	<b>Second Semester</b>		<b>Hrs.</b>
NU 225	Nursing of the Childbearing Family	5	NU 235	Nursing of Clients with Complex Health Care Needs	7
NU 227	Nursing of Children and Adolescents	5	NU 238	Leadership Strategies for Nurses	2
SY 235	General Sociology	3	NU 289	Concepts Review I	1
BI 325	Microbiology	<u>4</u>		Elective*	<u>3</u>
<b>Total</b>		<b>17</b>	<b>Total</b>		<b>13</b>

\*Electives must be approved. UL 101 University Life is a university requirement for incoming freshmen. Nursing courses must be taken in sequence with the designated Prerequisites and corequisites.

**PROGRAM OF STUDY: LPN ADVANCED PLACEMENT OPTION** (Effective summer 2017, applicants in the LPN Advanced Placement Option will follow the Program of Study outlined below)

<b>Prerequisite</b>		<b>Hrs.</b>
BI 114	Anatomy and Physiology I	<input type="text"/> 4
BI 214	Anatomy and Physiology II	<input type="text"/> 4
MA 121	College Algebra	<input type="text"/> 3
EN 111	Composition I	<input type="text"/> 3
SY 235	Introduction to Sociology	<input type="text"/> 3
UL 101	University Life*	<input type="text"/> 1
<b>Total</b>		<input type="text"/> <b>18</b>

NU 118	Foundations (Credit by examination)	<input type="checkbox"/>	8
<b>Summer Semester</b>			
NU 128	Client-Centered Care I	<input type="checkbox"/>	8
BI 325	Microbiology with Lab	<input type="checkbox"/>	4
	<b>Total</b>	<input type="checkbox"/>	<b>12</b>

<b>First Semester</b>			<b>Hrs.</b>	<b>Second Semester</b>			<b>Hrs.</b>
NU 218	Client-Centered Care II		8	NU 223	Role Transition		3
PH 320	Developmental Psychology		3	NU 229	Client-Centered Care III		9
	Creative Arts/Humanities Elective*		3				
	<b>Total</b>		<b>14</b>	<b>Total</b>			<b>12</b>

\*Electives must be approved. UL 101 University Life is a university requirement for incoming freshmen. Nursing courses must be taken in sequence with the designated Prerequisites and corequisites.

Nursing courses must be taken in sequence with the designated prerequisites and corequisites.

## REGISTRATION

Registration for all nursing courses can be completed online or on the Natchez Campus. Dates for registration are listed in the University calendar. All students are responsible for ensuring that registration is complete and that tuition has been paid each semester.

## PROGRESSION AND RETENTION

1. Students must comply with the prerequisites and corequisites as outlined in each nursing course description.
2. Students in nursing sequence must maintain a minimum 2.0 GPA on a 4.0 scale to remain in nursing sequence.
3. Students who earn a grade of less than "C" in a nursing and/or prerequisite or corequisite course may not progress to the next nursing course and or level.
4. Students previously admitted to the program, but not currently enrolled in the nursing course sequence, must maintain a minimum 2.0 GPA in order to be eligible for readmission.
5. Students who fail a nursing or corequisite course will not progress to the next nursing course and/or level.
6. A grade of "D", "F", "WF", or "I" must be removed before the student can progress in the curriculum.
7. A nursing course in which a "D", "F", or "WF" is achieved as a final grade may be repeated only one time.
8. Students must pass both the theory and clinical components of a nursing course in order to pass the course.
9. Failure to adhere to the Student Clinical Supervision Guidelines will result in failure of the nursing course.

10. A student will not progress in nursing sequence if he/she does not pass a campus lab clinical skill after three attempts.
11. A comprehensive pharmacology math test (CPMT) will be given in selected clinical courses. Passing the CPMT with 95% or greater is a requirement for continuation in the program of study. Scoring less than 95% on the third test constitutes failure of the nursing course, and requires withdrawal from all nursing courses at the time of the failure.

## **DISMISSAL**

A student will be dismissed from the program after two failures of any course with the NU prefix. Failure is defined as achieving a final grade of D, F, or WF.

## **GRADUATION**

The Associate of Science in Nursing degree is granted on the recommendation of the ASN faculty after satisfactory completion of the University and Program requirements. These requirements include:

1. Successful completion of the Associate of Science in Nursing curriculum.
2. Attainment of a cumulative grade point average of 2.00 or greater on a 4.0 scale.

All prospective candidates for graduation from Alcorn State University must either pass a departmental examination or complete a written project. The Associate of Science in Nursing Program has selected a comprehensive examination to meet the University requirement. This examination is part of the course requirements and will be administered in the graduating semester of the ASN Program.

Graduates of the Associate of Science in Nursing Program are eligible to write the National Council Licensure Examination for Registered Nurses (NCLEX-RN)® administered by the National Council of State Boards of Nursing. Pursuant to Mississippi Statute 43-11-13, graduates must submit an application to a state board of nursing and must be cleared for licensure through an investigation that shall consist of verification that the prospective licensee has not been convicted of or pleaded guilty or nolo contendere to a felony of possession or sale of drugs, murder, manslaughter, armed robbery, rape, sexual battery, sex offense listed in Section 45-33-23 (f), Mississippi Code 1972, child abuse, arson, grand larceny, burglary, gratification of lust, aggravated assault, or felonious abuse and/or battery of a vulnerable adult. To assist the Board in conducting its licensure investigation, all applicants shall undergo a fingerprint-based criminal history records check of the Mississippi Central Criminal Database and the Federal Bureau of Investigation Criminal History Database. Graduates seeking licensure in a state other than Mississippi will undergo a similar criminal history records check for that state.

## **AMERICANS WITH DISABILITIES ACT POLICY**

Upon admission, a student who discloses a properly certified disability will receive a reasonable accommodation. However, in order to perform safe client care, students must meet core performance standards and functional abilities for admission and progression, as published by the Southern Council on Collegiate Education for Nursing (SCCEN). A copy of the **Core Performance Standards** can be found on the School of Nursing (SON) webpage at [www.alcorn.edu/academics/schools/SON/](http://www.alcorn.edu/academics/schools/SON/) under the General Information tab.

Any student who feels he or she may need an accommodation based on the impact of a disability should contact Dorothy J. Davis, Director of Health and Disability Services at (601) 877-6460 to discuss specific needs. Health and Disability Services is located in the Felix H. Dunn Health Services Center, 1000 ASU Drive, 779, Alcorn State, MS 39096. The Office of Health and Disability Services coordinates reasonable accommodations for students with documented disabilities.

**ACCREDITATIONS**

In addition to the Southern Association for the Accreditation of Schools and Colleges Commission on Colleges (SACSCOC), the Department of Associate Degree Nursing is accredited by the following agencies:

**Accreditation Commission  
For Education in Nursing  
3343 Peachtree Rd., NE, Suite #850  
Atlanta, GA 30326  
Telephone: 1-404-975-5000  
[www.acenursing.org](http://www.acenursing.org)**

**State of Mississippi Board of Trustees of State Institutions of Higher Learning  
3825 Ridgewood Road  
Jackson, MS 39211-6453  
Telephone: 601-432-6486**

## **Bachelor of Science in Nursing Program**

*Rebecca Fairchild, Associate Dean and Interim Director, Undergraduate Programs*

*Cora S. Balmat School of Nursing*

*Telephone: (601) 304-4226*

*Fax: (601) 304-4372*

The Bachelor of Science in Nursing (BSN) Program is committed to the implementation of a curriculum that is designed to prepare the student for a multi-faceted role as an entry-level registered nurse. The curriculum is designed to prepare the student to use antecedent knowledge from the liberal arts and the sciences in order to provide a solid foundation for the development of the core competencies of client-centered care, professionalism, leadership, systems-based practice, informatics and technology, communication, teamwork and collaboration, safety, quality improvement, and evidence-based practice (Mississippi Nursing Competency Model, 2012). These core competencies provide an effective base of knowledge and cognitive skills for graduates to assume the role of professional registered nurse.

Graduates of the program are conferred the Bachelor of Science in Nursing degree by the University and are eligible to write the examination administered by the National Council Licensure Examination for Registered Nurses (NCLEX-RN®). Licensing of registered nurses in the State of Mississippi is regulated by the Mississippi Board of Nursing. Graduates seeking licensure in a state other than Mississippi will undergo a similar criminal history records check for that state. Conviction of a misdemeanor or felony offense may be grounds for refusal by the Board to issue a license. The minimum number of hours required for graduation with a Bachelor of Science in Nursing degree is 120 credit hours.

### **PURPOSES AND PROGRAM STUDENT LEARNING OUTCOMES**

The purposes of the Bachelor of Science in Nursing Program are to prepare generalists at the baccalaureate level and provide a foundation for graduate study in nursing.

The program-level student learning outcomes of the Bachelor of Science in Nursing curriculum are that graduates will be able to:

1. Synthesize knowledge from relevant theories, concepts, and principles from nursing, social, behavioral, and natural sciences as a basis for making professional nursing judgments.
2. Integrate major concepts and theories delineated in the theoretical framework into the practice of nursing.
3. Use the nursing process to assist persons, families, and communities to achieve their maximum health potential.
4. Use opportunities to promote and maintain health potential and safety for individuals in a variety of primary, secondary, and tertiary care settings.
5. Assume leadership roles in coordinating nursing strategies that enhance the quality of nursing practices.
6. Collaborate with nurses, other health professionals, clients, families, and community groups in providing health care services.
7. Assume responsibility and accountability for the evaluation of nursing practice outcomes.
8. Use relevant research findings to improve nursing practice and health care delivery.

9. Engage in nursing practice that incorporates values, ethics, morals, and legal aspects of the profession.
10. Contribute to the continuing development of nursing knowledge and nursing roles through education, practice, research, and technology.

## **ADMISSION CRITERIA AND REQUIREMENTS**

The applicant must:

1. be eligible for undergraduate admission to Alcorn State University;
2. submit an official high school transcript or documentation of GED;
3. submit official transcript(s) from each college/university attended;
4. have an ACT composite score of 21. Students with the required ACT composite score must also have at least a grade of “C” in each prerequisite course and an overall grade point average of 2.5 on a 4.0 scale;
5. have a cumulative grade point average (GPA) of 2.5 or higher on a 4.0 scale on transferable college credits;
6. complete an Alcorn State University Application for Undergraduate Admission;
7. complete an Application for Admission to Undergraduate Nursing Programs; and
8. complete lower level prerequisites for entering the Upper Level Program of Study. Lower level prerequisites must be completed and documented (via transcript) by each applicant prior to the anticipated date of enrollment in the first clinical nursing course.

## **LOWER LEVEL PREREQUISITE COURSES (Required of all BSN Program applicants)**

<b><u>Prerequisite Courses</u></b>	<b><u>Semester Hours</u></b>
<b>English (6 Hours)</b>	
Composition I	3
Composition II	3
<b>Creative Arts (9 Hours)</b>	
Literature	3
Oral Communication	3
Elective (Creative Arts Elective)	3
<b>Social Sciences (15 Hours)</b>	
History	3
Sociology	3
General Psychology	3
Developmental Psychology	3
Statistical Methods	3
<b>Natural/Physical Sciences 15 Hours Total (Including Labs)</b>	
Anatomy and Physiology I with Lab	4

Anatomy and Physiology II with Lab	4
Microbiology with Lab	4
Nutrition	3
<b>Mathematics (3 to 5 Hours)</b>	
College Algebra	3
<b>University Requirements</b>	
University Life	1
Health and Wellness	<u>1</u>
<b>Total</b>	<b>50</b>

Completion of lower level prerequisite course requirements for the Bachelor of Science in Nursing degree does not automatically assure admission to the BSN Program. Applicants are only considered for admission for the fall semester of each year as designated on the application form. If the applicant is accepted and fails to enroll, or if the applicant is not accepted, a new application must be submitted in order to be considered for a subsequent enrollment date. The new application is reviewed according to the current admission criteria.

With the notification of admission to the first clinical nursing course, each applicant will receive a health record form, an admission agreement form, and an estimate of expenses for the year. The health record form must be completed and returned to the Bachelor of Science in Nursing Program. Successful completion of a basic cardio-pulmonary resuscitation (CPR) course for health care providers is required before entering the first clinical nursing course. A satisfactory criminal history background check, a satisfactory drug screen, and documentation of current health insurance are required for all applicants who are accepted for Program admission, in addition to all continuing students.

Students who have failed two (2) or more nursing courses or who have been dismissed from any nursing program are not eligible for admission.

#### **PROCESS FOR SELECTION OF GENERIC BSN STUDENTS:**

1. All admission criteria must be completed by the date designated on the Application for Admission to Undergraduate Nursing Programs.
2. Individuals who have submitted all admission requirements by the specified deadline will be considered for program admission based on a rating scale (See BSN Program web page for details).
3. Applicants not selected for admission must reapply for the next fall term by submitting a new Application for Admission to Undergraduate Nursing Programs.

#### **TRANSFER STUDENTS**

Transfer students must meet general admission criteria and requirements and have a cumulative grade point average that is not less than 2.5 on a 4.0 scale. The Associate Dean for the School of Nursing will evaluate credit for transfer courses; however, only a maximum of 13 semester hours in nursing credits will be considered for transfer. Courses with grades less than "C" are not transferable. Nursing course work presented for transfer credit must have been completed with a grade of "C" or better and must have been completed within one year of the current request for admission. Only courses from a nationally accredited nursing program will be considered. Transfer students must have sufficient acceptable transcript hours to meet the requirements (120) for graduation.



## PROCESS FOR SELECTION OF TRANSFER STUDENTS:

1. Transfer students must meet general admission criteria and requirements and have a cumulative grade point average that is not less than 2.5 on a 4.0 scale.
2. Letter of Good Standing and a written recommendation from previous School of Nursing.
3. The Associate Dean's evaluation of credit for transfer courses.
4. Transfer students are admitted on a space basis only.
5. Participation in orientation and skills assessment session.

## UPPER LEVEL PROGRAM OF STUDY

### Junior Year (28)

First Semester		Hrs.	Second Semester		Hrs.
NU 321	Pharmacology I	<input type="text"/> 3	NU 350	Family Nursing	<input type="text"/> 6
NU 340	Concepts Basic to Nursing	<input type="text"/> 4	NU 352	Adult Health Care I	<input type="text"/> 6
NU 342	Health Assessment/Nursing Skills	<input type="text"/> 6	NU 354	Synthesis of Nursing Concepts I	<input type="text"/> 1
		<input type="text"/>	NU 322	Pharmacology II	<input type="text"/> 2
Total		<input type="text"/> 13	Total		<input type="text"/> 15

### Senior Year (42)

Summer Session		Hrs.
NU 421	Nursing Oriented to Psychosocial Functioning	<input type="text"/> 6
NU 440	Adult Health Care II	<input type="text"/> 6
Total		<input type="text"/> 12

First Semester		Hrs.	Second Semester		Hrs.
NU 420	Community Health Nursing	<input type="text"/> 6	NU 423	Leadership Strategies in Nursing	<input type="text"/> 6
NU 426	Research in Nursing	<input type="text"/> 3	NU 429	Seminar	<input type="text"/> 1
NU 450	Child/Adolescent Nursing	<input type="text"/> 6	NU 460	Adult Health Care III	<input type="text"/> 6
		<input type="text"/>	NU 462	Synth. of Nursing Concepts II	<input type="text"/> 2
Total		<input type="text"/> 15	Total		<input type="text"/> 15

## RN-BSN PROGRAM OPTION

The BSN Program also offers a RN-BSN Program Option for licensed registered nurses holding an Associate of Science or Diploma in Nursing degree who desire to advance their education. This program allows RNs to pursue a program of study, on-line, to obtain a Bachelor of Science in Nursing degree in one year (three semesters) of full-time study. Applicants are required to follow the same admission procedures as any other applicants entering the University and the Bachelor of Science in Nursing Program. Applicants who have completed the 50 hour Lower Level prerequisite course requirements with a grade of "C" or better are eligible to apply for admission to the RN - BSN Program Option.

Additional admission criteria and requirements include:

1. A copy of a current unencumbered registered nurse (RN) license.

- Students transferring from other colleges/universities must meet the admission criteria in the Bachelor of Science in Nursing Program.
- A satisfactory criminal background check, a satisfactory drug screen, and documentation of current health insurance are required of all applicants.

### PROGRAM OF STUDY: RN-BSN PROGRAM OPTION

First Semester		Hrs.	Second Semester		Hrs.
NU 422OL	Health Assessment	<input type="text" value="4"/>	NU 420OL	Community Health Nursing	<input type="text" value="6"/>
NU 424OL	Professionalism in Nursing	<input type="text" value="4"/>	NU 426OL	Research in Nursing	<input type="text" value="3"/>
NU 427OL	Nursing Informatics II	<input type="text" value="2"/>	NU 430OL	Health Policy and Finance	<input type="text" value="3"/>
NU 425OL	Mgt. Drug Therapy	<input type="text" value="3"/>	NU 428OL	Case Management	<input type="text" value="3"/>
<b>Total</b>		<input type="text" value="13"/>	<b>Total</b>		<input type="text" value="15"/>

Summer Session		Hrs.
NU 400OL	Independent Study	<input type="text" value="2"/>
NU 423OL	Leadership Strategies in Nursing	<input type="text" value="6"/>
NU 462OL	Synthesis of Nursing Concepts II	<input type="text" value="1"/>
NU 435OL	End Of Life Care	<input type="text" value="3"/>
<b>Total</b>		<input type="text" value="12"/>

*Thirty hours of credit is awarded to each RN to BSN student as credit-by-examination hours. To receive credit for the 30 hours, each student must pay a fee to the Business Office on the Lorman Campus during the first semester of enrollment. A receipt of payment must be provided to the Bachelor of Science in Nursing Program by mid-term of the Fall Semester or RN to BSN students will not be allowed to register for Spring Semester courses.*

Only Registered Nurses who have been admitted into the RN-BSN Program Option are eligible to register for online nursing courses.

### REGISTRATION

Registration for all nursing courses can be completed online or on the Natchez Campus. Dates for registration are listed on the University calendar. All students are responsible for ensuring that registration is complete and that tuition has been paid each semester.

### PROGRESSION AND RETENTION

- Students must comply with the prerequisites and corequisites as outlined in each nursing course description.
- Students in nursing course sequence must maintain a minimum 2.0 GPA on a 4.0 scale to remain in nursing sequence.
- Students who earn a grade of less than "C" in a nursing and/or prerequisite or corequisite course may not progress to the next nursing course and/or level.
- Students previously admitted to the program but currently not in the nursing course sequence must maintain a minimum 2.0 GPA in order to be eligible for readmission.
- Students who fail a nursing or corequisite course will not progress to the next nursing course and/or level.

6. A grade of "D", "F", "WF", or "I" must be removed before the student can progress in the curriculum.
7. A nursing course in which a "D", "F", or "WF" is achieved as a final grade may be repeated only one time.

**Students must pass both the theory and clinical components of a nursing course in order to pass the course.**

8. Failure to adhere to the Student Clinical Supervision Guidelines will result in failure of the nursing course.
9. A student will not progress in nursing sequence if he/she does not pass a campus lab clinical skill after three attempts.
10. A comprehensive pharmacology math test (CPMT) will be given in selected clinical courses. Passing the CPMT with 95% or greater is a requirement for continuation in the program of study. Scoring less than 95% on the third test constitutes failure of the nursing course, and requires withdrawal from all nursing courses at the time of the failure.

### **PROBATION:**

A student will be placed on probation if at the close of any term the student:

1. Achieves a cumulative grade point average (GPA) of less than 2.0 and is not subject to dismissal; and/or
2. Achieves a grade of D, F, or WF in a nursing course and is not subject to dismissal.

Students who are placed on probation and receive a written prescription must comply with the prescription in order to remove the probationary status.

Probationary status may be removed by repeating the course when it is first offered again, making a grade of "C" or above and by acquiring a GPA of 2.0 or better.

### **DISMISSAL**

A student will be dismissed if:

1. A grade of D, F, or WF is achieved in a third nursing course.
2. A grade of D, F, or WF is achieved in the same nursing course twice.
3. A grade of D, F, or WF is achieved in three nursing courses in one semester.
4. He/she is on probation and does not meet the required written prescription.

### **GRADUATION**

The Bachelor of Science in Nursing degree is granted on the recommendation of the BSN faculty after completion of University and Program requirements. These requirements include a minimum of 120 semester hours of applicable course work with at least a 2.0 cumulative grade point average in all completed course work.

All prospective candidates for graduation from the generic Bachelor of Science in Nursing and Program must meet the University's requirements for a departmental examination. This examination is part of nursing course requirements and is taken in the graduating semester of the BSN Program. RN to BSN students must meet the University's requirements for a comprehensive project. In lieu of taking the departmental examination, a comprehensive project will be completed in the graduating semester of the BSN Program.

Graduates of the Generic Bachelor of Science in Nursing Program are eligible to apply to the National Council of State Boards of Nursing to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN®). Pursuant to Mississippi Statue 43-11-13, graduates must submit an application to a state board of nursing and must be cleared for licensure through an investigation that shall consist of verification that the prospective licensee has not been convicted of or pleaded guilty or nolo contendere to a felony of possession or sale of drugs, murder, manslaughter, armed robbery, rape, sexual battery, sex offense listed in Section 45-33-23 (f), Mississippi Code 1972, child abuse, arson, grand larceny, burglary, gratification of lust, aggravated assault, or felonious abuse and/or battery of a vulnerable adult. To assist the Board in conducting its licensure investigation, all applicants shall undergo a fingerprint-based criminal history records check of the Mississippi Central Criminal Database and the Federal Bureau of Investigation Criminal History Database. Graduates seeking licensure in a state other than Mississippi will undergo a similar criminal history records check for that state.

## **AMERICANS WITH DISABILITIES ACT POLICY TECHNICAL STANDARDS FOR ADMISSION AND PROGRESSION**

### **AMERICANS WITH DISABILITIES ACT POLICY**

Upon admission, a student who discloses a properly certified disability will receive a reasonable accommodation. However, in order to perform safe client care, students must meet core performance standards and functional abilities for admission and progression, as published by the Southern Council on Collegiate Education for Nursing (SCCEN). A copy of the Core Performance Standards can be found on the School of Nursing (SON) webpage at [www.alcorn.edu/academics/schools/SON/](http://www.alcorn.edu/academics/schools/SON/) under the General Information tab.

Any student who feels he or she may need an accommodation based on the impact of a disability should contact Dorothy J. Davis, Director of Health and Disability Services at (601) 877-6460 to discuss specific needs. Health and Disability Services is located in the Felix H. Dunn Health Services Center, 1000 ASU Drive, 779, Alcorn State, MS 39096. The Office of Health and Disability Services coordinates reasonable accommodations for students with documented disabilities.

### **ACCREDITATIONS**

In addition to the Southern Association for the Accreditation of Schools and Colleges Commission on colleges (SACSCOC), the Bachelor of Science in Nursing Program is accredited by the following agencies:

#### **Accreditation Commission for Education in Nursing (ACEN)**

**3343 Peachtree Rd., NE, Suite #850**

**Atlanta, GA 30326**

**Telephone: 1-404-975-5000**

**[www.acenursing.org](http://www.acenursing.org)**

#### **State of Mississippi Board of Trustees of State Institutions of Higher Learning**

**3825 Ridgewood Road**

**Jackson, MS 39211-6453**

**Telephone: 601-432-6486**

**[www.ihl.state.ms.us/nursing/](http://www.ihl.state.ms.us/nursing/)**

## **COURSE DESCRIPTIONS IN NURSING (NU) ASN**

### **NU 121 3-6-5 FUNDAMENTALS OF NURSING**

This course is an introduction to the profession of nursing at the technical level. Included are the technical nursing skills necessary to assist individuals across the lifespan in meeting a hierarchy of basic needs, the nursing implications in growth and development, the concept of common health care needs, and the utilization of the nursing process. The supportive elements of the conceptual framework are introduced: communication, ethnic and cultural sensitivity, psychosocial needs, nutrition and diet therapy, pharmacology and moral, ethical, and legal accountability. (Fall) Prerequisites: BI 114, BI 114L, BI 214, BI 214L, MA 121. Corequisites: EN 111, PH 132, NU 129, NU 149. LPN Fast Track Prerequisites: BI 114, BI 114L, BI 214, BI 214L, MA 121, EN 111, EN 112, PH 132.

### **NU 129 2-0-2 ESSENTIALS OF HEALTH ASSESSMENT**

This course is an introduction to the essentials of a comprehensive health assessment. Included in the course are the nursing skills necessary to gather data through interview and physical examination of clients throughout the lifespan. This course requires independent skills laboratory practice. Proficiency is evaluated in the laboratory setting. (Fall and Summer) Prerequisites: BI 114, BI 114L, BI 214, BI 214L, MA 121. Corequisites: EN 111, PH 132, NU 121, NU149. For the LPN Fast-Track Prerequisites: BI 114, BI 114L, BI 214, BI 214L, MA 121, EN 111, EN 112, PH 132, Corequisites: NU130, NU131, NU149, PH 320.

### **NU 130 3-6-5 NURSING OF CLIENTS WITH COMMON HEALTH CARE NEEDS**

Emphasis is placed on concepts and supportive elements for clients experiencing common health care needs in the young adult age group. Emphasis is placed on the role of the nurse in utilizing selected nursing skills necessary to assist individuals with health care needs that are common to this age group. (Spring and Summer) Prerequisites: NU121, NU 129, BI 114, BI 114L, BI 214, BI 214L, PH 132, EN 111, MA 121. Corequisites: PH 320, EN 112, NU 131. For the LPN Fast-Track: Prerequisites: BI 114, BI 114L, BI 214, BI 214L, MA 121, EN 111, EN 112, PH 132, NU 121. Corequisites: NU 129, NU 131, NU 149, PH 320.

### **NU 131 2-6-4 NURSING OF CLIENTS WITH PSYCHOSOCIAL NEEDS**

Emphasis is placed on concepts and supportive elements for clients experiencing common psychosocial needs. Included are guided experiences in therapeutic communication and the use of the nursing process in psychiatric/mental health settings. (Spring and Summer) Prerequisites: NU 121, NU 129, BI 114, BI 114L, BI 214, BI 214L, PH 132, EN 111, MA 121. Corequisites: PH 320, EN 112, NU 130. For the LPN Fast-Track: Prerequisites: BI 114, BI 114L, BI 214, BI 214L, MA 121, EN 111, EN 112, PH 132, NU 121. Corequisites: NU 129, NU 130, NU 149, PH 320.

### **NU 149 1-0-1 NURSING SEMINAR**

The course is designed to give the student an opportunity to explore the implications of current issues and trends affecting the nursing profession and begin the process of socialization into the nursing profession. (Spring and Summer) Prerequisites: BI 114, BI 114L, BI 214, BI 214L, MA 121. Corequisites: NU 121, NU 129, EN 111, PH 132. For the LPN Fast-Track: Prerequisites: BI 114, BI 114L, BI 214, BI 214L, MA 121, EN 111, EN 112, PH 132, NU 121. Corequisites: NU 129, NU 130, NU 131, PH 320.

### **NU 225 3-6-5 NURSING OF THE CHILDBEARING FAMILY**

The course is a continuation of the concepts and supportive elements presented in the first level nursing and support courses. Emphasis is placed on the common health care needs of the childbearing family. Growth and development in the childbearing family is stressed. (Fall) Prerequisites: NU 121, NU 129, NU 130, NU 131, BI 114, BI 114L, BI 214, BI 214L, MA 121, EN 111, EN 112, PH 132, PH 320. Corequisites: NU 227, SY 235, BI 325, BI 325L. For the LPN Fast-Track: Prerequisites: BI 114, BI 114L, BI 214, BI 214L, MA 121, EN 111, EN 112, PH 132, PH 320, NU 121, NU 129, NU 130, NU 131, NU 149. Corequisites: NU 227, SY 235, BI 325, BI 325L.

**NU 227            3-6-5    NURSING OF CHILDREN AND ADOLESCENTS**

The course is a continuation of the concepts and supportive elements presented in the first Level nursing and support courses. Emphasis is placed on the common health care needs of the pediatric client. This course encompasses infancy through adolescence. Growth and development from infancy through adolescence is stressed. (Fall) Prerequisites: NU 121, NU 129, NU 130, NU 131, BI 114, BI 114L, BI 214, BI 214L, MA 121, EN 111, EN 112, PH 132, PH 320. Corequisites: NU 225, SY 235, BI 325, BI 325L. For the LPN Fast-Track: Prerequisites: BI 114, BI 114L, BI 214, BI 214L, MA 121, EN 111, EN 112, PH 132, PH 320, NU 121, NU 129, NU 130, NU 131, NU 149. Corequisites: NU 225, SY 235, BI 325, BI 325L.

**NU 235            4-9-7    NURSING OF CLIENTS WITH COMPLEX HEALTH CARE NEEDS**

This course is a continuation of NU130. Presented in this course are those health care needs that are more complex and commonly found in the middle and late maturity age groups. Utilization of the nursing process in planning and implementing care of clients of varied ages is stressed. (Spring) Prerequisites: NU 121, NU 129, NU 149, NU 130, NU 131, NU 225, NU 227, BI 114, BI 114L, BI 214, BI 214L, BI 325, BI 325L MA 121, EN 111, EN 112, PH 132, PH 320, SY 235. Corequisites: NU 238, NU 289. For the LPN Fast-Track: Prerequisites: BI 114, BI 114L, BI 214, BI 214L, BI 325, BI 325L, MA 121, EN 111, EN 112, PH 132, PH 320, SY 235, NU 121, NU 129, NU 130, NU 131, NU 149, NU 225, NU 227. Corequisites: NU 238, NU 289.

**NU 238            2-0-2    LEADERSHIP STRATEGIES FOR NURSES**

This course explores the basic principles of leadership and management; trends and issues in nursing; moral, ethical and legal implications; and the process of transition from the role of student to practitioner. (Spring) Prerequisites: NU 121, NU 129, NU 149, NU 130, NU 131, NU 225, NU 227, BI 114, BI 114L, BI 214, BI 214L, BI 325, BI 325L MA 121, EN 111, EN 112, PH 132, PH 320, SY 235. Corequisites: NU 235, NU 289. For the LPN Fast-Track: Prerequisites: BI 114, BI 114L, BI 214, BI 214L, BI 325, BI 325L, MA 121, EN 111, EN 112, PH 132, PH 320, SY 235, NU 129, NU 130, NU 131, NU 149, NU 225, NU 227. Corequisites: NU 235, NU 289.

**NU 289            1-0-1    CONCEPTS REVIEW I**

A course designed for candidates for the Associate of Science Degree in Nursing for the review of selected nursing content. Students are provided with an individualized plan of study based on learning needs that have been documented by standardized testing. (Spring) Prerequisites: NU 121, NU 129, NU 149, NU 130, NU 131, NU 225, NU 227, BI 114, BI 114L, BI 214, BI 214L, BI 325, BI 325L MA 121, EN 111, EN 112, PH 132, PH 320, SY 235. Corequisites: NU 235, NU 238. For the LPN Fast-Track: Prerequisites: BI 114, BI 114L, BI 214, BI 214L, BI 325, BI 325L, MA 121, EN 111, EN 112, PH 132, PH 320, SY 235, NU 121, NU 129, NU 130, NU 131, NU 149, NU 225, NU 227. Corequisites: NU 235, NU 238.

**COURSE DESCRIPTIONS IN ASSOCIATE NURSING (NU) ASN****NU 118            4-12-8    FOUNDATIONS OF CLIENT-CENTERED CARE.**

This course provides a foundation of nursing with emphasis placed on the knowledge and skills needed to provide safe, quality care. The theoretical foundation for basic assessment and nursing skills is presented, and the student is given an opportunity to demonstrate these skills in a clinical setting. The course introduces the concepts of patient-centered care, professionalism, leadership, systems-based practice, informatics and technology, communication, teamwork and collaboration, and quality improvement. Prerequisites: Admission to ASN Program, Bi 114, BI 114L; BI 214, BI 214L; MA121; UL 101; Corequisites: EN 111, SY 235.

**NU 128            4-12-8    CLIENT-CENTERED CARE I**

This course focuses on client-centered care of individuals experiencing acute and chronic conditions related to alterations in fluid and electrolyte and acid-base balance, oxygenation, cardiac output and tissue perfusion, and sensory perception. In addition, care of the pre- and post-operative clients and oncology clients is included. The concepts of client-centered care, professionalism, leadership, systems-based practice, informatics and technology, communication, teamwork and collaboration, and quality improvement are integrated in this course. Clinical experiences provide students the opportunity to apply the principles of safe and effective delivery of care in a variety of settings. Prerequisites: NU 118; BI 114; BI 114L; BI 214; BI 214L; MA 121; UL 101; EN111; SY 235 Corequisites: BI 325; BI 325L

**NU 218                    4-12-8    CLIENT-CENTERED CARE II**

This course focuses on the care of clients experiencing acute and chronic conditions related to alterations in regulation and metabolism, excretion, and reproduction across the lifespan. Additionally, this course provides an integrative, family-centered approach to the care of mothers, newborns, and children. The concepts of client-centered care, professionalism, leadership, systems-based practice, informatics and technology, communication, teamwork and collaboration, and quality improvement are integrated in this course. Clinical experiences provide students the opportunity to apply the principles of safe and effective delivery of care in a variety of settings. Prerequisites: NU 118; NU 128; BI 114; BI 114L; BI 214; BI 214L; MA 121; UL 101; EN111; SY 235; BI 325; BI 325L Corequisites: PH 320 : Elective

**NU 223                    3-0-3    ROLE TRANSITION**

This course focuses on the basic principles of leadership and management, trends and issues in nursing, moral, ethical, and legal implications, and the process of transitioning from the role of student to professional nurse. Emphasis is placed on nursing within the microsystem of a work unit, contemporary issues and management concepts, as well as developing the skills of delegation, conflict management, and leadership. Prerequisites: NU 118; NU128; BI 114; BI 114L; BI 214; BI 214L; MA 121; UL 101; EN 111; SY 235; BI 325; BI 325L; PH 320; Elective; Corequisites: NU 229.

**NU 229                    4-15-9    CLIENT-CENTERED CARE III**

This course focuses on client-centered care of individuals experiencing acute and chronic conditions related to alterations in Ingestion, digestion, absorption, and elimination, cognition and sensation, immunity, integument, mobility and alterations in mental health. The concepts of client-centered care, professionalism, leadership, systems-based practice, informatics and technology, communication, teamwork and collaboration, and quality improvement are integrated in this course. Clinical experiences provide students the opportunity to apply the principles of safe and effective delivery of care to groups of clients in a variety of settings.

Prerequisites: NU 118; NU 128; BI 114; BI 114L; BI 214; BI 214L; MA 121;UL 101; EN111; SY 235; BI 325; BI 325L; PH 320 : Elective Corequisites: NU 223

**COURSE DESCRIPTIONS IN BACCALAUREATE NURSING (NU) BSN****NU 321                    3-0-3    PHARMACOLOGY I**

The primary focus of this course is to provide students with necessary information on the integration of basic science with pharmaco-dynamics and therapeutics, origin of drugs and routes of administration, distribution of Drugs, and therapeutic and adverse effects of medications including chemotherapeutic agents, and those affecting the immune system, central, peripheral, and autonomic nervous system with implications for nursing. Prerequisites: Admission to Clinical Nursing Sequence. Corequisites: NU 340, NU 342 Fall Semester.

**NU 322                    2-0-2    PHARMACOLOGY II**

The primary focus of this course is to provide students with the necessary information on the therapeutic and adverse effects of medications affecting the endocrine, cardiovascular, renal, respiratory, and gastrointestinal systems with implications for nursing. Prerequisites: NU 321, NU 340, NU 342 Corequisites: NU 350, NU 352, NU 354. Spring Semester

**NU 340                    4-0-4    CONCEPTS BASIC TO NURSING**

The focus of this course is on the acquisition of knowledge related to basic nursing concepts and the emergence and evolution of the nursing profession. Basic knowledge will be gained to assist clients in meeting universal and developmental self-care requirements and therapeutic self-care demands. Prerequisites: Admission to Clinical Nursing Sequence Corequisites: NU 321, NU 342 Fall Semester.

**NU 342                    3-6-6    HEALTH ASSESSMENT/NURSING SKILLS**

The focus of this course is the acquisition of health assessment nursing skills knowledge that assists clients to meet universal self-care requirements. Prerequisites: Admission to Clinical Nursing Sequence Corequisites: NU 321, NU 340 Fall Semester.

**NU 350            3-6-6    FAMILY NURSING**

The course focus is on nursing care to individuals and their families in the childbearing phase. Basic family concepts are an integral part of this course. Prerequisites: NU 321, NU 340, NU 342 Corequisites: NU 322, NU 352, NU 354 Spring Semester.

**NU 352            3-6-6    ADULT HEALTH CARE I**

This course is designed to focus on theoretical concepts and selected physiological systems in the nursing care of the adult client. It builds on concepts from the first semester junior level. Additional nursing concepts, techniques, and technology support the content of the course. A focus of the course is on the care of adult clients who are experiencing acute and chronic health deviations in selected physiological systems. Clinical experiences focus on the adult client and are practiced in a variety of healthcare settings. Prerequisites: NU 321, NU 340, NU 342 Corequisites: NU 322, NU 350, NU 354 Spring Semester.

**NU 354            1-0-1    SYNTHESIS OF NURSING CONCEPTS I**

This course builds on the student's ability to integrate basic nursing concepts and techniques, family nursing and adult health care into nursing care planning. Prerequisites: NU 321, NU 340, NU 342 Corequisites: NU 322, NU 350, NU 352 Spring Semester.

**NU 398            (1)-0-(1)        INDEPENDENT STUDY**

This course provides students opportunities to participate in an individualized enhancement program based on nursing content and learning skill needs. The student's program of remediation is planned cooperatively by the counselor and chairperson in the Department of Baccalaureate Nursing and coordinated by an assigned faculty member. Fall, Spring, or Summer.

**NU 399            (1)-0-(1)        INDEPENDENT STUDY**

This course provides students opportunities to individualize work in the area of interest not regularly provided for by the on-going nursing courses. The students study under the direction of one or more faculty members who are knowledgeable in the area of the student's needs and/or interest. Fall, Spring, or Summer.

**NU 400OL        2-0-2    INDEPENDENT STUDY**

This course provides students opportunities to individualize work in the area of interest not regularly provided for by the on-going nursing courses. The student studies under the direction of one or more faculty members who are knowledgeable in the area of the student's needs and/or interest. This course is accessed on the WEB via the Blackboard Course Server. Prerequisites: NU 422OL, NU 424OL, NU 427OL, NU 425OL, NU 420OL, NU 426OL, NU430OL, NU 428OL Corequisites: NU 423OL, NU 462OL, NU 435OL. Summer Semester.

**NU 420            3-6-6    COMMUNITY HEALTH NURSING**

The focus of this course is nursing care of individuals, families, and groups in the community. Clinical laboratory experiences provide the student practice in health promotion and maintenance activities and practice in assisting clients with physiological deviations. Prerequisites: NU 321, NU 322, NU 340, NU 342, NU 350, NU 352, NU 354, NU 421, NU 440 Corequisites: NU 426, NU 450. Fall Semester.

**NU 420OL        3-6-6    COMMUNITY HEALTH NURSING ONLINE**

The focus of this course is nursing care of individuals, families, and groups in the community. Clinical laboratory experiences provide the student practice in health promotion and maintenance activities and practice in assisting clients with physiological deviations. Prerequisites: NU 422OL, NU 424OL, NU 427OL, NU 425OL; Corequisites: NU 426OL, NU 430OL, NU 428OL, Spring Semester.

**NU 421            3-6-6    NURSING ORIENTED TO PSYCHOSOCIAL FUNCTIONING**

The course focus is on the role of the professional nurse in the provision of nursing care to persons manifesting impaired self-management abilities due to altered psychological states and sociocultural conditions. Prerequisites: NU 321, NU 322, NU 340, NU 342, NU 350, NU 352, NU 354. Corequisites: NU 440 Summer Semester.



**NU 422OL      4-2-4    HEALTH ASSESSMENT**

This course is designed to enhance the health assessment skills of registered nurses in order to assist clients to meet universal self-care requisites. This course is accessed on the WEB via the Blackboard Course Server. Prerequisites: Admission to Clinical Nursing Sequence RN-BSN Online Program Option. Corequisites: NU 424OL, NU 427OL, NU 425OL. Fall Semester.

**NU 423            3-6-6    LEADERSHIP STRATEGIES IN NURSING**

Students function in the role of nurse leader. Synthesis of antecedent technologies, techniques and attitudes with new knowledge of management and leadership provide the theoretical and practical foundation for students to appreciate and assume the role of a leader in a nursing management situation with clients and personnel. Prerequisites: NU 321, NU 322, NU 340, NU 342, NU 350, NU 352, NU 354, NU 421, NU 440, NU 420, NU 426, NU 450 Corequisites: NU 429, NU 460, NU 462. Spring Semester.

**NU 423OL      3-6-6    LEADERSHIP STRATEGIES IN NURSING ONLINE**

Students function in the role of nurse leader. Synthesis of antecedent technologies, techniques and attitudes with new knowledge of management and leadership provide the theoretical and practical foundation for students to appreciate and assume the role of a leader in a nursing management situation with clients and personnel. This course is accessed on the WEB via the Blackboard Course Server. Prerequisites: NU 420OL, NU 422OL, NU 424OL, NU 426OL, NU 425OL, NU 427OL, NU 428OL, NU 430OL. Corequisites: NU 400OL, NU 435OL, NU 462OL, Summer Semester.

**NU 424OL      4-0-4    PROFESSIONALISM IN NURSING**

This course is designed to re-socialize the registered nurse to the professional role and to nursing as a scientific discipline. The course provides an overview of professional concepts, including historical, philosophical and theoretical, basic to the development of professionalism in nursing practice. This course is accessed on the WEB via the Blackboard Course Server. Prerequisites: Admission to Clinical Nursing Sequence RN-BSN Online Program Option. Corequisites: NU 422OL, NU 425OL, NU 427OL. Fall Semester.

**NU 425OL      3-0-3    NURSING MANAGEMENT OF DRUG THERAPY**

This course is designed to introduce the basics of selected drug classifications, their actions, side effects, interactions, and nursing management of drug therapy through assigned readings and independent study. Current issues and trends in drug therapy related to cost, managed care, aging population, health policy, alternative therapies and other relevant topics will be covered during class discussion. This course is accessed on the WEB via the Blackboard Course Server. Prerequisites: Admission to Clinical Nursing Sequence RN-BSN Online Program Option. Corequisites: NU 422OL, NU 424OL, NU 427OL. Fall Semester.

**NU 426            3-0-3    RESEARCH IN NURSING**

The focus of this course is the implementation of the role of the nurse as a researcher. A research proposal is formulated and a research project conducted. Prerequisites: NU 321, NU 322, NU 340, NU 342, NU 350, NU 352, NU 354, NU 421, NU 440 Corequisites: NU 420, NU 450 Fall Semester.

**NU 426OL      3-0-3    RESEARCH IN NURSING ONLINE**

The purpose of this course is to introduce the student to the research process and the role of the nurse as a researcher. Emphasis is on the development of an understanding of the components of the research process and their application.

Through a focus on critiquing nursing research studies, the student will engage in decision-making regarding the usefulness of studies for nursing practice. A research proposal is formulated and a research project conducted. This course is accessed on the WEB via the Blackboard Course Server. Prerequisites: NU 422OL, NU 424OL, NU 427OL, NU 425OL. Corequisites: NU 420OL, NU 430OL, NU 428OL. Spring Semester.

**NU 427OL 1-2-2 NURSING INFORMATICS II**

This course is designed to introduce the student to nursing informatics, in science, and health information technology as it impacts nursing and health. Effective student-computer interfacing, health information services, electronic communication, and data management are the primary focus of the course. Laboratory experiences are designed to provide the student with opportunities to develop beginning technology skills necessary to utilize information technology in nursing practice. It is anticipated that the student will begin to apply the concepts of nursing informatics in effective problem solving and client care. This course is accessed on the WEB via the Blackboard Course Server. Prerequisites: Admission to Clinical Nursing Sequence RN-BSN Online Program Option. Corequisites: NU422OL, NU 424OL, NU 425OL. Fall Semester.

**NU 428OL 3-0-3 CASE MANAGEMENT OF ADULT/ CHILD IN THE COMMUNITY**

This course focuses on the exploration of case management theory and the development of effective nurse case management techniques for adults/children. This course is accessed on the WEB via the Blackboard Course Server. Prerequisites: NU 422OL, NU 424OL, NU 427OL, NU 425OL. Corequisites: NU 420OL, NU 426OL, NU 430OL. Spring Semester.

**NU 429 1-0-1 SEMINAR**

This course provides an opportunity for the student to focus on trends and issues related to 20th century professional nursing and critically explore issues currently impacting nursing. Prerequisites: NU 321, NU 322, NU 340, NU 342, NU 350, NU 352, NU 354, NU 421, NU 440, NU 420, NU 426, NU 450 Corequisites: NU 423, NU 460, NU 462 Spring Semester.

**NU 430OL 3-0-3 HEALTH POLICY AND FINANCE**

This course is designed to provide an overview of basic health care financing mechanisms and political issues affecting health services. Underlying economic issues influencing social and health policy will be explored. This course is accessed on the WEB via the Blackboard Course Server. Prerequisites: NU 422OL, NU 424OL, NU 427OL, NU 425OL. Corequisites: NU 420OL, NU 426OL, NU 428OL. Spring Semester.

**NU 435OL 3-0-3 END OF LIFE CARE**

This course provides a primary study of life experiences that often leads to different conclusions on end of life nursing. It is designed to explore the roles of the Registered Nurse, rationality and relationship of the “consistent life ethic” and the “quality of life ethic”. This course is accessed on the WEB via the Blackboard Course Server. Prerequisites: NU 422OL, NU 424OL, NU 427OL, NU 425OL, NU 420OL, NU 426OL, NU 430OL, NU 428OL. Corequisites: NU 400OL, NU 423OL, NU 462OL. Summer Semester.

**NU 440 3-6-6 ADULT HEALTH CARE II**

This course is designed to continue the focus on theoretical concepts and selected physiological systems in the nursing care of the adult client. It builds on concepts from the junior level and focuses on the care of adult clients who are experiencing acute and chronic health deviations. The content presented assists the student to expand his/her knowledge of selected physiological systems and to assist the self-care agent or dependent care agent to promote and maintain the health of these systems. When health deviations occur, the course content relates to pathology and the client’s response to the deviation. Because health states may change rapidly, emphasis is placed on the role of the nurse in monitoring health state parameters and the role of the nurse in adjusting the methods of assisting accordingly. Social, economic, legal, and ethical issues that impact the delivery of health care are discussed. Laboratory experiences provide the student practice in health promotion and maintenance activities and practice in assisting clients with selected physiologic deviations. Nursing care of the adult client is the focus of the clinical experience. Prerequisites: NU 321, NU 322, NU 340, NU 342, NU 350, NU 352, NU 354. Corequisite: NU 421. Summer Semester.

**NU 450 3-6-6 CHILD/ADOLESCENT NURSING**

The content of this course centers on the provision of nursing care for both well/ill children and adolescents. Growth and development is stressed. The course emphasizes the importance of the nurse’s role in health promotion and maintenance and in considering the family as the focus of care. The influences on the child who is developing as a member of a family unit and maturing within a culture, community, and society are examined. Critical thinking skills are emphasized. Prerequisites: NU 321, NU 322, NU 340, NU 342, NU 350, NU 352, NU 354, NU 421, NU 440. Corequisites: NU 420, NU 426. Fall Semester.

**NU 460            3-6-6    ADULT HEALTH CARE III**

This course is designed to assist the student in obtaining knowledge in the care of adults in the complex nursing practice of secondary and tertiary care settings, including critical care and emergency settings. Clinical laboratory experiences provide the student practice in health promotion and maintenance activities and practice in assisting clients with select physiologic deviations. Prerequisites: NU 321, NU 322, NU 340, NU 342, NU 350, NU 352, NU 354, NU 421, NU 440, NU 420, NU 426, NU 450. Corequisites: NU 423, NU 429, NU 462. Spring Semester.

**NU 460OL        3-0-3    ADULT HEALTH CARE III ONLINE (ELECTIVE)**

This elective course is designed to assist the student in obtaining knowledge in the care of adults in the complex nursing practice of the critical care and emergency department settings. Selected physiological systems in the nursing care of the adult client will be presented. Social, economic, legal, and ethical issues that impact the delivery of health care will be discussed. This course is accessed on the WEB via the Blackboard Course Server. Prerequisites: Admission to Clinical Nursing Sequence RN-BSN Online Program Option. Fall, Spring, or Summer.

**NU 462            1-0-1    SYNTHESIS OF NURSING CONCEPTS II**

This course is designed to focus on the students' ability to synthesize knowledge from the liberal arts, the sciences, and nursing, and integrate this knowledge into nursing care that is predicated on managing safety for individuals, families, and communities. Prerequisites: NU 321, NU 322, NU 340, NU 342, NU 350, NU 352, NU 354, NU 420, NU 421, NU 440, NU 426, NU 450. Corequisites: NU 423, NU 429, NU 460 Spring Semester.

**NU 462OL        1-0-1    SYNTHESIS OF NURSING CONCEPTS II ONLINE**

This course is designed to focus on the students' ability to synthesize knowledge from the liberal arts, the sciences, and nursing, and integrate this knowledge into nursing care that is predicated on managing safety for individuals, families, and communities. This course is accessed on the WEB via the Blackboard Course Server. Prerequisites: NU 420OL, NU 422OL, NU 424OL, NU 426OL, NU 427OL, NU 430OL, NU 425OL, NU 428OL. Corequisites: NU 400OL, NU 423OL, NU 435OL. Summer Semester.

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