Computers are also supported with statistical software for statistical data analysis. The department's plans to 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.

**Bachelor of Science Degree: Biology Concentration (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. This B.S. degree program also qualifies students for entry into selected professional programs upon the completion of qualifying entrance examinations. This degree 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 grade of "C'. Prior to registering for advanced courses (300 and 400 levels), students must complete the appropriate prerequisites. 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)** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **First Semester** | **Class** | | **Hrs.** | | **Second Semester** | **Class** | | **Hrs.** |
| 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 |
| BI 125<br>BI 191 | General Biology I<br>or<br>Honors Biology I | | 3 | | BI 126<br>BI 192 | General Biology II<br>or<br>Honors Biology II | | 3 |
| BI 125L<br>BI 191L | General Biology I Lab<br>or<br>Honors Biology I Lab | | 1 | | BI 126L<br>BI 192L | General Biology II Lab<br>or<br>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 | | ND 101 | Health and Wellness | | 1 |
| | **TOTAL** | | **16** | | | **TOTAL** | | **16** |
| **Sophomore Year (29)** | | | | | | | | |
| BI 215L | Comparative Anatomy Lab | | 1 | | PY 112 | Physical Science II | | 3 |
| BI 215 | Comparative Anatomy | | 3 | | CH 315 | Survey of Org. Chemistry | | 3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SA 223 | Oral Communication | | 3 | | CH 315L | Survey of Org. Chem. Lab | | 1 |
| PY 111 | Physical Science I | | 3 | | EN 213 | Studies in Literature | | 3 |
| HI 111<br><br>SY 235 | World Civilization I<br>or<br>General Sociology | | 3 | | HI 112<br><br>PH 132 | World Civilization II<br>or<br>General Psychology | | 3 |
| | | | | | MU 213<br><br>AR 214 | Music Appreciation<br>or<br>Art Appreciation | | 3 |
| | **TOTAL** | | **13** | | | **TOTAL** | | **16** |
| **Junior Year (30)** | | | | | | | | |
| BI 335 | Human Anatomy & Physiology I | | 3 | | BI 300 | Biological Chemistry | | 3 |
| BI 335L | Human Anatomy & Physiology I Lab | | 1 | | BI 336 | Human Anatomy & Physiology II | | 3 |
| BI 325 | General Microbiology | | 3 | | BI 336L | Human Anatomy & Physiology II Lab | | 1 |
| BI 325L | General Microbiology Lab | | 1 | | BI 390 | Environmental Bio. & Ecol. | | 3 |
| BI 355 | General Parasitology | | 3 | | BI-390L | Environmental Bio. & Ecol. Lab | | 1 |
| BI 355L | General Parasitology Lab | | 1 | | EC 201 | Principles of Economics I | | 3 |
| BI 361 | Cell & Molecular Biology I | | 3 | | | | | |
| BI 361L | Cell & Molecular Biology I Lab | | 1 | | | | | |
| | **TOTAL** | | **16** | | | **TOTAL** | | **14** |
| **Senior Year (29)** | | | | | | | | |
| BI 423 | Introduction to Biostatistics | | 3 | | BI 420 | Medical Microbiology | | 3 |
| BI 425 | Prin. of Immunology | | 3 | | BI 420L | Medical Microbiology Lab | | 1 |
| BI 425L | Prin. of Immunology Lab | | 1 | | BI 446 | Histology | | 3 |
| BI 445 | Genetics | | 3 | | BI 446 | Histology Lab | | 1 |
| BI 445L | Genetics Lab | | 1 | | BI 328 | Conceptual Analysis and Critical Thinking I | | 3 |
| BI 481 | Introduction to Toxicology | | 3 | | BI 300-400 | Elective | | 3 |
| | | | | | BI 300-400 | Elective (lab) | | 1 |
| | **TOTAL** | | **14** | | | **TOTAL** | | **15** |

***Suggested Biology Elective: BI 324 General Botany with lab, BI 482 Applied Physiology with lab, 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 methodology 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** | **Class** | | **Hrs.** | | **Second Semester** | **Class** | | **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 324 | General Botany | | 3 |
| CH 121L | General Chemistry I Lab | | 1 | | BI 324L | 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 |
| | **TOTAL** | | **15** | | | **TOTAL** | | **17** |
| **Sophomore Year (33)** | | | | | | | | |
| AR 214<br>MU 213 | Art Appreciation<br>or<br>Music Appreciation | | 3 | | BI 336 | Human Anatomy & Physiology II | | 3 |
| SA 223 | Oral Communications | | 3 | | BI 336L | Human Anatomy & Physiology II Lab | | 1 |
| BI 311 | Survey of Biological Sciences | | 3 | | BI 226 | Developmental Biology | | 3 |
| BI 335 | Human Anatomy & Physiology I | | 3 | | BI 226L | Developmental Biology Lab | | 1 |
| BI 335L | Human Anatomy & Physiology I Lab | | 1 | | HI 112 | World Civilization II | | 3 |
| EN 213 | Introduction to Literature | | 3 | | PH 132 | General Psychology | | 3 |
| | | | | | ED 200 | Social Studies/Multicultural Ed | | 3 |
| | **TOTAL** | | **16** | | | **TOTAL** | | **17** |
| **Junior Year (30)** | | | | | | | | |
| BI 361 | Cell & Molecular Biology I | | 3 | | BI 485 | Teaching Science in the Secondary School | | 3 |
| BI 361L | Cell & Molecular Biology I Lab | | 1 | | BI 328 | Analysis and Critical Thinking I | | 3 |
| 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 390 | Env. Bio. & Ecology | | 3 |
| ED 351 | Managing Classroom | | 3 | | BI 390L | Env. Bio. & Ecology Lab | | 1 |
| | **TOTAL** | | **14** | | | **TOTAL** | | **16** |
| **Senior Year (25)** | | | | | | | | |
| BI 445 | Genetics | | 3 | | ED 468 | Directed Teaching | | 12 |
| BI 445L | Genetics Lab | | 1 | | | | | |
| ED 348 | Foundations of Ed. | | 3 | | | | | |
| PH 347 | Measurement & Evaluation | | 3 | | | | | |
| BI 415 | Computer Application | | 3 | | | | | |
| | **TOTAL** | | **13** | | | **TOTAL** | | **12** |

**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** | **Class** | | **Hrs.** | | **Second Semester** | **Class** | | **Hrs.** |
| BI 125<br><br>BI 121 | General Biology I<br>or<br>General Zoology I | | 3 | | BI 126<br><br>BI 122 | General Biology II or<br>General Zoology II | | 3 |
| BI 125L<br><br>BI 121L | General Biology I Lab<br>or<br>General Zoology I Lab | | 1 | | BI 126L<br><br>BI 122L | General Biology II Lab or<br>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 | | | | | |
| | **TOTAL** | | **16** | | | **TOTAL** | | **15** |
| **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 I (Non-Calculus) | | 3 | | PY 216 | General Physics II (Non-Calculus) | | 3 |
| PY 215L | General Physics I (Non-Calculus) Lab | | 1 | | PY 216L | General Physics II (Non-Calculus) 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<br><br>AR 214 | Music Appreciation<br>or<br>Art Appreciation | | 3 |
| | **TOTAL** | | **14** | | | **TOTAL** | | **17** |
| **Junior Year (29)** | | | | | | | | |
| 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 | Cell & Molecular Biology II | | 3 |
| CH 331L | Biochemistry I Lab | | 1 | | BI 362L | Cell & Molecular Biology II Lab | | 1 |
| BI 361 | Cell & Molecular Biology I | | 3 | | BI 336 | Human Anatomy & Physiology II | | 3 |
| BI 361L | Cell & Molecular Biology I Lab | | 1 | | BI 336L | Human Anatomy & Physiology II Lab | | 1 |
| SA 223 | Oral Communications | | 3 | | | | | – |
| BI 449 | Independent Study | | ~~2~~ | | | | | |
| | **TOTAL** | | **17** | | | **TOTAL** | | **12** |

| Senior Year (29) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BI 423 | Introduction to Biostatistics | | 3 | | BI 400 | Evolution | | 3 |
| BI 445 | Genetics | | 3 | | BI 498 | Bio. Research Instrumentation | | 3 |
| BI 445L | Genetics Lab | | 1 | | BI 498L | Bio. Research Instrumentation Lab | | 1 |
| BI 403 | Mycology | | 3 | | BI 402 | Bioethics | | 3 |
| BI 403L | Mycology Lab | | 1 | | BI 328 | Analysis & Critical Thinking I | | 3 |
| BI 425 | Prin. of Immunology | | 3 | | BI 450 | Seminar | | 1 |
| BI 425L | Prin. of Immunology Lab | | 1 | | | | | |
| | **TOTAL** | | **15** | | | **TOTAL** | | **14** |

**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** | **Class** | | **Hrs.** | | **Second Semester** | **Class** | | **Hrs.** |
| 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 |
| BI 125<br>BI191 | General Biology I<br>or<br>Honors Biology I | | 3 | | BI 126<br>BI 192 | General Biology II<br>or<br>Honors Biology II | | 3 |
| BI 125L<br>BI 191L | General Biology I Lab<br>or<br>Honors Biology I Lab | | 1 | | BI 126L<br>BI 192L | General Biology II Lab<br>or<br>Honors Biology II Lab | | 1 |
| EN 111 | Composition I | | 3 | | EN 112 | Composition II | | 3 |
| MA 121 | College Algebra | | 3 | | MA 132 | Trigonometry | | 3 |
| UL 101 | University Life | | 1 | | ND 101 | Health and Wellness | | 1 |
| | **TOTAL** | | **15** | | | **TOTAL** | | **15** |
| **Sophomore Year (34)** | | | | | | | | |
| SA 223 | Oral Communications | | 3 | | MU 213<br>AR 214 | Music Appreciation<br>or<br>Art Appreciation | | 3 |
| BI 215 | Comparative Anatomy | | 3 | | PH 132 | General Psychology | | 3 |
| BI 215L | Comparative Anatomy Lab | | 1 | | EC 201 | Principles of Economics I | | 3 |
| SP 111 | Spanish I | | 3 | | PY 111 | Physical Science I | | 3 |
| EN 213 | Studies in Literature | | 3 | | SP 112 | Spanish II | | 3 |
| HI 111<br>SY 235 | World Civilization I<br>or<br>General Sociology | | 3 | | BI 328 | Conceptual Analysis and Critical Thinking I | | 3 |
| | **TOTAL** | | **16** | | | **TOTAL** | | **18** |

| **Junior Year (27)** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BI 325 | General Microbiology | | 3 | | BI 318 | Field Biology & Ecology | | 3 |
| BI 325L | General Microbiology Lab | | 1 | | BI 318L | Field Biology & Ecology | | 1 |
| BI 355 | General Parasitology | | 3 | | BI 390 | Env. Biology & Ecology | | 3 |
| BI 355L | General Parasitology Lab | | 1 | | BI 390L | Env. Biology & Ecology Lab | | 1 |
| BI 361 | Cell & Molecular Biology I | | 3 | | BI 300 | Biological Chemistry | | 3 |
| BI 361L | Cell & Molecular Biology I Lab | | 1 | | BI 324 | Botany | | 3 |
| | | | | | BI 324L | Botany Lab | | 1 |
| | **TOTAL** | | **12** | | | **TOTAL** | | **15** |
| **Senior Year (29)** | | | | | | | | |
| BI 423 | Introduction to Biostatistics | | 3 | | BI 348 | Plant Physiology | | 3 |
| BI 445 | Genetics | | 3 | | BI 348L | Plant Physiology Lab | | 1 |
| BI 445L | Genetics Lab | | 1 | | BI 400 | Evolution | | 3 |
| BI 453 | Environmental Risk Assessment | | 3 | | BI 456 | Special Topics in Environmental Biology/Ecology | | 3 |
| BI 481 | Introduction to Toxicology | | 3 | | BI 462 | Environmental Policy | | 3 |
| BI 449 | Independent Study | | 2 | | BI 450 | Seminar | | 1 |
| | **TOTAL** | | **15** | | | **TOTAL** | | **14** |

**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 B.S. Degree in Biology with a concentration in Health Science.

| **Freshman Year (30)** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **First Semester** | **Class** | | **Hrs.** | | **Second Semester** | **Class** | | **Hrs.** |
| BI 125<br>or<br>BI 191 | General Biology I<br>or<br>Honors Biology I | | 3 | | BI 126<br>or<br>BI 192 | General Biology II<br>or<br>Honors Biology II | | 3 |
| BI 125L<br>or<br>BI 191L | General Biology I Lab<br>or<br>Honors Biology I Lab | | 1 | | BI 126L<br>or<br>BI 192L | General Biology II Lab<br>or<br>Honors Biology 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 Lab | | 1 |
| EN 111 | Composition I | | 3 | | EN 112 | Composition II | | 3 |
| MA 121 | College Algebra | | 3 | | MA 132 | Trigonometry | | 3 |
| UL 101 | University Life | | 1 | | ND 101 | Health & Wellness | | 1 |
| | **TOTAL** | | **15** | | | **TOTAL** | | **15** |
| **Sophomore Year (30)** | | | | | | | | |
| MU 213<br>or<br>AR 214 | Music Appreciation<br>or<br>Art Appreciation | | 3 | | PH 320 | Developmental Psychology | | 3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ND 225 | Intro. To Nutrition | | 3 | | BI 308 | Introduction to Health Science | | 3 |
| SY 235<br><br>PH 132 | General Sociology<br>or<br>General Psychology | | 3 | | SA 223 | Oral Communications | | 3 |
| EN 213 | Studies in Literature | | 3 | | HI 111<br><br>EC 201 | World Civilization I<br>or<br>Principles of Economics I | | 3 |
| PE 245 | First Aid & Safety | | 3 | | PE 122 | Health | | 3 |
| | **TOTAL** | | **15** | | | **TOTAL** | | **15** |
| **Junior Year (32)** | | | | | | | | |
| CH 315 | Survey of Organic Chemistry | | 3 | | BI 300 | Biological Chemistry | | 3 |
| CH 315L | Survey of Organic Chemistry Lab | | 1 | | BI 336 | Human Anatomy & Physiology II | | 3 |
| BI 325 | General Microbiology | | 3 | | BI 336L | Human Anatomy & Physiology II Lab | | 1 |
| BI 325L | General Microbiology Lab | | 1 | | BI 320 | Medical Terminology | | 3 |
| BI 335 | Human Anatomy & Physiology I | | 3 | | BI 328 | Analysis and Critical Thinking I | | 3 |
| BI 335L | Human Anatomy & Physiology I Lab | | 1 | | BI 326 | Pharmacology | | 3 |
| BI 355 | General Parasitology | | 3 | | | | | – |
| BI 355L | General Parasitology Lab | | 1 | | | | | |
| | **TOTAL** | | **16** | | | **TOTAL** | | **16** |
| **Senior Year (28)** | | | | | | | | |
| BI 361 | Cell & Molecular Biology I | | 3 | | BI 420 | Medical Microbiology | | 3 |
| BI 361L | Cell & Molecular Biology I Lab | | 1 | | BI 425L | Medical Microbiology Lab | | 1 |
| BI 445 | Genetics | | 3 | | BI 400 | Evolution | | 3 |
| BI 445L | Genetics Lab | | 1 | | BI 402 | Bioethics | | 3 |
| BI 425 | Immunology | | 3 | | BI 300-400 | Biology elective (restricted) | | 3 |
| BI 425L | Immunology Lab | | 1 | | | | | |
| BI 423 | Introduction to Biostatistics | | 3 | | | | | |
| | **TOTAL** | | **15** | | | **TOTAL** | | **13** |

***Suggested Biology Electives: BI-311 Survey of Biology, BI 481 Introduction to Toxicology, 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 Office of Honors and Pre-Professional Programs along with 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 3.0 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** | **Class** | | **Hrs.** | | **Second Semester** | **Class** | | **Hrs.** |
| 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 |
| BI 125<br>BI 191 | General Biology I<br>or<br>Honors Biology | | 3 | | BI 126<br>BI 192 | General Biology II<br>or<br>Honors Biology II | | 3 |
| BI 125L<br>BI 191 | General Biology I Lab<br>or<br>Honors Biology I | | 1 | | BI 126L<br>BI 192 | General Biology II Lab<br>or<br>Honors Biology II | | 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 | | ND 101 | Health and Wellness | | 1 |
| PR 101 | Intro Pre-Prof & Pre-Grad Prog | | 0 | | PR 101 | Intro Pre-Prof & Pre-Grad Prog | | 0 |
| | **TOTAL** | | **16** | | | **TOTAL** | | **16** |
| **Sophomore Year (35)** | | | | | | | | |
| HI 111<br>SY 235 | World Civilization I<br>or<br>General Sociology | | 3 | | MU 213<br>AR 214 | Music Appreciation<br>or<br>Art Appreciation | | 3 |
| CH 221L | Organic Chemistry I | | 3 | | CH 222 | Organic Chemistry II | | 3 |
| CH 221 | Organic Chemistry I Lab | | 1 | | CH 222L | Organic Chemistry II Lab | | 1 |
| SA 223 | Oral Communications | | 3 | | EN 213 | Studies in Literature | | 3 |
| PY 215 | General Physics I (Non-Calculus) | | 3 | | PH 132 | General Psychology | | 3 |
| PY 215L | General Physics I (Non- Calculus) Lab | | 1 | | PY 216 | General Physics II (Non-Calculus) | | 3 |
| BI 215 | Comparative Anatomy | | 3 | | PY 216L | General Physics II (Non-Calculus) Lab | | 1 |
| BI 215L | Comparative Anatomy Lab | | 1 | | | | | |
| PR 201 | Pre-Prof & Pre-Grad Program I | | 0 | | PR 202 | Pre-Prof & Pre-Grad Program I | | 0 |
| | **TOTAL** | | **18** | | | **TOTAL** | | **17** |
| **Junior Year (29)** | | | | | | | | |
| BI 335 | Human Anatomy & Physiology I | | 3 | | BI 336 | Human Anatomy & Physiology II | | 3 |
| BI 335L | Human Anatomy & Physiology I Lab | | 1 | | BI 336L | Human Anatomy & Physiology II Lab | | 1 |
| BI 361 | Cell & Molecular Biology I | | 3 | | BI 328 | Analysis and Critical Thinking I | | 3 |
| BI 361L | Cell & Molecular Biology I Lab | | 1 | | BI 300-400 | Biology elective (restricted) | | 3 |
| CH 331 | Biochemistry I | | 3 | | BI 300-400 | Biology elective (restricted) | | 3 |
| CH 331L | Biochemistry I Lab | | 1 | | PR 302 | Pre-Prof & Pre-Grad Program II | | 0 |
| BI 325 | General Microbiology | | 3 | | | | | |
| BI 325L | General Microbiology Lab | | 1 | | | | | |
| PR 301 | Pre-Prof & Pre-Grad Program II | | 0 | | | | | |
| | **TOTAL** | | **16** | | | **TOTAL** | | **13** |
| **Senior Year (24)** | | | | | | | | |
| BI 425 | Prin. of Immunology | | 3 | | BI 420 | Medical Microbiology | | 3 |
| BI 425L | Prin. of Immunology Lab | | 1 | | BI 420L | Medical Microbiology Lab | | 1 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BI 423 | Introduction to Biostatistics | | 3 | | BI 446 | Histology | | 3 |
| BI 450 | Seminar | | 1 | | BI 446L | Histology Lab | | 1 |
| BI 445 | Genetics | | 3 | | BI 482 | Applied Physiology | | 3 |
| BI 445L | Genetics Lab | | 1 | | BI 482L | Applied Physiology Lab | | 1 |
| PR 401 | Pre-Prof & Pre-Grad Seminar | | 0 | | PR 402 | Pre-Prof & Pre-Grad Seminar | | 0 |
| | **TOTAL** | | **12** | | | **TOTAL** | | **12** |

**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 designed 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 prerequisites. The curriculum leads to a Bachelor of Science Degree in Biology.

| **Freshman Year (30)** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **First Semester** | **Class** | | **Hrs.** | | **Second Semester** | **Class** | | **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<br>BI 191 | General Biology I<br>or<br>Honors Biology I | | 3 | | BI 126<br>BI192 | General Biology II or<br>Honors Biology II | | 3 |
| BI 125L<br>BI 191 L | General Biology I Lab<br>or<br>Honors Biology I Lab | | 1 | | BI 126L<br>BI 192L | General Biology II Lab<br>or<br>Honors Biology II Lab | | 1 |
| EN 111 | Composition I | | 3 | | EN 112 | Composition II | | 3 |
| MA121 | College Algebra | | 3 | | MA 132 | Trigonometry | | 3 |
| UL 101 | University Life | | 1 | | ND 101 | Health and Wellness | | 1 |
| | **TOTAL** | | **15** | | | **TOTAL** | | **15** |
| **Sophomore Year (32)** | | | | | | | | |
| SP 111 | Spanish I | | 3 | | SP 112 | Spanish II | | 3 |
| SA 223 | Oral Communication | | 3 | | EN 213 | Introduction to Literature | | 3 |
| PY 215 | General Physics I (Non-Calculus) | | 3 | | PY 216 | General Physics II (Non-Calculus) | | 3 |
| PY 215L | General Physics I (Non- Calculus) Lab | | 1 | | PY 216L | General Physics II (Non- Calculus) Lab | | 1 |
| EC 201 | Principles of Economics I | | 3 | | HI 111 | World Civilization | | 3 |
| PH 132 | General Psychology | | 3 | | AR 214<br>MU 213 | Art Appreciation<br>or<br>Music Appreciation | | 3 |
| | **TOTAL** | | **16** | | | **TOTAL** | | **16** |
| **Junior Year (31)** | | | | | | | | |
| BI 335 | Human Anatomy & Physiology I | | 3 | | BI 336 | Human Anatomy & Physiology II | | 3 |
| BI 335L | Human Anatomy & Physiology I Lab | | 1 | | BI 336 L | Human Anatomy & Physiology II Lab | | 1 |
| BI 325 | General Microbiology | | 3 | | PH 320 | Developmental Psychology | | 3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BI 325L | General Microbiology Lab | | 1 | | BI 328 | Conceptual Analysis and Critical Thinking | | 3 |
| BI 215 | Comparative Anatomy | | 3 | | BI 320 | Medical Terminology | | 3 |
| BI 215L | Comparative Anatomy Lab | | 1 | | BI 326 | Pharmacology | | 3 |
| MA 377 | Statistics | | 3 | | | **TOTAL** | | **16** |
| | **TOTAL** | | **15** | | | | | |
| **Senior Year (27)** | | | | | | | | |
| BI 445 | Genetics | | 3 | | BI 420 | Medical Microbiology | | 3 |
| BI 445L | Genetics Lab | | 1 | | BI 420L | Medical Microbiology Lab | | 1 |
| BI 300-400 | Biology elective (restricted) | | 3 | | BI 468 | Kinesiology | | 3 |
| BI 300-400 L | Biology elective Lab (restricted) | | 1 | | BI 468L | Kinesiology Lab | | 1 |
| PE 435 | Physiology of Exercise | | 3 | | BI 482 | Applied Physiology | | 3 |
| BI 400 | Evolution | | 3 | | BI 482L | Applied Physiology Lab | | 1 |
| PR 401 | Pre-Prof & Pre-Grad Program Seminar | | 0 | | BI 450 | Seminar | | 1 |
| | | | | | PR 402 | Pre-Prof & Pre-Grad Program Seminar | | 0 |
| | **TOTAL** | | **14** | | | **TOTAL** | | **13** |

***Suggested Biology Electives: 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 (PE 328), Kinesiology (PE 468) etc., are strongly recommended.**

## Pre-Nursing

This lower level pre-professional nursing curriculum is designed to focus on courses in the liberal arts, physical, biological, social, and behavioral sciences. The curriculum meets the general education core requirements for eligibility to apply for admission to 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 State University may require additional general education coursework.

Minimum eligibility requirements to qualify for admission to Alcorn State University'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 (61 Credit Hours)

| **Freshman Year (30)** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **First Semester** | **Class** | | **Hrs.** | | **Second Semester** | **Class** | | **Hrs.** |
| CH 121 | General Chemistry | | 3 | | EN 112 | Composition II | | 3 |
| CH 121L | General Chemistry Lab | | 1 | | HI 225 | United States History | | 3 |
| EN 111 | Composition I | | 3 | | PH 132 | General Psychology | | 3 |
| MA 121 | College Algebra | | 3 | | SA 223 | Oral Communication | | 3 |
| CS 201 | Basic Programming | | 3 | | EN 213 | Introduction to Literature | | 3 |
| UL 101 | University Life | | 1 | | | **TOTAL** | | **15** |
| | **TOTAL** | | **14** | | | | | |

***Elective/Added Coursework: CH 121 and 122 with labs, BI 125 and 126 with labs.**

| **Sophomore Year (31)** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BI 335 | Human Anatomy & Physiology I | | 3 | | BI 325 | General Microbiology | | 3 |
| BI 335L | Human Anatomy & Physiology I Lab | | 1 | | BI 325L | General Microbiology Lab | | 1 |
| PH 320 | Developmental Psychology | | 3 | | SS 307 | Statistical Methods | | 3 |
| SY 235 | General Sociology | | 3 | | BI 336 | Human Anatomy & Physiology II | | 3 |
| SS 397 | Ethics | | 3 | | BI 336L | Human Anatomy & Physiology II Lab | | 1 |
| ND 225 | Introduction to Nutrition | | 3 | | SY 408 | The Family Creative Arts/Humanities | | 3 |
| | **TOTAL** | | **16** | | Electives | (AR 214, SA 245, HU 201, MU 213) | | 3 |
| | | | | | | **TOTAL** | | **17** |

**** Suggested Biology Electives: BI 355 General Parasitology, BI 400 Evolution, BI 328 Conceptual Analysis and Critical Thinking, BI 481 Toxicology, BI 326 Pharmacology or other courses with the approval of the curriculum advisor.**