Arkansas State University - Jonesboro Bachelor of Science

Major: Biological Sciences – Biology Emphasis 2012-2013

Students requiring developmental course work based on low entrance exam scores (ACT, SAT, ASSET, COMPASS) may not be able to complete this program of study in eight (8) semesters. Developmental courses do not count toward total degree hours. **Students having completed college level courses prior to enrollment will be assisted by their advisor in making appropriate substitutions.** In most cases, general education courses may be interchanged between semesters. A minimum of 45 hours of upper division credit (3000-4000 level) is required for this degree. Mandatory state and institutional assessment exams will be required during your degree program. Failure to participate in required assessments may delay graduation.

| during you | r degree program. <i>Failure</i> : | to parti | cipate in r | equired assessn | <u>nents may delay graduati</u> | <u>on.</u> | | |
|---------------|------------------------------------|----------|-------------|------------------------|---------------------------------|------------|-----------|--|
| | Year 1 | | | Year 1 Spring Semester | | | | |
| | Fall Semester | | | | | | | |
| Course No. | Course Name | Hrs | Gen Ed | Course No. | Course Name | Hrs | Gen Ed | |
| BIO 1013 | Biology Making Connections | 3 | | BIO 1503 | Biology of Plants | 3 | | |
| BIO 1303 | Biology of Animals | 3 | | BIO 1501 | Biology of Plants Lab | 1 | | |
| BIO 1301 | Biology of Animals Lab | 1 | | CHEM 1013 | General Chemistry I | 3 | Х | |
| ENG 1003 | Composition I | 3 | Х | CHEM 1011 | General Chemistry I Lab | 1 | Х | |
| MATH 1054 | Precalculus | 4 | | ENG 1013 | Composition II | 3 | Х | |
| | | | | MATH 2194 | Survey of Calculus | 4 | | |
| Total Hours | | 14 | | Total Hours | | 15 | | |
| | Year 2 | | | Year 2 | | | | |
| Fall Semester | | | | Spring Semester | | | | |
| Course No. | Course Name | Hrs | Gen Ed | Course No. | Course Name | Hrs | Gen Ed | |
| BIO 2013 | Biology of the Cell | 3 | Х | BIO 3023 | Principles of Ecology | 3 | | |
| BIO 2011 | Biology of the Cell Lab | 1 | Х | CHEM 3103 | Organic Chemistry I | 3 | | |
| CHEM 1023 | General Chemistry II | 3 | | CHEM 3101 | Organic Chemistry I Lab | 1 | | |
| CHEM 1021 | General Chemistry II Lab | 1 | | PHYS 2064 | General Physics II | 4 | | |
| PHYS 2054 | General Physics I | 4 | | | Social Science | 3 | Х | |
| | Social Science | 3 | Х | STAT 3233 | Applied Statistics I | 3 | | |
| Total Hours | | 15 | | Total Hours | | 17 | | |
| | Year 3 | | | | Year 3 | | | |
| | Fall Semester | | | Spring Semester | | | | |
| Course No. | Course Name | Hrs | Gen Ed | Course No. | Course Name | Hrs | Gen Ed | |
| BIO 3013 | Genetics | 3 | | BIO 3033 | Evolution | 3 | | |
| BIO 3011 | Genetics Lab | 1 | | BIO 3323 | Animal Physiology | 3 | | |
| BIO 3322 | Invertebrate Zoology | 4 | | BIO 3321 | Animal Physiology Lab | OR 4 | | |

| BIO 3332 | Invertebrate Zoology Lab | | | | OR | | | | |
|-------------|---|-----|-----|-----------------|---------------------------|------------|-----|--|--|
| | OR | | | Bio 4513 | Plant Physiology | | | | |
| BIO 3303 | General Entomology | | | BIO 4133 | Cell Biology | 3 | | | |
| BIO 3301 | General Entomology Lab | | | BIO 4131 | Cell Biology Lab | OR 4 | | | |
| CHEM 3113 | Organic Chemistry II | 3 | | | OR | 一 」 | | | |
| CHEM 3111 | Organic Chemistry II Lab | 1 | | CHEM 4243 | Biochemistry | | | | |
| | Fine Arts | 3 | Х | | Humanities | 3 | Х | | |
| | | | | SCOM 1203 | Oral Communication | 3 | Х | | |
| Total Hours | | 15 | | Total Hours | | 15 | | | |
| | Year 4 | | | | Year 4 | | | | |
| | Fall Semester | | | Spring Semester | | | | | |
| Course No. | Course Name | Hrs | Gen | Course No. | Course Name | Hrs | Gen | | |
| Course No. | oodise name | """ | Ed | Goding No. | Gourse Nume | 15 | Ed | | |
| BIO 3302 | Comparative Anatomy | 2 | | BIO 4332 | Animal Histology | 4 | | | |
| BIO 3312 | Comparative Anatomy Lab | 2 | | BIO 4342 | Animal Histology Lab | | | | |
| BIO 4021 | Biological Seminar | 1 | | | OR | | | | |
| BIO 4104 | Microbiology | 4 | | BIO 4343 | Animal Embryology | | | | |
| BIO 4542 | Mycology | 3 | | BIO 4341 | Animal Embryology Lab | | | | |
| BIO 4541 | Mycology Lab | | | BIO 4704 | Plant Systematics | 3 | | | |
| | OR | 1 | | | OR | OR 4 | | | |
| BIO 4552 | Medical Mycology | 7 | | BIO 4522 | Wetland Plant Ecology | \dashv | | | |
| BIO 4551 | Medical Mycology Lab | 7 | | BIO 4531 | Wetland Plant Ecology Lab | | | | |
| | US History (to or since 1876) or American Government | 3 | Х | | Electives of Your Choice | 6 | | | |
| Total Hours | | 15 | | Total Hours | | 14 | | | |
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