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| **Course Title/Number** | BSC 104 INTRODUCTION TO BIOLOGY/DUAL CREDIT BIOLOGY |
| **Semester/Year** | Fall 2015 |
| **Days/Time** | M-F 11:31 - 1:03 |
| **Location** | Rm 10 Harman High School |
| **Instructor** | Jonnie A. Lane Skidmore |
| **Office** | Rm 10 Harman High School |
| **Phone** | 304-227-4114 |
| **E-Mail** | Jnlane@k12.wv.us |
| **Office Hours** | M-F 1:31 - 2:16 |
| **University Policies** | By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy by going to [www.marshall.edu/academic-affairs](http://www.marshall.edu/academic-affairs) and clicking on “Marshall University Policies.” Or, you can access the policies directly by going to [www.marshall.edu/academic-affairs/policies/](http://www.marshall.edu/academic-affairs/policies/). Academic Dishonesty/Excused Absence Policy for Undergraduates/Computing Services Acceptable Use/Inclement Weather/Dead Week/Students with Disabilities/Academic Forgiveness/Academic Probation and Suspension/Academic Rights and Responsibilities of Students/Affirmative Action/Sexual Harassment |

**Course Description: From Catalog**

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| Fundamentals of biology with emphasis on the unity of life, energetics, genetics, evolution, classification of organisms in the kingdoms of life. Intended for non-science majors. Does not count toward a major in Biological Sciences. |

**The table below shows the following relationships: How each student learning outcome will be practiced and assessed in the course.**

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| **Course student learning outcomes** | **How students will practice each outcome in this course** | **How student achievement of each outcome will be assessed in this course** |
| Students will comprehend the nature of science and the methods used to gather scientific information. | Read Text  Discuss scientific method.  Complete Lab | Exam Questions, Lecture Quizzes and Lab Report |
| Students will learn about the uses of modern molecular methods. | Read Text  Lecture on biotechnology | Exam Questions and Lecture Quizzes |
| Students will understand of the nature of biological molecules. | Read Text  Lecture on Biological Molecules  Enzyme Lab  Biological Molecule Lab | Exam Questions  Lab Reports |
| Students will understand the relationships between form and function at the cellular level | Lecture on Cell type, structure and function  Cell Lab | Exam Questions  Lecture Quizzes  Lab Reports |
| Students will know and appreciation the link between heredity and the continuation of life. | Lecture on DNA structure and replication, segregation of chromosomes and alleles and recombination mechanisms.  Mitosis Lab  Genetic Crosses Lab | Exam Questions  Lecture Quizzes  Lab Reports |

**Required Texts, Additional Reading, and Other Materials**

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| The BSC 104 Lab Manual  Essential Biology, 5th ed, by Simon, Dickey, and Reece, Benjamin Cummings |

**Course Requirements/Due Dates**

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| The exams will be made available during lecture and must be completed during class.  Lab work must be completed each week during class. |

**Grading Policy**

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| Grading will be based on your performance on the exams, quizzes and labs as follows:  Lecture Quizzes 10%  Four Exams 17.5% each  Lab 20%  Grading scale is as follows: A 89.5 B 79.5 C 69.5 D 59.5 F <59.5 |

**Attendance Policy**

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| **Attendance** of lecture is not mandatory but you are **absolutely and solely responsible** for any material covered or announcements made in class.  **Attendance of labs is mandatory** unless you have a school excuse. **Make**-up work due to absence must be made up within two days of the absence. **It is the student’s responsibility to ask for and make-up missed work.** |

**Course Schedule**

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| Weeks of | Lecture Topic |
| Week 1: 8/17 | Intro. To Biology, the scientific process |
| Week 2: 8/24 | The Chemical nature of life |
| Week 3: 8/31 | The cell |
| Week 4: 9/7 | Cellular dynamics |
| Sept 14 | **Test 1** |
| Week 5: 9/15 | Photosynthesis |
| Week 6: 9/21 | Respiration |
| Week 7: 9/28  Week 8: 10/5 | Cell Cycle and Mitosis |
| Oct 12 | **Test 2** |
| Week 9: 10/13 | Meiosis and Genetics |
| Week 10: 10/19 | The DNA molecule |
| Week 11: 10/26 | Biotechnology |
| Nov 9 | **Test 3** |
| Week 12: 11/2 | The Theory of Evolution, Evolutionary Biodiversity |
| Week 13: 11/10 | The Evolution of Microbial Life |
| Week 14: 11/16 | The Evolution of Fungi and Plants; The Evolution of Animals |
| Week 15: 11/23 | **Thanksgiving Break** |
| Week 15: 11/30 | Ecology |
| Week 16: 12/7 | Population Ecology and Community and Ecosystem Ecology |
| Date TBA | **Final Test (Comprehensive)** |

Schedule of Labs is contained in your lab book.