BIOL 1107 - Principles of Biology I
Course Syllabus – Fall 2015

Individuals with disabilities who need to request accommodations should contact the Disability Services Coordinator, Student Center 214, 678-466-5445, disabilityservices@mail.clayton.edu.

COURSE NUMBER AND TITLE:

BIOL 1107 Principles of Biology (CRN: 80653, 81305, 80654, 80655, and 81321)

CREDIT HOURS:

3.0 semester credit hours

CATALOG DESCRIPTION:

An introductory biology sequence designed for science majors which includes chemistry, cell structure and function, cell division, molecular genetics, Mendelian genetics, evolution, plant and animal systematics, and ecology. BIOL1107 is the first course of a two semester sequence for students majoring in the sciences or in some pre-professional programs. It is expected that students have a biology and chemistry background from high school and have a familiarity with algebra. Writing coherently is also expected.

CO-REQUISITES:

BIOL1107L, Principles of Biology I laboratory. Withdrawal from BIOL1107 requires withdrawal from BIOL1107L and withdrawal from BIOL1107L requires withdrawal from BIOL1107.

NOTEBOOK COMPUTER REQUIREMENT:

Each CSU student is required to have ready access throughout the semester to a notebook computer that meets faculty-approved hardware and software requirements.
for the student's academic program. Students will sign a statement attesting to such access. For further information on CSU's Official Notebook Computer Policy, please go to http://itpchoice.clayton.edu/policy.htm.

**COMPUTER SKILL PREREQUISITES:**

- Able to use the computer’s operating system
- Able to access and send e-mail
- Able to use a web browser and search engine
- Able to use a word processing program and spreadsheet program for assignments as needed
- Able to install software as required for accessing course materials, including browser plug-ins such as Adobe Flash player, Adobe PDF reader, etc.
- Able to access Desire2Learn. PowerPoints, Test Materials, etc. will be posted on D2L
- Student training videos and print materials can be found at http://www.clayton.edu/cid/d2lstudenttraining
- You can gain access to Desire2Learn by signing into the SWAN portal and selecting “D2L” on the top right side. If you experience any difficulties with Desire2Learn, please e-mail or call The HUB (TheHub@mail.clayton.edu or (678) 466-HELP)

Students who do not have the required skills should go to the HUB and/or Student Software Support Services for training and help. Your instructor is not able to provide this training. Assignments may require use of your computer and an inability to complete an assignment due to a lack of the above (or other general computer issues) will not be an acceptable excuse.

**IN-CLASS USE OF STUDENT NOTEBOOK COMPUTERS:**

Student notebook computers may be used in the classroom in this course for class assignments. Computers will be required to access course materials, work on assignments outside of class, and to communicate with your instructor. **Students may be permitted to use computers in class for general use at the instructor's discretion. Instructors may deny permission to use a computer during class time.** In addition, instructors reserve the right to forbid computer use to particular students if those students are found using them for purposes not related to the course (e.g., web surfing, email, instant messaging, etc.). This same limitation applies to the use of other electronic devices in class (including, but not limited to cell phones, personal digital assistants, etc.). Violation of these rules may result in loss of points, so check with your instructor to determine what is acceptable.
COURSE OBJECTIVES

• To understand science as a process of inquiry.
• To describe the levels of organization in living things.
• To integrate chemical information in the investigation of cell structure and function.
• To investigate the processes of bioenergetics necessary for life.
• To investigate inheritance and genetics from the Mendelian, chromosomal and molecular perspective.

STUDENT LEARNING OUTCOMES:

General education outcomes:

The following link provides the Clayton State University Core Curriculum outcomes (see Area D):  http://www.clayton.edu/Portals/5/core_curriculum_outcomes_clayton.pdf

Biology outcomes:

BIOL1107 supports outcomes 1, 4, 5, and 7 of the biology major:

• Outcome 1. Knowledge of the basic principles of major fields of biology.
• Outcome 4. Ability to communicate orally and in writing in a clear concise manner.
• Outcome 5. Ability to collect, evaluate, and interpret scientific data, and employ critical thinking skills to solve problems in biological science and supporting fields.
• Outcome 7. Appreciation for the impact of biological and physical science on the environment and society

TEACHER EDUCATION STANDARDS

Conceptual Framework:

The mission of the Teacher Education Unit is to prepare professional educators who engage in reflective practice and who are competent, caring, committed, collaborative, culturally responsive, and prepared to teach diverse learners in an ever-changing society.

The content of this course syllabus correlates to education standards established by national and state education governing agencies, accrediting agencies and learned society/ professional education associations. Please refer to the course correlation
matrices located at the following web site:
http://www.clayton.edu/teachered/standardsoutcomes.

OPERATION STUDY

At Clayton State University, we expect and support high motivation and academic achievement. Look for Operation Study activities and programs this semester that are designed to enhance your academic success such as study sessions, study breaks, workshops, and opportunities to earn Study Bucks (for use in the University Bookstore) and other items.

INSTRUCTOR INFORMATION:

**Dr. Jacqueline Jordan**
Office: Natural and Behavioral Sciences Building (NBS), 149
Phone: (678) 466-4781
E-mail: JacquelineJordan@clayton.edu
Internet address: http://faculty.clayton.edu/jjordan
Office Hours: http://faculty.clayton.edu/jjordan/home

**Dr. Jere Boudell**
Office: Laboratory Annex Building (LAB), 116C
Phone: (678) 466-4772
Email: JereBoudell@clayton.edu
Internet address: http://faculty.clayton.edu/jboudell
Office Hours: http://faculty.clayton.edu/jboudell

**Dr. Julie Morgan**
Office: Faculty Hall, Department of Biology
Phone: (678) 466-4770
Email: JulieMorgan@clayton.edu
Internet address: http://faculty.clayton.edu/jmorgan
Office Hours: http://faculty.clayton.edu/jmorgan
CLASS MEETINGS

<table>
<thead>
<tr>
<th>CRN</th>
<th>SECTION</th>
<th>DAYS</th>
<th>TIMES</th>
<th>LOCATION</th>
<th>INSTRUCTOR</th>
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<tbody>
<tr>
<td>80653</td>
<td>01</td>
<td>M/W/F</td>
<td>11:00 – 11:50am</td>
<td>UC 265</td>
<td>J. Boudell</td>
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<td>81305</td>
<td>02</td>
<td>M/W/F</td>
<td>10:00 – 10:50am</td>
<td>UC 265</td>
<td>J. Morgan</td>
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<td></td>
<td>M</td>
<td>11:00 – 11:50am</td>
<td>UC 267</td>
<td>J. Morgan</td>
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<td>80654</td>
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<td>M/W/F</td>
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<td>UC 265</td>
<td>J. Morgan</td>
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<td>UC 267</td>
<td>J. Morgan</td>
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<tr>
<td>80655</td>
<td>03</td>
<td>T/TH</td>
<td>9:50 – 11:05am</td>
<td>UC 265</td>
<td>J. Jordan</td>
</tr>
<tr>
<td>81321</td>
<td>05</td>
<td>M/W/F</td>
<td>10:00 – 10:50am</td>
<td>UC 265</td>
<td>J. Morgan</td>
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REQUIRED MATERIALS:

You are required to provide your own scantrons for exams. Scantrons can be purchased at the bookstore. Students who fail to bring a scantrons on the day of the exam will receive a zero for any sections of the test that required the scantrons.

TEXTBOOK INFORMATION:

Required text:


- Access to masteringbio.com (included if you have purchased your text book new - otherwise, you can purchase access at www.masteringbio.com). If you purchase access to masteringbio.com separately, you are responsible for making sure it is compatible with the US 10th Edition of the textbook. Please obtain the Course ID and Username from Instructor. Quizzes are administered via Mastering Biology.


Optional texts:

- Scientific American: Current Issues in Biology v5 (0-321-54187-1)
- Scientific American: Current Issues in Biology v6 (0-321-59849-0)
EVALUATION:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>POINTS</th>
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<tr>
<td>4 Lecture Exams, Worth 100 points each</td>
<td>400</td>
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<tr>
<td>Quizzes, Assignments, Research Papers</td>
<td>100</td>
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<tr>
<td>Final Exam</td>
<td>100</td>
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<td>Total points</td>
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GRADING:

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<th>Grade</th>
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<th>Point Range</th>
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<tbody>
<tr>
<td>A</td>
<td>90 - 100%</td>
<td>540-600</td>
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<tr>
<td>B</td>
<td>80 - 89%</td>
<td>480-539</td>
</tr>
<tr>
<td>C</td>
<td>70 - 79%</td>
<td>420-479</td>
</tr>
<tr>
<td>D</td>
<td>60 - 69%</td>
<td>360-419</td>
</tr>
<tr>
<td>F</td>
<td>below 60%</td>
<td>&lt;359</td>
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TENTATIVE CLASS SCHEDULE

Changes or additions to this syllabus, including reading, exam schedule, grading, total number of evaluation points, and course policies can be made at the discretion of the instructor at any time.

<table>
<thead>
<tr>
<th>Week of</th>
<th>TOPICS and TENTATIVE EXAM DATES</th>
<th>CHAPTERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 17</td>
<td>Introduction, Review Syllabus</td>
<td>1</td>
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<tr>
<td></td>
<td>Evolution and Themes in the Study of Life</td>
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<tr>
<td>August 24</td>
<td>Chemical Content of Life</td>
<td>2</td>
</tr>
<tr>
<td>August 31</td>
<td>Water and Life</td>
<td>3</td>
</tr>
<tr>
<td>Date</td>
<td>Topic</td>
<td>Week</td>
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<tr>
<td>September 8</td>
<td>Structure and Function of Biological Molecules</td>
<td>4</td>
</tr>
<tr>
<td>September 14</td>
<td><strong>EXAM 1 (Chapter 1-5)</strong></td>
<td>5</td>
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<tr>
<td>September 21</td>
<td>Metabolism</td>
<td>6</td>
</tr>
<tr>
<td>September 28</td>
<td>Cells</td>
<td>7</td>
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<tr>
<td></td>
<td>Membrane Structure and Function</td>
<td>7</td>
</tr>
<tr>
<td>October 5</td>
<td>Cellular Respiration and Fermentation</td>
<td>8</td>
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<tr>
<td>October 19</td>
<td><strong>Exam 2 (Chapter 6-10)</strong></td>
<td>9</td>
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<tr>
<td>October 26</td>
<td>Meiosis and Sexual Life</td>
<td>10</td>
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<tr>
<td>November 2</td>
<td>Mendel and Gene Idea</td>
<td>11</td>
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<tr>
<td>November 9</td>
<td>Chromosomal Basis of Inheritance</td>
<td>12</td>
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<tr>
<td>November 16</td>
<td><strong>Exam 3 (Chapter 12-15)</strong></td>
<td>13</td>
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<tr>
<td>November 23</td>
<td>Gene Expression</td>
<td>14</td>
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<tr>
<td>November 30</td>
<td>Gene Expression</td>
<td>15</td>
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<tr>
<td>November 25-28</td>
<td><strong>NO CLASSES, THANKSGIVING HOLIDAY, November 25-28</strong></td>
<td>16</td>
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<tr>
<td>November 30</td>
<td>Gene Expression</td>
<td>17</td>
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<tr>
<td>December 7</td>
<td>Biotechnology, if time permits</td>
<td>18</td>
</tr>
<tr>
<td>December 7</td>
<td>Last Day of Regular Classes</td>
<td>19</td>
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**FINAL EXAM SCHEDULE**

*Boudell, J., Dec. 11, Friday, 12:30 – 2:30pm*

*Jordan, J., Dec. 10, Thursday, 8:00 – 10:00 am*
Morgan, J., Dec. 11, Friday, 10:15 – 12:15pm

Please note that the schedule is tentative and the dates of the exams and the chapters that each exam will cover are tentative and subject to change. You should check this page or with your instructor often for updates to the schedule.

Due dates for assignments may be changed at the instructor’s discretion. You are responsible for keeping track of due dates and turning in your work when it is required.

Exam dates are not set until they are announced in class. The exam date will be announced by your instructor, so check with him/her if you are uncertain of the date of an upcoming exam.

MID-TERM PROGRESS REPORT

The mid-term grade in this course, which will be issued on October 9, 2015 reflects approximately 30% of the entire course grade. Based on this grade, students may choose to withdraw from the course and receive a grade of “W.” Students pursuing this option must fill out an official withdrawal form, available in the Office of the Registrar, or withdraw on-line using the Swan by mid-term, which occurs on October 9, 2015.

Instructions for Withdrawing are provided at this link. The last day to withdraw without academic accountability is Friday October 9, 2015.

COURSE POLICIES

Students must abide by policies in the Clayton State University Student Handbook, and the Basic Undergraduate Student Responsibilities.

UNIVERSITY ATTENDENCE POLICY

Students are expected to attend and participate in every class meeting. Instructors establish specific policies relating to absences in their courses and communicate these policies to the students through the course syllabi. Individual instructors, based upon the nature of the course, determine what effect excused and unexcused absences have
in determining grades and upon students’ ability to remain enrolled in their courses. The university reserves the right to determine that excessive absences, whether justified or not, are sufficient cause for institutional withdrawals or failing grades.

**POLICY FOR COURSE ATTENDENCE and QUIZZES, ASSIGNMENTS, and EXAMS**

Absences from EXAMS must also be accompanied by a signed physician's or judge's excuse (*there are no exceptions*). Without an excuse provided within one week, a grade of zero points will be assigned for the missed assessment. If the student has a valid excuse the final exam will be doubled to make up for the missed one, unless it is a final exam, in which case a makeup will be administered. *You are only permitted one excused absence from class exams.* Because one quiz grade is dropped at the end of the semester, make up quizzes are not given.

Quizzes and exams are given at the beginning of class. If you come in late and the quiz or exam is still underway, you can take the exam or quiz but you will not receive any additional time to complete the quiz or exam.

*All electronics such as cell phones, mp3 devices, calculators, etc. must be turned off during quizzes and exams and stored off of your desks. Failure to turn off and store such devices will result in a zero on the quiz or exam.* If you must monitor your cell phone due to an emergency, you need to inform your professor, and you can keep the phone on vibrate.

Attendance is expected for all class periods. Attendance is required for quiz and examination periods (see above). Any absence must be accompanied by a written excuse from a doctor or other competent authority. Without an excuse, a grade of zero points will be assigned for the missed work. Late assignments must be turned in within one day of the due date and 10% will be deducted from the final assignment grade. Assignments may NOT be sent to the instructor via email. Assignments are due at the beginning of class.

**COMPUTER AND CELL PHONE POLICY**

Laptop computers may be used during lecture. Laptops are for taking notes only. The use of laptop computers during lecture is at the discretion of the instructor. Abuse of the laptop computer policy may result in no laptop use during lecture.

**E-MAIL**

Each student must activate his/her e-mail account at Clayton State University. The class list-serve is only used by the instructor. If you respond to the list-serve, every student will receive your email. Please email the instructor directly at jboudell@clayton.edu. You must obtain permission from the instructor to use the class list-serve. You should check Desire 2 Learn regularly for new announcements. Communication must be from CSU email account. In the email, you must include the following information:
• Clearly identify yourself in the body of the e-mail. Address the instructor in an appropriate manner in the email.
• Clearly identify which class you are writing about. Be specific with your question.
• Do not ask specific questions concerning grades, as they cannot be discussed by e-mail.

GENERAL COURSE POLICIES

Visitors, including children, are not allowed in the classroom.

No smoking, other use of tobacco, eating, or drinking is permitted at any time in the classroom.

All examinations are closed book, unless noted by the instructor. NO student produced study sheets, note cards, notes from class, electronic information, etc. may be used on exams. During exams you may have only pencil (s) and an eraser at your desk.

No form of academic dishonesty will be tolerated in this class. Any type of activity that is considered dishonest by reasonable standards may constitute academic misconduct. The most common forms of academic misconduct are cheating and plagiarism. All instances of academic dishonesty will result in a MINIMUM penalty of a grade of zero for the work involved. All instances of academic dishonesty will be reported to the office Student Life/Judicial Affairs. Judicial procedures are described at http://adminservices.clayton.edu/judicial/.

DISRUPTIVE BEHAVIOR POLICY

Disruptive behavior in the classroom can negatively affect the classroom environment as well as the educational experience for students enrolled in the course. Disruptive behavior is defined as any behaviors that hamper the ability of instructors to teach or students to learn. Common examples of disruptive behaviors include, but are not limited to:

Eating in class
Monopolizing classroom discussions
Failing to respect the rights of other students to express their viewpoints
Talking when the instructor or others are speaking
Constant questions or interruptions which interfere with the instructor’s presentation
Overt inattentiveness (e.g., sleeping or reading the paper in class)
Creating excessive noise
Entering the class late or leaving early
Use of pagers or cell phones in the classroom
Inordinate or inappropriate demands for time or attention
Poor personal hygiene (e.g., noticeably offensive body odor)
Refusal to comply with faculty direction

Students exhibiting these types of behaviors can expect a warning from the instructor or dismissal for the lesson in which the behavior occurs. Failure to correct such behaviors can result in dismissal from the course.

More extreme examples of disruptive behavior include, but are not limited to:

- Use of profanity or pejorative language
- Intoxication
- Verbal abuse of instructor or other students (e.g., taunting, badgering, intimidation)
- Harassment of instructor or other students
- Threats to harm oneself or others
- Physical violence

Students exhibiting these more extreme examples of disruptive behavior may be dismissed from the lesson or the entire course.

Students dismissed from a lesson will leave the classroom immediately or may be subject to additional penalties. Dismissed students are responsible for any course material or assignments missed.

Students dismissed from a course have the right to appeal the dismissal to the department head responsible for the course. Appeals beyond the department head may also be pursued. If no appeal is made or the appeal is unsuccessful, the student will receive a grade of WF (withdrawal – failing) regardless of the current grade in the course.

Conditions attributed to physical or psychological disabilities are not considered as a legitimate excuse for disruptive behavior.

1 The description of disruptive behavior and listings of examples of disruptive behavior are taken from the Web sites of James Madison University, the University of Delaware and Virginia Tech.