BIOL 1306 – Spring 2020
Principles of Biology I

Instructor: Greg Krukonis
Email: gkrukonis@angelo.edu
Office: Cavness Science Building 003A
Office Hours: Tuesday, Thursday 9:15-11:00 AM (and other times by appointment)

Course Information

Class Meeting Dates and times
Spring 2020 Semester: Monday 13 January- Friday 8 May
1307.040 TR 8:00-9:15 AM Cavness 023
1307.060 TR 11:00-12:15 AM Cavness 123

Course Description
An introduction to the unifying principles of biology with emphasis on biological chemistry, energetics and homeostasis, cell structure and function, gene expression, and patterns of inheritance. Recommended for students majoring in biological sciences or related disciplines. Not intended for non-majors.

Prerequisite and Co-requisite Courses
Students must register for Biology 1106 laboratory concurrently.

Student Learning Outcomes
This course introduces the integration between structure and function of biological organization. You will be asked to use processes of science to apply principles of evolution, genetics, diversity, and ecology to living systems. Observation, experimentation, and investigation are emphasized. Biology 1306 requires a conceptual understanding of the material rather than the simple memorization and regurgitation of facts. This course will challenge you to analyze and apply information, solve problems, and make connections different from the context in which they were learned. These are critical skills in biology. More detailed learning objectives are provided in the Blackboard course page.
Course Delivery
This is a face-to-face course with learning resources and supplemental materials posted in Blackboard¹.

Required Texts and Materials
  - Option 1 eBook with CONNECT™ – ISBN: 9781260933437
  - Option 2 Loose leaf Book AND CONNECT™ ISBN: 9781260933437

Technology Requirements
- Students need access to Blackboard Learning Management System. Blackboard is available as an app for smartphones and tablets and a website on laptop computers.
- A Digital device with wireless capability (cell phone, tablet, laptop).
  - If you do not have a device with wireless capability, please contact Dr. Connie Heimann (cheimann@angelo.edu) so that she can assist you.

Communication
Faculty will respond to email and/or telephone messages within 24 hours during working hours Monday through Friday. Weekend messages may not be returned until Monday evening.

Written communication via email: All private communication will be done exclusively through your ASU email address. Check your ASU email frequently for announcements and policy changes. In your emails to faculty, include the course name and section number in your subject line.

Virtual communication: Office hours and/or advising may be done with the assistance of the telephone and/or Blackboard Collaborate.

Grading
Evaluation and Grades
Course grades will be determined based on a combined total of 1000 points from lecture and lab as indicated in the following table.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities (CONNECT, quizzes, homework, etc.)</td>
<td>200</td>
</tr>
<tr>
<td>Exam 1</td>
<td>100</td>
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<tr>
<td>Exam 2</td>
<td>100</td>
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<tr>
<td>Exam 3</td>
<td>100</td>
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<tr>
<td>Final Exam* (comprehensive)</td>
<td>200</td>
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<tr>
<td>Laboratory</td>
<td>300</td>
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<tr>
<td><strong>Course total points</strong></td>
<td><strong>1000</strong></td>
</tr>
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Total course points: 700 lecture points; 300 lab points

**Grading System**

Course grades will be dependent upon completing course requirements and meeting the student learning outcomes.

The following grading scale is in use for this course:

- **A** = 900-1000 points
- **B** = 800-899.9 points
- **C** = 700-799.9 points
- **D** = 600-699.9 points
- **F** = 0-599.9 points (Grades are not rounded up)

*The Comprehensive Final Exam (percentage grade) can also replace a lower grade on one of the first three semester lecture exams.

**Assignment and Activity Descriptions**

Knowledge of Student Learning Outcomes will be assessed as multiple choice, matching, true/false questions on examinations. Activities will be a mix of various assignment formats including; questions during lecture, CONNECT assignments, Blackboard quizzes, worksheets, and other assessment formats. There will be no makeup activity if you are absent or late.

**Make-up Exams**

Make-up exams will be given only in emergency situations which preclude class attendance or pre-arranged, approved university absence. Opportunity to take a make-up exam is based on University policy and instructor discretion. Arrangements for excused make-up exams should be made prior to the scheduled date of the exam, unless it is a health emergency, in which case you should contact the instructor before the first class following the absence.

**Laboratory Grades**

Success in the laboratory involves teamwork in designing and conducting experiments, performing pre-lab and lab activities and report writing. In addition, you will conduct activities designed to develop and improve critical thinking and problem-solving skills related to the topics discussed in lectures. You must earn a minimum of 60% of the lab points (180 out of 300) to pass the course. **You WILL NOT pass the course if you fail the lab!!**
General Policies Related to This Course

All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook
- Angelo State University Catalog

Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university’s Statement of Academic Integrity.

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student’s responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dallas Swafford
Director of Student Disability Services, Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you
from completing course work. Documentation may be required. See ASU Operating Policy 10.11 \textit{Grading Procedures}\footnote{Grading Procedures} for more information.

**Student Absence for Observance of Religious Holy Days**

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for \textit{Observance of Religious Holy Day}\footnote{Observance of Religious Holy Day} for more information.

**Title IX at Angelo State University**

The University prohibits discrimination based on sex, which includes pregnancy, sexual orientation, gender identity, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination including: sexual assault, sex-based discrimination, sexual exploitation, sexual harassment, public indecency, interpersonal violence (domestic violence and/or dating violence), and stalking. As a faculty member, I am a Responsible Employee meaning that I am obligated by law and ASU policy to report any allegations I am notified of to the Office of Title IX Compliance.

Students are encouraged to report any incidents of sexual misconduct directly to ASU’s Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator at:

Michelle Boone, J.D.
Director of Title IX Compliance/Title IX Coordinator
Mayer Administration Building, Room 210
325-942-2022
michelle.boone@angelo.edu

You may also file a report online 24/7 at \url{www.angelo.edu/incident-form}.

If you are wishing to speak to someone about an incident in confidence you may contact the University Health Clinic and Counseling Center at 325-942-2173 or the ASU Crisis Helpline at 325-486-6345.

For more information about Title IX in general you may visit \url{www.angelo.edu/title-ix}.

**Course Schedule**

Tentative schedule of dates, topics, and exams. Order and dates are subject to change.

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
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<tr>
<td>2</td>
<td><strong>MLK Day Holiday: Monday 20 January</strong>&lt;br&gt;Cell membranes and other cell constituents, Organelle structure/function</td>
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<tr>
<td>3</td>
<td>Introduction to cell communication</td>
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<td>4</td>
<td>Review and <strong>EXAM 1 Thursday 6 February</strong></td>
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<tr>
<td>5</td>
<td>Enzymes</td>
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<tr>
<td>6</td>
<td>Energy Transformations – How Cells Release Energy</td>
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<tr>
<td>7</td>
<td>Energy Transformations – How Cells Harvest Energy</td>
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<tr>
<td>8</td>
<td>Review and <strong>EXAM 2 Thursday 5 March</strong></td>
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<tr>
<td></td>
<td><strong>SPRING BREAK – NO CLASSES!</strong></td>
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<tr>
<td>9</td>
<td>DNA Structure, Gene Function</td>
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<td>10</td>
<td>DNA Replication, Cell Cycle, Mitosis&lt;br&gt;<strong>Drop Date: Thursday 26 March</strong></td>
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<tr>
<td>11</td>
<td>Sexual Reproduction, Meiosis</td>
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<td>12</td>
<td>Mendelian Inheritance&lt;br&gt;<strong>Spring Holiday: Friday 10 April</strong></td>
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<tr>
<td>13</td>
<td>Review and <strong>EXAM Thursday 16 April</strong></td>
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<tr>
<td>14</td>
<td>Biotechnology</td>
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<tr>
<td>15</td>
<td>Wrap up and review for Final Exam</td>
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<tr>
<td>16</td>
<td><strong>FINAL EXAM</strong>&lt;br&gt;Section 040 Tuesday 5 May – 8:00am-10:00am&lt;br&gt;Section 060 Tuesday 5 May – 10:30am-12:30pm</td>
</tr>
</tbody>
</table>

1. https://blackboard.angelo.edu
3. https://www.angelo.edu/catalogs/
5. https://www.angelo.edu/services/disability-services/
6. https://www.angelo.edu/content/files/14197-op-1011-grading-procedures
7. https://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of