Biology for Science Majors I Online Laboratory
BIOL 1106-500 Fall 2023

Name: Alexandria Bryant, MIS; SFASU Biology Department

Email: alexandria.bryant@sfasu.edu (Please do NOT email me through D2L. I rarely check it.)

Phone: (936) 468-2458 (only if I’m in my office; email is the best way to reach me)

Office: Miller Science 105

Office Hours: M 10:00 am - 11:00 am
T 11:00 am - 1:00 pm
W 10:00 am – 11:00 am
R 10:00 am – 11:00 am

I have an open-door policy. If my office door is open then I am available to speak with you. Otherwise, come during office hours above or make an appointment.

Class Meeting Time and Place: Online on Brightspace D2L (No F2F or planned Zoom meetings)

Course Description:
This laboratory-based course accompanies BIOL 1306 Biology for Science Majors I. Laboratory activities will reinforce the fundamental principles of living organisms, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Study and examination of the concepts of cytology, reproduction, genetics, and scientific reasoning are included.
Number of credit hours: 1

Credit Hour Justification:
Students can expect to spend 2 – 4 hours completing each laboratory exercise and an additional 2 – 4 hours writing up the results of each laboratory exercise to successfully complete this course.

Prerequisite: None

Co-requisite: BIOL 1306 Biology for Science Majors I (lecture)

Attendance:
There are no required class meetings to attend; however, students are expected to access D2L regularly in order to complete quizzes and assignments by their deadlines. This is NOT a self-paced online course.

Text and Materials:
Lab kits are purchased from Carolina Biological Supply, Distance Learning, and instructions for purchase are posted in D2L. Lab kits contain all lab materials. Student worksheets and lab manuals are posted on D2L. All lab reports should be submitted as .pdf documents to avoid compatibility issues.

Course Requirements:
To complete Biology for Majors (I) you must be enrolled in BIOL 1306 & BIOL1106 in the same semester. Your laboratory grade is determined by weekly assignments and quizzes. Your lecture instructor will calculate your final course grade using your lab average as follows:
lab avg. = 25% lecture avg. = 75%

Program Learning Outcomes
Each course objective and student learning outcome listed below corresponds to the Biology Department PLO 1, to Demonstrate a good knowledge base in biological concepts and be able to integrate knowledge with critical thinking skills to become problem solvers. Knowledge base will include: levels of complexity (molecular/cellular through population/communities/ecosystems); biological principles and processes.
Student Learning Outcomes
Upon successful completion of this course, students will: 1. Describe the characteristics of life (CO #1). 2. Explain the methods of inquiry used by scientists (CO #1, 2). 3. Identify the basic requirements of life and the properties of the major molecules needed for life (CO #1). 4. Compare structures, reproduction, and characteristics of viruses, prokaryotic cells, & eukaryotic cells (CO #1, 2). 5. Describe the structure of cell membranes and the movement of molecules across a membrane (CO #1, 2). 6. Identify the substrates, products, and important chemical pathways in metabolism (CO #1). 7. Identify the principles of inheritance and solve classical genetic problems (CO #1). 8. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins (CO #1). 9. Describe the unity and diversity of life and the evidence for evolution through natural selection (CO #1, 2)

Jacks Teach
This course meets educator preparation standards for one or more certification programs; a complete listing of all the educator preparation standards this course meets can be found at: https://sfasu.edu/docs/jacksteach/jacksteach-standards-alignment-chart.xlsx

Academic Integrity:
(University Policy A-9.1 Statement):
The Code of Student Conduct and Academic Integrity outlines the prohibited conduct by any student enrolled in a course at SFA. It is the responsibility of all members of all faculty, staff, and students to adhere to and uphold this policy.

Articles IV, VI, and VII of the new Code of Student Conduct and Academic Integrity outline the violations and procedures concerning academic conduct, including cheating, plagiarism, collusion, and misrepresentation. Cheating includes, but is not limited to: (1) Copying from the test paper (or other assignment) of another student, (2) Possession and/or use during a test of materials that are not authorized by the person giving the test, (3) Using, obtaining, or attempting to obtain by any means the whole or any part of a non-administered test, test key, homework solution, or computer program, or using a test that has been administered in prior classes or semesters without permission of the Faculty member, (4) Substituting for another person, or permitting another person to substitute for one’s self, to take a test, (5) Falsifying research data, laboratory reports, and/or other records or academic work offered for credit, (6) Using any sort of unauthorized resources or technology in completion of educational activities.

Plagiarism is the appropriation of material that is attributable in whole or in part to another source or the use of one’s own previous work in another context without citing that it was used previously, without any indication of the original source, including words, ideas, illustrations, structure, computer code, and other expression or media, and presenting that material as one’s own academic work being offered for credit or in conjunction with a program course or degree requirements.

Collusion is the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any provision of the rules on academic dishonesty, including disclosing and/or distributing the contents of an exam.

Misrepresentation is providing false grades or résumés; providing false or misleading information in an effort to receive a postponement or an extension on a test, quiz, or other assignment for the purpose of obtaining an academic or financial benefit for oneself or another individual or to injure another student academically or financially.

Students are allowed the use of AI software including Chat GPT and others, in order to provide helpful information and extra explanation on topics found on lab quizzes and assignments; however, many of the questions are phrased in such a way that simply copying and pasting answers provided by artificial intelligence will not earn full points on the grading rubric because students will be asked to justify their answers using data and provide evidence from the lab exercise in their explanation.

Copying work from another student in the course, or from prior semesters is a violation of the Code of Student Conduct and Academic Integrity. The possible sanction for this behavior, if a student is found responsible according to the procedure outlined in the Code of Student Conduct and Academic Integrity, would be receiving a “zero” on the lab quiz or assignment without the ability to make up the lab.

Withheld Grades Semester Grades Policy (5.5)
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the coursework because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course to compute the grade point average. For additional information, go to https://www.sfasu.edu/policies/course-grades-5.5.pdf.

Acceptable Student Behavior:
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This prohibition applies to all instructional forums, including online, electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/ inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.

Expectations for Students in BIO 1106 online

Technical Preparation: The technical nature of the course demands preparation on your part. Students should submit all assignments early enough to account for technical difficulties. Don’t wait until just before the assignments are due to try to submit them. If your computer glitches or your internet goes down, you may miss the deadline. In the event of a technical catastrophe (e.g. the university's main fiber optic line gets severed, a hurricane floods telecommunications hubs in Houston, the D2L server goes down, Snowmageddon occurs, etc.), please do not inundate the Biology Department with phone calls. I will communicate with the class as soon as is technically possible.

Technology Requirement: As you have elected to enroll in an online course, it is your responsibility to acquire a consistent, stable, dependable computer and internet connection with which to complete the assignments for the course by the deadlines indicated on the Semester Calendar. It is not the responsibility of the instructor to provide additional time for assignments or exams or an alternative means of completing the course due to technological issues on your part. Just as it is your responsibility to acquire and maintain adequate transportation to attend a face-to-face course, it is your responsibility to secure the technological means to participate in and complete this course. If you are having technical issues with D2L, please call the student help line at 936-468-1919 or e-mail at d2l@sfasu.edu. Live support is available from 8 am CST to 5 pm CST, Monday through Friday. Additional information can be found on the SFA online website. For many labs, a device (smart phone, digital camera, etc.) will be required to photograph results and progress for submission.

You should be logging onto D2L on a regular basis. In addition to the detailed course calendar, all assignments are entered into the D2L calendar. This is NOT a self-paced course.

Due dates are firm. Late assignments are not accepted. Once a quiz or an assignment’s drop box is closed, it will not be re-opened. No assignments will be accepted through email. They must be uploaded to the D2L drop box. Special arrangements for submitting work early or late due to University sponsored trips/events need to be made in advance.
Disabilities Statement:
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/

Student Wellness and Well-Being
SFA values students’ overall well-being, mental health and the role it plays in academic and overall student success. Students may experience stressors that can impact both their academic experience and their personal well-being. These may include academic pressure and challenges associated with relationships, emotional well-being, alcohol and other drugs, identities, finances, etc.

If you are experiencing concerns, seeking help, SFA provides a variety of resources to support students’ mental health and wellness. Many of these resources are free, and all of them are confidential.

On-campus Resources:
The Dean of Students Office (Rusk Building, 3rd floor lobby)
www.sfasu.edu/deanofstudents
936.468.7249
dos@sfasu.edu

SFA Human Services Counseling Clinic Human Services, Room 202
www.sfasu.edu/humanservices/139.asp
936.468.1041

The Health and Wellness Hub “The Hub”
Location: corner of E. College and Raguet St.
To support the health and well-being of every Lumberjack, the Health and Wellness Hub offers comprehensive services that treat the whole person – mind, body and spirit. Services include:
Health Services
Counseling Services
Student Outreach and Support
Food Pantry
Wellness Coaching
Alcohol and Other Drug Education
www.sfasu.edu/thehub
936.468.4008
thehub@sfasu.edu

Crisis Resources:
Burke 24-hour crisis line: 1.800.392.8343
National Suicide Crisis Prevention: 9-8-8
Suicide Prevention Lifeline: 1.800.273.TALK (8255)
Crisis Text Line: Text HELLO to 741-741

Grade Determination:
The 25 points available for each lab will be added together to determine a total score out of the 265 points available for the entire lab course. A percentage score will be calculated from these points and reported to your lecture instructor to determine your overall grade in the course. Your final grade for the lab will be the same as your lecture grade.
Lab Grade = points earned/265 x 100
Final Grade = Lab grade x 0.25 + Lecture grade x 0.75

BIOL 1106 Online Fall 2023 Schedule

All quizzes must be taken and all lab reports uploaded to the D2L drop box by 11:00pm on their due dates. Once the drop box or quiz closes, it will not be reopened. No work will be accepted through email.

<table>
<thead>
<tr>
<th>Laboratory Activity</th>
<th>Assignment Opens in D2L</th>
<th>Due Date</th>
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</thead>
<tbody>
<tr>
<td>Syllabus Quiz</td>
<td>Aug 28</td>
<td>Sep 1</td>
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<tr>
<td>Lab 1: PPE and Safety</td>
<td>Aug 28</td>
<td>Sep 1</td>
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<tr>
<td>Lab 2: The Scientific Method</td>
<td>Sep 1</td>
<td>Sep 8</td>
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<tr>
<td>Lab 3: Biological Molecules and Enzymes</td>
<td>Sep 8</td>
<td>Sep 15</td>
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<td>Lab 4: Cell Structure and Function Osmosis</td>
<td>Sep 15</td>
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<td>Lab 5: Cellular Respiration</td>
<td>Sep 22</td>
<td>Sep 29</td>
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<tr>
<td>Lab 6: Photosynthesis and Pigments</td>
<td>Sep 29</td>
<td>Oct 6</td>
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<tr>
<td>Lab 7: Mitosis and Meiosis Simulation</td>
<td>Oct 6</td>
<td>Oct 13</td>
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<td>Lab 8: Cell Cycle Mitosis: Virtual Microscope</td>
<td>Oct 13</td>
<td>Oct 20</td>
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<td>Lab 9: Mendelian Inheritance</td>
<td>Oct 20</td>
<td>Nov 3</td>
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<td>Lab 10: Blood Typing</td>
<td>Nov 3</td>
<td>Nov 10</td>
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<tr>
<td>Lab 11: Introduction to Biotechnology-Gel Electrophoresis</td>
<td>Nov 10</td>
<td>Nov 17</td>
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