

Biology for Science Majors I

BIOL-1406

Summer II 2021 Sections 5BD CRN-40867, 5BE CRN-40868 4 Credits 07/12/2021 to 08/09/2021 Modified 07/11/2021

Meeting Times

Lecture

Mon-Sun
Online

Lecture will be completely online. Assignments will be due everyday of the week. Be sure to check all due dates.

Lab

Monday, Tuesday, Wednesday, Thursday, 12:10 PM to 2:40 PM, D231/via Zoom

Face-to face and zoom days will vary depending on your section. Please review your schedule to ensure that you attend the correct modality.

Contact Information

Instructor: Dr. Shawanda Stanford

Email: Shawanda.Stanford@blinn.edu

Office: D176

Phone: (979)209-7682

Website: <https://www.blinn.edu/brazos/natscience/biol/sstanford/> (<https://www.blinn.edu/brazos/natscience/biol/sstanford/>)

Email sent before 4pm will be answered the same day. After 4pm will be within 24hrs. Emails received after 4pm on Friday will have a 48hr response time.

Office Hours

Q and A Sessions

Friday, 3:00 PM to 4:00 PM, Via Zoom

Others by appointment

Description

3 lecture hours and 3 lab hours per week; 96 total contact hours. Credit: 4 semester hours

Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. Lab activities reinforce lecture topics.

Requisites

Prerequisite: A student must be college ready in reading according to TSI college-ready standards.

Recommended: Successful completion of MATH 1314 - College Algebra or concurrent enrollment in higher-level mathematics.

★ Core Curriculum Statement

Through the Texas Core Curriculum, students will gain a foundation of knowledge in human cultures and the physical and natural world, develop principles of personal and social responsibility for living in a diverse world, and advance intellectual and practical skills that are essential for all learning. For details relating to this core course, please see:

<http://www.blinn.edu/academics/core-curriculum.html> (<http://www.blinn.edu/academics/core-curriculum.html>)

||| Outcomes

1. Describe the characteristics of life.
2. Explain the methods of inquiry used by scientists.
3. Identify the basic requirements of life and the properties of the major molecules needed for life.
4. Compare and contrast the structures, reproduction, and characteristics of viruses, prokaryotic cells, and eukaryotic cells.
5. Describe the structure of cell membranes and the movement of molecules across a membrane.
6. Identify the substrates, products, and important chemical pathways in metabolism.
7. Identify the principles of inheritance and solve classical genetic problems.
8. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.
9. Describe the unity and diversity of life and the evidence for evolution through natural selection.
10. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
11. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
12. Communicate effectively the results of scientific investigations.

☰ Materials

Textbook: *Life: The Science of Biology* (BIOL 1406 PKG bundled with LaunchPad access and REEF coupon), 12th Edition, 2020. Sadava, Hillis, Heller, and Hacker. Sinauer Associates. [ISBN 9781319384784].

Laboratory Manual: *BIOL 1406 Lab Manual*, 1st Edition, 2019. Hayden-McNeil/Macmillan Learning, Plymouth, MI [ISBN 9781533919212]

Safety Gear: A disposable lab coat for the labs.

Required eCampus Access

Access to the Internet is REQUIRED. eCampus is an online course tool. It is in essence our virtual classroom through which I will be posting course related materials, information, news items, as well as homework, and quizzes. To access eCampus, go to <https://ecampus.blinn.edu> and select this course. For help on how to navigate eCampus, go to <http://www.blinn.edu/disted/internet/tutorials.htm> or for problems accessing eCampus contact Distance Education at <http://www.blinn.edu/disted/help.html>

Student e-Mails

Students are assigned an e-mail address that must be checked regularly for official Blinn communications and course information. The address is of the form: Firstname.LastnameLast2digitsBlinnID @buc.blinn.edu Information about accessing this account can be found at: www.blinn.edu/acadtech/studentemail/

HonorLock Requirements

Test monitoring will be provided by HonorLock. As such, a webcam, audio recording device (i. e. microphone), and photo ID are required to take all exams.

☰ Course Requirements

All sections of this course regardless of location or modality will require:

1. A minimum of three major exams
2. A minimum of two laboratory exams
3. A comprehensive final exam

✓ Evaluation

How to Succeed in this Course

Science courses may be challenging and difficult. Most successful students spend two to four hours studying per week for each credit hour of the course.

Key Points

- Have access to all the materials and technology required for this course (webcam, microphone, computer, reliable internet, etc).
- Attend all classes. Each lecture builds on the previous lecture. Stay ahead of the material.
- Come to class prepared by reading the textbook and/or lab manual beforehand and taking notes before class to improve success.
- If you have a question during lecture, go ahead and ask it. Chances are that at least three other students have this same question.
- Know your deadlines and course policies by looking at the syllabus, instructor announcements, and eCampus dates, schedules, and news items.
- Work through lots of practice problems in addition to your homework.
- Form study groups with your peers.
- Ask your professors for help, visit office hours, and, if needed, request an appointment to see your instructor one-on-one.
 - Be prepared when you visit with your instructor and have questions related to content ready.
- Seek help from Blinn College's tutoring services, if needed.
- Be responsible for your own learning by actively engaging in the course.

Criteria

Lecture Exams (30%): There will be four lecture exams each worth 50 points. The exact date of each exam is noted in the schedule on the syllabus. All exams will be administered online. There will be **NO MAKE-UP EXAMS** unless proof of technical difficulties is supplied. A zero will be recorded for the missed exam.

Laboratory Exams (20%): There will be three lab practical exams worth 50pts. All lab practicals will be multiple choice. Also, there will be **NO MAKE-UP EXAMS** for the lab. A zero will be recorded for the missed exam.

Final Exam (20%): The final is a common comprehensive final worth 100 points. It will consist of at least 100 multiple choice questions. You cannot take the final early as the final exam must be taken during the week of finals. This exam will be administered online during the time and date noted in the syllabus schedule.

Class Participation (15%): This will include online quizzes lab, lecture activities/animations from LaunchPad, and group/individual activities. Class participation points will vary. A grade of zero will be recorded for missing activities and/or worksheets. Late work is not accepted. **There will be NO MAKE-UP for missed activities.**

Launchpad Online Homework Assignments (15%): Homework will come from the McMillian's Launchpad homework points will also vary. All due dates and times are noted in the assignment schedule on the syllabus. **DUE DATES ARE FINAL AND THERE WILL BE NO MAKE-UP.**

PLEASE NOTE: THERE WILL BE GRADED ASSIGNMENTS DUE ALMOST EVERY DAY OF THE WEEK. KEEP UP WITH ALL DUE DATES.

Breakdown

Lecture Exams.....	30%
Lab Exams.....	20%
Class Participation.....	15%
LaunchPad Homework.....	15%
Final Exam.....	20%

YOUR COURSE AVERAGE = (YOUR TOTAL POINTS/ TOTAL POSSIBLE POINTS) X 100 = _____%

A = > 90%; B = > 80%; C = > 70%; D = > 60%; F = < 60%

Blinn College Policies

All policies, guidelines, and procedures in the [Blinn College Catalog \(http://catalog.blinn.edu/\)](http://catalog.blinn.edu/), [Blinn College Board Policies \(http://pol.tasb.org/Home/Index/1204\)](http://pol.tasb.org/Home/Index/1204), and the [Blinn College Administrative Regulations \(https://www.blinn.edu/administrative-regulations/\)](https://www.blinn.edu/administrative-regulations/) are applicable to this course.

[Specific information on civility, attendance, add/drop, scholastic integrity, students with disabilities, final grade appeal, alternative retailers, campus carry and proctoring arrangements and cost. \(http://www.blinn.edu/syllabus-policies/\)](http://www.blinn.edu/syllabus-policies/)

Notice of any action taken under these protocol and procedures, by Blinn College or its employees, may be delivered by hand, through the U.S. Postal Service, or electronically to the student's Blinn Buc e-mail account. Notice shall be deemed received upon actual receipt, on deposit in the U.S. Mail, or upon entering the information processing system used by Blinn College for Blinn Buc e-mail accounts, whichever first occurs.

Information about the changes Blinn has made to the May Minimester, Summer I, and Summer II semesters: [Back with Blinn \(https://www.blinn.edu/back-with-blinn/index.html\)](https://www.blinn.edu/back-with-blinn/index.html).

* Course Policies

[Please read: May Minimester, Summer I, and Summer II 2021 General Classroom Procedures. \(http://www.blinn.edu/back-with-blinn/course-policies.html\)](http://www.blinn.edu/back-with-blinn/course-policies.html)

Problem Resolution

If you have a complaint about your class, you should first request a conference with your instructor to try and resolve the problems or issues. If the problems or issues cannot be resolved at the instructor level, you should request a conference with the Biology Department Head.

Dr. Steve R. Simcik
Office: D-211
Phone: 979-209-7515
Email: steve.simcik@blinn.edu

Laboratory Safety

Students will be provided with laboratory safety training during the first week of class. Students are expected to follow all safety rules including rules related to proper lab attire. **Closed toe shoes are required in the laboratory.** Students that fail to follow this rule, will be required to leave the lab and will be assigned an unexcused absence for the class day.

Attendance and Late Work

Active participation in class is required for successful completion of his course. Attendance will be based on submission of at least 70% of the weeks assignments to include attendance to face-to-face labs, drop box submission, online homework, quizzes, and exams. Missing a week of material will result in you being dropped from the course. Late work will not be accepted and a grade of zero will be given for the assignment. Be sure to submit the correct assignment into the corresponding drop box in one of the supported file extensions (jpg, PNG, word, PPT, or PDF). Work not following the guidelines will receive a zero and re-submission will not be possible.

Schedule

When	Topic	Notes									
		<table border="1"> <thead> <tr> <th></th> <th>Lecture Online</th> <th>Lab</th> </tr> </thead> <tbody> <tr> <td>Week 1 07/12-07-18</td> <td>Chapters 1-4 Lecture Exam 1 07/16-17</td> <td>Face-to-Face: Labs 1-4 Part C/E; Lab 6 Online: Lab 4 Parts A-B/D; Lab 5 Lab Exam 1 07/17-18</td> </tr> <tr> <td>Week 2 07/19-07/25</td> <td>Chapters 5-7.2; 16.3 Lecture Exam 2 07/24-25</td> <td>Face-to-Face: Lab 7 Part A, B, Part C 1-3, Part D (onion) Lab 8 Observing Cells Part A, Lab 9 Part D & Lab 9 Demos, Lab 11 Online: Lab 7 Part A online, Part C 4&5, Part D (Cheek), Lab 8 Observing Cells Part B, Lab 9 Part A-C, E, F, and Lab 10</td> </tr> </tbody> </table>		Lecture Online	Lab	Week 1 07/12-07-18	Chapters 1-4 Lecture Exam 1 07/16-17	Face-to-Face: Labs 1-4 Part C/E; Lab 6 Online: Lab 4 Parts A-B/D; Lab 5 Lab Exam 1 07/17-18	Week 2 07/19-07/25	Chapters 5-7.2; 16.3 Lecture Exam 2 07/24-25	Face-to-Face: Lab 7 Part A, B, Part C 1-3, Part D (onion) Lab 8 Observing Cells Part A, Lab 9 Part D & Lab 9 Demos, Lab 11 Online: Lab 7 Part A online, Part C 4&5, Part D (Cheek), Lab 8 Observing Cells Part B, Lab 9 Part A-C, E, F, and Lab 10
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When	Topic	Notes	Face-to-Face:
		<p>Week 3</p> <p>07/26-08/01</p> <p>Q-drop 07/30/2021</p>	<p>Chapters 8-11</p> <p>Labs 12-15 Part 1 & 2</p> <p>Lecture Exam 3</p> <p>07/30-31</p> <p>Online:</p> <p>Cell Metabolism Concept Maps</p> <p># 1- 4</p> <p>Lab 14 and 16 (Restriction Digest Set-up)</p> <p>Lab Exam 2</p> <p>07/31-08/01</p>
		<p>Week 4</p> <p>08/02-08/08</p>	<p>Chapters 12-15.2; 16.1-16.2</p> <p>Face-to-Face: Lab 16 (DNA Extraction)-17</p> <p>Online:</p> <p>Gene Expression Concept Maps #1-3</p> <p>Lecture Exam 4</p> <p>08/06-07</p> <p>Lab Exam 3</p> <p>08/07-08</p>
		<p>Week 5</p>	<p>Final Exam</p> <p>08/09/2021</p> <p>12am-11:59pm</p>

When	Topic	Notes