

Biology I 1406 – C2
Blinn College – Bryan Campus
Course Information Sheet
Fall 2010

Instructor: David Bridges, D.C.

Office: S-117

Phone: 979-209-7572

Phone: 361-782-1800 (cell)

Office Hours: 3:00 – 4:00pm MW

email: david.bridges@blinn.edu

Course Description:

This is an introductory survey of contemporary biology that includes the chemical basis of life, structure and function of cells, energy transformation, and genetics. Three class hours and three laboratory hours per week. Credit: Four semester hours.

Core Curriculum Course:

This is a course in the 42-hour Core Curriculum of Blinn College. As such, students will develop proficiency in appropriate intellectual competencies, exemplary educational objectives and general perspectives. The URL of the Blinn College core curriculum web site is: www.blinn.edu/corecurriculum

Course Objectives and Student Learning Outcomes:

After successfully completing Biology 1406, students should be able to:

- Interpret the process by which scientific knowledge is acquired and evaluated
- Evaluate the characteristics of cells
- Recognize the molecular basis of evolutionary change
- Evaluate the composition of biological macromolecules and the role they play in the structure and function of cells
- Interpret selected metabolic processes carried out by cells and their essential role in sustaining life
- Compare and contrast the methods by which cells divide
- Set-up and evaluate basic Mendelian genetic problems
- Demonstrate the ability to use the compound light microscope and technical applications utilized in modern biology

Textbooks and other materials:

Required Textbook: *Biology*, 2nd ed., Brooker, Widmaier, Graham, Stiling. McGraw-Hill. ISBN: 978-0-07-353221-9

Required Laboratory Manual: *Blinn College Biology 1406 Lab Manual*, Richardson et. al. University Copy Center

Response Key Pad: Remote keypad (clicker) and enrollment code for the e-Instruction Classroom Performance System (CPS). Register your keypad online at <http://www.einstruction.com/>. Specific information on how to register will be provided in class. CPS response pads should be brought to every class. They will be used to record attendance and class quizzes.

Description of Course Content and Class Schedule:

Week	Week of	Chapter	Lecture Topic (Example)	Laboratory Exercise	Laboratory Topic
1	August 30 th	1	Syllabus Intro to Biology	Lab 1 Lab 2	Laboratory Safety Process of Science
2	September 6 th	2	Atoms, Molecules, Water	Lab 3 Lab 4	Scientific Method Experimental Design
3	September 13 th	3	Organic Molecules	Lab 5	Metric Measurement Organic Molecules Activity
4	September 20 th	4	General Features of Cells Exam 1 (Ch. 1-4)	Lab 6	General Features of Cells Testing for Organic Molecules
5	September 27 th	5 6	Membrane Structure, Transport Energy, Enzymes, Metabolism	Lab 7 Lab 8	Microscopy Observing Cells in Action
6	October 4 th	7	Cellular Respiration	Lab 9	Prokaryotic and Eukaryotic Cells Cellular Respiration Concept Map
7	October 11 th	8	Photosynthesis	Lab 10	Membrane Transport
8	October 18 th	9	Exam 2 (Ch. 5-8) Cell Communication		Review for Lab Exam 1 Lab Exam 1
9	October 25 th	10 11	Multicellularity Nucleic Acid Structure	Lab 11 Lab 12	Spectrophotometer Chromatography
10	November 1 st	14 12	Mutation Gene Expression	Lab 13	Photosynthesis Photosynthesis cont.
11	November 8 th	12	Gene Expression Exam 3 (Ch. 9-12, and 14)	Lab 14	Gene Expression Concept Map DNA Isolation
12	November 15 th	13 15	Gene Regulation Eukaryotic Cell Cycle	Lab 15	RFLPs and Gel Electrophoresis Eukaryotic Cell Cycle cont.
13	November 22 nd	16	Simple Patterns of Inheritance THANKSGIVING HOLIDAY	Lab 16	Mitosis THANKSGIVING HOLIDAY
14	November 29 th	16	Simple Patterns of Inheritance continued Exam 4 (Ch. 13, 15, and 16)	Lab 17	Mendelian Genetics Lab Exam 2 Review
15	December 6 th	17	Complex Patterns of Inheritance Review		Lab Exam 2 Review
	December 13 th 3:15-5:15		Final Exam		

Attendance Policy: The College District believes that class attendance is essential for student success; therefore, students are required to promptly and regularly attend all their classes. Each class meeting builds the foundation for subsequent class meetings. Without full participation and regular attendance, students shall find themselves at a severe disadvantage for achieving success in college. Class participation shall constitute at least 10 percent of the final course grade. It is the responsibility of each faculty member, in consultation with the division chair, to determine how participation is achieved in his or her class. Faculty will require students to regularly attend class and will keep a record of attendance from the first day of class and / or the first day the student's name appears on the roster through final examinations. If a student has one week's worth of unexcused absences during the semester, the student will receive an email by the College requiring contact with the instructor and schedule a conference immediately to discuss attendance issues. If the student accumulates two week's worth of unexcused absences, the student will be administratively withdrawn from the class.

There are four forms of excused absence officially recognized by the institution: (1) Observance of religious holy days: The student should notify the instructor not later than the 15th day of the semester concerning the specific date(s) that the student will be absent for any religious holy day(s); and (2) Representing Blinn College at an official institutional function; and (3) official involvement in a high school activity for "dual credit" students; and (4) military service. Other excuses will be considered and may be excusable at the instructor's discretion, with documentation.

Missing **lecture or lab or both** will count as one absence.

For this class, one week is 2 class meetings, and 2 weeks is 4 class meetings. Unexcused absences are cumulative throughout the semester, including the final exam! You should also be aware the State has legislated students are allowed only 6 drops throughout their college career.

Dropping: If a student chooses to drop the course, it is that student's responsibility to complete a drop order at the Office of Enrollment Services. Failure to do so could result in a grade of F in the course. The last day to withdraw with a "W" is **Friday November 19th**.

Eating and drinking are **not** allowed in classrooms or laboratories.

Civility Statement: Members of the Blinn College community, which includes faculty, staff and students, are expected to act honestly and responsibly in all aspects of campus life. Blinn College holds all members accountable for their actions and words. Therefore, all members should commit themselves to behave in a manner that recognizes personal respect and demonstrates concern for the personal dignity, rights, and freedoms of every member of the College community, including respect for College property and the physical and intellectual property of others.

If a student is asked to leave the classroom or have access to the online classroom denied because of uncivil behavior, the student may not return to that class until he or she arranges a conference with the instructor. It is the student's responsibility to arrange for this conference.

Dishonesty Statement: Blinn College does not tolerate cheating, plagiarism or other acts of dishonesty. Definitions of these acts and procedures for dealing with them are described in "Scholastic Dishonesty" in the Blinn College Student Handbook, copies of which are available at the information desk in the administration building.

Electronic Device Policy: All the functions of all personal electronic devices designed for communication and/or entertainment (cell phones, pagers, beepers, iPods, and similar devices) must be turned off and kept out of sight in all Blinn College classrooms and associated laboratories. Any noncompliance with this policy will be addressed in accordance with the Blinn College civility policy (Administrative Policy).

CPS Response pads should be brought to class **EVERY** day. They will be used to take attendance and to administer in-class quizzes.

ADA Statement: Reasonable accommodations for students with documented learning or physical disabilities will be made upon presentation of an official request by the student. An official request form is supplied and completed by the Office of Disability Services (ODS) located in the College Park Center Administration Building. The URL is <http://www.blinn.edu/disability.htm>. Accommodation is not retroactive from the time of concluding agreement for accommodation.

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 Division Chair, Mr. Dwight Bohlmeyer, Science 241, dbohlmeier@blinn.edu.

Course Criteria for Grading:

Point Distribution:	Lecture exams	300 points
	Comprehensive final exam	200 points
	Lab exams (2)	200 points
	Lecture Quizzes	100 points
	<u>Lab exercises</u>	<u>200 points</u>
	TOTAL POSSIBLE POINTS	1000

Criteria for Grading:

Your final grade is based on 1000 points.

Points	Grade	Points	Grade	Points	Grade	Points	Grade	Points	Grade
<594	F	595-694	D	695-794	C	795-894	B	895+	A

Lecture Exams: There will be four lecture exams each worth 100 points. Lecture exams may consist of a combination of true/false, multiple choice, fill in the blank and short answer questions. **Make-up exams will only be offered to those with excused absences, no exceptions.** Excused absences include: Illness with Dr's note, official Blinn College activity, Religious Holiday (see attendance policy) or death of a close family member with appropriate documentation. Students must contact me during the following class period or via e-mail to schedule a make-up. If you know that you will need to miss an exam prior to the test date, contact me ASAP so that I may plan accordingly. Student's lecture exam totals will consist of the top three exams for a total of 300 points.

Comprehensive Final Exam: The final is a common comprehensive final worth 200 points. It will consist of multiple choice type questions, matching, fill in the blank, and short answer questions. I will reschedule an individual's final exam date when you have a clash in the final exam time and provide a letter from your academic advisor that confirms the time conflict. Please see me ASAP so that I may plan accordingly.

Laboratory Exams: There will be two lab practical exams worth 100 points each. Lab practical exams will test students' ability to carry out specific tasks or techniques that relate to lab activities performed and/or the overall student learning outcomes for the laboratory. Additional short answer, problem solving, or fill-in-the-blank questions may also be administered. An overview of possible laboratory stations for these exams can be found in Appendix IV of your lab manual. There will be **NO MAKE-UP EXAMS** for the lab.

Lecture Quizzes: Throughout the semester we will be using the response pad to measure your understanding of material that is being presented in the classroom. These quizzes, worth a total of 100 points, will cover material from the previous or current day's lecture, the text, or assigned outside reading.

Laboratory Exercises: Lab exercises and assignments are to be completed during the lab. Students must have their lab activity sheet checked by me before leaving the lab to receive full credit for lab assignments.