

1. COURSE INFORMATION

Title: General Biology I **CRN Number:** 10987 **Section:** BIOL 1406-312

Course Meets: Lecture: Mon/Wed: 1:25 PM – 2:40 PM (S216)

Lab: Mon/Wed: 2:50 PM-4:05 PM (S215)

Semester: Fall 2012

2. INSTRUCTOR INFORMATION

Instructor: Dr. Rebecca Delgado

Office: S-117

Office Hours: M, W 10:30-11:30 or by appointment

Tel: 979 -209-7571

Email: rebecca.delgado@blinn.edu

3. COURSE DESCRIPTION: An in-depth introductory survey of contemporary biology for students majoring in the biological sciences. Topics emphasized include, the chemical basis of life, structure and function of cells, energy transformations, and molecular biology and genetics. Three class hours and three laboratory hours per week. Credit: Four semester hours.

4. PREREQUISITE: Exemption from or passing score on the reading section of the state test or completion of READ 0306 with a “C” or higher score.

5. CORE CURRICULUM COURSE: This is a Core Course in the 42-Hour Core Curriculum of Blinn College. As such, students will develop proficiency in the appropriate Intellectual Competencies, Exemplary Educational Objectives, and Perspectives: www.blinn.edu/corecurriculum.

6. STUDENT LEARNING OUTCOMES:

After completing this course, you will 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 genetics problems.
- Demonstrate the ability to use the compound light microscope and technological applications utilized in modern biology.

7. REQUIRED TEXTBOOKS AND MATERIALS:

Textbook: *Biology, 2nd ed.*, Brooker et al., 2011 McGraw Hill

Lab Manual: *Blinn College Biology 1406 Lab Manual, 7th ed.*, Richardson et. al., 2011. Copy Stop Print & Postal. (Please note that this manual can only be purchased in the copy center on campus, not in the bookstore).

Test forms: All exams will have a scantron portion for which you will need an Advantage test form. These are available in the bookstore.

8. COURSE REQUIREMENTS

eCAMPUS: Access to the Internet is **required**. Internet access at home would certainly be a plus, however, all students at Blinn College have computing resources available to them. The Open Computer Labs at Blinn College are located in Rooms H-225 and L-258, and the Library. If you are not familiar with these, see me or inquire at the Learning Center in the Library Building, Room 258, for more details, ASAP. eCampus is an online course tool. It is in essence a virtual classroom through which I will be posting course related materials and information. You will also be able to contact me with questions and or problems you might be having and have the ability to contact your classmates. It will be your responsibility to check this site regularly:

<https://ecampus.blinn.edu>.

Lecture Exams: There will be four exams (closed book, no notes) (worth 100 points each) that may be a combination of short answer, fill-in-the-blank, multiple choice, identification, and short essay. I will drop the lowest of the four lecture exam scores. **Make-up exams will only be offered to those with excused absences, no exceptions.** After exams are graded, scantrons will be returned to the student. Lecture exams can be reviewed during the instructor's office hours which will give me time to discuss the exam with you and if needed, guidance on how to improve your grade.

Final exam: A cumulative, departmental lecture final (worth 200 points) will be given at the end of the semester. **The final exam score cannot be dropped.** Note that the time day and time of this exam may differ from the normal class period. See exam schedule below.

Lab Practicals: Two 100-point lab practicals are scheduled throughout the semester. The exams will cover material previously covered in lab and will be primarily fill-in-the-blank questions. **The lab practical grade cannot be dropped. I do not give makeup lab practicals.**

Quizzes: Three 15-point quizzes are scheduled throughout the semester. These quizzes may be a combination of short answer, fill-in-the-blank, multiple choice, identification, and short answer. These quizzes will cover material previously covered in lecture and lab.

Labs: Every day in lab we will engage in active learning sessions of observing specimens and hands-on procedures. You will be required to finish a lab report for each lab and these reports will be graded and handed back for you to study this same material for the lab exams. The daily lab activities will contribute 255 points to the total points for the semester.

Preparation: Please read the assigned chapter in the textbook and specific lab in the lab manual before coming to lecture and lab. Because of the quantity of material to be covered, please do not fall behind in your readings. I will always try to be available before and after class to answer any questions you may have.

9. CRITERIA FOR GRADING AND DETERMINING FINAL GRADE:

Point Allocation:

Evaluation Methods	Points
Quizzes	45
Lecture Exams (Top 3 of 4)	300
Comprehensive Final Exam	200
Lab Exams	200
Lab Exercises	255
Total Points	1000

Approximate Grading Scale:

Percentage of Total Points	Letter Grade
90 to 100 %	A
80 to 89 %	B
70 to 79 %	C
60 to 69 %	D
Below 59 %	F

Your Course Average = (Your Total Points)/1000 x 100 = _____%

10. BLINN POLICIES

a. 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.

Civility Notification Statement. If a student is asked to leave the classroom because of uncivil behavior, the student may not return to that class until he or she arranges a conference with the faculty member; it is the student's responsibility to arrange for this conference.

This statement reflects step one in a possible four step process. The Incivility Protocol is detailed in the Blinn College Student Handbook, www.blinn.edu/student%20handbook.pdf.

b. 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. A record of attendance will be maintained from the first day of classes 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 (2 classes) during the semester, he or she will be sent an e-mail by the College District requiring the student to contact his or her instructor and schedule a conference immediately to discuss his/her attendance issues. **Should the student accumulate two weeks' worth of unexcused absences (4 classes), he or she will be administratively withdrawn from class.**

There are four forms of excused absences recognized by the institution:

1. observance of religious holy days - The student should notify his or her instructor(s) 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);
2. representing the College District at an official institutional function;
3. high school dual credit students representing the independent school district at an official institutional function; and
4. military service.

Other absences may be considered excused at the discretion of the faculty member with appropriate documentation. A student enrolled in a developmental course is subject to College District-mandated attendance policies. Failure to attend developmental classes shall result in removal from the course as defined by the College District.

It is the student's responsibility to officially drop a class he or she is no longer attending. To officially drop a class the student must obtain the class withdrawal form from Enrollment Services, complete the class withdrawal form, secure the required signatures, and return the completed form to Enrollment Services. **The last day to drop this semester with a Q is November 16, 2012.**

c. Scholastic Integrity. Blinn College does not tolerate cheating, plagiarism, or any other act of dishonesty with regard to the course in which you are enrolled. The following text defines the faculty member's responsibility with regard to the scholastic integrity expectation for this and all courses at Blinn College.

It is the responsibility of faculty members to maintain scholastic integrity at the College District by refusing to tolerate any form of scholastic dishonesty. Adequate control of test materials, strict supervision during testing, and other preventive measures should be utilized, as necessary, to prevent cheating or plagiarism. If there is compelling evidence that a student is involved in cheating or plagiarism, the faculty member should assume responsibility and address the infraction. Likewise, any student accused of scholastic dishonesty is entitled to due process as outlined in Blinn College Board Policy FLB (Local). The Scholastic Integrity Policy is located in the Blinn College Student Handbook, www.blinn.edu/student%20handbook.pdf. In a case of scholastic dishonesty, it is critical that written documentation be maintained at each level throughout the process.

d. Students with Disabilities. Blinn College is dedicated to providing the least restrictive learning environment for all students. Support services for students with documented disabilities are provided on an individual basis, upon request. Requests for services should be made directly to the Office of Special Populations serving the campus of your choice. For the Bryan campus, the Office of Special Populations (Administration Building) can be reached at (979)209-7251. The Brenham, Sealy and Schulenburg campuses are served by the Office of Special

Populations on the Brenham campus (Administration Building Room 104) and can be reached at (979)830-4157. Additional information can be found at www.blinn.edu/disability/index.html.

e. Final Grade Appeals Policy. If a student wishes to appeal a final grade in a course, Blinn College Board Policy FLDB (Local), Course Grade Complaints, outlines the timeline for the appeal and the four steps in the appeal. This policy is located in the Blinn College Student Handbook, www.blinn.edu/student%20handbook.pdf.

f. Electronic Devices. 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 College District classrooms and associated laboratories. Any noncompliance with this policy shall be addressed in accordance with the College District Civility Policy (Administrative Policy). This information is contained in Blinn College Board Policy FLB (Local).

11. OUTLINE OF THE COURSE CONTENT AND SCHEDULE:

Week	Week Of	Day	Lecture Period	Lab Period
1	8/27	M	Syllabus/ Ch 1: Intro to Biology	Lab 1 & 2 - Safety & Process of Science
		W	Ch 1 & Ch 2: Atoms & Molecules	Lab 3 – Scientific Method
2	9/3	M	Labor Day Holiday	Labor Day Holiday
		W	Ch 2: Atoms & Molecules	Lab 4 and Lab 5
3	9/10	M	Ch 3: Organic Molecules	Lab 6 – Metric Measurement
		W	Ch 3: Organic Molecules	Organic Molecules Activity
4	9/17	M	Exam 1 (Ch. 1-3)	Lab 6 – Metric Measurement cont.
		W	Ch 4: Features of Cells; Quiz 1	Lab 7 – Testing for Organic Molecules
5	9/24	M	Ch 4: Features of Cells cont.	Lab 8 – Microscopy
		W	Ch 5: Membrane Structure, Trans.	Lab 9 – Observing Cells in Action
6	10/1	M	Ch 5: Membrane Structure, Trans.	Lab 10 – Prokaryotic & Eukaryotic Cells
		W	Ch 10: Multicellularity	Lab 11 – Membrane Transport
7	10/8	M	Ch 6: Energy, Enzymes, Metabolism	Lab 11 – Membrane Transport cont.
		W	Exam 2 (Ch. 4-6, 10)	Ch 7: Cellular Respiration

8	10/15	M	Ch 7: Cellular Respiration	Review for Lab Practical 1
		W	Cellular Respiration Concept Map	<u>Lab Practical 1 – Weds. October 17th</u>
9	10/22	M	Ch 8: Photosynthesis; Quiz 2	Lab 12 – Spectrophotometer
		W	Ch 8: Photosynthesis	Lab 13 – Chromatography
10	10/29	M	Ch 11: Nucleic Acid Structure	Lab 14 – Photosynthesis
		W	Ch 11: Nucleic Acid Structure	Lab 14 – Photosynthesis cont.
11	11/5	M	Exam 3 (Ch. 7-8, 11)	Ch 12 Gene Expression
		W	Ch 12: Gene Expression	Gene Expression Concept Map
12 Q	11/12	M	Ch 13: Gene Reg./Ch 14: Mutation	Lab 15 - DNA Isolation; Quiz 3
		W	Ch 15: Eukaryotic Cell Cycle	Lab 16 - Restriction Endonucleases
13	11/19	M	Ch 15: Eukaryotic Cell Cycle	Lab 17 - Mitosis
		W	Thanksgiving Holiday	Thanksgiving Holiday
14	11/26	M	Ch 16: Simple Patt. of Inheritance	Ch 16: Simple Patt. of Inheritance
		W	Exam 4 (Ch. 12-16)	Lab 18 - Mendelian Genetics
15	12/3	M	Ch 17: Complex Patt. of Inheritance	Review for Lab Practical
		W	Ch 17 continued ...	<u>Lab Practical 2 – Weds. December 5th</u>
16	12/10	M	Lab 18 continued...	Review and Assessment

Final Exam for section 312 is Friday, December 14th @ 12:45 PM in S216

Q The last day to withdraw with a “Q” is Friday, November 16th, 2012

EXAM CALENDAR:

Date	Exam	Material Tested
<i>Lecture Exams</i>		
Monday, September 17	Exam 1	Chapters 1-3
Wednesday, October 10	Exam 2	Chapters 4-6, 10
Monday, November 5	Exam 3	Chapters 7-8, 11
Wednesday, November 28	Exam 4	Chapters 12-16
<i>Lab Exams</i>		
Wednesday, October 17	Lab Exam 1	Labs 1-11
Wednesday, December 5	Lab Exam 2	Labs 11-18
<i>Final Exam</i>		
Friday, December 14th @ 12:45 PM	Final Exam	Chapters 1-8, 10-17

QUIZ CALENDAR

Date	Quiz	Material Tested
Wednesday, September 19	Quiz 1	Organic Molecules
Monday, October 22	Quiz 2	Cellular Respiration
Monday, November 12	Quiz 3	Gene expression