



## GENERAL BIOLOGY I BIOL-1406

Spring 2013 Section SECTION\_301 CRN-20500 4 Credits  
01/14/2013 to 05/07/2013 Modified 01/10/2013

### 🕒 Meeting Times

#### Lecture

Monday, Wednesday, 7:45 AM to 9:00 AM, S225

#### Lab

Monday, Wednesday, 9:10 AM to 10:25 AM, S224

### 👤 Contact Information

#### Instructor: Dr. Rebecca Delgado

**Email:** [rebecca.delgado@blinn.edu](mailto:rebecca.delgado@blinn.edu) (mailto:rebecca.delgado@blinn.edu)

**Office:** S117

**Phone:** 979-209-8851

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

#### Office Hours

Monday, Wednesday, 10:30 AM to 11:30 AM, S117

### 📖 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.

#### Requisites

Prerequisites: Exemption or passing score on reading section of THEA or alternative test or completion of READ 306 with a grade of C or higher.

### ★ Core Curriculum Statement

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.

### 📊 Outcomes

1. Interpret the process by which scientific knowledge is acquired and evaluated.
2. Evaluate the characteristics of cells.
3. Recognize the molecular basis of evolutionary change.
4. Evaluate the composition of biological macromolecules and the role they play in the structure and function of cells.
5. Interpret selected metabolic processes carried out by cells and their essential role in sustaining life.
6. Compare and contrast the methods by which cells divide.

7. Set-up and evaluate basic Mendelian genetics problems.
8. Demonstrate the ability to use the compound light microscope and technological applications utilized in modern biology.

## Materials

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Textbook: *Biology*, 2<sup>nd</sup> Edition, 2011. Brooker, Widmaier, Graham and Stiling, McGraw Hill

Lab Manual: *Biology 1406 Laboratory Manual*, Spring 2013, Richardson et. al. Copy Stop Print & Postal

### Test Forms

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

## Course Requirements

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### 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> (<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. 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.

### 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. I do not give makeup lab practicals.

### Quizzes

Three 10-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 170 points to the total points for the semester.

### Final Exam

A cumulative, departmental lecture final (worth 200 points) will be given at the end of the semester. Note that the time day and time of this exam may differ from the normal class period. See exam schedule below.

### 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.

## ✓ Evaluation

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### Criteria

#### Point Allocation:

<b>Evaluation Methods</b>	<b>Points</b>
Quizzes	30
Lecture Exams	400
Comprehensive Final Exam	200
Lab Exams	200
Lab Exercises	170
<b>Total Points</b>	<b>1000</b>

#### Approximate Grading Scale:

<b>Percentage of Total Points</b>	<b>Letter Grade</b>
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 = \_\_\_\_%

## 🎓 Blinn College Policies

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Blinn College policies on civility, class attendance; scholastic integrity; students with disabilities; final grade appeals; and electronic devices as stated in the Blinn College Student Handbook, Faculty Handbook, Blinn College Catalog and specific technical program handbooks. All policies, guidelines and procedures in the Student and Faculty Handbook and the Board and Administrative Policy Manuals are applicable to this course

### 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 instructor; 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](http://www.blinn.edu/student%20handbook.pdf) (<http://www.blinn.edu/student%20handbook.pdf>).

## 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 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, 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 15<sup>th</sup> 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 with a Q is according to the Academic Calendar ([http://calendar.blinn.edu/2012\\_2013\\_printable\\_calendar.pdf](http://calendar.blinn.edu/2012_2013_printable_calendar.pdf)).

## 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 instructor 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](http://www.blinn.edu/student%20handbook.pdf) (<http://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.

## 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 (view\_syllabus?course\_id=11). 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 (view\_syllabus?course\_id=11). Additional information can be found at [www.blinn.edu/disability/index.html](http://www.blinn.edu/disability/index.html) (<http://www.blinn.edu/Disability/index.html>).

## Final Grade Appeal

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](http://www.blinn.edu/student%20handbook.pdf) (<http://www.blinn.edu/student%20handbook.pdf>).

## 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).

## ⚙️ Course Policies

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### Attendance Policy Reminder

Missing lecture, lab or both will count as one absence. For classes that meet twice a week during the spring semester two absences counts as one week's absence. Students accumulating two week's worth of absences (four unexcused absences) will be dropped.

### 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 Bohlmeier, Science 241, [dbohlmeier@blinn.edu](mailto:dbohlmeier@blinn.edu) (<https://exchange.blinn.edu/owa/redir.aspx?C=i0gGv9aGvkqpoAtd3rLKbi9IOoBRws9lidTk62E0NWTI-xcgCEHAXjDLhezA5H3kZTE8Iyo3MQo.&URL=mailto%3adbohlmeier%40blinn.edu>).

### Eating and Drinking

Eating and drinking are not allowed in classrooms or laboratories.

## 📅 Schedule

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When	Topic	Notes				
		Week	Date	Chapter	Lecture Topic	Laboratory Topic
		1	01/14 01/16	1 1/2	First Day /Intro to Biology Intro to Biol/Atoms & Molecules	Labs 1 & 2 - Safety/Process of Science Lab 3 - The Scientific Method

When	Topic	Notes	01/21	-	<b>MLK Holiday - No Classes</b>	<b>MLK Holiday - No Classes</b>
			01/23	2	Atoms, Molecules, and Water	Lab 4 and 5 - Exp. Design/Graphing
		3	01/28	3	Organic Molecules	Lab 6 - Metric Measurement
			01/30	3	Organic Molecules	Organic Molecules Activity
		4	02/04	-	<b>Exam 1 (Ch. 1-3)</b>	Lab 6 - Metric Measurement <i>cont'd</i>
			02/06	4	General Features of Cells/ <b>QUIZ 1</b>	Lab 7 - Testing for Organic Molecules
		5	02/11	4	General Features of Cells	Lab 8 - Microscopy
			02/13	5	Membrane Structure, & Transport	Lab 9 - Observing Cells in Action
		6	02/18	5	Membrane Structure, & Transport	Lab 10 - Prokaryotic and Eukaryotic Cells
			02/20	10	Multicellularity	Lab 11 - Membrane Transport
		7	02/25	6	Energy, Enzymes, & Metabolism	Lab 11 - Membrane Transport <i>cont'd</i>
			02/27	-	<b>Exam 2 (Ch. 4-6, 10)</b>	Ch 7: Cellular Respiration
		8	03/04	7	Cellular Respiration	Review for Lab Practical #1
			03/06	7	Cellular Respiration Concept Maps	<b>Lab Exam #1 (Wednesday, 03/06)</b>
		9	-	<b>Happy Spring Break (03/11-03/15) - No Classes</b>		
		10	03/18	8	Photosynthesis/ <b>QUIZ 2</b>	Ch 8: Photosynthesis
			03/20	11	Nucleic Acid Structure	Lab 12 - Spectrophotometry
		11	03/25	11	Nucleic Acid Structure	Lab 13 - Chromatography
			03/27	-	<b>Exam 3 (Ch. 7-8, 11)</b>	Lab 14 - Photosynthesis
		12	04/01	12	Gene Expression	Lab 14 - Photosynthesis <i>cont'd</i>
			04/03			Gene Expression Concept Maps
		13 <sup>Q</sup>	04/08	13/14	Gene Regulation/Mutation	Lab 15 - DNA Isolation
			04/10	15	Eukaryotic Cell Cycle/ <b>QUIZ 3</b>	Lab 16 - Restriction Endonucleases
		14	04/15	15	Eukaryotic Cell Cycle	Lab 17 - Mitosis
			04/17	16	Simple Patterns of Inheritance	Lab 18 - Mendelian Genetics
		15	04/22	16	Simple Patterns of Inheritance	Lab 18 - Mendelian Genetics <i>cont'd</i>
			04/24	-	<b>Exam 4 (Ch. 12-16)</b>	Review for Lab Exam #2

<b>When</b>	<b>Topic</b>	<b>Notes</b>	04/29	17	Complex Patterns of Inheritance	<b>Lab Exam #2 (Monday, 04/29)</b>
			05/01			Review and Assessment
		<b>Final Exam</b>	<b>Final Exam for section 301 is Monday, May 6<sup>th</sup> @ 7:45 AM in S225</b>			
<b>Exam Calendar</b>	<b>Date</b>		<b>Exam</b>		<b>Material Tested</b>	
	<b>Lecture Exams</b>					
	Monday, February 4		Exam 1		Chapters 1-3	
	Wednesday, February 27		Exam 2		Chapters 4-6, 10	
	Wednesday, March 27		Exam 3		Chapters 7-8, 11	
	Wednesday, April 24		Exam 4		Chapters 12-16	
	<b>Lab Exams</b>					
	Wednesday, March 6		Lab Exam 1		Labs 1-11	
	Monday, April 29		Lab Exam 2		Labs 12-18	
	<b>Final Exam</b>					
<b>Monday, May 6 @ 7:45 AM</b>		Final Exam		Chapters 1-8, 10-17		
<b>Quiz Calendar</b>	<b>Date</b>		<b>Quiz</b>		<b>Material Tested</b>	
	Wednesday, Feb 6		Quiz 1		Organic Molecules	
	Monday, March 18		Quiz 2		Cellular Respiration	
	Wednesday, April 10		Quiz 3		Gene expression	