

**Biology 1406 Blinn College - Bryan Campus**  
**Course Information Sheet**  
**Summer Session II, 2009**

**Instructor:** Dr. Kimberly Head  
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**Blinn Office:** S117

**Office Hours:** M-Th 3:00-3:45  
**Blinn Tel:** (979) 209-7571  
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**Course Description:**

An introductory survey of contemporary biology that includes the chemical basis of life, structure & function of cells, energy transformations and genetics. 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.htm](http://www.blinn.edu/corecurriculum.htm)

**Course Objectives and Student Learning Outcomes:**

After successfully completing Biology 1406, the student should have a working knowledge of:

- Factors which distinguish biology from other sciences
- Factors which distinguish the sciences from other fields of knowledge and methods of learning
- The role of evolution in the history of life on earth
- Atomic and molecular structures relevant to the construction of living organisms
- Chemical processes underlying oxidative metabolism and photosynthesis
- The structure and functions of cells and their organelles
- The mechanisms of inheritance
- The process by which DNA directs cellular functions

The following skills will be demonstrated:

- Operation of compound and dissecting microscopes
- Preparing microscope slides of fresh specimens (wet mount)
- The ability to recognize and demonstrate the proper use of basic laboratory measuring devices
- The ability to design a controlled experiment
- The ability to interpret experimental data

**ADA Statement:**

Students with physical or learning disabilities must present documentation from the Office of Disability Services (room 165, Science Bldg) to receive accommodation on exams and assignments. Accommodation is not retroactive.

**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/](http://www.blinn.edu/acadtech/studentemail/)

**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 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.

**Attendance:** 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 class attendance, students shall find themselves at a severe disadvantage for achieving success in college. Class participation shall constitute at least ten 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. During a Summer Session, if a student accumulates three (3) absences (= 3 class and/or lab meetings for Biology 1406), he/she may be administratively withdrawn from class. There are three forms of excused absence officially designated by Blinn College: (1) Observance of religious holy days: The student should notify his/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); and (2) Representing Blinn College at an official institutional function and (3) official involvement in a high school activity for "dual credit" students. Other excuses will be considered and may be considered excusable at the instructor's discretion. Missing lecture or lab or both will count as one absence. 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.

Eating, drinking, and cell phone use are not allowed in classrooms or laboratories.

Cell Phones are to be **turned off (powered down)** in classrooms or laboratories.

Each failure to comply with laboratory safety procedures results in a zero for any of that day's lab activities (worksheets, quizzes, practicals).

**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. Failure to comply with the Scholastic Dishonesty policy during a test will result in a grade of zero on that test, and cannot be dropped. A final course grade of "F" may also be imposed.

**Criteria for Grading:**

**Lecture Exams:** There will be four lecture exams during the semester plus a comprehensive final exam. Exams can include multiple choice, true/false, matching, fill-in-the-blank, short answer and essay questions. Make-up exams are only offered to students with an excused absence. Excused absences include those officially recognized by Blinn College, plus a death in the family, or an illness with a doctor's certification. To arrange for a make-up exam see me during the first class period following your absence. **An unexcused absence from an exam will result in a grade of zero.**

**Laboratory Exams:** There will be two lab exams. **An unexcused absence from an exam will result in a grade of zero. No make-up exams will be offered for lab exams.**

**Laboratory Work:** Most lab exercises must be completed during the lab period and turned in at the end of the period. Late work turned in within one week of the assignment will be accepted for half credit.

**Quizzes:** Periodic quizzes will cover recent topics and assigned readings from the lecture and the laboratory. A grade of zero will be recorded for missed quizzes unless an approved excuse is submitted. **No make-up is offered for missed quizzes.**

<b>Point Distribution:</b>	Lecture exams (4 exams x 100 points each)	400 points
	Final exam	200 points
	Lab exams (2 exams x 100 points each)	200 points
	Quizzes	100 Points
	Lab Work	<u>100 points</u>
		1,000 points

Final course grades are calculated as:

A: 895 or more points, B: 795 to 894 points, C: 695 to 794 points,  
D: 595 to 694 points, F: 594 or less points.

**Required textbooks and other materials:**

**Required Textbook:** *Biology: Life on Earth*, eighth edition 2008. Audesirk, Audesirk and Byers. Pearson Prentice Hall.

**Required Laboratory Manual:** *Biology 1406 Laboratory Manual, 2nd ed.* 2009. Vidya Rajan and Linda R. Richardson. Hayden McNeil.

**Required Supplemental Lab Pack:** A small packet of materials that will be used to accompany your Lab manual will be available for purchase at Blinn's Copy Center. The cost is approximately \$3.

**Description of Course Content and Class Schedule:** The tentative order of coverage of lecture topics is shown below: \*All dates, topics, and exams are tentative and subject to change at the discretion of the instructor. The instructor will give as much advance notice of changes as possible.

6 – Monday Chapter 1 ..... Lab 1 Lab 2 (Design Exp)	7 – Tuesday Chapter 2 ..... Lab 2 – Experiment Evaluation of Exp. Design ( <b>packet</b> )	8 - Wednesday Chapter 3 ..... Lab 3 – Metric Meas. HW – ( <b>packet</b> )	9 – Thursday <b>EXAM I</b> ..... Metric HW Review Lab 6 – Organic Molecules Lab 4 – Begin Microscopy	10 – Friday Chapter 4 ..... Lab 4, cont. Scientific Illustration ( <b>packet</b> ) Lab 5, 7
13 – Monday Chapter 4/5 ----- Lab 7, cont.	14– Tuesday Chapter 5 ----- Lab 9 Lab 10	15 - Wednesday Chapter 6 ----- Lab 10, cont. Spec Lab ( <b>packet</b> )	16- Thursday <b>EXAM II</b> ----- Lab 11 – Enzymes Graphing /Data Analysis ( <b>packet</b> )	17 - Friday <b>No Class</b>
20 – Monday Chapter 7 ----- Graphing/Data Analysis, cont. ( <b>packet</b> ) Review	21 – Tuesday Chapter 7/8 ----- <b>LAB EXAM I</b>  <b>Common Exam</b>	22 - Wednesday Chapter 8 ----- Lab 12 – Chromatography & Spectrophotometry Intro to Lab 13 Exp. Design	23- Thursday <b>EXAM III</b> ----- Lab 13 Graphing/Data Analysis ( <b>packet</b> )	24 - Friday <b>No Class</b>
27 – Monday Chapter 9 ----- Appendix V – DNA Isolation Introduction to PCR	28 – Tuesday Chapter 10 ----- RFLPs and Gel Electrophoresis DNAi.org Activity ( <b>packet</b> )	29 - Wednesday Chapter 10/11 ----- Lab 18 – Mitosis (modified)	30 - Thursday Chapter 11/12 ----- Lab 18/19 – Meiotic Division and Inheritance Modified ( <b>packet</b> )	31 - Friday <b>No Class</b>
3 – Monday Chapter 12 ----- Genetics Worksheet ( <b>packet</b> ) Intro to Lab 20	4– Tuesday <b>EXAM IV</b> ----- Lab 20	5 - Wednesday Chapter 13 ..... <b>LAB EXAM II</b>  <b>Common EXAM</b>	6 – Thursday <b>FINAL EXAM</b>	<b>BIOL 1406 Schedule Summer II - 2009</b>