

Biology 2401-Section A5
Blinn College – Bryan Campus
Course Information Sheet
Fall 2009

Instructor: Ellen Ott-Reeves

Office: S 110

Tel 209-7432 / 694-1421 home

Office Hours: MW 10-12, TR 8:15-9

email: eott-reeves@blinn.edu

Course Description: Biology 2401 – Anatomy and Physiology I Principles of structure and function of the human body. Anatomy and Physiology I is the first course in a 2 semester sequence which examines the systems of the human body using an integrated approach. The **chemistry** of life provides a foundation to investigate the major organ systems of the body. The areas of study include structure and function of **cells, histology**, the physiological and anatomical aspects of **support and movement** systems and the **nervous** system. Prerequisite: Biol 1406 or approval of the division chair on the relevant campus. Chem 1407 or 1411 are recommended. Three class hours and 3 laboratory hours per week. Credit: 4 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 .

Student Learning Outcomes: At the completion of the course, the student will:

- 1) Explain the principle of complementarity of structure and function.
- 2) Describe homeostasis and feedback mechanisms.
- 3) Use correct anatomical terms to describe the human body.
- 4) Explain the major molecular structures basic to life.
- 5) Describe the anatomy and physiology of cells.
- 6) Compare the structures and functions of major tissue types.
- 7) Explain the integumentary system histology and function, including repair, cancer, and thermoregulation.
- 8) Describe the anatomy and physiology of bone.
- 9) Describe the process of ossification and calcification
- 10) Describe articulation structures and movements.
- 11) Explain the sequence of events during muscle contraction and properly identify human muscles.
- 12) Describe neural physiology and components of the central and peripheral nervous systems.

Class Policies:

> **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 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, he / she will be sent an email by the College requiring the student to contact his / her instructor and schedule a **conference immediately** to discuss his / her attendance issues. If the student subsequently accumulates **two week's** worth of unexcused absences, he / she will be **administratively withdrawn** from the class.

There are three forms of excused absence officially recognized by the institution: (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 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. These unexcused absences are cumulative throughout the semester, through the final exam! You should also be aware that the State has legislated that students are only allowed 6 drops throughout your college career. For an illness to be excused, I must have a doctor’s excuse the first day you return to class.

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 Thursday, November 14th.

> **Eating and drinking** are not allowed during class or laboratory work.

> **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.

> **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 applies to attire as well as language and behavior. Please dress appropriately for the academic classroom and laboratory.

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.

>**ADA Policy:** Students needing special accommodation due to a disability must obtain authorization from the Disabilities Counseling Office in room 157 of the Blinn science building.

The above requirements and policies are discussed more fully in the **Blinn College Student Handbook** which, by reference, is incorporated into this information. Please obtain and read.

Safety is always important in science. We will be using expensive **equipment** and preserved **specimens**. **Be aware** of those around you, especially during dissection. If you are **pregnant**, or become pregnant during the semester, please let me know; formaldehyde is a teratogen, and is used in preservation of specimens.

Required Textbooks and other materials:

- *Anatomy and Physiology with Lab Manual, Biol 2401 Blinn College* available at Blinn Bookstore. *Anatomy & Physiology Revealed* disc is also packaged with this compilation of Saladin’s 5th edition text and Martin’s Lab Manual.
- www.mhhe.com/saladin5 is the review website for the text, and has effective tools to help you practice and apply your learning.
- <http://connect.mcgraw-hill.com> is an assignment site for the text, with links to LearnSmart, another review tool.
- <http://ecampus.blinn.edu> will be used for powerpoints and online quizzing.

Course Requirements:	Points	Your score:
Class Work, connect, learn smart	150	
Quiz Average	100	
Lab Practical (3 @ 50 points each)	150	
Lecture Exams (4 @ 100 points each)	400	
Comprehensive final	200	
TOTAL GRADE	1000	Your final points:

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

- **Ecampus / Angel** is an online classroom tool. To log in, go to <http://ecampus.blinn.edu> & follow directions given. **PLEASE** use the computers **on campus** to access if needed @ the Library, Learning Center, and H building. Under the Lessons tab, you'll find powerpoints, pertinent information for labs, as well as a quiz for the chapter. Powerpoints are huge, so please print as handouts with several per page (right click on slide, choose **print options**, print as **handout**, choose number per page as 3 or 4). You are charged for printing on campus. Powerpoints are not a substitute for the text! They are a guide for lecture. Actively listen and take notes, use them to review the text. You will need these reviews to prepare for the final exam as well.
- **Class Work Activities** are in lecture &/or lab. These are **open note, group** review questions, **lab reports**, etc. Late work will not be graded. If I take up a lab report, I need either the page from your **lab book**, or a photocopy. The Bryan Learning Center has a copy of the lab book if you need to make copies. Lab report sheets **MUST** be **complete**, or you get no credit. You will also have classwork assignments using the A&P Revealed discs, the connect online reviews, and learnsmart online reviews.
- **Quiz Average** includes ecampus, lab quizzes or class quizzes. Lab Review sheets can also be graded as quizzes
- **Lab Practicals** are 4 multiple choice exams, worth 50 points each, with the lowest practical grade being **dropped**.
- **Lecture exams** are multiple choice, matching, etc., on scantron, plus a writing portion. We will have 4 lecture exams, none dropped. If you miss an exam or are not happy with your grade on 1 exam, you can take a **cumulative makeup** exam at the end of the semester.
- The **Final** is comprehensive, scantron, 100 questions at 2 points each.

My opinion: This is a **tough, competitive** class! You have a ton of information to comprehend and be able to use. From student feedback, the best way to study for this class is to 1) **read** the book. 2) **work** the labs. 3) use as many **reviews** as possible, including an effective study group, online study guides. **Ask** questions when you're stuck. Come by to review during **office hours**. I cover material quickly in lecture. Many of you may need more time to digest the information; office hours are your time to use me as a **tutor** to help you understand the material. Tutoring is also available through Blinn Learning Center.

Description of Course Content and Tentative Class Schedule:

Date	Text	Topic	Lab	Lab Topic
9/1	1	Course Info, Pretest Intro to A&P	1	Safety Scientific Method, Measuring
9/3	1 2	Homeostasis Feedback group work Chemistry	2	Felt people, Organ Systems matching Body cavities & serosa
9/8	2	Chemistry Matching Exercise	3	Chemistry of Life
9/10	3	Cells	4 5	Microscope Cell Structure, Organelles matching
9/15	3	Cells	6	Membranes: Dye diffusion, RBC solution, Egg lab
9/17	4	Genetics and Cell Function	7	Cell Cycle
9/22	4	Cell Metabolism	8 9	Epithelial Tissue Connective Tissue
9/24	5	Tissues	10	Muscle & Nervous Tissue/Matching Review
9/29	5	Tissues		Practical 1 labs 1-10
10/1		Exam 1 Ch 1-5	11	Integument
10/6	6 7	Integument Bone Tissue 1	12 13 14	Bone structure Skeleton Organization Skull
10/8	7	Bone Tissue 2	15	Vertebrae, thoracic cage
10/13	8	Skeletal System	16 17 18	Pectoral, Upper limb Pelvic, Lower limb Fetal Skeleton
10/15	9	Joints	19	Joint Structure and movement
10/20		Review		Practical 2 labs 11-19
10/22		Exam 2: Ch 6-9	62	Cat dissection, p 515
10/27	10	Muscular System	20 22	Muscle Structure, Cat Muscles of head and neck, laminates
10/29	10	Muscular System II	23 24	Chest, shoulder, upper limb, Laminates, Cat Deep back, abdomen, Pelvis
11/3	11	Muscular Tissue	25	Hip, lower limb, laminates, Cat, Muscle models
11/5	11	Muscular Tissue	26	Surface Anatomy Cat Quiz
11/10		Review		Practical 3: labs 20-26, 62
11/12		Exam 3: Muscles	27	Nerve Tissue Movie: Nerve impulse Movie: Brain Universe Within
11/17	12	Nervous Tissue	28 29	Spinal cord, Movie spinal cord Reflex Arc & Reflexes
11/19	12, 13	Nervous Tissue, spinal cord	30	Brain, Movie: brain
11/20		W drop date		
11/24	14	Brain	32	Brain & Cranial nerves/ Movie Sheep Brain Dissection
11/26		Thanksgiving Holiday		
12/1	14	Brain		Review
12/3		Exam 4: Ch 10-11		Autonomic Nervous System
12/8	15	Autonomic Nervous System		Practical 4: Labs 27-33
12/10		Cumulative Exam		
12/15 10:15		Final Exam @ 10:15 LAB room		