

Course: BIO 201 Human Anatomy and Physiology I
Spring 2010

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Office Hours: by appointment

Textbook: *Human Anatomy and Physiology*, Elaine N. Marieb, Addison Wesley Longman, Inc., 8th edition, 2010. You may use earlier versions of this text, please just check with me to make sure they are sufficient for our course.

Laboratory Manual:

Lab guide is required

Supplements:

- BlackBoard – online learning module of course
<http://online.rcc.edu>
Username: Your NEW Student ID (S#)
Password: The first six characters of your self-selected PIN from the online registration system. (If you did not register online, the default PIN is your birthday as MMDDYY).
- Anatomy of the Cat, Saul Wischnitzer, Laboratory Studies in Biology: Muscular System

Optional: *Anatomy and Physiology Coloring Book*, Elaine N. Marieb, The Benjamin/Cummings Publishing Co., Inc.

Supplies: Disposable gloves (may be purchased at the bookstore or a drugstore)
Dissecting kit (may be purchased at the bookstore)
Colored pencils (may be purchased at the bookstore)

Objectives: Human anatomy and physiology consists of two courses (BIO 201, 202), each a semester long and each with a laboratory requirement. The objective of these courses is to introduce the student to the structure and function of the human body through an exploration of the chemical, physical and biological principles common to all living organisms. Successful completion of these courses should provide a solid foundation for many health- and fitness-related fields.

Specific Course Objectives:

Through lectures, laboratory exercises and examinations students are expected to demonstrate achievement of the objectives listed at the beginning of each chapter in the textbook.

General Course Information:

Your success in this class depends on regular attendance and good study habits. Poor attendance in lecture and laboratory and poor study techniques will result in poor grades. Please come to me for help!

1. Lecture: Saturday 9:00-11:30 a.m.

Attendance is necessary. Material may be covered that is not in the text or lecture notes. You are responsible for ALL material covered whether or not you are present. It is the responsibility of the student to seek out other students for missed lecture material.

2. Laboratory: Saturday 11:30-1:30 p.m.

The laboratory exercises are an essential component of the course. They are designed to reinforce lecture material by providing you with a “hands on” approach to mastering the information. Furthermore, material will be presented in lab that is NOT covered in lecture. Also note that a significant portion of the final grade is represented by laboratory performance. Thus, it is critical that you attend each laboratory session and complete the assigned work. Missed labs CANNOT be repeated, and it is very easy to fall behind when lab sessions are missed. There will be **open labs** to be scheduled by the TAs.

Review sheets are located at the back of the laboratory manual beginning on p 479. These will not be graded, however I strongly urge you to complete them. They provide for a useful review of the material on which you will be tested.

3. Exams:

Both lecture and laboratory exams will be administered only on the scheduled date and time unless a DOCUMENTED reason involving illness or emergency is provided by the student. Makeup exams (for documented emergencies) are to be arranged by the instructor. Makeup lecture exams will be entirely essay format.

Due to the nature of the laboratory practical exams, these CANNOT be administered on any day but the scheduled exam day. Missed lab practicals CANNOT be retaken.

4. Grading:

The assignment of a grade in BIO 201 will be based on the exams listed below plus 4 homework assignments worth 25 points each.

Lecture exams will consist of objective-type questions (*e.g.*, multiple choice, matching) and short answer questions (*e.g.*, define, describe, explain).

<u>Lecture Exam</u>	<u>Topic</u>	<u>Points</u>
1	Intro, Cells, Cell Division	100
2	Skeletal Tissue, Articulations, Muscle Tissue	100
3	Nervous Tissue, Neurophysiology, Spinal Cord, Spinal Nerves	100
4	Brain, Autonomic Nervous System + Comprehensive (TAKE HOME)	150

<u>Lab Practical</u>	<u>Exercises</u>	<u>Points</u>
1	3, 4, 6A Microscope, Cell Anatomy, Cell Division, Epithelium, CT, Integument	50
2	9, 10, 11, 13 Skeleton	50
3	14, 15, Diss Ex 1 Muscles	60*
4	17, 19, 24, 25 Brain, CNs, Eye, Ear	50

The **anatomy** portion of the laboratory will be tested in the format of practical fill-in-the-blank exams. *You will be penalized for spelling errors.* One-quarter point will be deducted for each spelling error up to a total of 2 points deducted for misspelling from the exam. **Physiology** material will be tested using objective and short answer questions. Laboratory exams will be administered during regularly scheduled laboratory periods.

*Laboratory Exam #3 will consist of two exams: A practical portion focused on the identification of muscle tissue (*i.e.*, microscopic anatomy) and muscles on the cat, and a written examination (*i.e.*, objective multiple choice questions) on muscle action.

<u>Prelab</u>	<u>Exercises</u>	<u>Points</u>
1	Cell & Tissues	0
2	Skeleton	0
3	Muscles	0
4	Brain, Eye & Ear	0

<u>Homework</u>	<u>Topic(s)</u>	<u>Points</u>
1	Chemistry	30
2	Tissues & Integument	40
3	Bioenergetics	30
4	Sensory	30

5. Final Grade:

The letter grades listed below must be earned as a percentage of the total number of points possible for the entire course. A decision to “normalize” grades will be made AT THE INSTRUCTOR’S DISCRETION, based on overall class performance. Any normalizing will take place at the end of the semester only, after your total course percentage has been determined.

Incompletes will be dealt with on an individual basis at the appropriate time. Please note the College rules for qualifying for and Incomplete grade: A minimum of two-thirds of the course work must be completed satisfactorily with a grade of “C” or better, and the instructor must determine that

the student has a reasonable chance of completing the remainder of the course work with a passing grade. An incomplete grade will NOT be given for failing the course!

- A = 90 - 100%
- B = 80 - 89%
- C = 70 - 79%
- D = 60 - 69%
- F = below 60%

6. Academic Integrity:

Disciplinary action will be taken against any student found guilty of *academic dishonesty* such as cheating or plagiarism.

Any student that is having problems with course content is strongly advised to consult with the instructor as soon as the problem comes to light. **Please** use my office hours or make appointments with me as necessary. Good luck in the coming semester.

Spring 2010 January 19 - May 11

Spring Registration begins . November 16, 2009

Registration payment due by 5 p.m. (for registration on or before Jan 5)* January 5

If you register and do not drop your class, you will be responsible for payment.

Interim January Day Sessions begin (two week sessions) January 4

New Student Orientation (5:30 - 7:30 p.m.) . . January 12

International Student Orientation January 14

Martin Luther King Holiday, no classes . January 18

15-week classes begin . . January 19

15-week weekend classes begin. . . January 22

Application deadline for spring graduation . . February 3

Deadline for credit/audit changes for 15-Week Classes . . February 3

Deadline to Petition for Residency Reclassification . . February 3

Last day to drop 15-week classes and initiate a tuition refund February 3

Registration payment due by 5 p.m. (for registration after Jan 5)* February 3

If you register and do not drop your class, you will be responsible for payment.

No classes; spring break . . March 29-April 4

No classes; Easter weekend (both campuses closed) April 3-4

Registration for Summer 2010 begins April 5

Registration for Fall 2010 begins . . April 5

No classes; All-College Development Day . . April 20

Last day to withdraw from 15-week classes ("W" recorded-no refund)* . . April 21

Spring Session Ends . . May 11

Spring Graduation May 15

Foundation Scholarship application for Fall 2010-Spring 2011 deadline; due by 5 p.m. June 4

Any changes will be announced in class.

BIO 201

Spring 2010

Week	Date	Chapter	Lecture Topics	Laboratory
1	S Jan 23	1,3	Intro to A & P Cell Structure/membrane transport (#1 Homework - Chemistry)	Ex 3 The Microscope/Cell Anatomy Ex 4 Cell Anatomy and Division Cell building exercise
2	S Jan 30	3	Cell Division Integument Exam review (#1 Homework - Chemistry Due)	Ex 4 Cell Anatomy and Division Ex 6A Epithelium and Connective Tissue Integument Lab exam review
3	S Feb 6	1,3	Protein Synthesis Begin skeletal system discussion Lecture exam review	Lab Practical #1 (Ex 3, 4, 6A Microscope, Cell Anatomy, Cell Division, Epithelium, CT, Integument)
4	S Feb 13	1,3	Lecture Exam #1 (Intro, Cells, Cell Div, Prot Syn) (#2 Homework – Tissues and Integument)	Ex 10-11 The Axial and Appendicular Skeleton
5	S Feb 20	6 8	Skeletal Tissue & Articulations (#2 Homework – Tissues and Integument Due)	Ex 10-11 Skeleton
6	S Feb 27	6 8	Skeletal Tissue & Articulations, Muscle Tissue	Ex 10-11 Skeleton
7	S Mar 6	6, 8, 9, 24	Bioenergetics Take Home Exam #2 (Skel Tiss, Articulations, Musc Tiss)	Lab Practical #2 (Ex 9, 10, 11, 13 Skeleton)
8	S Mar 13	24 11	Take Home Lect. Exam #2 due Bioenergetics and Nervous Tissue (#3 Homework – Bioenergetics)	Ex 14 Microscopic Anatomy of Skeletal Muscle + Ex 15 + Dissection Exercise 1 Gross Anatomy of the Muscular System Ex 15 + Dissection Exercise 1 Gross Anatomy of the Muscular System
9	S Mar 20	11, 12	Neurophysiology (#3 Homework – Bioenergetics Due)	Ex 15 + Diss Ex 1
10	S Mar 27	12, 13	Spinal Cord + Spinal Nerves	Ex 15 + Diss Ex 1
11	S Apr 3		No lecture – Easter weekend	No lab – Easter weekend
12	S April 10	12, 13	Spinal Cord + Spinal Nerves Review for Lect. Exam #3	Lab Practical #3 (Ex 14, 15, Diss Ex 1 Muscles) Ex 17 Histology of Nervous Tissue
13	S April 17	11, 12, 13	Lect. Exam #3 (Nerv Tiss/Phys, SC/SN) (#4 Prelab Brain, Eye, Ear)	Ex 19 Gross Anatomy of the Brain and Cranial Nerves
14	S April 24	12, 13	Cranial Nerves + Brain Brain(#4 Homework – Sensory)	Ex 24 Special Senses: Vision Ex 25 Special Senses: Hearing and Equilibrium
15	S May 1	14	Brain & ANS Take Home Lecture Exam #4 (#4 Homework – Sensory Due)	Review
16	S May 8	12, 13, 14, +	Take home Lecture Exam #4 due (Brain, Senses, ANS (100 pt) + Comp (50 pt))	Lab Practical #4 (Ex 17, 19, 24, 25 Brain, CNS, Vision, Hearing)