

# ENMU Ruidoso Instruction Center

## Master Syllabus

**Course Number: BIOL 210U**  
**Credits: 3**

**Course Title: Anatomy & Physiology II**  
**Semester: Spring, 2009**

### Instructor Information:

Name: Karen McCort  
Email: karen.mccort@enmu.edu  
Phone: 505-257-7257 (Please do not call before 9 a.m. or after 9:30 p.m.)  
Meeting date/times: This online course is available 24/7.

### Rationale for student taking this course:

This class is required for students seeking degrees in most health occupation areas. Students will learn the basic concepts that will be applied in subsequent classes required for their majors. In addition, success in this course will help give students the discipline and critical thinking skills that are necessary for a career in health related professions.

**Course Description:** Part two of an integrated systems approach covering gross human anatomy, histology and physiological function. This section covers the other major body systems including cardiovascular, respiratory, renal and gastrointestinal systems.

### Required Text:

**Human Anatomy and Physiology with InterActive Physiology 9-System Suite, 7th edition**  
by Elaine Marieb and Katja Hoehn, Pearson Benjamin Cummings Publisher, 2007.

This new textbook package includes the following materials that are required for use in the online course.

1. **Human Anatomy & Physiology, 7/E** text by Elaine N. Marieb and Katja Hoehn **The text is required.**
2. **InterActive Physiology® 9-System Suite CD-ROM** **These are required for the course.**
3. **Brief Atlas of the Human Body, 2/E** by Hutchinson, Mallatt, Marieb, and Wilhelm **Useful but not required.**
4. **My A&P Valuepack card, 7/E** for online access to text resources This comes with the textbook and includes PhysioEx experiments online. **PhysioEx is required for lab. It can be accessed through My A&P.**

**If you buy a used text, a one year use of PhysioEx MUST be purchased at**  
<http://www.physioex.com/login.html> **for about \$20.**  
**Only PhysioEx is required. You do not need to purchase a Valuepack card.**

**If you used this textbook last semester, your access to the textbook website is still valid.**  
**You will need to use a new course ID number. It is listed on the 'Homepage' of the course.**

**ORDER YOUR BOOKS FROM THE RUIDOSO CAMPUS. CALL 1-800-934-3668, EXT. 7826.**

### Expected Student Outcomes or Competencies:

Upon satisfactory completion of this course, the student will be able to:

1. Describe the anatomy of blood vessels and the heart. (10%)
2. Describe events of the cardiac cycle, the regulation of blood pressure and the function of endocrine glands. (15%)
3. Explain the functions of blood, the immune system and the respiratory system. (25%)
4. Describe the anatomy of the digestive system and the processes involved in digestion and metabolism of carbohydrates, proteins and lipids. (25%)
5. Describe the anatomy and physiology of the urogenital system and the major events of pregnancy and development. (25%)

### Requisites for the Course:

Concurrent enrollment: BIOL 210LU. Prerequisites: BIOL 209/209L. **Although chemical and cellular concepts will be reviewed as needed in the course, it is assumed that the student is already familiar with basic chemistry and cell structures covered in Chapters 2 and 3 of the textbook.**

**Integration of Critical Skills:**

Upon satisfactory completion of this course, the student will develop the following critical skills:

1. Critical thinking skills will be developed through problem solving exercises, quizzes and exams.
2. Writing skills will be developed through written answers to problem solving exercises, quizzes and exams.
3. Extensive computer use for this course will develop computer skills both on and off line.

**Course Outline:**

**1. Course Grading Policy and Course Requirements**

**Lecture Grade.** The final lecture grade will be based on the total points earned in lecture exams and quizzes. You will have 10 minutes to take each quiz. Late quizzes will not be graded. Lecture grades will be given based on the grading scale below.

Lecture Grading Scale:		Record your points in the spaces provided.
A = 540-600 pts.	10 Quizzes @ 5 points each = 50 points	Ten 5 point quizzes _____
B = 480-539 pts.	Lecture Exam 1 = 100 points	Lecture Exam 1 _____
C = 420-479 pts.	Lecture Exam 2 = 100 points	Lecture Exam 2 _____
D = 360-419 pts.	Lecture Exam 3 = 100 points	Lecture Exam 3 _____
F = below 360 pts.	Lecture Exam 4 = 100 points	Lecture Exam 4 _____
	Final Exam = 150 points	Final Exam _____
	<b>Total Points = 600 points</b>	Total Points _____

**2. Other Policies**

**a. Academic integrity.** All students will abide by the standards described in the ENMU, Ruidoso catalog. "Students are responsible for achieving academic and course goals and objectives as prescribed by their instructors and for demonstrating attainment in an honest manner." **Do your own work; cheating will not be tolerated. If you are caught cheating or plagiarizing, you will be given a zero for that exam or homework assignment.**

**b. Student Code of Conduct** – For the complete Student Code of Conduct please refer to the Student Handbook available at <http://www.enmu.edu/studentlife/handbook/conduct.shtml>. Instructors at ENMU-Ruidoso will not tolerate poor student behavior including plagiarism. Plagiarism is:

- Offering the work of another as one's own;
- Offering the work of another without acknowledgment or
- Failing to give credit for quotations or essentially identical expressions of material taken from books, encyclopedias, magazines, other reference works, term papers, reports or sources of any other individual.

Punishment is left up to the instructor and may range from a written warning to expulsion from the university.

**c. Harassment.** Sexual harassment directed toward students or employees is an intolerable conduct that disrupts the learning environment. Such conduct will not be tolerated.

**d. Disclaimer.** The instructor and ENMU--Ruidoso believe that the lab activities included in this course, when conducted with reasonable safety precautions, are safe for the student. However, the activities may be accompanied by some degree of risk, including human error, misuse of equipment, chemical spills, exposure to sharp objects, or outdoor dangers associated with field biology. If a student has any questions, problems, or reasons s/he does not feel safe participating in a lab activity, please contact the instructor so that other arrangements can be made to fulfill the lab requirements. In addition, ENMU exercises no control over and has no responsibility for views and information accessed in online courses through links to outside web sites.

**e. Americans with Disabilities Act:** If you have physical or learning needs that require accommodation, contact your instructor or a counselor from Student Affairs (257-2120) at the beginning of the semester. All efforts will be made to accommodate these needs or to provide equipment necessary to accomplish the requirements for this course. Discussions and documentation will be kept confidential.

**f. Course cancellation policy:** Classes may not be cancelled by the instructor. If the instructor is ill or unable to hold class for reasons beyond their control, a substitute instructor will hold class or students will be given the opportunity to make up missed class time through an alternative meeting time (agreeable to all students) or by completion of an outside assignment.

**3. Semester Outline** (See the Semester Schedule.)

**4. Web Resources** (For a more detailed list, visit my web page, **A&P Online** at <http://webfac1.enmu.edu/mccortk/>.)

- **WebAnatomy: quizzes by Murray Jensen, U. of Minnesota** at [http://www.gen.umn.edu/faculty\\_staff/jensen/1135/webanatomy](http://www.gen.umn.edu/faculty_staff/jensen/1135/webanatomy)

- **Histoweb:** histology site from the U. of Kansas at <http://www.kumc.edu/instruction/medicine/anatomy/histoweb/>
- **e-Skeletons Project:** NSH sponsored site includes human, gorilla and baboon bones at <http://www.eskeletons.org/>
- **Merck Manual:** describes diseases, symptoms, treatments at <http://www.merck.com/mrkshared/mmanual/home.jsp>
- **Ruidoso Center Library's Online Resources** at [http://www.ruidoso.enmu.edu/library/lib\\_main.htm](http://www.ruidoso.enmu.edu/library/lib_main.htm)

*If you experience difficulty with the course material, contact your instructor immediately.*

SPRING 2009	SEMESTER SCHEDULE: BIOL 210/210LU (Dates and topics may change if necessary.)				Instructor: Ms Karen McCort	
WEEK	LECTURE NOTES (Lecture Exams = 600 points)	TEXTBOOK	REVIEW QUESTIONS (Answers are in the back of the text.)	QUIZZES (50 pts.)	LAB ASSIGNMENTS (Lab Exercises = 105 points; Lab Exams = 150 points)	DUE DATES for quizzes, exams and lab assignments
1 1/18	Lesson 1. Blood Vessels Lesson 2. Heart	Ch. 19: pp. 714-723 Ch. 18: pp. 678-690	page 771; questions 1, 2, 7, 13 page 711; questions 4, 5, 6	Quiz 1	Exercise 1. Blood Vessels Read Ch. 19: pp. 742-767	11 p.m. Sunday, 1/25
2 1/25	Lesson 3. Heart Physiology	Ch. 18: pp. 690-709	page 711; questions 3, 7	Quiz 2	Exercise 2. Heart Anatomy	11 p.m. Sunday, 2/1
3 2/1	Lesson 4. Cardiovascular Physiology	Ch. 19: pp. 723-742	page 771; questions 3, 4, 5, 6, 8	Quiz 3	<b>LAB EXAM 1: Exercises 1, 2</b>	11 p.m. Sunday, 2/8
4 2/8	<b>LECTURE EXAM I</b> Lesson 5. Blood	<b>Ch. 18, 19</b> Ch. 17: pp. 647-674	page 675; questions 1, 2, 3, 4, 6, 9, 10		Exercise 3. ECG	11 p.m. Sunday, 2/15
5 2/15	Lesson 6. Lymphatic System	Ch. 20: pp. 774-787	page 787; questions 3, 4, 5, 6, 7, 8, 9	Quiz 4	Exercise 4. Blood Pressure	11 p.m. Sunday, 2/22
6 2/22	Lesson 7. Body Defenses	Ch. 21: pp. 789-828	page 828; questions 1, 2, 3, 7, 8	Quiz 5	Exercise 5. Blood	11 p.m. Sunday, 3/1
7 3/1	Lesson 8. Respiratory System Lesson 9. Respiratory Physiology	Ch. 22: pp. 823-846 Ch. 22: pp. 846-880	page 880; questions 4, 6, 8 page 880; questions 3, 5, 10, 11, 13, 14, 15, 16	Quiz 6	Exercise 6. Respiratory Physiology	11 p.m. Sunday, 3/8
8 3/8 Midterms	<b>LECTURE EXAM II</b> Lesson 10. Chemistry Review	<b>Ch. 17, 20, 21, 22</b> Ch. 2: pp. 43-60	page 62; questions 18, 19, 20, 21		<b>LAB EXAM 2: Exercises 3, 4, 5, 6</b>	11 p.m. Sunday, 3/15
9 3/15	Lesson 11. Digestive System	Ch. 23: pp. 883-927 Ch. 16: pp. 632-634	page 940; questions 2, 10, 11, 12	Quiz 7	Exercise 7. Digestive System: Anatomy (Read about the pancreas on pages 632-634.)	11 p.m. Sunday, 3/22

WEEK	LECTURE NOTES	TEXTBOOK	REVIEW QUESTIONS (Answers are in the back of the text.)	QUIZZES	LAB ASSIGNMENTS	DUE DATES for quizzes, exams and lab assignments
<b>SPRING BREAK 3/22-28</b>						
<b>10</b> 3/29  Last day to withdraw: 4/3	Lesson 12. Physiology of Digestion Lesson 13. Metabolism	Ch. 23: pp. 927-940 Ch. 24: pp. 956-985	page 940; questions 4, 5, 6, 8, 13, 14, 15, 16 page 995; questions 2, 8, 9, 10	Quiz 8	Exercise 8a. Digestive Physiology Exercise 8b. Nutrition	11 p.m. Sunday, 4/5
<b>11</b> 4/5	<b>LECTURE EXAM III</b> Lesson 14. Urinary System	<b>Ch. 2, 23, 24</b> Ch. 25: pp. 998 -1033	page 1033; questions 2, 10, 11, 12		Exercise 9. Urinary System	11 p.m. Sunday, 4/12
<b>12</b> 4/12	Lesson 15. Fluid, Electrolyte and Acid-Base Balance Lesson 16. Male Reproductive System	Ch. 26: pp. 1036-1063 Ch. 27: pp. 1066-1082	page 1063; questions 1, 2, 3, 4, 8, 12, 13 page 1111; questions 5, 6, 7, 8, 10 (6)	Quiz 9	Exercise 10. Fluid Balance	11 p.m. Sunday 4/19
<b>13</b> 4/19	Lesson 17. Female Reproductive System	Ch. 27: pp. 1082-1109	page 1111; questions 1, 2, 10 (1), 11, 14	Quiz 10	Exercise 11. Reproductive Systems	11 p.m. Sunday, 4/26
<b>14</b> 4/26	Lesson 18. Pregnancy and Development	Ch. 28: pp. 1114-1141	page 1143; questions 1, 4, 5, 8, 9, 10, 11, 12, 13, 14		<b>LAB EXAM 3: Exercises 9, 10 and 11</b>	11 p.m. Sunday, 5/3
<b>15</b> 5/3	<b>LECTURE EXAM IV</b>	<b>Ch. 25, 26, 27, 28</b>			Exercise 12. Life's Greatest Miracle	11 p.m. Sunday, 5/10 This lab cannot be turned in late.
<b>16</b> 5/10	<b>FINAL LECTURE EXAM</b>	<b>The final is comprehensive. It will consist of 75 questions over all chapters covered in the course. The final lecture exam must be taken by 11 p.m. Friday, May, 15.</b>				11 p.m. Friday, 5/15