Zool 231: Human Anatomy and Physiology II  Spring 2014
Lecture: MW 1:00–1:50, Waggoner 378  
Laboratory: MW 8:00–9:50, 10:00–11:50, 2:00–3:50, or 5:00-6:50, or TTh 5:00–6:50, Waggoner 363

Instructor:  Dr. Jeff Engel  
Phone:  298-2041 (office and lab); 298-2270 (fax)  
Email:  je-engel@wiu.edu (put "A&P" in subject line, and don't assume I received email unless I reply)  
DO NOT EMAIL ME THROUGH WESTERNONLINE. Also, don’t email the student Jeffrey E. Engle!  

Office:  Waggoner 359 (sometimes I am in my lab, Waggoner 373)  
Office Hours:  M 2:00-3:00, Tu 8:00–10:00, W 2:00–3:00, and by appointment or drop-in

Course Web Site:  WesternOnline

About this course:

Nature and purpose: An integrated study of the organ systems of the normal human body. The topics included are the endocrine, respiratory, cardiovascular, digestive, metabolic, urinary, and reproductive systems. Laboratory includes cat dissection and appropriate physiological experiments. Prerequisite: Zool 230.

Goals and objectives (Lecture component): Students will be able to:
• describe the major functions of the body systems covered in this course  
• explain the cellular mechanisms and structures that underlie those functions  
• apply the concepts of feedback, reflex control, and homeostasis in explaining those functions  
• describe some of the clinical aspects (such as pathological conditions or clinical assessments)

Time constraints prevent much attention to clinical aspects in lecture, so the fourth objective will primarily be your responsibility. Resources include Clinical Modules in the textbook.

Course Materials:

If the Marieb lab manual is a used copy, it must not be marked with answers

Supplemental materials (recommended but NOT required):

Required Equipment: All students will be required to bring a dissection kit and goggles for dissections. You are responsible for bringing them to every lab unless your instructor has told you there will be no dissection.

Your dissection kit should include:
• scissors (required)  
• forceps or tweezers (required)  
• blunt "mall" probe (highly recommended)  
• scalpel (optional; less essential for dissection than you might expect)

Be sure to get good quality scissors and forceps. Get a scalpel handle that takes disposable blades (unless you are prepared to resharpen your own blade.)  

Dissection kits and goggles can be purchased at the WIU bookstore. Be sure to get the kits we ordered for A&P, not the cheaper kits for intro classes. (If you already have a kit from another course you may use it.) Goggles must be worn whenever you are dissecting or observing dissection. If you don’t have goggles on those lab days you will not be allowed to participate and you will be counted absent. The main risk is from chemical splashes or flicked bits of preserved tissue. Therefore, goggles should cover the sides, top and bottom.

Latex or synthetic gloves will be provided. We can provide synthetic gloves to students who react to latex.
ADDITIONAL RESOURCES AND SUPPORT:

**Study Skills Seminars** are offered weekly at Memorial Hall - Conference Room 124. Get the schedule at: http://www.wiu.edu/student_services/ucc/programs/studyskills.php

More tips for study and time management are at: http://www.wiu.edu/student_services/ucc/resources/ and: http://www.wiu.edu/users/ccss/study_skills/

**Tutoring Sessions** are offered for this class. Check at http://www.wiu.edu/advising/tutoring/index.php

**Audio Recorders:** You may record my lectures for your own review. I retain the copyright for my lectures.

**Disability Resource Center** offers various kinds of support for note taking, exams, etc. to qualified students. They are at 143 Memorial Hall, 298-2512, and at: www.wiu.edu/student_services/disability_resource_center/

**Accommodations:** In accordance with University policy and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. For the instructor to provide the proper accommodation(s) you must obtain documentation of the need for an accommodation through Disability Resource Center (DRC) and provide it to the instructor. It is imperative that you take the initiative to bring such needs to the instructor's attention, as he/she is not legally permitted to inquire about such particular needs of students. Students who may require special assistance in emergency evacuations (i.e. fire, tornado, etc.) should contact the instructor as to the most appropriate procedures to follow in such an emergency. Contact Disability Resource Center (DRC) at 298-2512 for additional services.

GRADING AND EXAMS:

**Grading:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>500</td>
</tr>
<tr>
<td>3 one-hour exams</td>
<td>360 (120 pts each)</td>
</tr>
<tr>
<td>Online quizzes</td>
<td>120 (10 pts each; extra quizzes might be given to replace low scores)</td>
</tr>
<tr>
<td>2 assignments</td>
<td>20</td>
</tr>
<tr>
<td>Laboratory</td>
<td>500</td>
</tr>
</tbody>
</table>

Grading scale will be:

- 93–100% = A
- 90–92.99% = A–
- 87–89.99% = B+
- 83–86.99% = B
- 80–82.99% = B–
- 77–79.99% = C+
- 73–76.99% = C
- 70–72.99% = C–
- 67–69.99% = D+
- 63–66.99% = D
- 60–62.99% = D–
- 59.99% or less = F

Theoretical knowledge and practical experience are equally important for this topic. Therefore, the course grade will not be more than one level (10%) above the percentage earned in either Lecture or Laboratory. Note that this can only be the case for students who do more than 20% worse in one half of the course than the other.

Types of examinations (Lecture part of the course):

*Quizzes* will be given online using WesternOnline (Desire2Learn). You will have about a week to finish each quiz. *There will be no makeups for missed quizzes, so take them early.*

*Exams* will include multiple choice and short answer items. You may need to apply your knowledge to scenarios that have not appeared in lecture or your textbook. To encourage you to use textbook learning tools, *some questions will be taken from the textbook* (sometimes with modification). The Final Exam will not be comprehensive, but questions on any exam may incorporate knowledge from earlier parts of the course. I try to score exams within a week, but that may not always be possible.

**Adjustment of exam scores**: My exams are designed to find out how much you know, so they are inherently difficult. I believe that in a good-sized class of committed students, earning an "A" must be a realistic goal. Moreover, sometimes a particular question is more obscure than I expected. Therefore, I adjust exam scores in two steps. First, any multiple choice item answered correctly by fewer than 25% of students, or short answer item with an average score below 25%, is eliminated and all students get those points. Second, points are added to every student's score so that the high score in the class becomes 100% of the perfect score.

Note that the above policy of adjusting exam scores *is for lecture exams only*. Laboratory instructors will explain their own scoring policies, which will be different from the above.
STATE ACCREDITATION POLICY INFORMATION:

“In accordance with Illinois State Board of Education certification rules, all candidates seeking teacher certification are required by Western Illinois University to obtain a grade of “C” or better in all directed general education course, all core courses, and all courses in the option. Note: A “C–” is below a “C”. Please note: any secondary science teacher certification student wanting to see how this course is aligned with the State and National Standards should see their advisor and/or examine the Secondary Science Teacher Certification WesternOnline Advising site.

ATTENDANCE AND MAKEUP EXAMS:

Lecture: Many students in this course are preparing for professions with very high standards, such as nursing. If you are truly committed to preparing yourself, you will do your best to attend every lecture.

Attendance is required for lecture exams. Makeup exams will only be given if the absence is due to an official university trip with advance notice, an important personal event cleared with me in advance, or a personal or family emergency with documentation. Oversleeping or forgetting the date of an exam WILL NOT be accepted as an excuse. If you know about a conflict in advance, I may allow you to take the exam earlier than the scheduled time. EXCUSES MUST BE SUPPORTED WITH DOCUMENTATION, and it is your responsibility to obtain this documentation. If you do not provide documentation, there will be no makeup.

MAKE-UP EXAMS WILL BE ESSAY OR SHORT ANSWER FORMAT because those are easier to write than multiple-choice items. Make-up exams must be taken within one week of the scheduled time, except in exceptional circumstances such as an extended illness. A student who misses the final exam (with valid excuse) must make up the exam within the first six weeks of the next semester. A score of zero will be given for a missed exam that is not made up within the stipulated time period.

Laboratory: Attendance is mandatory. If you miss more than 2 labs without excuse or more than 4 lab sessions for any reason you will FAIL THE COURSE.

Be aware that laboratory practical exams are usually taken down at the end of the day to make room for the next day's work. It is a substantial burden to set up an exam for one student. Makeup exams or quizzes will only be allowed if the absence is excused WITH DOCUMENTATION. The laboratory instructor will determine what constitutes an acceptable excuse, according to policies stated in his or her syllabus. These policies may be different than the ones for lecture because of the different nature of laboratory work. It is your responsibility to contact your laboratory instructor as soon as possible about missing an exam. Makeup exams must be taken WITHIN ONE WEEK of the scheduled time. Makeup exams may be different from the original exam.

OARS Reporting: Although this is a convenient way to inform us that you will be missing a lecture exam or a laboratory session, it does NOT constitute adequate documentation for an excused absence for this course.

WesternOnline Quizzes

Weekly quizzes will be posted by Thursday night. The deadline for completing each quiz will be the following Tuesday night (actually Wednesday morning at 4:00 am). Don’t leave it for the last minute, because there will be NO MAKEUPS for missed quizzes (even if due to illness or computer problems). However, there will probably be more than 12 quizzes in the semester, so a 0 score can be replaced (see Grading policy for quizzes).

Quizzes are open-book and open-note, but any help from other people (besides the course instructors) is prohibited.
ACADEMIC CONDUCT:

It is the student’s responsibility to be familiar with the information (including required forms, definitions, and time lines) contained in the following university web sites. Each student should access these web sites and carefully read the information they contain. Your instructors will hold you responsible for knowing this information. If you have questions about any of the information contained in the web sites, ask your instructor:

- Students’ Rights and Responsibilities: http://www.wiu.edu/provost/students.php
- University Final Exam Policy: http://www.wiu.edu/policies/finexam.php
- Grade Appeal Policy: http://www.wiu.edu/policies/gradeapp.php

**Academic dishonesty**, including but not limited to plagiarism, cheating, or lying, will be penalized in accordance with university policy. Penalties may include failing the course or expulsion from the university. You should assume that collaborating with other students on class work IS NOT allowed unless permission is given explicitly. If in doubt, ask your instructor! Please review the following policy of the WIU Department of Biological Sciences:

**Definition of Plagiarism**

The faculty of the Department of Biological Sciences subscribe to a definition of plagiarism as expressed by V. E. McMillan in *Writing Papers in the Biological Sciences* (Bedford/St. Martin’s Press, New York, pg 16)

> “Plagiarism is the theft of someone else’s words, work, or ideas. It includes such acts as (1) turning in a friend’s paper and saying it is yours; (2) using another person’s data or ideas without acknowledgement; (3) copying an author’s exact words and putting them in your paper without quotation marks; and (4) using wording that is very similar to that of the original source but passing it off as entirely your own even while acknowledging the source.”

This includes information in textbooks or laboratory manuals, honors and masters theses, all writing assignments, and images. The faculty of the Department attempt to monitor student writing assignments (essay exams, papers, laboratory reports, and other writing assignments or exercises) for incidence of plagiarism. If plagiarism is found, the faculty will discuss the situation with the student and indicate to the student the penalty for this academic dishonesty. Potential penalties include those cited in the academic dishonesty section of the WIU web page, http://www.wiu.edu/policies/acintegrity.php.

**WesternOnline Quizzes**

The online WesternOnline quizzes are meant to prompt you to read and think about the textbook. THEY ARE OPEN-BOOK, so any student who understands the book section should score well. However, students must take these quizzes ALONE, **without any help from others**.

**Electronic Devices at Lecture**

*Use of any electronic devices during an exam is prohibited* without specific permission from me, and may be grounds for failing the exam.

During Lectures, avoid the use of electronic devices except in the context of learning (e.g. audio recording of the lecture, taking notes, or following along with a PowerPoint I uploaded in advance). If I feel your use of a device is disrupting the class (or distracting me), I will ask you to put it away, but I expect you to show courtesy so I won’t even have to think about that.

*In the laboratory*, you must follow your lab instructor’s rules for electronic devices.
If you bought a new copy of the textbook or lab manual that includes a MasteringA&P access card, you can register for this publisher’s site to use some very nice additional resources.

For the textbook, the Course ID is “MAPENGERLTBF2013”. If you have both the textbook and lab manual access cards, I recommend registering for the textbook Course ID first.

For the lab manual, the Course ID is “MAPENGERLLMF2013”.
# LECTURE SCHEDULE  
**Spring 2014**

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture</th>
<th>Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-13</td>
<td>L01: Introduction; Hormones</td>
<td>Chapter 18</td>
</tr>
<tr>
<td>01-15</td>
<td>L02: Hormones: Principles (example: insulin)</td>
<td>Chapter 18</td>
</tr>
<tr>
<td>01-20</td>
<td><strong>No Class - Martin Luther King Jr. Day</strong></td>
<td></td>
</tr>
<tr>
<td>01-22</td>
<td>L03: Hormones: Hypothalamus/Pituitary</td>
<td>Chapter 18</td>
</tr>
<tr>
<td>01-29</td>
<td>L05: Blood</td>
<td>Chapter 19</td>
</tr>
<tr>
<td>02-03</td>
<td>L06: Blood</td>
<td>Chapter 19</td>
</tr>
<tr>
<td>02-05</td>
<td>L07: Heart</td>
<td>Chapter 20</td>
</tr>
<tr>
<td>02-10</td>
<td>L08: Heart</td>
<td>Chapter 20</td>
</tr>
<tr>
<td>02-12</td>
<td><strong>No Class - Lincoln’s Birthday</strong></td>
<td></td>
</tr>
<tr>
<td>02-17</td>
<td>L09: Heart &amp; Circulation</td>
<td>Chapter 21</td>
</tr>
<tr>
<td>02-19</td>
<td>L10: Circulation &amp; Blood Pressure</td>
<td>Chapter 21</td>
</tr>
<tr>
<td>02-24</td>
<td><strong>Exam 1: L01–L09</strong></td>
<td>Chapter 22</td>
</tr>
<tr>
<td>02-26</td>
<td>L11: Lymphatic System &amp; Body Defenses</td>
<td></td>
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<tr>
<td>03-03</td>
<td>L12: Lymphatic System &amp; Body Defenses</td>
<td>Chapter 22</td>
</tr>
<tr>
<td>03-05</td>
<td>L13: Respiration</td>
<td>Chapter 23</td>
</tr>
<tr>
<td>03-10</td>
<td><strong>No Class - Spring Break</strong></td>
<td></td>
</tr>
<tr>
<td>03-12</td>
<td><strong>No Class - Spring Break</strong></td>
<td></td>
</tr>
<tr>
<td>03-17</td>
<td>L14: Respiration</td>
<td>Chapter 23</td>
</tr>
<tr>
<td>03-19</td>
<td>L15: Respiration</td>
<td>Chapter 23</td>
</tr>
<tr>
<td>03-24</td>
<td>L16: Digestion</td>
<td>Chapter 24</td>
</tr>
<tr>
<td>03-26</td>
<td>L17: Digestion and Metabolism</td>
<td>Chapter 24, 25</td>
</tr>
<tr>
<td>03-31</td>
<td>L18: Metabolism</td>
<td>Chapter 25</td>
</tr>
<tr>
<td>04-02</td>
<td>L19: Urinary</td>
<td>Chapter 26</td>
</tr>
<tr>
<td>04-07</td>
<td><strong>Exam 2: L10–L18</strong></td>
<td>Chapter 26</td>
</tr>
<tr>
<td>04-09</td>
<td>L20: Urinary</td>
<td></td>
</tr>
<tr>
<td>04-14</td>
<td>L21: Urinary</td>
<td>Chapter 26</td>
</tr>
<tr>
<td>04-16</td>
<td>L22: Fluid Homeostasis</td>
<td>Chapter 27</td>
</tr>
<tr>
<td>04-21</td>
<td>L23: Male Reproduction</td>
<td>Chapter 28</td>
</tr>
<tr>
<td>04-23</td>
<td>L24: Female Reproduction</td>
<td>Chapter 28</td>
</tr>
<tr>
<td>04-28</td>
<td>L25: Female Reproduction</td>
<td>Chapter 28</td>
</tr>
<tr>
<td>04-30</td>
<td>L26: Development</td>
<td>Chapter 29</td>
</tr>
</tbody>
</table>

**Final Exam: Wednesday, May 7, 1:00–2:50 PM – L19–L26**

The above schedule is tentative and all aspects, including exam times, are subject to change with notice.

The schedule for twice-weekly laboratories will be distributed in the first week of laboratories.