GENERAL INFORMATION

“NO ONE RISES TO LOW EXPECTATIONS.”

PREREQUISITES: BIO 105 "Introductory Biology: Unity", grade of C or better; and BIO 211 "Human Anatomy", grade of C or better. Based on these pre-reqs, I must make assumptions about what you already know.

- Most students find that their biochemistry & cell biology from Bio 105 are dangerously rusty, so there is a review of this in D2L Content to be followed by an online Quiz (worth 5% of your final 212 grade) that must be completed no later than 5:00 pm on Wednesday September 13.
- Refresh your anatomy knowledge ahead of every unit, using either your Anatomy text or your Bio 212 text.

REQUIRED MATERIALS

  - The last time UWO used the 13th edition was Spring 2015. I understand that some of you will want to use an older, cheaper edition of the text. It’s at your own risk. I have no opinion.
- **LAB MANUAL** on sale at University Books & More in Reeve Union on campus. See lab syllabus for more information about materials.

TUTOR & SI availability will be announced on the class D2L site as soon as it is known.

STUDENTS WITH DISABILITIES are welcome in this course. D2L Content has a form for you to fill out and hand in to Dr. Merriman at the time you present your documentation to her. PLEASE DO NOT DO THIS AS I AM SETTING UP AND TAKING DOWN FOR CLASS.

EMAIL COMMUNICATION and D2L will be used frequently throughout the semester to communicate between Instructors and Students. Emails and D2L constitute legal, official University communication. Not checking your email or D2L is not an excuse for performance problems in the class. Contact Academic Computing for assistance with email and D2L.

ACADEMIC HONESTY policies are clearly defined at this University and all students are expected to abide by them. Penalties for violations are severe in this course, in part because so many students enrolled in it are aiming for employment in the health care field where honesty and integrity are a matter of life and death. Cheating on an exam (including looking at someone else's paper) at a MINIMUM leads to zero on that exam, with no opportunity for a make-up or extra credit. A second offense is an F in the course and a report to Dean of Students.

COURSE OBJECTIVES

1. To understand the central physiological principle of **HOMEOSTASIS**.
2. To understand physiology on the **MOLECULAR TO ORGAN SYSTEM** levels.
3. To understand physiological **SYSTEMS INTEGRATION**.
4. To build physiology **VOCABULARY & QUANTITATIVE SKILLS**.
5. To **PREPARE STUDENTS FOR FURTHER PHYSIOLOGY COURSEWORK**, such as Exercise Physiology or Pathophysiology.
CALCULATING THE FINAL BIO 212 GRADE (will post on TitanWeb by 6pm on Wed Dec 20th).

The assignments listed in the table below are explained in detail in the Lecture and Lab syllabi.

<table>
<thead>
<tr>
<th>Item</th>
<th>Exam Date</th>
<th>Weight</th>
<th>Exam material coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio 105 Review Quiz</td>
<td>Sept 6-13</td>
<td>5%</td>
<td>D2L Content, JIT Reviews</td>
</tr>
<tr>
<td>Lecture Exam 1</td>
<td>Wed Oct 4</td>
<td>15%</td>
<td>Lecture thru Wed Sept 27</td>
</tr>
<tr>
<td>Lab Midterm</td>
<td>Oct 23-26</td>
<td>10%</td>
<td>Labs 1-5</td>
</tr>
<tr>
<td>Lecture Exam 2</td>
<td>Wed Nov 1</td>
<td>20%</td>
<td>Lecture thru Wed Oct 25</td>
</tr>
<tr>
<td>Lab Final</td>
<td>Dec 4-7</td>
<td>10%</td>
<td>Labs 6-11</td>
</tr>
<tr>
<td>Lecture Exam 3</td>
<td>Fri Dec 15</td>
<td>20%</td>
<td>Lecture thru Mon Dec 11</td>
</tr>
<tr>
<td>Lab Quizzes (best 9 of 10)</td>
<td>Weekly</td>
<td>10%</td>
<td>Each quiz over prior lab</td>
</tr>
<tr>
<td>Lecture Quizzes (best 10 of 12)</td>
<td>Weekly</td>
<td>10%</td>
<td>Each HW over prior week</td>
</tr>
</tbody>
</table>

Overall, lecture is worth 70% and lab is worth 30%. Each student’s overall % score (Final Course Grade in D2L Gradebook for LECTURE) will be located on the table below to determine the letter grade.

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>%</th>
<th>Grade Points per Unit (cr.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>92.0-100</td>
<td>4.00</td>
</tr>
<tr>
<td>A-</td>
<td>90.0-91.9</td>
<td>3.67</td>
</tr>
<tr>
<td>B+</td>
<td>88-89.9</td>
<td>3.33</td>
</tr>
<tr>
<td>B</td>
<td>82.0-87.9</td>
<td>3.00</td>
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<tr>
<td>B-</td>
<td>80.0-81.9</td>
<td>2.67</td>
</tr>
<tr>
<td>C+</td>
<td>78.0-79.9</td>
<td>2.33</td>
</tr>
<tr>
<td>C</td>
<td>72.0-77.9</td>
<td>2.00</td>
</tr>
<tr>
<td>C-</td>
<td>70.0-71.9</td>
<td>1.67</td>
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<tr>
<td>D+</td>
<td>68.0-69.9</td>
<td>1.33</td>
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<tr>
<td>D</td>
<td>62.0-67.9</td>
<td>1.00</td>
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<tr>
<td>D-</td>
<td>60.0-61.9</td>
<td>0.67</td>
</tr>
<tr>
<td>F</td>
<td>&lt;60.0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Being near a cutoff point is not a reason to be moved up. There is NO extra credit in this course.
ABOUT LECTURE

INSTRUCTOR
Professor Dana Merriman, Department of Biology
Office: Halsey 249     Phone: 424-3076     Email: merrimad@uwosh.edu
Office Hours: Tues 1-2 pm, Weds 3-4 pm.

Appointments: Variable timing; sign up on the sheet taped to my office door. I often book up a week or more in advance.

LECTURE POWERPOINTS will be provided in D2L Content. Actual versions shown in class may differ slightly.

LECTURE PODCASTS will be recorded and posted to D2L. This courtesy to students is NOT guaranteed. Your Instructor is not responsible for any podcast failures and is unable to troubleshoot them. PLEASE refrain from talking to me in the 10 minutes before and after class. It takes focus and precision to successfully set up and complete a podcast. I enjoy talking to students, just not at these times of day.

LECTURE OBJECTIVES

1. To understand the central physiological principle of HOMEOSTASIS.
2. To understand physiology on the MOLECULAR TO ORGAN SYSTEM levels.
3. To understand physiological SYSTEMS INTEGRATION.
4. To build physiology VOCABULARY & QUANTITATIVE SKILLS.
5. To PREPARE STUDENTS FOR FURTHER PHYSIOLOGY COURSEWORK, such as Exercise Physiology or Pathophysiology.

ABOUT LECTURE (attendance will not be taken)

• Please do not talk, text, or surf the internet during lecture, as this disturbs other students.
• Attend every lecture and remain engaged by taking notes. I will teach you useful shorthand to help improve your note-taking.
• I welcome pertinent questions during lecture, but also be sure to ask questions during lab or on the D2L Discussion board.
• Do not wait until right before an exam to ask a question; learning takes time to “sink in” (the formal term for this is “memory consolidation”).
• Lecture WILL be held on Mon Nov 20 before Thanksgiving.

LECTURE GRADES will post in the D2L Lecture Gradebook (overall, 70% of final 212 grade):

• 5%: Bio 105 Review Quiz (covers JIT reviews found in D2L Content)
• 10%: 10 highest D2L Lecture Quiz scores
• 15%: Exam 1 (covers & emphasizes Sept 6 – 27)
• 20%: Exam 3 (covers Sept 6 – Dec 11, emphasizes Oct 27 – Dec 11)
LECTURE QUIZZES

There will be **12 weekly Lecture Quizzes** and all will cover the *previous* week’s lectures. The 2 lowest of the 12 scores will be dropped.

- Lecture Quizzes will be on D2L in the Quiz function ONLY.
- The quiz will open the MONDAY (8:00 am) following each lecture week and close five days later, on FRIDAY (5:00 pm).
- You may take each Lecture Quiz *twice* during the 5 days it is open. The questions may not be exactly the same each time, but the topics/skills tested will be. D2L will save only your highest score.
- **NO EXCUSES** for “my computer didn’t work, so I couldn’t take the quiz”. Use the campus computer centers if your home machine or internet service is not to be trusted.

LECTURE EXAMS

- Lecture Exams are NO notes, NO book, NO hat, NO electronics, NO neighbor.
- In a class this large, scantrons must be used.
  - You must hand back your paper test with your scantron in order to receive credit for any scantron exam.
  - Question format will include “Multiple-Choice, All-That-Apply” (essentially, true or false).
  - A document called “How to take Bio 212 Exams” is found in D2L Content that explains in complete detail how to take this type of exam. Questions (with answers) from old Bio 212 exams are provided as examples.
- Exam questions **will** include questions drawn from the weekly Lecture Quizzes.
- Exams are **cumulative** (all information builds on itself in physiology). Questions will emphasize material covered since the previous exam. See exam list previous page for all details.
- Exams/scantrons are not handed back and a key is not posted. To examine the key, come to an office hour or make an appointment.
- **MISSED EXAMS**: Makeups for missed exams require a properly documented excuse of illness, bereavement, military duty, or University athletics event. Makeups will cover the same material in the missed exam. However, questions may be different. To request consideration for a Makeup Exam, you must **FILL OUT A FORM and submit it to me by the stated deadlines** to be considered for a makeup exam. See the Makeup Exam Request Form in D2L Content for all details.
LECTURE TOPIC ORDER (we do our best to have lab and lecture topic synchronized, but this cannot be guaranteed). Chapters mentioned here are in Fox Human Physiology 14th ed.

- Organizing Principles such as Homeostasis & Feedback Loops (Ch 1 all)
- Basic Biochemistry & Metabolism (parts of Ch 2, 3, 4, 5, 19)
- Cell Physiology & Membrane Transport (parts of Ch 3, Ch 6 all)
- Tissue Physiology (bits and pieces from all over book)
- Neurophysiology (Ch 7 most, Ch 8 = anatomy review, Ch 9 most)
- Sensory Physiology (Ch 10 most)
- Endocrinology (Ch 11 all, Ch 19 some)
- Muscle Physiology (Ch 12 all)
- Cardiovascular Physiology (most of Ch 13 and 14)
- Respiratory Physiology (parts of Ch 16)
- Immunology (parts of Ch 15)
- Osmoregulatory Physiology (most of Ch 17)
- Gastrointestinal Physiology (most of Ch 18)
- Reproductive Physiology (most of Ch 20)

See General Syllabus for General Information and Lab Syllabus for Lab Information.
ABOUT LAB

LAB INSTRUCTOR:  Ms. Sonja Jeter, Department of Biology
Office: Halsey 256  Phone: 424-3490  Email: jeters@uwosh.edu
Office Hours: Posted on window of Halsey 120 lab classroom.

REQUIRED MATERIALS

- Lab manual on sale at University Books & More in Reeve Union on campus.
- Lab notebook your choice of style.
- Writing utensil.
- Simple calculator for D2L Quizzes taken outside of class.

LAB OBJECTIVES
1. To understand the central physiological principle of HOMEOSTASIS.
2. To understand physiology on the MOLECULAR TO ORGAN SYSTEM levels.
3. To understand physiological SYSTEMS INTEGRATION.
4. To build physiology VOCABULARY & QUANTITATIVE SKILLS. EMPHASIZED IN LAB.
5. To PREPARE STUDENTS FOR FURTHER PHYSIOLOGY COURSEWORK, such as Exercise Physiology or Pathophysiology.

ABOUT LAB (attendance WILL be taken)

- A main focus of 212 lab is your facility with QUANTITATION (equations) and UNITS OF MEASURE as they relate to physiology. Prepare to be constantly tested on both.
- Cell phones-Backpacks-Coats-Purses are to be hung up in the front of the room and NOT brought to the bench.
- A visible cell phone (in use or not) during the entire lab period will result in the loss of points off your lab grade.
- Plan on lab taking the full two hours.
- Missed lab: If you miss your lab, you may not receive credit for the online D2L Quiz over that lab unless you make appropriate arrangements with your Lab Instructor within 7 days of the missed lab.

LAB QUIZZES

There will be 10 weekly Lab Quizzes and all will cover the previous lab. The lowest of the 10 scores will be dropped.

- Lab Quizzes will be on D2L in the Quiz function ONLY.
- The quiz will open the MONDAY (8:00 am) following each lab and close five days later, on FRIDAY (5:00 pm).
- You may take each Quiz twice during the 5 days it is open. The questions may not be the same each time, but the topics/skills tested will be. D2L will save only your highest score.
- NO EXCUSES for “my computer didn’t work, so I couldn’t take the quiz”. Use the campus computer centers if your home machine or internet service is not to be trusted.
LAB EXAMS

- These will be completed in the classroom at the benches and are closed-notes.
- The Lab Midterm will cover Labs 1-5.
- The Lab Final will cover Labs 6-11.

LAB GRADE (overall, 30% of final 212 grade) is derived from:

- 10%: your nine highest D2L Lab Quiz scores
- 10%: Lab Midterm
- 10%: Lab Final
- MINUS any demerits for visible cell phone or other failure to follow rules.
- Lab grades will post in a D2L Gradebook specifically for lab, maintained by your Lab Instructor.
- Your end-of-semester overall lab grade (which counts 30% toward your Bio 212 final grade) will be entered into the D2L LECTURE Gradebook some time before Wednesday December 20, 2017.

Lab Schedule:

Labs are conducted in Halsey 120 unless otherwise announced.
Always read the lab manual the night before lab so you are ready to work upon arrival.

**Just because there is “NO LAB” doesn’t mean lecture is canceled!**

<table>
<thead>
<tr>
<th>Dates</th>
<th>Lab#</th>
<th>Lab Activity</th>
<th>D2L Lab Quiz open Mon-Fri</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept 6-8</td>
<td>NO LAB</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Sept 11-14</td>
<td>1</td>
<td>Erythrocyte Physiology</td>
<td>-</td>
</tr>
<tr>
<td>Sept 18-21</td>
<td>2</td>
<td>Pulse and Pressure</td>
<td>Q1 over RBCs</td>
</tr>
<tr>
<td>Sept 25-28</td>
<td>3</td>
<td>EEG and States of Consciousness</td>
<td>Q2 over Pulse/Pressure</td>
</tr>
<tr>
<td>Oct 2-5</td>
<td>4</td>
<td>Brain Imaging</td>
<td>Q3 over EEG etc.</td>
</tr>
<tr>
<td>Oct 9-12</td>
<td>5</td>
<td>Electromyography &amp; Dynamometry</td>
<td>Q4 over Brain Imaging</td>
</tr>
<tr>
<td>Oct 16-19</td>
<td>6</td>
<td>Electrocardiography</td>
<td>Q5 over EMG/Dyn.</td>
</tr>
<tr>
<td>Oct 23-26</td>
<td>7</td>
<td>Lab midterm (1-5), then WBC Differential</td>
<td>Q6 over ECG</td>
</tr>
<tr>
<td>Oct 30-Nov 2</td>
<td>8</td>
<td>Ventilation &amp; Spirometry</td>
<td>Q7 over WBC Differential</td>
</tr>
<tr>
<td>Nov 6-9</td>
<td>9</td>
<td>Urinalysis</td>
<td>Q8 over Vent/Spirom.</td>
</tr>
<tr>
<td>Nov 13-16</td>
<td>10</td>
<td>View film “Fed Up”, food diary assigned</td>
<td>Q9 over Urinalysis</td>
</tr>
<tr>
<td>Nov 20-21</td>
<td>NO LAB</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Nov 27-30</td>
<td>11</td>
<td>Physiology of Adiposity; SOS of lab instructor</td>
<td>Q10 over Fed Up film</td>
</tr>
<tr>
<td>Dec 4-7</td>
<td>12</td>
<td>Lab final (6-11)</td>
<td>-</td>
</tr>
<tr>
<td>Dec 11-14</td>
<td>NO LAB</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>