PSIO 202: HUMAN ANATOMY AND PHYSIOLOGY
TYPICAL COURSE SYLLABUS

Note: This syllabus is not the current semester syllabus; if you would like the current syllabus, please email the course coordinator

Course Instructors Spring Semester:
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Course Instructors Fall Semester:
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Course Instructor Summer Session II:
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Course coordinator:
Claudia Stanescu, Ph.D.                    
Department of Physiology                   
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Adding/Switching sections
If you need to add, or switch lab sections, please contact Dr. Stanescu. Adding and/or switching laboratory sections will be permitted only during the first two weeks of classes if open seats are available.

Attendance:
Regular lecture and laboratory attendance is essential to student success in this course. If you miss a class, you are responsible for getting missed material from a classmate. Course instructors and teaching assistants will not give out lecture or lab notes, as they are not intended to supplement your notes or replace notes from missed classes.

Make up labs will not be allowed except for school holidays.

Monday, January 17th is Martin Luther King Jr. Day and no labs will be scheduled on this holiday. Students registered in a Monday lab (sections 001A, B, C, D) will be required to attend another lab section during the same week. Sign up sheets for make up labs will be available at the end of lecture on January 12 and January 14.

Lecture Exams:
Lecture exams will be closed-book and will cover material presented in lecture as well as reading assignments specified in the class notes or by the instructor. Lecture exams are not cumulative, and will therefore only cover material since the last lecture exam. There will be four lecture examinations valued at 150 points each. Lecture exams will consist of 50 multiple choice questions; students will mark their answers on a scantron form. Make-up exams will consist of essay questions and will only be given under extreme circumstances, and only if the course coordinator is notified prior to the exam or immediately after the missed exam (the same day). Written documentation must be provided to explain the circumstances for the missed exam. If you fail to contact the course coordinator about the missed exam, a grade of zero will be recorded and not changed. Making personal travel plans that coincide
with an exam date is not considered an extreme circumstance and will not be considered for make up exams. If you fail to take the final exam without notifying the course coordinator in advance, you will not be permitted to make up the exam. Students who arrive late for any exam may not be allowed to take the exam.

NOTE: It is an inevitable fact that there will be mistakes in any textbook. If you discover an error, please point it out to the instructor. The instructor will serve as the primary authority. If the information in the book differs from what you hear in lecture, you are responsible for what is presented in lecture.

Laboratory Practicals:
The laboratory practicals will be given on the dates indicated in the lab schedule. Practicals will be based upon lab material studied, i.e. lab exercises, review sheets, microscope slides, dissection material and TA lecture. Each practical will be worth 50 points and will consist of fill in the blank and short answer type questions. Making up a missed lab practical will only be permitted under extreme circumstances, and only if you have contacted your TA or course coordinator prior to or immediately after the missed practical (the same day). Written documentation must be provided to explain the circumstances for the missed practical. Make up practicals will consist of 10 questions worth 4 points each and 2 short answer questions worth 5 points each.

NOTE: In order to facilitate a hands-on learning experience in the laboratory we will be using some preserved specimens like sheep hearts and pig kidneys.

Quizzes:
There will be six quizzes worth 10 points each, the five best of which will factor into a student’s grade. All quizzes will be given in lab and will cover both the material from the previous laboratory session (8 pts), and an overview of the lab to be conducted in the present session (2 pts). Because quizzes are generally given at the beginning of lab, it is essential that you not be late for lab. In addition, if the student misses a lab for any reason a make up quiz will not be permitted.

Case Study:
A case study will be presented in the laboratory over the course of the semester to introduce students to problem solving and integration of concepts across the systems covered in PSIO 202. Students will generate hypotheses based on the initial case presentation, will work in groups to assign learning issues related to the case, will present the information they gathered to their group and will complete a problem set that will help them resolve the case and learn the key information of the case.

Special Note Concerning Course Examinations:
All cell phones must be turned off and placed out of sight while taking any lecture examination, laboratory practical, or laboratory quiz. All baseball caps must have the visor turned around and all sun-protective head gear (e.g., straw hats) should be removed and placed beneath your seat. All class notes, books, and review materials must also be placed beneath your seat and be inaccessible to view during the examination, practical, or quiz. Bathroom breaks are not allowed during the exam.

Academic Integrity:
The U of A Code of Academic Integrity places full responsibility on the student for the content and integrity of all academic work submitted in the form of quizzes, examinations, laboratory practicals, case study assignments and others. The student is responsible for following the guidelines listed in the syllabus and those presented by the instructor at the beginning of the exam. The following are examples of unacceptable behavior: looking at another student’s exam, leaving course materials out instead of putting them out of sight, having any electronic devices on during the exam, removing an exam from the classroom, plagiarism and lazy writing. If a student is involved in unacceptable behavior that is deemed to be dishonest behavior by the PSIO 202 faculty and TAs, the Dean of Students office will be notified and the following sanctions will be applied: the student will lose credit for the exam (grade of zero) and a notation of dishonest behavior can be added to the student’s transcript. All exams are the property of the Department of Physiology and may not be removed from the classroom or office. Removal of exams will be considered in violation of the code of academic integrity. If you are having difficulty with the class, contact your TA or the course instructor for assistance. A copy of the Code of Academic Integrity can be found at http://deanofstudents.arizona.edu/codeofacademicintegrity. Take the time to read it.
Problem Solving:
If you have a problem, question, complaint or concern the first person to see is your TA. If the problem cannot be resolved with your TA, please contact Dr. Stanescu (621-2795 or stanescu@u.arizona.edu). Dr. Stanescu is available to discuss course concerns with you.

Grades:
There are 900 points possible during the semester, distributed as follows:

- Lecture Exams 4 @ 150 points = 600
- Lab Practicals 4 @ 50 points = 200
- Quizzes 5 @ 10 points = 50 (the best 5 of 6 scores will count)
- Case Study 50 points = 50

TOTAL POINTS = 900

Grades are determined as the percentage of points accumulated during the semester. Total points available are 900. If you accumulate 90% you will receive an “A” for the course. Similarly, 80% = B, 70% = C, 60% = D, 59% and below = E. A curve will not be used unless the entire class performance warrants it, which will be determined at the end of the semester. No extra credit will be offered in this course. TAs keep a record of the grades throughout the semester. If you have any questions about your grades you should first contact your TA, then discuss further concerns with Dr. Claudia Stanescu.

Note about grade appeals: It is the student’s responsibility to check and make sure that their recorded grade is the correct grade. Students are required to keep their exam score forms. Problems related to grading must be addressed before the next scheduled exam and not at the end of the semester. For final grades, please contact the course coordinator within 2 weeks of the final exam date.

INCOMPLETES: University policy states that an incomplete shall only be assigned if a student has successfully completed at least 80% of course requirements with a passing grade. If a student has a valid reason which makes completing the remaining 20% of the course impossible at the end of the current semester, an incomplete may be warranted. In this case, the student should discuss this option with the coordinator before the end of the term. After reporting final grades to the registrar’s office, a grade of incomplete is not possible. Note that if a student stops attending class and fails to drop or withdraw, a final grade of “E” will be recorded with the registrar’s office. It is the responsibility of the student to drop the course if he or she decides to do so.

Note to Pre-Physiology (PRP) Majors: PSIO 201 and PSIO 202 are gateway courses for the major. Students must earn a C or better in both courses in order to subsequently register for upper division courses in the Physiology major.

Required Materials:
2) Laboratory Manual for Anatomy and Physiology, Allen, 3rd edition
3) Slides for lecture and lab – available on D2L

Optional Materials:
2) Anatomy and Physiology Revealed, CD-ROM by McGraw Hill, version 2.0, volumes 1-4
3) Coloring Guide to Anatomy and Physiology, by Stone

Anatomy and Physiology on the D2L:
Course materials will be posted on the University of Arizona D2L site http://d2l.arizona.edu/. Here you will find the course syllabus, lecture schedule including the readings, and lecture slides; the lab schedule including the histology slides and required handouts. Example exam questions written by the instructors will also be available. Please check D2L often for announcements.
Anatomy and Physiology Study Center:
The anatomy and physiology study center is located in the Gittings building, Room 3E, and is available to students during the office hours of the teaching assistants and/or course instructors. The study center is designed to provide 201/202 students with another opportunity to review materials learned in lecture and lab, and to serve as an anatomy and physiology library. The study center is equipped with a computer workstation and A&P learning materials, microscopes and slides, A&P models and diagrams, and a variety of textbooks and study guides; in addition, when necessary, relevant materials used in the laboratory will be made available on a week to week basis. Materials are not to be removed from the study center at any time. NOTE that the study center is NOT intended to serve as a replacement for attending lab or lecture; students who attempt to use the center in that capacity will soon discover that their grades will suffer if lecture or lab is repeatedly missed.

Disability Resource Center Students:
If you are in the Disability Resource Center program at the University of Arizona, it is your responsibility to identify yourself to your TA two weeks in advance in order to receive any special accommodations for a practical exam. Your TA will explain our testing policies.

Class Conduct:
It is expected that all class members will exhibit respectful and courteous behavior in their words and actions during all class sessions and in all interactions with other students, faculty, graduate teaching assistants, and departmental staff members.

Respectful and courteous behavior includes all of the following actions:
• Arriving in the classroom on time so that the class session is not interrupted by late entry
• Turning off cell phones and pagers when entering the classroom
• Avoiding unkind, tactless, or rude comments to others and refraining from threatening behavior (See http://policy.web.arizona.edu/~policy/threatening.pdf)
• Following the University of Arizona “Student Code of Conduct” (See: http://deanofstudents.arizona.edu/studentcodeofconduct)

Subject to Change Policy:
Policies contained within the syllabus are subject to change. Students will be given advance notice of the aforementioned changes.
# PSIO 202 Typical Lecture Schedule

**TOPIC** | **Tortora 12th edition Readings** 
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Cardiovascular System: Introduction | 717-730
Cardiovascular System: The Heart; conduction system and EKG | 730-738
Cardiovascular System: The heart; mechanics; cardiac output | 738-742
Cardiovascular System: Control of heart rate | 742-744
Cardiovascular System: Hemodynamics: capillary exchange | 769-772
Cardiovascular System: Hemodynamics: pressure, flow, resistance | 772-775
Cardiovascular System: Control of blood pressure and flow | 775-781
Cardiovascular System: The Blood; physical properties | 689-695
Cardiovascular System: The Blood; erythrocytes | 695-699
Cardiovascular System: The Blood; white blood cells | 699-703
Cardiovascular System: The Blood; platelets & clotting | 703-707
**EXAM 1**
Lymphatic System: Non-specific resistance to disease | 831-841
Lymphatic System: Immunity | 842-846
Lymphatic System: Immunity | 846-856; 862-863
Respiratory System: Introduction and lung Mechanics | 874-889
Respiratory System: Mechanics, lung volumes, ventilation | 890-896
Respiratory System: Gas exchange: O2 | 896-899
Respiratory System: Gas exchange: CO2 | 900-905
Respiratory System: Acid/Base physiology | 900-905
Respiratory System: Regulation | 905-909
**EXAM 2**
Endocrine System: Introduction | 642-650
Endocrine System: Hypothalamus and anterior pituitary | 650-655
Endocrine System: Posterior pituitary and thyroid | 656-665
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<thead>
<tr>
<th><strong>TOPIC</strong></th>
<th><strong>READING</strong></th>
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<tbody>
<tr>
<td>Endocrine System: Adrenal glands and pancreatic hormones</td>
<td>665-672</td>
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<tr>
<td>Digestion: Histology and upper GI tract</td>
<td>921-936</td>
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<tr>
<td>Digestion: Stomach</td>
<td>937-942; 965-967</td>
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<tr>
<td>Digestion: Small intestine</td>
<td>949-959</td>
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<tr>
<td>Digestion: Pancreas, liver, and large intestine</td>
<td>943-949; 959-965</td>
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<tr>
<td>Metabolism: Carbohydrates</td>
<td>977-1001</td>
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<tr>
<td>Metabolism: Lipids and Proteins</td>
<td>977-1001</td>
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<td><strong>EXAM 3</strong></td>
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<td>Urinary System: Introduction and kidney anatomy</td>
<td>1019-1029</td>
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<td>Urinary System: Glomerular filtration</td>
<td>1029-1034</td>
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<td>Urinary System: Tubular reabsorption and secretion</td>
<td>1034-1040</td>
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<tr>
<td>Urinary System: Concentrating mechanisms</td>
<td>1040-1046; 1049-1052</td>
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<td>Urinary System: Water balance; micturition</td>
<td>TBA</td>
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<td>Reproductive System: Male anatomy and physiology</td>
<td>1081-1095</td>
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<tr>
<td>Reproductive System: Female anatomy &amp; physiology</td>
<td>1095-1112</td>
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<td>Reproductive System: Female reproductive cycle</td>
<td>1112-1117</td>
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<td>Reproduction: Female reproductive cycle and pregnancy</td>
<td>1133-1140</td>
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<td>Pregnancy</td>
<td>1140-1147;1155-1156</td>
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<tr>
<td>Development</td>
<td>TBA</td>
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<td><strong>FINAL EXAM</strong></td>
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# PSIO 202 Typical Laboratory Schedule

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<thead>
<tr>
<th>LAB#</th>
<th>TOPIC</th>
<th>READING</th>
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<tbody>
<tr>
<td>1</td>
<td>The Cardiovascular System: The Heart and ECG</td>
<td>Exercise 27, 28</td>
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<td>2</td>
<td>The Cardiovascular System: Blood Vessels and Blood Pressure (QUIZ 1)</td>
<td>Exercise 29, 30</td>
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<tr>
<td>3</td>
<td>The Cardiovascular System: The Blood (QUIZ 2)</td>
<td>Exercise 26</td>
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<td><strong>LAB PRACTICAL #1</strong></td>
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<td>4</td>
<td>The Lymphatic System</td>
<td>Exercise 26, 31</td>
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<td>5</td>
<td>Anatomy and Physiology of the Respiratory System (QUIZ 3)</td>
<td>Exercise 32, 33</td>
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<td><strong>LAB PRACTICAL #2</strong></td>
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<tr>
<td>6</td>
<td>Endocrine System</td>
<td>Exercise 25</td>
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<td>Anatomy of the Digestive System</td>
<td>Exercise 34</td>
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<td>7</td>
<td>Physiology of Digestion (QUIZ 4)</td>
<td>Exercise 35</td>
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<td><strong>LAB PRACTICAL #3</strong></td>
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<td>8</td>
<td>Anatomy of the Urinary System</td>
<td>Exercise 36</td>
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<td>9</td>
<td>Urinalysis and Renal Physiology (QUIZ 5)</td>
<td>Exercise 37</td>
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<tr>
<td>10</td>
<td>Anatomy and Physiology of the Reproductive System (QUIZ 6)</td>
<td>Exercise 38, 39</td>
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<td><strong>LAB PRACTICAL #4</strong></td>
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