

**BIOLOGY 2401**  
**Human Anatomy and Physiology I- CRN# 76512**  
**SYLLABUS**  
**Spring - 2012**

**Class time:** Friday (lecture) 8:30 – 11:30 AM; (Lab) 12:00-3:00 PM  
**Location** Learning Hub Room 312/314

**Instructor:** Alicia Linda Cummings MPH, RD, LD  
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 Cell: 713-703-7047  
 Available by appointment

<b>Course Description:</b>	<b>Examination of the following anatomical systems histology-tissues; integumentary-skin; skeletal; muscular; and nervous.</b>
<b>Text: Required</b>	<b><i>Fundamentals of Anatomy and Physiology 9<sup>th</sup> edition. Martini, Nath, and Bartholomew</i></b>
<b>Lab Manual: Required</b>	<b>Human Anatomy &amp; Physiology I Lab Manual, Fourth edition, 2010 by Dr. Jyoti R. Wagle and Dr. Jane Johnson-Murray</b>
<b>Study Guides: Optional</b>	<b>Human Anatomy &amp; Physiology I Study Guide by Dr. Jyoti R. Wagle Human Anatomy &amp; Physiology I Study Guide by Dr. Renu Jain</b>

**Eagle Learning Management System:** Your Eagle Online ID is now the same as your HCC User ID which is used for Online Registration. [For example: W0034567] If you do not know your User ID you can look it up by visiting the HCC home page: From [www.hccs.edu](http://www.hccs.edu), click on “Login Help” under the “Student System Sign In” field then click on “Retrieve User ID” and follow the instructions. Your default Eagle Online password at the beginning of the term is: "distance". This password is independent of your Online Registration password. You will be required to change your password when you first log in. Trouble logging in? go to <http://online.hccs.edu> for more information

**OTHER RESOURCES**

1. Textbooks and videotapes are available in the reserve section of the library.
2. Lecture support:
  - Free tutoring will be available throughout the semester. Schedule will be posted in biology classrooms and bulletin boards outside the labs as soon as they become available.
  - PowerPoint lecture notes and slides, exam reviews though Eagle
  - Mastering textbook support and materials
3. Lab support:
  - Sciences Computer Lab (LHSB 415) is available to access biology web pages, study pages (<http://cc.hccs.edu/biology/Wagle/html/Lab2401.htm>) and other computer software and animations. Schedule will be posted in biology classrooms and on bulletin boards outside the labs
  - Open Lab sessions will also be available. The schedule for open labs will be posted in biology classrooms and on bulletin boards outside the labs.

**Prerequisites:** NONE. STRONGLY taking BIOL 1406 prior to enrolling in API. Many of the concepts of Anatomy and Physiology I require prior knowledge of general biology which are **NOT** covered in this course. Students who have little to no general biology background will have difficulty with the information being presented in API.

**Objectives:**

1. Students will be able to understand and apply the principals of homeostasis and the importance of feedback loops.
2. Students will be able to evaluate information and make conclusions based on their knowledge of membrane transport.
3. Students will be able to apply their knowledge of muscle structure to explain how muscles function.
4. Students will be able to apply their knowledge of the structure of the skeletal system to its functions.
5. Students will be able to understand and apply their knowledge of changes in polarity on membrane potential.
6. Students will be able to apply and demonstrate their knowledge concerning reflex arcs.
7. Students will be able to apply the knowledge gained in lab utilizing anatomical models, physiological experiments, histological slides and the compound light microscope.
8. Students will utilize online interactive evaluation tools to gauge their understanding of key anatomical and physiological concepts prior to lecture/examinations/quizzes where applicable.

**POLICIES:**

***Attendance/Withdrawal/Grade***

**HCC Course Withdrawal Policy:**

Academic performance is the responsibility of each student. Failure to meet the requirements for the course will result in a failing grade. You are expected to attend class and labs. Research has shown class attendance is the predominant factor for academic success. If you miss a class it is your responsibility to obtain any materials covered during your absence. If you are having difficulty, please see the instructor for additional assistance to avoid the possibility of having to withdraw from the course. The State of Texas has begun to impose penalties on students who drop courses excessively. For example, if you repeat the same course more than twice, you have to pay extra tuition.

- Beginning in fall 2007, the Texas Legislature passed a law limiting students to no more than SIX total course withdrawals throughout their educational career in obtaining a certificate and/or degree.
- In the event you find it necessary to withdraw from the course, submission of your request must be completed no later than **4:30 PM on Thursday, March 29th.**
  - Students who stop attending class and do not withdraw will receive a final grade FX. This notifies the Federal and State Loan agencies the student has discontinued attendance. This could potentially affect student loan approvals for future semesters.
- An incomplete (“I”) will only be given for extraordinary circumstances (death in the family, severe illness, military duty, etc). Incompletes cannot be assigned unless the student has completed at least **75%** of the course materials (exams, labs, etc). Attendance and punctuality is strongly recommended.

***International Students***

Receiving a W in a course may affect the status of your student Visa. Once a W is given for the course, it will not be changed to an F because of the visa consideration. Since January 1, 2003, international students are restricted in the number of distance education courses that they may take during each semester. **ONLY ONE** online/distance education class may be counted towards the enrollment requirement for International Students per semester. Please contact the International Student Office at 713-718-8520 if you have any questions about your visa status and other transfer issues.

### ***Americans With Disabilities Act (ADA)***

HCCS Disability Support Service states: Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc) who needs to arrange reasonable accommodations must contact the appropriate Disability Support Service (DSS) Counselor at the beginning of each semester. Faculty are authorized to provide only the accommodations requested by the Disability Support Services Office. Students who are requesting special testing accommodations must first contact John Reno at [john.reno@hccs.edu](mailto:john.reno@hccs.edu) or call him at 713/718-6165.

### ***Academic Integrity***

Any violation of scholastic integrity will result in failure of the course and disciplinary actions deemed necessary and appropriate by the school administration. Students are expected to conduct themselves with honesty and respect. Dishonest practices can result in diverse penalties leading to potential academic probation or dismissal. Cheating will not be tolerated!

### ***Classroom Etiquette/Guideline***

1. Arrive on time.
2. All cell phones and/or pagers must be set on vibrate or silent mode.
3. As a courtesy to other classmates, please refrain from talking during lectures.
4. Textbook and lab manual are required. Study guide is highly recommended.
5. Class attendance is mandated by the state. Attendance will be given only if you attend full class period. Coming late to the class or leaving early is considered as disruption. More than four unexcused absences may result in an administrative withdrawal. You are responsible for everything covered or announced during your absence.

### **Recommendations**

The following are strongly recommended for each student:

- Read or peruse the week's chapter before each class. Following the lecture read the chapter carefully. Bring any questions to the attention of the instructor if you need additional clarification.
- Complete pre-lab reports prior to lab exercises. Read through each lab fully to understand what will be covered in the lab exercise.
- DON'T GET BEHIND! Work hard from the beginning of the semester rather than playing a "catch-up game. There are copious amounts of information to absorb and it is better done in small increments rather than large volumes.
- Take advantage of the resources made available to you.
- Contact your professor if you have any questions regarding any element of the course you do not understand. Do not wait to have your questions answered until right before an exam.
- If you need a B or an A for the course start making those grades from **the first submission** of lab reports, quizzes, exams, etc. Do not procrastinate. Desire and performance are not mutually exclusive - meaning the one will not necessarily produce the other.

## Grading/Testing/Assignments

Lecture (3) Lab Practicum (2) Exams	500 points
Lowest scored exam will be dropped	(100 points)
Mandatory Comprehensive Final Exam	125 points
On-line Homework Mastering Exercises	100 points
Special senses project	30 points
Class and Lab participation	75 points
Lab reports	<u>100 points</u>
Total	830 points

1. 5 lecture/lab exams and one final exam. The lowest score on the first 5 lecture/lab exams will be dropped. The final exam **is mandatory**. If you miss an exam it will be dropped as your lowest score. Makeup for a 2<sup>nd</sup> missed exam will be at the discretion of the instructor.
2. Lecture exams will consist of multiple-choice, true-false, matching, and short answer questions. **Students must provide scantrons for each exam.**
3. Lab exams will be practicum. Students will move from station to station answering indicated questions on models, microscopes, dissections, etc; the lab exams are **NOT** multiple choice. There is **ABSOLUTELY NO MAKEUP** for lab exams.
4. On-line mastering homework exercises. These will be announced as the semester progresses and will be correlated with scheduled quizzes. (Approximately 10 exercises)
5. There is one 30 point special project. A copy of selected projects is attached to your syllabus. Projects are due no later than April 27<sup>th</sup> (NO EXCEPTION) but can be submitted prior to due date.
6. **Exams will begin promptly**. If you arrive late you will not have additional time to complete the exam which could potentially affect your performance. If you are aware you will be arriving late you **MUST** notify the instructor.
7. If you are unable to attend class on scheduled exam days **NOTIFY THE INSTRUCTOR IMMEDIATELY**.
8. **CELL PHONES, IPHONES, ETC MAY NOT BE USED DURING EXAMS.** *Individuals who answer phones or leave the classroom during the exam will be asked to forfeit their exam.*
9. **Lab reports and attendance**
  - In the lab, you are encouraged to work in small groups. However, you are responsible for your own lab reports. Answer each question in the both the pre- lab and regular lab reports to the best of your ability once the exercise is completed.
    - **Lab reports will be removed from the lab manual and submitted at the end of class. In the event the lab exercises do not leave sufficient time to complete reports they will be due the following lab class.**
  - Late lab reports will be subject to point reductions.
  - Do a good job on lab reports- there is a strong possibility you will see some questions from your lab reports on lab practicum exams.
    - Lab attendance is highly recommended. You will not do well in this course by skipping lab sessions. You will fail to receive full lab participation points if you leave lab sessions early, do not engage in lab activities, or miss the lab session.
    - You must read the laboratory safety rules before doing any of the lab exercises. The laboratory safety release form must be signed during the first lab session you attend. If you do not sign the release form, none of your test grades will be returned to you

Date	Lecture	
1/20	ORIENTATION; Lecture Chapter 1 / <i>Excerpts</i> Chapter 3 Lab Exercise 1 Microscope / Cells	
1/27	Lecture Chapter 4- <i>Tissue levels of Organizations</i> Lab exercise 2 and Lab exercise 3	
2/3	Lecture Chapter 5- <i>Integumentary system</i> Lab Exercise 3 and 4	
2/10	<b>LECTURE EXAM 1- Chapters 1, Excerpts 3, 4, 5</b> <ul style="list-style-type: none"> <li>• Lecture Chapter 6-<i>Osseous Tissue and Bone Structure</i></li> <li>• Lab exercise 5-<i>Bone Structure</i></li> </ul>	
2/17	Lecture chapter 7- <i>Axial Skeleton</i> Lab Exercise 6	
2/24	Lecture chapter 8- <i>Appendicular Skeleton</i> Lab Exercise 7	
3/2	Lecture Chapter 9- <i>Articulations</i> Lab Exercise 10	
3/9	<b>LECTURE EXAM 2 –Chapters 6, 7,8,9</b> Lecture Chapter 10- <i>Muscular Tissue</i>	
3/16	<b>SPRING BREAK – NO CLASS</b>	
3/23	<b>LAB EXAM 1- Morning</b> Begin Lecture Chapter 11 <i>Muscle System</i> Lab Exercise 8	
3/30	Lecture Chapter 11 – <i>Muscle System</i> ; Begin Lecture Chapter 12 - <i>Neural Tissue</i> <b>Cat dissection</b>	
4/6	<b>Spring Holiday – NO CLASS</b>	
4/13	Lecture Chapter12 – <i>Neural Tissue</i> ; Lecture Chapter13 – <i>Spinal Cord</i> Lab Exercise 11- <i>Spinal Cord/Reflexes</i>	
4/20	<b>LECTURE EXAM 3- CHAPTERS 10, 11, 12, 13</b> Lecture Chapter 14 – <i>Brain/Cranial Nerves</i> Lab Exercise 12 – <i>Brain/Nerves</i>	
4/27	Lecture Chapter 15- <i>Neural Integration- sensory</i> ; 17- <i>Special Senses</i> Lab Exercise 13- <i>Senses</i> <b>Senses Project Due</b>	
5/4	<b>LAB EXAM 2- Morning</b> Lecture Chapter 16 – <i>Autonomic NS</i>	
5/11	<b>MANDATORY FINAL EXAM</b>	

**This is a tentative schedule and is subject to change. Any alteration in the schedule will be announced and posted in a timely manner**