



Course Syllabus

Anatomy and Physiology II

BIOL 2402

<u>Semester</u>	FALL 2011
<u>(CRN)</u>	55826
<u>Instructor contact</u>	AUGUSTE NIOUPIN 8001 FULTON, Houston, TX 77022
<u>Phone Number:</u>	(713) 718-2443
<u>Email Address:</u>	auguste.nioupin@hccs.edu
<u>Office Location and Hours</u>	Northline Campus, Room 321 Fridays; 10:00 a.m. to 2:00 p.m.
<u>Course Location/Times</u>	Tuesdays: 11:00 p.m. to 2:00 p.m.; Room 217 (Lecture) Thursdays: 11:00 p.m. to 2:00 p.m.; Room 309 (Lecture/ Lab)
<u>Course Semester Credit Hours (SCH)</u>	Credit Hours 4.00 Lecture Hours 3.00 (3 college credits) Laboratory Hours 3.00 (1 college credit)
<u>Total Course Contact Hours</u>	96.00
<u>Course Length</u>	16 weeks
<u>Type of Instruction</u>	In person, on campus.
<u>Course Description:</u>	Study of the structure and function of human cells, tissues, and organ systems including integumentary skeletal, musculature, and nervous systems. Core Curriculum course.
<u>Course Prerequisite(s)</u>	<ul style="list-style-type: none">• College-level reading (or take GUST 0342) and• College-level writing (or take ENGL 0310/0349)• BIOL 2401: Anatomy and Physiology 1

Instructional Materials

TEXTBOOK:

- TITLE: *Principles of Anatomy and Physiology*, 12th ed. 2009.
- AUTHORS: *Tortora, G.J. and B. Derrickson.*
- PUBLISHERS: *John Wiley and Sons*
- Student companion site: <http://bcs.wiley.com/health/Books?action=index&itemId=0470084715&bcsId=4185>

LAB MANUAL:

- TITLE: *Anatomy and Physiology II Laboratory Manual*
- AUTHORS: *Keating and Wiersema*

Course Student Learning Outcomes (SLO):

1. Outline histology, gross anatomy and physiology of the endocrine system; explain hormone receptor interactions that provide foundation for understanding the basis of many pharmacological agents that are developed for treatment of various maladies of the human body.
2. Learn the histology, gross anatomy, physiology and the terminologies of the cardiovascular system and describe the normal values for blood volume, differential white blood cell counts, blood pressure, cardiac cycle, electrocardiogram and the pulse rate.
3. Study the histology, gross anatomy and physiology of the respiratory and urinary systems, discuss the structural and physiological linkage of these systems with the cardiovascular system and define terminologies and normal values of the respiratory system.
4. Describe histology, gross anatomy and physiology of the immune system, explain components and functions of non-specific and specific immunity, the various mechanisms that human body has to protect itself against harmful agents and pathogens, and discuss the different types of malfunctions in the immune system.
5. Describe histology, gross anatomy and physiology of the gastrointestinal and reproductive systems of the human body; understand the cellular physiology of the processes involved with digestion and reproduction.

Learning Objectives

- Outline histology, gross anatomy and physiology of the endocrine system; explain hormone receptor interactions that provide foundation for understanding the basis of many pharmacological agents that are developed for treatment of various maladies of the human body.**
- Learn the histology, gross anatomy, physiology and the terminologies of the cardiovascular system and describe the normal values for blood volume, differential white blood cell counts, blood pressure, cardiac cycle, electrocardiogram and the pulse rate.**
- Study the histology, gross anatomy and physiology of the respiratory and urinary systems, discuss the structural and physiological linkage of these systems with the cardiovascular system and define terminologies and normal values of the respiratory system.**
- Describe histology, gross anatomy and physiology of the immune system, explain components and functions of non-specific and specific immunity, the various mechanisms that human body has to protect itself against harmful agents and pathogens, and discuss the different types of malfunctions in the immune system.**
- Describe histology, gross anatomy and physiology of the gastrointestinal and reproductive systems of the human body; understand the cellular physiology of the processes involved with digestion and reproduction.**

Instructional Methods

This course focuses on your textbook readings and instructor Power Point lectures. Course contents are heavily based on the topics covered in the required textbook, although certain details may be added from various easily accessible sources. It is the responsibility of the student to read the chapters assigned by the instructor with emphasis on the topics and concepts covered in class. Any of these topics can be included in lecture exams, although the main focus of these tests will be derived from the reviews.

Laboratory sessions will include exercises from the required laboratory manual. In most cases, "lab day" will be de facto lecture/lab exercise. Lab reports are due at the next **lecture** session immediately following "lab day". Lab reports must be turned in to your instructor no later than the **end** of that lecture session. Lab reports turned within 24 hours after the deadline will be assessed a 20% penalty. Anything turned in more than 24 hours after the deadline will earn you a **0 (zero!)**.

Student Assignments

Students are required to read assigned chapters. Announced or unannounced quizzes during lecture or lab may be conducted throughout the semester.

Student Assessment(s)

EXAMINATIONS AND GRADES:

Students will be assessed via lecture and laboratory examinations, final lecture and lab examinations.

There will be a total of five examinations in all. These include 3 lecture exams, 1 laboratory exam and a final examination.

You must provide ASAP a USB Flash drive with at least 1 gigabyte (1 GB) of available memory to your instructor to have a copy of lecture outlines, the reviews, the animations, and other useful documents.

The laboratory exam will be based on tissue slides and/or body parts models.

The final will include material from review 4.

HCC Grading Scale

A = 100- 90	4 points per semester hour
B = 89 - 80:	3 points per semester hour
C = 79 - 70:	2 points per semester hour
D = 69 - 60:	1 point per semester hour
59 and below = F	0 points per semester hour
IP (In Progress)	0 points per semester hour
W(Withdrawn)	0 points per semester hour
I (Incomplete)	0 points per semester hour
AUD (Audit)	0 points per semester hour

IP (In Progress) is given only in certain developmental courses. The student must re-enroll to receive credit. COM (Completed) is given in non-credit and continuing education courses. To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades "IP," "COM" and "I" do not affect GPA.

For Health Science programs, see the Program/Discipline Requirements section for specific grading requirements.

**Instructor Grading
Criteria**

THE FINAL AVERAGE FOR THE COURSE IS CALCULATED AS FOLLOWS:

3 LECTURE EXAMS:	36% (12% each)
1 LABORATORY EXAM:	20%
ATTENDANCE POINTS:	5%
LAB REPORTS AVERAGE:	5%
FINAL EXAM:	34%

**Instructor's
Requirements**

BASIC REQUIREMENTS

Students should be on time for class and be prepared with required materials including textbook and lab manual. Full class attendance is required including lecture and lab portions. Full attention during lecture and lab is required.

ATTENDANCE POLICY

The Houston Community College System permits up to 4 absences during a regular semester. Beyond that, the student may be subject to administrative withdrawal at the discretion of the Instructor.

In this course, attendance will constitute 5% of the final grade

0 absences = 100%

1 absence = 90%

2 absences = 80%

3 absences = 70%

4 absences = 60%

More than 4 absences = 0

Note: Classes start on time, at the designated, officially scheduled start time. You have 15 minutes to come in. Past 15 minutes after the officially scheduled start of class the doors shall be "locked" regardless of your circumstances. Your next opportunity to come in would be at break time which should occur 1 hour and 15 minutes after the officially scheduled start of class. Break time lasts 15 minutes, after which doors will be "locked" again. Missing half the class causes you to be half absent (whether you came in at break time, or you left before class was dismissed). Of course half absences **do** add up to full absences. Be aware of that.

PHONES/ELECTRONIC DEVICES

Absolutely no phone or other personal electronic devices are to be used during class (lecture and lab). This includes making or taking a call, reviewing messages, texting, playing games, checking email, surfing the web, anything that involves a phone or other personal electronic device. If your work or family situation requires that you be available via phone, your phone can be on vibrate mode and you can take the call during our regular scheduled breaks or you can exit the class to review the call. Notify your friends, family, employers, and anyone else who regularly contacts you that you will be in class and that you should be contacted only when necessary. The taking of calls during class is not only disruptive but it is also discourteous to classmates and the instructor.

HCC ADA Policy Statement:

Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office of their respective college at the beginning of each semester. Faculty is authorized to provide only the accommodations requested by the Disability Support Services Office. For questions, contact Donna Price at 713-718-5165 or the Disability Counselor at your college.

Northeast ADA Counselor – **Kim Ingram – 713-718-8420**

ADA website: <http://www.hccs.edu/hccs/future-students/disability-services>

Student Services Policies

<http://hccs.edu/student-rights>

EGLS3 – Evaluation for Greater Learning Student Survey System

At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time near the end of the term, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and department chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term. EGLS3 availability will be published later during the semester.

ACADEMIC HONESTY

Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Disciplinary proceedings may be initiated by the College System against a student accused of scholastic dishonesty. Penalties can include a grade of "0" or "F" on the particular assignment, failure in the course, academic probation, or even dismissal from the College. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism and collusion.

COURSE REPEATERS:

"Students who repeat any college-level course for a third time or more at Houston Community College (HCC) will be assessed an extra fee of \$50 per credit hour. Please ask your instructor / counselor about opportunities for tutoring or other assistance prior to considering course withdrawal or if you are not receiving passing grades."

Faculty will **no** longer be able to "withdraw" students on their final semester roll sheets. The use of the **withdrawal form** must be used by students/faculty to withdraw students from coursework with appropriate boxes) checked. **If a student decides to withdraw from a class upon careful review of other options, the student can withdraw online prior to the deadline through their HCC Student Center, on PeopleSoft. Students should check HCC's Academic Calendar by Term for withdrawal dates and deadlines.**

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. In 2007, the Texas Legislature passed a law limiting students to no more than **six** total course withdrawals throughout their academic career in obtaining a baccalaureate degree. There may be future penalties imposed.

To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your instructor will “alert” you and HCC Student Services of the chance you might fail a class because of excessive absences and/or poor academic performance. You should visit with your Instructor, an HCC counselor, or HCC Online Student Services to learn about what, if any, HCC interventions might be offered to assist you – tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

MAKE UP POLICY

A student **may** be allowed to make up an exam at the sole discretion of the instructor. Each situation will be evaluated on a case by case basis.

CALENDAR:

IMPORTANT DATES FOR FALL 2011

Classes begin:	August 29 th	
Labor Day Holiday:	September 5 th	(Monday)
1 st lecture exam:	September 27 th	(Review 1 on Sept. 22 nd . Questions are due Sept. 21 st before 7:30 p.m.)
2 nd lecture exam:	October 25 th	(Review 2 on Oct. 20 th . Questions are due Oct. 19 th before 7:30 p.m.)
Last Day to Drop (W):	November 3rd	(4:30 p.m.)
3 rd lecture exam:	November 22 nd	(Review 3 on Nov. 17 th . Questions are due Nov. 16 th before 7:30 p.m.)
Thanksgiving Holiday:	Nov. 24 th to Nov. 27 th	
Lab Exam Review:	December 6 th	
Laboratory Exam:	December 8 th	
Final Examinations:	December 13 th	(See Official Schedule) (Review 4 on Dec. 1 st . Questions are due Nov. 30 th before 7:30 p.m.)
Semester Ends:	December 18 th	
Grades available:	December 23 rd	

See the Instructor for exact time and date. Time and Dates may be changed on *short notice*

**CHAPTERS
TO BE COVERED**

18. Endocrine system
19. Cardiovascular system—Blood
20. Cardiovascular system—Heart
21. Cardiovascular system—Blood Vessels and Hemodynamics
22. Lymphatic system and immunity
23. Respiratory system
24. Digestive system
25. Metabolism and nutrition
26. Urinary system
27. Fluid, electrolyte and acid-base homeostasis
28. Reproductive system
29. Development and inheritance

- Lecture **Exam #1** *should* cover chapters 18, 19, 20
- Lecture **Exam #2** *should* cover chapters 21 (selected topics), 22, 23
- Lecture **Exam #3** *should* cover chapters 24, 25 (selected topics), 26, 27 (selected topics)
- **Final Exam** *should* cover chapters 28, & 29.

**LABORATORY
EXERCISES
TO BE COVERED**

All lab exercises should be covered.

**LABORATORY
SAFETY RULES:**

Read the rules in your lab book. Each student is responsible for cleaning up after labs; this includes glassware, utensils, specimens/models and other material used during lab time.

ONLINE TUTORING

All BIOL students are encouraged to use HCC's online tutoring system for help with any BIOL class. Questions submitted to the ASK queue will be answered within 24 hours – and usually much before that. Tutors are on duty 7 days a week, 365 days a year. Online tutors will not do homework for you, but they will guide you in the right direction. To maximize the effectiveness of the system, be specific when you ask questions, and let the tutor know what class you are taking. Registering for online tutoring is easy. Go to www.hccs.askonline.net. Select a user name and password that you will remember. Use any e-mail address, and add your student ID number in the COMMENT box. It will probably take five minutes to set up your askonline account. After that, you can submit questions in seconds. Tutor responses are not e-mailed to you. To see the answers, log back in to the system and click the bright yellow NEW button.

Online tutoring is also available for chemistry, physics, math, English, and papers in all disciplines.

PLEASE NOTE!

- You need to purchase your textbook and lab manual as soon as possible.
- If you have any problem whatsoever with the class, speak to the instructor first. Together we can handle it.
- You may contact me any time via the email.
- Check my office hours for personal conferences.
- Check on your grades often and discuss your concerns with me. Don't wait till the end of the semester!
- Students are expected to conduct themselves as adults. Be courteous to your classmates and the instructor. Disruptive behavior or any behavior that interferes with any educational activity being performed by the instructor will not be allowed. No cursing is allowed in this class! You may have to walk... ☺
Additionally, no student may interfere with his/her fellow students' right to pursue their academic goals to the fullest in an atmosphere appropriate to a community of scholars. Disruptive behavior may result in removal from the class.
- Turn in reports and assignments when they are due. Late work will be penalized.
- **SHOW UP! SHOW UP!! SHOW UP!!!**
- **STUDY! STUDY!! STUDY!!!**

Anatomy and Physiology of the Bowel and Urinary Systems. Article. Full-text available. Main requirements for a knee rehabilitation supporting device are specified by researching the knee's anatomy and already existing mechanisms. A three degree of freedom (3 DOF) system (four-bar like linkage with controlled variable lengths of rockers) is synthesised to perform the reference path of instantaneous centre of rotation (ICR). Presentation on theme: "Principles of Anatomy and Physiology" Presentation transcript: 1 Principles of Anatomy and Physiology 14th Edition CHAPTER 11 The Muscular System Copyright © 2014 John Wiley & Sons, Inc. All rights reserved. 1. 14 Muscles and Their Movements Anatomy Overview: Selected Muscles and Movements You must be connected to the Internet and in Slideshow Mode to run this animation. Copyright © 2014 John Wiley & Sons, Inc. All rights reserved. 15 Running Injuries Most running injuries involve the knee Running injuries are usually related to faulty training techniques Running injuries can be treated with: PRICE NSAIDS or corticosteroid injections Rehabilitative exercises Copyright © 2014 John Wiley & Sons, Inc. All rights reserved. Principles of Anatomy and Physiology Set 15e Global Edition. Gerard J. Tortora. 4.8 out of 5 stars 191. Paperback. \$90.53. Anatomy and Physiology, Laboratory Manual. Connie Allen. 4.4 out of 5 stars 156. Ring-bound. \$113.24. Anatomy & Physiology is a 2-sequence course that nearly everyone that heads into healthcare has to take, and there are many misconceptions or stories about the course material. Naturally, A&P is a challenging course, but with a good instructor, good study habits (& motivation to study), and a good textbook, you should be set! The authors of the book, Tortora & Derrickson try their best to explain difficult concepts to the reader in a way that isn't super complex, but relatively reasonable. principles of anatomy&physiology Gerard J. Tortora / Bryan Derrickson 14th Edition Experience + Innovation start here go anywhere Principles of ANATOMY & PHYSIOLOGY 14th Edition Gerard J. Tortora Bergen Community College Bryan Derrickson Valencia College VP and Executive Publisher Kaye Pace Associate Publisher Kevin Witt Executive Editor Bonnie Roesch Marketing Manager Maria Guarascio Associate Editor Lauren Elfers Developmental Editor Karen Trost Senior Product. For more information, please visit our website: www.wiley.com/go/citizenship. Copyright © 2014, 2012, 2009, 2006, 2003, 2000. © Gerard J. Tortora, L.L.C., Bryan Derrickson, John Wiley & Sons, Inc. All rights reserved. Anatomy. science of body structures and the relationships among them. Physiology. science of how body functions-how the body works. How many levels of structural organization? Smallest structural/functional units of organisms and the smallest living units in the body ex. nerve, muscle, epithelial. Tissue level. groups of cells & materials surrounding them working together for a particular function 4 basic types: 1. epithelial 2. connective 3. muscular 4. nervous.