

**HUMAN ANATOMY & PHYSIOLOGY Winter Quarter 2012****5.0 Units****Instructor: L. K. Sengupta, Ph.D.**

00256 - 01Lecture	02:30 pm - 4:20 pm	TTh	SC1102
00256 - 01Laboratory	04:30 am - 7:20 pm	T	SC2106
00257 - 02 Lecture	02:30 pm - 4:20 pm	TTh	
00257 - 02 Laboratory	04:30 am - 7:20 pm	Th	SC2106

IMPORTANT DATES / HOLIDAYS [Refer: College website <http://www.deanza@fhda.edu>]

You are responsible for observing all important administrative deadlines / schedule. Consult with Admissions and Records regarding all administrative deadlines.

First day of WINTER Quarter [Bio 40C, T Th sections]	Tuesday, 1/10	
Last day to add quarter-length classes (<i>Add date is enforced</i>)	Saturday, 1/21	
Last day to drop for a refund for out-of-state or foreign students	Saturday, 1/14	
Last day to drop for a refund for resident students	Saturday, 1/21	
Last day to drop a class with no record of grade (<i>Drop date is enforced</i>)	Saturday, 1/28	
Last day to drop with a "W" (<i>Withdraw date is enforced</i>)	Friday, 3/2	
FINAL LAB EXAM	REGULAR LAB TIME	T [3/20] & Th [3/22]
FINAL Lecture EXAM	1:45 pm - 3:45 pm	Wednesday, 3/28

PREREQUISITES

Biology 40 B with a grade of **C** or better. Students without prerequisites will not be allowed to enroll. Check with the Office of the Dean, BHES Division, Kirsch Center, Room 228 for pre-requisite information.

BRIEF STATEMENT ON COURSE DESCRIPTION:

Hours: Four hours lecture, three hours laboratory (84 hours total per quarter).

This course, an introduction to the disciplines of Human Anatomy & Physiology, is the 3rd of a 3 - part series. The emphasis will be on the “**Study of the endocrine system, lymphatic system, digestive system, metabolism, urinary and reproductive systems, embryological development and classical Mendelian and modern biochemical genetics including genetic engineering**”. The goals will be achieved by lectures, discussion, active participations and presentations by students, and laboratory practical / demonstrations. Sometimes we will try to understand complex topics by analyzing case studies or discussing real-world scenarios. There will be challenge statements and critical thinking questions that will help to analyze what you already know on the subjects, the misconceptions and how the class is helping you to modify and / or build your knowledge.

Instructors do not “give” grades; they are earned by the students through hard work. Be responsible for your own learning.

Please attend all your scheduled lecture and lab meetings in first week to secure your spot in the class!

Class Website: <http://faculty.deanza.fhda.edu/senguptalakshmikanta/>

Visit the Class website on a regular basis for class related information and assignments

CONTACTING ME

Office hours: T [1:15 pm – 2:15 pm] @ SC 1 [Upper level]: Biology Faculty Offices

e mail: senguptalakshmikanta@fhda.edu

Use e-mail [subject line Bio 40 B] to inform me of your situation if you are ill or otherwise out of class for an extended period. If you have questions, see me in the Office during posted hour.

COURSE MATERIALS

1. **Text Book: Principles of Anatomy & Physiology**, *Current* edition. by Gerard J. Tortora & Bryan Derrickson / Tortora, Grabwosky; John Wiley & Sons, Inc.
2. **Lab Book:** I will upload the lab worksheets for each week, however, you need the lab manual to complete the lab activities. Please download and print the lab worksheets and bring it to the lab. DO NOT buy new lab manual for this quarter, bring the one you already have from the list below:
 - ♣ **Human Anatomy & Physiology Laboratory Manual** by Elaine Marieb and Linda S Kollett, Pearson Benjamin Cummings
 - OR**
 - ♣ **Laboratory Manual for Anatomy & Physiology**, Connie Allen & Valerie Harper; John Wiley & Sons, Inc.
3. *ScanTron form [882 –E and 2020] and # 2 pencils and One pack of 3 inch by 5 inch index cards (any color, with or without lines, cost ~\$0.90) – bring to every lecture*

LABORATORY MATERIALS

Unless specified, all laboratory materials will be provided for you (such as dissection kits, gloves). If any extra materials are required, these will be made known to you in advance.

GENERAL INFORMATION

Classes will be divided into lecture and laboratory sections. The lab will start with short introduction of lab assignment. You may work in pairs or groups. All members in a group must contribute equally. Remember that this is a challenging career-track course. Our objective is to prepare students for the next level of Anatomy & Physiology to gain entry into professional schools. **You must bring the lab manual to lab.** Bring the text to class if at all possible.

Specific skills and competencies are expected of students who successfully complete this course, including:

- ✓ Ability to learn, retain and demonstrate knowledge of course materials
- ✓ Ability to apply course materials at knowledge, comprehension, application and analysis levels
- ✓ Ability to demonstrate critical thinking and problem solving skills
- ✓ Ability to follow instructions / directions, work effectively as an individual and in a group
- ✓ Ability to work independently and engage in self-directed learning
- ✓ Ability to work safely in a lab environment

SPELLING & GRAMMAR

You will be learning a new language of terminology and concepts throughout this course and will need to demonstrate a working knowledge of these terms and concepts. In most instances, partial points may be deducted for errors. In certain instances, full points may be deducted. This is an important skill that you will want to master early on in this course.

Student Learning Outcome [SLO]

Outcome 1: Predict the homeostatic responses of the endocrine system to internal and external changes or stimuli.

Outcome 2: Appraise the role of the lymphatic and immune system in the body's defense to diseases.

Outcome 3: Generalize the way in which nutrients are processed to perform various energetic and structural functions in the body.

Outcome 4: Integrate the structure and function of the kidneys in the regulation of fluid, electrolyte, and pH balance.

COPYRIGHT

Most of the slide presentations are **copyrighted** by the publishers. All **voice recordings** are for only academic purpose, may **NOT** be reproduced or distributed without the expressed permission of the Instructor. **NO VIDEOGRAPHY OR PHOTOGRAPHY** of the class session is permitted. However, students **can photograph** the models /histology slides / or other relevant material for academic use.

ASKING QUESTIONS

If you have a question, feel free to raise your hand. I will repeat things as often as necessary for the majority of students to catch on. If you need individual attention for any reason, see me during posted office hours. If at any time you have a problem that affects your performance in class, please talk with me about it ASAP.

ACCOMMODATION

I wish to make this course as accessible as possible to students who fall under the "**Americans with Disabilities Act**" that may affect any aspect of course assignments or participation. I encourage such students to communicate with me by the 2nd week of the course about accommodation that will improve your experience in [or access to] this course. Students must provide documentation before they are entitled to accommodations. You may contact the Disability Services and Programs for Students @ 408-864-8753] for assistance.

ATTENDANCE / DROP / WITHDRAWAL POLICY

- Students NOT attending the first day of the class will be dropped [unless already informed] to accommodate wait listed students as per the wait list approved by the Division Dean's Office.
- Any student who fails to attend all class sessions between the first day of the class [January 10, 2012] and the CENSUS DAY will *be marked* NO SHOWS on the CENSUS ROSTER.
- This is a content - heavy, time-consuming course. I expect you to be prepared for each class and to participate in all activities to gain the most from them. **Participation, not merely attendance, is mandatory.**
- A student may be dropped if no longer participating in the course. "No longer participating includes but is not limited to excessive absences."

➤ The following criteria define **participation**:

1. *arrive on time to class and stay the entire class period*
2. *bring all of the materials necessary for that class, for example books, paper, pens, etc.*
3. *complete and turn in all assignments on time*
4. *actively participate to complete the assigned lab work*
5. *contribute to class discussions*
6. *contribute to group projects/ lab*
7. *follow all of the rules and safety regulations of the class*
8. *take all assigned quizzes and exams as per schedule*

- Attendance will be accounted for by sign-in sheets. On each day of lecture and / or lab you are responsible for checking off your own name. If you miss a lecture, it is your responsibility to find out what you missed and keep up with the work. You are welcome to visit and discuss your concern during posted Office hour.
- For purposes of emergency or illness, you may miss up to one [1] lab and / or two [2] lecture sessions. Please talk to me regarding absences beyond the excused absences. If you are not participating or have excessive absences, you may be dropped from the course.

Do Not Depend on Me to Do That for you to AVOID an UNDESIRABLE GRADE at the last moment!

- **It is your responsibility to withdraw / drop out from the class by College due date.** If you have not dropped the course by the drop deadline you must receive a grade for the course. **Protect yourself from receiving an "F"** for a class that you stopped attending at some point in the quarter! See the De Anza class schedule for more information regarding drop dates.

EXPECTATIONS FROM THE STUDENTS

- ❖ **Student Handbook:** The Biological and Health Sciences Division has a student handbook available at <http://bhs.deanza.edu/StudentHandbook.pdf>. You need to access all material contained in the handbook is a part of this green sheet and applies to you as a student in this class.

CLASSROOM BEHAVIOR

- ❖ **Be courteous to all!** Critical thinking and critical caring are important to become a responsible citizen.
- ❖ Show up to class on time, **turn off cell phones, ipods etc. during class.** Pay attention, ask relevant questions, enjoy the learning process. Honest, open discussions are encouraged as long as the discussion is appropriate and done in a respectful, orderly fashion. If you have a question, please attract attention of the Instructor by raising your hand. I would encourage group discussion as a tool for effective learning.
- ❖ **ELECTRONIC DICTIONARIES** are **NOT** allowed **during quizzes and exams.** However, you can use the laptops or electronic dictionaries during regular class sessions for note-taking.
- ❖ Any form of disruptive **behavior will not be tolerated.** Any incidence where the faculty member feels s/ he or any class member is threatened, the faculty member will immediately call Security and the Dean. Administrative follow up will occur. Refer <http://bhs.deanza.edu/StudentHandbook.pdf>
- ♣ **NO FOOD, GUM OR DRINKS** (except water) are allowed.
- ❖ **Children are not allowed in lecture nor in lab.**

- ❖ Always follow the **SAFETY RULES** during labs. You will sign a contract on the first lab day.
- ❖ **KEEP YOUR LAB AREA CLEAN.** Everyone is responsible for seeing that all common areas are clean and all equipment is in its proper place.
- ❖ "Anything you do, do it as a **Professional to Professional standards.**

READING and PREPARING STUDY TOOLS

Students are expected to complete reading the lecture and lab materials and pre-lab activities **BEFOREHAND following** the schedule. This ensures the best use of everybody's time and hopefully alleviates confusion. Download and print out the class-related material, when available, and bring them to class. But don't expect them to replace taking notes. Taking notes is another form of **active learning**.

Construct study tools. Learning content-intensive material such as Biology often **requires many steps: Seeing, Hearing, Thinking, and Doing.** Create a list of terms presented in lecture. Write out flashcards and reorganize your lecture notes after each class day to help you process the material effectively.

EVALUATION, EXAMINATIONS & EXAM POLICIES

All exams are closed-book. All papers containing course-related material or notes must be put away during exams. Translation computers are **NOT** allowed. **You are NOT allowed to leave the room during examination.** If you are late to class, you may choose to begin the exam / quiz but will not be given extra time.

ASSIGNMENTS

1. There will be **FREQUENT OPEN ENDED** in-class activities during MOST CLASS SESSIONS. You will discuss among yourselves and then I will ask for the feedback.
2. **Storyboard presentations by students:** As a group of two, you will make a storyboard to show your understanding of the subject matter and relating the same to our daily lives. This will be a tool to assess the Student Learning Outcomes [described above]. The storyboards will be presented by each group of 2 and all others will participate in discussion and peer evaluation [**35 + 10= 45**]. The guidelines for this will be posted.
3. There will be **short quiz** on each lab day [except first week; weeks of lab exams and finals week]. Bring in Scantron form 2020 [the short one] and # 2 pencils. The quiz will be multiple choice type and will be based on the previous lab.. There will be no make-up for this quiz for those missing the lab are attending the lab late.
4. Any other assignments that would seem appropriate to make the student learning more effective [TBA].
5. **REFLECTION ON LAB ACTIVITIES: You will maintain on the reflection of each lab with the following information: [if you miss, state absent] POINTS AVAILABLE = 7 labs @ 3 points each = 21 points**

Date lab title what you learned/ enjoyed; had trouble with; would like to work again; what you did not like

LATE ASSIGNMENTS

Late submission of assignments will reduce 20% of the maximum points available. Late submission by 5 or more days will NOT earn any point. If you miss an assignment, contact me as soon as possible to discuss the situation; don't put it off. The faculty has the authority to determine what is or is not an acceptable excused absence or tardy.

About the Tests: The tests will include a variety of question styles that require you to recall, evaluate, apply, and reflect on what you learned. I will provide a study sheet in advance.

LECTURE EXAMS

There are **two ONE HOUR lecture MIDTERMS [75 X 2 = 150 points]**; non-cumulative] and **COMPREHENSIVE / CUMULATIVE FINAL lecture test [150 points]**. Check the course calendar. The tests would include a variety of question styles [like T/F, multiple choice, fill-in-blanks, mix & match, short answer and critical thinking] that require you to recall, evaluate, critically think, apply and reflect on what you learned. These tests cover content discussed in lecture / lab meetings and assignments. **TOTAL = 300 Points**

Please keep the scantron [# 882 – E] and a # 2 pencils with you on all class days. The study guide for each chapter will be posted in the class website from time to time.

MAKEUP LECTURE EXAMS

These exams are **discouraged**. However, if you miss an exam, with the exception of the final exams, due to a verifiable, unplanned emergency, you must communicate immediately to notify of your absence and schedule a make up. In all situations, tests must be made up at a time and place to be specified by the Instructor. One student will get only one rescheduled lecture test. Be warned, make up exams are harder than the regular exams. If you miss a second test you will receive zero points for that exam.

LAB ACTIVITIES / QUIZZES / ASSIGNMENT

The **LAB WORKSHEETS** for each lab will be uploaded in the class website. **Download / print** a copy of each and **bring on respective lab days**. Completed worksheets WILL BE DUE on the next lab meeting.

Pre-Lab Activities: Read the downloaded worksheets, use the lab manual you have as a resource and in your own words describe what the **goals** are for the upcoming lab and **what specifically you will learn** about. **What procedures or techniques** will you use? **What aspects of the lab topic or procedures are least clear to you?** (100 words or more) Those assignments should take ~15 minutes, and must be submitted by **4:30 pm on your assigned lab days** (no late credit available). **POINTS AVAILABLE = 6 labs @ 4 points each = 24 points**

During **EACH LAB MEETINGS**, you will work with your partners to be able to identify external / internal anatomical features including models and prepared slides, and study physiological processes and perform laboratory tests. based on worksheets. Every person needs his / her own copy of the worksheets each week. When you finish a lab you will show me your notes/worksheets to receive a stamp. That stamp verifies your participation and involvement for the day. **POINTS AVAILABLE = 7 labs @ 5 points each = 35 points**

Completed Lab Worksheets are due in lab one week after their assignment date. Lab worksheets handed in without a stamp [indicating missed lab] will receive an automatic 5-point deduction. **POINTS AVAILABLE = 7 labs @ 10 points each = 70 points**

You will be given **short quizzes** on lecture / lab related questions to help you understand the broader contexts of the subject areas for the quarter. To receive credit, you must be present to answer the questions on scantron [# 2020] or index card. **POINTS AVAILABLE = 6 labs @ 10 points each = 60 points**

Students will discuss and develop **CONCEPT MAPS** for the day's topic as part of the lab work.

MISSED LAB

Due to materials availability and scheduling restrictions, labs cannot be made up unless you attend another lab section that same week [T and Th]. Students must complete lab during their **scheduled lab period**. Missing a lab will cost you at least 5 points and you will also miss the lab quiz points.

LAB EXAMINATIONS

There will be **two LAB EXAMS, mid-term worth 50 points and the Final [comprehensive] worth 100 points**. Laboratory learnt in labs during the quarter will be emphasized. You will be asked to identify a structure [surface anatomy, gross anatomy, histology], and / or state its function and / or discuss the meaning of the results of a physiological process using figure, models, and interpretation of graphs. You will be asked to perform lab experiments that was conducted during regular practical sessions. You must take the lab practical on the date indicated. If you miss the practical, you will receive a zero for that exam. Remember that to be a successful healthcare professional, you will require all your lab knowledge and skill throughout your career. **POINTS AVAILABLE = 50 + 100 = 150 points**

NO MAKEUP FOR LABORATORY EXAMINATION / QUIZZES. NO MAKE UP EXAM FOR FINAL. NO EARLY OR LATE EXAM

1. You will be assessed out of: **5 points** [Student Survey] + **300 points** (lecture exams) + **150 points** (LAB exam) + **24 points** [pre-lab activities] + **35 points** [Lab participation including group activities] + **70 points** [Lab Worksheet completion] + **60 points** [short quizzes in lab] + **21 points** [Lab Reflection Statements] + **35 points** [Storyboard assignments] + **10 points** [peer review of storyboard] + **variable points** [Case Studies and other assignments]

PROFESSIONALISM

1. The instructor will treat you as adults and expects that you act as adults. Respect and consideration for your classmates during lectures, labs, and exams will be expected.
2. **CHEATING, PLAGIARISM, DISHONESTY, ETC:** None of these behaviors, nor the appearance of these behaviors, will be tolerated in BHES Division. Please refer to the De Anza College Catalog and the Division's Student Accountability for further details on specific examples.
3. The following behaviors are **examples** of cheating/plagiarism (this list is not exhaustive):
 - ✓ Using unauthorized notes while taking an exam.
 - ✓ Copying another student's work (other than course notes) inside or outside of class.
 - ✓ Turning in homework that is identical to another student's (both parties will receive zero).
 - ✓ Copying from any source (including the Internet) without citing the source.
 - ✓ Passing off any work as your own that is not.
 - ✓ Turning in work completed for another class (unless pre-authorized by the instructor).

All instances of plagiarism will be reported to the Division Dean for appropriate action as per the College Policy.

FINAL GRADING

Your individual scores from all the exams, quizzes and assignments will count in computing the final course grade. At the end of the course a percentage of your total points is taken for your assigned grade. Determination of borderline grades will be based on attendance and deportment in class.

GRADING SCALES:

88 – 100 %	= A (Excellent)
78 – <88 %	= B (Good)
66 – < 78 %	= C (Satisfactory)
55 - < 66 %	= D (Passing- less than satisfactory)
Less than 55 %	= F (Failing)

INCOMPLETE GRADE

An Incomplete (I) may be given if circumstances are warranted following the College Policy. An “Incomplete” is not a substitute grade for a “D”, “F”, or “W”. **Refer to the college policy on ‘Incomplete’ grades.**

SCIENCE RESOURCE CENTER:

Use the resources to enhance your KNOWLEDGE and GRADE!! This lab has a variety of materials and media available as well as staff assistance.



<http://www.deanza.edu/slo/>

(Leveque, 1999-2000)