GENERAL COURSE INFORMATION

Instructor: Ahmed Badr, MEP, ACSM-CEP, ACSM-EIMIII
Instructor’s Office: PE 227
Email Address: abadr@calstatela.edu
Meeting Times: Lecture: MWF 08:00am – 08:50am, KH LH2
Office Hours: MW 9:00am-10:30am, F 9:00am-9:30am & by appointment only
Any questions regarding lab should be directed to your lab instructor. You’re welcome to talk to me about the lab. Any concern about the overall lab should be directed to professor Badr.

Laboratory – Monday & Wednesday in ASCB 365

<table>
<thead>
<tr>
<th>LAB</th>
<th>DAY</th>
<th>TIME</th>
<th>ROOM</th>
<th>INSTRUCTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>MW</td>
<td>10:45am-12:00PM</td>
<td>ASCB 365</td>
<td>Peter Ewing</td>
</tr>
<tr>
<td>03</td>
<td>MW</td>
<td>12:15pm-1:30PM</td>
<td>ASCB 365</td>
<td>Peter Ewing</td>
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<tr>
<td>04</td>
<td>MW</td>
<td>1:40pm-2:55PM</td>
<td>ASCB 365</td>
<td>Daniel Barta</td>
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<tr>
<td>05</td>
<td>MW</td>
<td>03:05pm-4:20PM</td>
<td>ASCB 365</td>
<td>Anahid Mirzatoni</td>
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<tr>
<td>06</td>
<td>MW</td>
<td>4:30pn-5:45PM</td>
<td>ASCB 365</td>
<td>Anahid Mirzatoni</td>
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<tr>
<td>07</td>
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<td>CANCELLED</td>
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</table>

Email: pewing2@calstatela.edu
Anahid.Mirzatoni@calstatela.edu
abadr@calstatela.edu (lab coordinator)
dbarta@amnh.org

COURSE DESCRIPTION

This Course provides an introduction to human anatomy and physiology for non-science majors. The general objectives of the course are to gain a detailed understanding of the structure and function of the human body; to appreciate the relationship between structure and function; and to understand how various cells, tissues, organs and organ systems work together to maintain homeostasis. To achieve these general objectives, we will study the structure and function of the human body from a systems viewpoint.

This semester, we will cover the nervous system, the endocrine system, the reproductive system (including gametogenesis and development), the cardiovascular system (some lymphatic system included) and the respiratory system.

PowerPoint slides will be posted after every lecture. For each lecture students are advised to write their own additional notes. Slides will contain figures and/or bullet point information, I will elaborate on these points and it is up to YOU [the student] to take these additional notes. Further, students are required to read related
Study effort & expectations

1. **You are expected to spend at least 3 extra hours** studying/reviewing for every hour we meet in this course; that means with the 5.5 hours that we meet every week, **you will need at least an extra 17.0 hours** to study and go over the materials covered. So good time management is a crucial part of being successful in this class. Success will depend on a commitment by the student to learning as well as proper time management skills.

2. Another crucial part of being successful is good studying practices, you will need to identify what type of learner you are, and use it to your advantage. Do not blindly follow other’s studying methods if they do not work for you.

3. Read the assigned chapters before each lecture. Create lists of unfamiliar terms and concepts and review these frequently. Become familiar with the study guides at the end of each chapter, which contain summaries, practice questions.

4. **You are expected to attend classes and prepare before coming to lectures or labs**

5. **Talking, drinking, and eating in class are NOT allowed.**

**REQUIRED TEXTBOOKS**


Laboratory: Human Anatomy & Physiology Laboratory Manual: for CSULA; McGraw-Hill. **MUST PURCHASE A LAB MANUAL TO COMPLETE ASSIGNMENT**

Access code: **MUST PURCHASE an ACCESS CODE TO COMPLETE HOMEWORK**

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**COURSE WEBSITES AND REGISTRATION INFORMATION**

- **Moodle for Biology 2020** - will contain syllabus, lecture slides, grade points and anything else the teaching staff deems relevant to your successful completion of the course.
  

  On Connect, you will find all weekly online homework assignments and other activities to help you in this course. In addition, you find pictures of tissues, models, dissection specimens, and quizzes. **Use of this online homework resource will begin in week 2 through end of semester.**

  **To register for BIOL2020 /Fall 2018 on Connect:**

  Instructions are posted on the course Moodle website

  **IMPORTANT:** Any questions related to the use or obtaining the code for connect should be directed to McGraw Hill. Their contact information is listed on Moodle

  **Homework assignments for each week will be made available online every Friday at 10.00am for 72hours or so. There will be NO extended times given and/or or changes to dates and times. NO LATE LAB ASSIGNMENTS WILL BE ACCEPTED.**
iClicker

- To obtain full credit for this course students need to purchase an iClicker 2 from the student bookstore or from a reputable seller. **Starting week three**, each class session will have some clicker questions to test student knowledge on the material presented in class *that day and the lecture before*. Students should review lecture material before entering into class. iClickers **SHOULD BE REGISTERED**, instructions are included with your clicker remote. **Please review and register before using.** iClickers should **also be registered with your MOODLE account**, allowing the clicker ID to sync with your name/account. On your Moodle webpage you will see an icon allowing you to register your clicker on Moodle, please do this immediately to allow your clicker ID sync with your name.

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ATTENDANCE AND BEHAVIOUR

Lecture attendance is **required (also will be recorded by your iClickers)** and very important to the overall progress you can achieve in this course. You are responsible for your education and so it is in your best interest to be present in class and be an active participant in both class and lab.

Laboratory attendance is also very important to the level of success of this course. You must be enrolled in a lab session, where you will perform experiments, study and manipulate anatomical models and charts, study histological specimens, and view/study demonstrations relevant to the topics in the lecture material. This laboratory section is **NOT** another lecture; it is designed for collaborative, exploratory, ad inquiry based learning. Therefore, come to lab prepared to work (this implies that there is some learning that should be done prior to arriving to lab). **NO MAKE UP LABORATORY SESSIONS.**

**NOTE:** If you miss more than two lab classes you will forfeit the ability to earn extra credit and lose any earned extra credit in lab and lecture throughout the quarter.

No inappropriate behavior will be tolerated in lecture and lab sections. Any inappropriate behavior will be brought to professor Badr’s attention. **Class expulsion is an option that will be considered in certain cases.**

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IMPORTANT NOTICE!

Cell phones: must be switched off and inside your backpack during lecture & lab. Violation of this policy would result in **5 points deduction per incident** of your overall score!!!

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ACADEMIC HONESTY

Students are expected to read and abide by the University’s Academic Honesty Policy, which can be found at: [http://www.calstatela.edu/academic/senate/handbook/ch5a.htm](http://www.calstatela.edu/academic/senate/handbook/ch5a.htm) **Students who violate this policy will be subject to disciplinary action**

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ADA STATEMENT

Reasonable accommodation will be provided to any student who is registered with the Office of Students with Disabilities and requests needed accommodation.

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MAKE-UPS LAB AND LECTURE
NO MAKE-UP EXAMS WILL BE GIVEN. Exception will ONLY be given with documentation (i.e., physician's note) of a serious and compelling reason for a missed exam.

LECTURE AND LABORATORY EXAM PROCEDURE

NOTE: Topics covered in lab sessions could be examined in written lecture exams

Leave ALL your personal items either in the back of the lecture hall, or on the floor in the front of the lecture hall. The only items you can take to your seat are the materials needed and allowed to take the exams such as pencils, pens and erasers. No electronic devices of any kind are allowed to be on you or use on exam days. If caught, you will fail the class as this will be considered cheating and therefore violate the academic honesty statement. Student must have their student ID present during ALL exams

STUDENTS HAVE BEEN CAUGHT BEFORE WITH ELECTRONIC DEVICES IN LAB EXAMS, IF CAUGHT YOU WILL BE AUTOMATICALLY EXPELLED FROM LAB AND REFERRED TO THE DEPARTMENTAL CHAIR

If you are LATE the day of the exam, you will NOT be allowed to take the test if ONE person already turned in their exam. For laboratory exams, you will NOT be allowed to make up any of the missed stations you rotate through. In other words, DO NOT BE LATE ON EXAM DAYS. ABSOLUTELY NO EXCUSES.

SYLLABUS DISCLAIMER STATEMENT

SERIOUS EFFORT AND CONSIDERATION WERE USED IN FORMULATING THE COURSE SYLLABUS. WHILE VIEWED AS AN EDUCATIONAL CONTRACT BETWEEN PROFESSOR BADR AND STUDENT, UNFORESEEN EVENTS MAY CAUSE CHANGES TO THE SCHEDULING OF LECTURES, EXERCISES, EXAMINATIONS, ETC. EVERY EFFORT WILL BE MADE NOT TO CHANGE SCHEDULED ITEMS. NONETHELESS, PROF. BADR RESERVES THE RIGHT TO MAKE ANY CHANGES DEEMED NECESSARY TO BEST FULFILL THE COURSE OBJECTIVES. STUDENTS REGISTERED FOR THIS COURSE WILL BE MADE AWARE OF ANY CHANGES IN A TIMELY FASHION USING REASONABLE MEANS (I.E. THROUGH CAMPUS EMAIL OR COURSE WEBSITE). THIS DISCLAIMER DOES NOT ABROGATE ANY STUDENT RIGHTS AS DESCRIBED BY UNIVERSITY RULES AND REGULATIONS.

TENTATIVE LECTURE & LAB SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday</th>
<th>Wednesday</th>
<th>Friday</th>
<th>Day 1 (Mon)</th>
<th>Day 2 (Wed)</th>
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<tbody>
<tr>
<td>Date</td>
<td>Event Description</td>
<td>Syllabus Topics</td>
<td>Additional Info</td>
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<tr>
<td>9/17/18</td>
<td>LECTURE EXAM 1</td>
<td>Nervous System: Senses (16.1-16.5; 14.4)</td>
<td>REVIEW DAY</td>
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<td>9/24/18</td>
<td>Nervous System: Senses</td>
<td>Nervous System: Senses (16.1-16.5; 14.4)</td>
<td>Lab Exercise 33</td>
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<td>(16.1-16.5; 14.4)</td>
<td>Endocrine System (17.1-17.11)</td>
<td>Lab Exercise 34</td>
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<td>Lab assessment 4</td>
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<tr>
<td>10/1/18</td>
<td>Endocrine System</td>
<td>Endocrine System (17.1-17.11)</td>
<td>Lab Exercise 35 &amp; 36</td>
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<td>(17.1-17.11)</td>
<td>Reproductive System (28.1-28.5)</td>
<td>Lab Exercise 37</td>
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<td>Lab assessment 5</td>
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<td>10/8/18</td>
<td>Reproductive System</td>
<td>Reproductive System (28.1-28.5)</td>
<td>Lab Exercise 38</td>
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<td></td>
<td>(28.1-28.5)</td>
<td>Development &amp; Pregnancy (29.1-29.8)</td>
<td>REVIEW DAY</td>
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<td>10/15/18</td>
<td>LECTURE EXAM 2</td>
<td>Cardiovascular System: Blood (18.1-18.5)</td>
<td>LAB PRACTICAL 2</td>
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<td>Cardiac System: Heart</td>
<td>Cardiovascular System: Heart (19.1-19.10)</td>
<td>Lab Exercise 39</td>
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<td>10/22/18</td>
<td>Cardiac System: Heart</td>
<td>Cardiovascular System: Heart (19.1-19.10)</td>
<td>Lab Exercise 58 &amp; MALE MEIOSIS MODELS</td>
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<td>Lab assessment 6</td>
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<td>10/29/18</td>
<td>Cardiac System: Vessels &amp;</td>
<td>Cardiac System: Vessels &amp; Circulation (20.1-20.12)</td>
<td>Lab Exercise 41 &amp; 43</td>
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<td>REVIEW DAY</td>
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<td>(20.1-20.12)</td>
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<td>Lab assessment 7</td>
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<td>11/5/18</td>
<td>Lecture exam III</td>
<td>Respiratory System (23.1-23.8)</td>
<td>LAB PRACTICAL 3</td>
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<td>Lab Exercise 44</td>
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<td>Lab assessment 8</td>
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<td>11/12/18</td>
<td>No Class (Veterans Day)</td>
<td>Respiratory System (23.1-23.8)</td>
<td>NO LAB (Veteran's Day)</td>
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<td>Lymphatic System (21.1 - 21.4)</td>
<td>Lab Exercise 47</td>
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<td>Lab assessment 9</td>
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<tr>
<td>11/19/18</td>
<td>No Class (Thanksgiving Week)</td>
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<td>NO LAB (Thanksgiving)</td>
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<tr>
<td>11/26/18</td>
<td>Lecture quiz IV</td>
<td>Immune System and The Body's Defense (22.1-22.9)</td>
<td>Lab Exercise 45 &amp; 48</td>
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<td>Research paper due</td>
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<td>Lab Exercise 50 &amp; 51</td>
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<td>Lymphatic System</td>
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<td>Lab assessment 10</td>
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<tr>
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<td>(21.1 - 21.4)</td>
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<td>12/3/18</td>
<td>Immune System and The Body's</td>
<td>Review for Cumulative Final</td>
<td>REVIEW DAY</td>
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<td>Defense (22.1-22.9)</td>
<td></td>
<td>LAB PRACTICAL 4</td>
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**Final Week:** Final exam (cumulative): 12/10/2018, 7am-9am.

**Important Notes:**
1) This is tentative schedule; adjustment to the syllabus may be made at the professor's discretion to better meet the needs of the class.
2) The lecture and laboratory sections will go out of sync during the semester.
3) Lab exams will be model identification, histological identification based etc...
4) No lab session swapping.

**GRADING**
You will receive a single grade for the lecture and lab portions of the course. Letter grades will be determined based on the grading scale below. The plus/minus grading system will be used.

**Grading Scale**
- A = (93% - 100%)
- A- = (90% - 92%)
- C = (73% - 76%)
- C+ = (77% - 79%)
- A+ = (93% - 100%)
- F = (0% - 64%)

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- F = (0% - 64%)
### Component | Points | Location | Comments
--- | --- | --- | ---
**LECTURE** |  |  | Attendance and class participation is **expected**. People who attend lectures **usually** do well in this course.
Online homework | 150 | Connect | Homework assignments (weekly starting end of week 2)
Clicker Questions | 70 | In class | Clicker questions will be given on a daily basis starting week 3
4 Quizzes | 100 | On Connect | fill-in-the-blanks, multiple choice, and/or True/False questions
3 Midterm Exams | 210 | In class KH LH2 | **Three** midterm exams; formats may be any or all of the following: multiple choice, short-answer, fill in the blanks, diagramming (70pts each exam)
Final Exam | 190 | In class KH LH2 | **In class final exam**; format may be any or all of the following: multiple choice, short-answer, fill in the blanks, diagramming
Research paper | 50 | Turn-it-in | See detail below
**Total Lecture Points** | **770** |  |  

### LABORATORY

| Component | Points | Location | Comments |
--- | --- | --- | ---
4 Lab exams | 400 | In lab | **Four Lab exams**, 100pts each
Lab Exercises | 130 | In lab | Thirteen End of Exercise Assessment page completion that will be due at the end of class period. Exercise # 27,28,30,39,58,59,41,43,44,45,48, 50,&51.
Lab assessment | 70 | Connect | **Ten assessments** will be post it on **Connect** on Wednesdays. Each one includes 14-15 questions and will test your knowledge on materials you learned that week. Each assessment will be due on Friday midnight of same week.
Individual demonstration | 25 | In lab | **One oral demonstration** of testable laboratory structures to the class, in preparation for the practical exams. You may elect to demonstrate any of the following resources: histology/microscopic anatomy, models, sheep/cow organs, although your demonstration must be pre-approved by the instructor. You will present a minimum of 15 features in front of the instructor and a minimum of 3 other students. You may use your study guide as a casual reference during the demonstration but you must know the material being presented. To earn the full 25 points credit for this demo: you will present with accuracy and confidence (see attached rubric).
Group demonstration | 25 | In lab | **One group demonstration** - Each student will work collaboratively on a group demonstration where you will collectively present on an organ system along with a written key to be used as a study specimen prior to practical exams for units two through four. Approximately 25 structures must be presented & accurately labeled to earn the full 25 points credit. Group members who are absent or do not participate will earn 0 points. They will be given a second chance later. It is your
responsibility to participate in a group demonstration prior to the fourth practical exam.

| Total Lab points | 650 |

**Research paper guidelines: Coronary Artery Disease (CAD)**

- 5 typed pages not including title page and citations
- Line spacing 1.5
- Margins 1 inch
- Paper title Arial 16
- Arial 12 for main text
- Arial 12 for sub titles in bold
- Outline
  - **Introduction:**
    - Talk about the basic anatomy & physiology of the heart
    - Talk about blood supply to the heart.
  - Pathophysiology
    - Molecular events leading to CAD, particular susceptible groups of people etc..
  - Diagnostic tools
    - What are the different Methods to diagnose CAD?
  - Risk factors
    - What are CAD risk factors?
  - Methods of treatment
  - Prognosis
  - Conclusions and what you learned from your research

- **4-6 primary research articles** must be cited, only one physiology/anatomy textbook and one website can be used as a citation example CDC, NIH

- Citation must be properly referenced with authors, year of publication, complete title and page and volume number
- Citation referred to in the text must be numbered.
- PubMed/Medline are a good source for information.
• No referencing Wikipedia or random webpages

Your research paper must be submitted to TURNITIN on the BIOL2020 MOODLE webpage. This program will scan for plagiarism and a score higher than 20% will not be graded and earned of 0 points out of 50. Paper is due on Nov 26/2018!!!