

#### **Basic Course Information**

| Semester         | Winter 2016                          | Instructor's Name                        | Dr. Tom Morrell                                 |
|------------------|--------------------------------------|--|---|
| Course Title & # | Anatomy and Physiology I<br>BIOL 200 | Instructor's Email                       | thomas.morrell@imperial.edu                     |
| CRN#             | 15035                                | Personal Webpage                         | http://spaces.imperial.edu/thomas.mor rell/     |
| Room             | 2737                                 | Office                                   | 410   |
| Class Dates      | Jan 5 through Feb 5                  | Office Hours                             | There are no office house during Winter Session |
| Class Days       | Mon through Friday                   | Office Phone # (PT may use dept. number) | 760 355 6148                                    |
| Class Times      | <u>CRN 15035</u> :                   | Who students should contact if emergency | Science Department Secretary                    |
|                  | Lecture: 9:00 - 10:15 am             | or other absence                         | 760 355 6155                                    |
|                  | Lab: 10:35 am - 3:25 pm              |  |   |
| Units 4          |                                      |  |   |

# **Course Description**

Human anatomy and physiology. A two semester study of the structure and function of the human organism, from the molecular to the gross level. This course may require the use of human cadavers for observation and/or dissection. Preparatory for RN program and paramedical programs. (CSU)(UC credit limited. See a counselor). Prerequisites include Math 090, and CHEM 100 and BIOL 100 or BIOL 122 or BIOL 180 or BIOL 182 with a minimum grade of "C" or better, or MATH 090 with a minimum grade of "C" or better and a current California LVN license.

#### **Student Learning Outcomes**

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

- 1. Illustrate competency related to topics in human anatomy and physiology using pre- and post-examination. (ILO 1,2)
- 2. Identify the anatomy and/or physiology processes related to cells, tissues, or organ systems.(ILO 1,2)
- 3. Describe the components of the human skeleton and its articulations.(ILO 1, 2)

#### **Course Objectives**

- 1. List the characteristics of the human organism and describe the body's organization, regions, and cavities
- 2. Describe the structure and explain the function of the cell membrane, cytoplasm, nucleus and associated organelles. The student will describe genetic regulation and protein synthesis.
- 3. List and describe the types, function, and locations of the different tissues in the body.
- 4. Describe the structure of the integumentary system and derivatives and will explain their functions.
- 5. Explain bone formation and functions. The student will also recall the names and location of skeletal parts and describe the various types of articulations.
- 6. Explain the molecular theories of muscle contraction and will recall the names, location and actions of selected muscles.
- 7. Explain transmission and regulation of nerve impulses. The student will describe the structure and function of the human brain, spinal cord, and sensory organs.
- 8. Explain hormone action and will list and describe the function of selected human hormones.

## Required Textbooks (online textbooks can be used - online Lab manuals may not be used)

1. Saladin, Kenneth. 2015. Anatomy and Physiology: The unity of form and function (7th

edition). McGraw Hill Publisher

ISBN-13: 9780073403717 ISBN-10: 0073403717

2. Marieb E. and L. Smith. 2015. Anatomy and Physiology Laboratory Manual (Fetal Pig

Version). 12th Edition. Pearson Publishing

ISBN13: 9780133925593 ISBN 10: 0133925595

#### **Course Requirements and Instructional Methods**

This is an intensive lecture/lab course. Students will be called to answer questions during lectures. Students will utilize textbooks, lab manuals, models, computer software, and a cadaver during labs. Homework assignments will be given at the end of each day of instruction. Homework will involve drawing figures, answering questions, and composing essays.

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

## **Course Grading Based on Course Objectives**

Your course grade will be based on 6 lecture exams, 5 lab practical exams, out of class assignments, lab and lecture quizzes (some unannounced)

- 5 lab practical exams (80 points each approximately)
- 6 lecture exams to cover lectures, textbook, computer assignments, and other lecture/lab materials (80 points each approximately the final will be partially comprehensive)
- Variable: 1 10 Quizzes (5 20 points ea. approximate)
- Variable: 1-15 Homework and lab assignments (10 50 points ea. approximate)

#### Total = 850 to 1,000 points (approximate)

Grades will be assigned according to the following scale:

```
>90% = A
80 - 89.9% = B
70 - 79.9% = C
60 - 69.9% = D
<59.9% = F
```

#### I do not accept late homework without a signed legal or medical excuse.

It is the responsibility of the student to fill out the necessary paperwork if he/she no longer attends the class. In order for a student to "officially" drop the course he/she must fill out the proper paperwork. If this is not done a semester grade of "F" will be assigned.

#### **Attendance**

- A student who fails to attend the first meeting of a class or does not complete the first
  mandatory activity of an online class will be dropped by the instructor as of the first official
  meeting of that class. Should readmission be desired, the student's status will be the same as
  that of any other student who desires to add a class. It is the student's responsibility to drop
  or officially withdraw from the class. See General Catalog for details.
- Regular attendance in all classes is expected of all students. A student whose continuous, unexcused absences exceed the number of hours the class is scheduled to meet per week may be dropped. For online courses, students who fail to complete required activities for two consecutive weeks may be considered to have excessive absences and may be dropped.
- If for some reason you can't attend a lecture, quiz or an exam, it is your responsibility to approach me as soon as possible to determine if you have missed something important, and whether you can make it up. In order to make up missed opportunities you must provide a signed medical or legal excuse to document your absence. Students must realize that some labs, "in-class lab assignments," and particularly lab practical exams CANNOT be

- made up (regardless of the activity that resulted in the absence, or whether it's an excused absence). Some labs and lab practical exams require numerous hours to prepare and/or require cooperative student participation. Thus, attendance is mandatory at all labs.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences. Nonetheless, some lab assignments and all lab practical exams can not be made up.

## **Classroom Etiquette**

- IVC catalog states "disruption of a class can result in disciplinary action." I consider coming into class tardy a disruption. Thus, if I have started my lecture you cannot enter the class. Wait for the class to take the next "break" and then enter. This includes being tardy following any announced breaks during class or lab. Again, do not enter the class if lecture has already started. Wait outside of class until the class takes a break. Please note that personal issues, such as family obligations, family situations, border slowdowns, babysitters, railroad crossings, job interviews, car problems, taking family members to appointments, and work schedules are not acceptable excuses for an absence. Additionally, leaving class or lab before it has been officially dismissed will be regarded as an unexcused absence. Should you miss both components of a given lecture you will be recorded as absent (even if you attend the lab).
- Cell Phones: If I see you checking your cell phone for ANY reason, or if your cell phone rings, vibrates, buzzes, flashes or blinks during lecture or during lab (even if it is in your backpack, pocket, or purse!) I will ask you to leave the class for that day and you will be recorded as absent. Rest assured, I will provide you plenty of breaks that enable you to address all of your cell phone and social networking needs. You can provide your children's day care, and/or family health care providers the number of the IVC front office, and the front office can contact you in class in the event of an emergency.
- **Food and Drink**: are prohibited in all classrooms. This includes during breaks. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs.
- Recording my lecture is okay if you use a recorder. You cannot use your cell phone or an I-pod (or similar device) to record my lectures.
- In order to participate in lab you must read and submit the lab safety form.

Rules of Professional Conduct in This Class: Health care professionals are expected to conduct themselves professionally. If health care professionals engage in unethical or unprofessional conduct, they can receive discipline ranging from being fired to losing their license. The following rules of professional conduct are not exclusive. Think about the policy that drives these rules and what other behavior not explicitly mentioned falls within the rules. Unprofessional behavior that is disruptive to the learning environment may result in removal from the class.

#### 1. No rudeness.

Think about what you say before you say it. Treat everyone the way you would like to be treated. Do not behave as though you are entitled to anything. Be respectful of other people's gender, cultures, and beliefs. **Do not swear.** 

- 2. Be deferential to those in authority. Think before you speak.
- 3. Walk into class aware that you make an impression, as you will when you are a health care professional, the moment you walk into the room.
- 4. Unless otherwise instructed, put your cell phone away before class begins. See above rules regarding cell phones.

Why? Several reasons. Successful health care professionals have exemplary social skills, including the ability to establish rapport with patients and co-workers. If you are focused on your phone instead of the person to whom you are speaking, you cannot establish rapport. Further, good manners require that when a patient, coworker, boss, or professor speaks to you, you devote your full attention to the speaker.

- 5. Everyone present in class deserves your respect and consideration. You will distract others if you enter the room after class has begun or leave the room after class has begun. It is rude to rustle belongings while another student or the professor is speaking. Be prepared for class when its starts.
- 6. During lecture others can hear you when you talk to your neighbor. It distracts them. It distracts me. Do not ask your neighbor about something you did not hear during lecture. Raise your hand and ask me. Passing notes is also distracting. Don't do it.
- 7. You impress others at all times.

Appear engaged, even if you are not. No slouching, open yawning, eye rolling, resting your head on the table, or displaying any other behavior that is disrespectful to your classmates or to the professor.

8. Take responsibility for your work.

Do not blame others. Welcome criticism, try not to be defensive, and understand that if you do not correct your errors now, you will have to correct them when the stakes are much higher, like when you are working.

9. Be prepared for class before I start to lecture. The beginning of my lecture (or during my lecture) is not the appropriate time to start getting ready for class. That is, do not unwrap things or rummage around your backpack or purse once I have started lecture.

10. If you realize you have been rude to someone, apologize. Avoid the conditional apology, which is "I am sorry if I offended you." A conditional apology is arguably worse than no apology.

## **Academic Honesty**

- <u>Plagiarism</u> is to take and present as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to correctly 'cite a source', you must ask for help.
- <u>Cheating</u> is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using materials, or assisting others in using materials, which are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment, (e) use of a commercial term paper service

#### Additional Help – Discretionary Section and Language

- <u>Blackboard</u> support center: <u>http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8543</u>
- <u>Learning Labs</u>: There are several 'labs' on campus to assist you through the use of computers, tutors, or a combination. Please consult your college map for the Math Lab, Reading & Writing Lab, and Learning Services (library). Please speak to the instructor about labs unique to your specific program
- <u>Library Services:</u> There is more to our library than just books. You have access to tutors in the learning center, study rooms for small groups, and online access to a wealth of resources.

## **Disabled Student Programs and Services (DSPS)**

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. If you feel you need to be evaluated for educational accommodations, the DSP&S office is located in Building 2100, telephone 760-355-6313. If you believe that you would be unable to evacuate the building in a timely fashion during an emergency please inform the instructor.

## **Student Counseling and Health Services**

Students have counseling and health services available, provided by the pre-paid Student Health Fee. We now also have a fulltime mental health counselor. For information see <a href="http://www.imperial.edu/students/student-health-center/">http://www.imperial.edu/students/student-health-center/</a>. The IVC Student Health Center is located in the Health Science building in Room 2109, telephone 760-355-6310.

## **Student Rights and Responsibilities**

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities please refer to the IVC General Catalog available online at

http://www.imperial.edu/index.php?option=com\_docman&task=doc\_download&gid=4516&Itemid=762

## **Information Literacy**

Imperial Valley College is dedicated to help students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at <a href="http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/">http://www.imperial.edu/courses-and-programs/divisions/arts-and-letters/library-department/info-lit-tutorials/</a>

# **Anticipated Class Schedule / Calendar**

| WEEK | DAY    | DATE | LECTURE                       | LABORATORY                                     |
|------|--------|------|-------------------------------|--|
| 1    | Mon.   | 1-4  |                               |  |
|      | Tues.  | 1-5  | Orientation; Cha. 1 Intro. To |  |
|      |        |      | A & P 12                      | Small human models & lg. torso models          |
|      | Wed.   | 1-6  | Cha. 2 Chemical Basis of      |  |
|      |        |      | Life 1 2 1                    | Same as 1-5                                    |
|      | Thurs. | 1-7  |                               | Microscopes, clean slides and cover slips. 50  |
|      |        |      |                               | ml of physiologic solution in each of 4        |
|      |        |      |                               | different. 50 ml of NaCl solution in each of 4 |
|      |        |      | Cha. 3 Cellular Form and      | beakers. Disposable pipets. Lancets. All       |
|      |        |      | Function 2 1 2                | previous labs. Cell Posters                    |
|      | Fri.   | 1-8  | Exam and Lab Practical 1      | All previous lab models and posters            |
|      |        |      |                               |  |
| 2    | Mon.   | 1-11 | Cha. 4 Genetics and Cellular  |  |
|      |        |      | Function 1 2 1                | Computers                                      |
|      | Tues.  | 1-12 |                               | Computers & Prepared slides: Connective        |
|      |        |      | Cha. 5 Histology 2 1 2        | tissue (Areolar, Adipose, Reticular, Dense     |

|   | Wed.   | 1-13 | Cha. 5 Histology 1 2 2                               | Regular, Dense Irregular, Elastic, Hyaline Cartilage, Fibrocartilage, Elastic Cartilage, Bone tissue, Blood, Lymph; Epithelial Tissue: Simple epithelium (squamous, cuboidal, columnar), Stratified epithelium (squamous, cuboidal, columnar), Glandular epithelium, Mucus epithelium; Nervous Tissue: Neuron Smears; Muscle Tissue: Cardiac, Smooth, Skeletal. Posters of Animal cells and Tissues Same as 1-12 |
|---|--------|------|--|--|
|   | Thurs. | 1-14 | Cha. 6 Integumentary                                 | oame do 1 12   |
|   |        |      | System 1 2 2   | Skin models and everything from 1-13   |
|   | Fri.   | 1-15 | Exam and Lab Practical 2                             | Everything from 1-14   |
|   |        |      |  |  |
| 3 | Mon.   | 1-18 | HOLIDAY MLK  | HOLIDAY MLK  |
|   | Tues.  | 1-19 | Cha. 7 Bone Tissue & Cha 8<br>Axial Skeleton 121     | Skin models, Bone tissue models, skulls, bone boxes, skeletons (big and small), joint models, bone tissue slides & and all skin models and slides  |
|   | Wed.   | 1-20 | Cha. 8 Appendicular<br>Skeleton 2 1 2                | Same as 1-19   |
|   | Thurs. | 1-21 | Cha. 9 Joints 122                                    | Same as 1-20   |
|   | Fri.   | 1-22 | Exam and Lab Practical 3                             | Same as 1-21   |
| 4 | Mon.   | 1-25 | Cha. 11 Muscle Tissue & Cha<br>10 Muscle Systems 121 | All muscle models, and slides  |
|   | Tues.  | 1-26 | Cha. 11 Muscle Tissue (Pt. 2) 2 1 2                  | Same as 1-25   |
|   | Wed.   | 1-27 | Cha. 12 Nervous Tissue 121                           | Same as 1-26 AND All neuron and nervous system models & slides   |
|   | Thurs. | 1-28 | Cha 13 Spinal Cord 212                               | Same as 1-27   |
|   | Fri.   | 1-29 | Exam and Lab Practical 4                             | Same as 1-28   |
|   |        |      |  |  |
| 5 | Mon.   | 2-1  | Cha. 14 Brain 1 2 1                                  | All brain and spinal cord models   |
|   | Tues.  | 2-2  | Cha 15 ANS 2 1 2                                     | Same as 2-1  |
|   | Wed.   | 2-3  | Cha. 16 Sensory Organs 1<br>2 1                      | Same as 2-2 AND all sensory models   |
|   | Thurs. | 2-4  | Review   | Same as 2-3  |
|   | Fri.   | 2-5  | Exam and Lab Practical 5                             | Same as 2-4  |