Basic Course Information

Semester:	**Spring 2017**	Instructor Name:	**Dr. Jia Sun**
Course Title & #:	**Human Physiology – BIOL 206**	Email:	**jia.sun@imperial.edu**
CRN #:	**20045**	Webpage (optional):	**NA**
Classroom:	**2737**	Office #:	**2778**
Class Dates:	**2/13/17 – 6/09/17**	Office Hours:	**MW 5:15PM-6:25PM TR 1PM-1:50PM**
Class Days:	**TR**	Office Phone #:	**(760) 355-6521**
Class Times:	**8:30AM-9:35AM 9:40AM-12:45PM**	Emergency Contact:	**jia.sun@imperial.edu**
Units:	**4**		

Course Description

Lecture and laboratory course designed to introduce the function of the human body from cellular through organ system levels of organization. Emphasis will be on integration of body systems and interrelationships for maintaining homeostasis. The practical applications of the basic concepts are presented. This course may require the use of human cadavers for observation and/or dissection. (CSU) (UC credit limited. See a counselor.)

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. Conduct and analyze an electroencephalogram, electromyogram, or electrocardiogram performed on another person. (ILO 1,2)
2. Conduct and interpret the results of a urinalysis (ILO 1,2)
3. Demonstrate understanding about the physiology associated with cells, tissues, organs, or organ systems (ILO 1,2)

Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Describe homeostasis and the mechanisms to maintain homeostasis.
2. Discuss the chemical aspect of the human body.
3. Describe cell structure and function.
4. Discuss control of enzyme activity and bioenergetics.
5. List nervous system divisions and components and describe their basic functions.
6. Discuss the special senses and their nervous control.
7. Discuss the function of the endocrine system and major regulation hormones, especially the hormones of the anterior pituitary.
8. Discuss muscle function and understand the similarities and differences between different muscle types.
9. Discuss the regulation and functions of the cardiovascular system.
10. Describe the mechanism immunity.
11. Describe the functions of the respiratory system and the environmental effects.
12. Describe the kidney function and urine formation.
13. Distinguish between physical and chemical digestion and describe the functions of the digestive tract and accessory digestive organs.

14. Describe the male and female reproductive physiology and the female cyclic changes.
15. Demonstrate knowledge of metabolic and physiological disorders of the major organ systems
16. Demonstrate an understanding of the scientific method, experimental design, and the philosophy of science by applying the scientific method to physiological experiments.

Textbooks & Other Resources or Links

Sherwood, L. 2016. *Human Physiology: From Cells to Systems,* 9th Ed. Brooks/Cole Cengage Learning. Belmont, CA
ISBN: 978-1-285-86693-2

Course Requirements and Instructional Methods

This is an intensive lecture/lab course. Students will be called on to answer questions during lectures. Students will utilize the textbook, labs, models, and computer software in the course. Students will be assessed using exams, iClicker questions, and lab assignments.

Exams:
The course includes four (4) equally-weighted exams, the exams will include materials covered both in lecture and lab. While the exams may not be fully cumulative; no concept in biology is truly independent, so each might require knowledge of previously covered material.

iClicker Questions:
Every class session includes iClicker questions that students will answer in class based on the lecture given. Each correct answer will be worth one (1) point. Although more than 50 questions will be given over the semester, a total of 50 points can be earned from answering these questions

Labs:
While concepts from all labs assigned in class will be present during exams, ten (10) individual labs will be graded at the end of the day that they are assigned, before students leave the class. The specific labs that will be graded will not be announced beforehand to encourage attendance to all labs.

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.

THE LAST DAY TO DROP THE COURSE WITH A 'W' IS 5/13

Course Grading Based on Course Objectives

Exams	4 x 125pts	500pts
iClicker Questions	50**+** x 1pt	50pts
Labs	10 x 10pts	100pts
		650pts

The Following grade cutoffs are guaranteed:
A: ≥ 90%; B: ≥ 80%; C: ≥ 70%; D: ≥ 60%

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.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

Classroom Etiquette

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- Food and Drink are prohibited in all classrooms. Water bottles with lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed by the instructor.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- Children in the classroom: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Academic Honesty

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- Plagiarism is taking and presenting 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 "cite a source" correctly, you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing 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 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) using a commercial term paper service.

Additional Student Services

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- **Blackboard Support Site.** The Blackboard Support Site provides a variety of support channels available to students 24 hours per day.
- **Learning Services.** There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your Campus Map for the Math Lab; Reading, Writing & Language Labs; and the Study Skills Center.
- **Library Services**. There is more to our library than just books. You have access to tutors in the Study Skills 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. The DSP&S office is located in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodations.

Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

- **Student Health Center**. A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC Student Health Center at 760-355-6128 in Room 1536 for more information.
- **Mental Health Counseling Services**. Short-term individual, couples, family, and group therapy are provided to currently enrolled students. Contact the IVC Mental Health Counseling Services at 760-355-6196 in Room 2109 for more information.

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and to due process of law. For more information regarding student rights and responsibilities, please refer to the IVC General Catalog.

Information Literacy

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC Library Department provides numerous Information Literacy Tutorials to assist students in this endeavor

Anticipated Class Schedule/Calendar ***Tentative, subject to change without prior notice***

WK	DATE	LECTURE	LABORATORY
1	2/14	Introduction to Physiology (1)	
	2/16	Introduction to Physiology (1)	
2	2/21	Chemistry of Life (appendix A)	
	2/23	Cell Physiology (2)	
3	2/28	Plasma Membrane & Membrane Potential (2&3)	Interactive Physiology (IP)
	3/2	Mitosis & Meiosis	*Exam Q&A*
4	3/7	**EXAM 1**	
	3/9	Neurons (4)	IP
5	3/14	Central Nervous System (5)	
	3/16	Peripheral Nervous System: Afferent Division (6)	Sensory Stimuli
6	3/21	Peripheral Nervous System: Efferent Division (7)	IP
	3/23	Muscle Physiology (8)	IP
7	3/28	Muscle Physiology (8)	*Exam Q&A*
	3/30	**EXAM 2**	
8	4/4	Cardiac Physiology (9)	IP
	4/6	Cardiac Physiology (9)	
9	4/11	Blood Vessels & Blood Pressure (10)	Sphygmomanometers & Stethoscopes
	4/13	Blood (11)	IP
SPRING BREAK (4/16-4/22)			
10	4/25	Immunity (12)	Blood Typing
	4/27	Immunity (12)	IP
11	5/2	Respiratory System (13)	IP
	5/4	Respiratory System (13)	*Exam Q&A*
12	5/9	**EXAM 3**	
	5/11	Urinary System (14) **LAST DAY TO DROP W/ 'W' 5/13**	IP
13	5/16	Urinary System (14)	Urinalysis
	5/18	Digestive System (16)	
14	5/23	Digestive System (16)	IP
	5/25	Endocrine System: Central Glands (18)	
15	5/30	Endocrine System: Peripheral Glands (19)	IP
	6/1	Male Reproductive Physiology (20)	
16	6/6	Female Reproductive Physiology (20)	*Exam Q&A*
	6/8	**EXAM 4**	