Basic Course Information

		Instructor	
Semester:	Spring 2022	Name:	SETAREH MADANI
Course Title &	Human Physiology		
#:	- BIOL206	Email:	Setareh.madani@imperial.edu
		Webpage	
CRN #:	20589	(optional):	http://www.imperial.edu/students/canvas
			Room # 2779 Online Via Zoom:
Classroom:	2737	Office #:	https://cccconfer.zoom.us/j/6512389098
	2/14/2022 -		Online via Zoom:
Class Dates:	6/10/2022	Office Hours:	MW 2 - 3 PM, TR 9:35 - 10:35 am
Class Days:	TR		
		Office Phone #:	760 355 6148
Class Times:	2:40 – 3:45 pm	Emergency	Department Secretary
	3:55 – 7:05 pm	Contact:	760 355 6155
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. (C-ID BIOL 120 B) (CSU) (UC credit limited. See a counselor.)

Course Prerequisites

CHEM 100 and BIOL 204 with grades of "C" or better, OR

Appropriate placement as defined by AB705, OR

MATH 098 or MATH 091, with a grade of "C" or better, and current California LVN or RN 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. Conduct and interpret the results from a urinalysis and an electroencephalogram/ electromyogram/ electrocardiogram. (ILO 1, 2)
- 2. 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. Cengage. ISBN: 9781285866932

J. G. Betts et al. *Anatomy and Physiology* OpenStax, ISBN: 9781938168130. This is an OER textbook and digital access to this textbook is free: <u>https://openstax.org/details/books/anatomy-and-physiology</u>

* **Registration with Achieve website** via Canvas is required to do some parts of your assignments online – requires credit card.

Course Requirements and Instructional Methods

This is an intensive lecture/lab course. Teaching will be aided with the use of PowerPoint slides based on the materials derived from the textbook and other sources. Videos, simulated labs, and question sets will be used as well. Students will need to register to Sapling learning to complete the weekly assignments. There will also be simulated labs to accomplish, and discussions to participate.

EXAMS:

There will be <u>five equally weighted **cumulative** exams</u> with multiple-choice questions, true or false, and assay questions. Each of these exams will be worth <u>50</u> points. It will provide you with <u>250</u> possible points.

<u>Final exam</u> will also be **cumulative**, and in two parts, each with <u>50</u> possible points to take. Part one of the final exam will cover the first half of the course material, with 50 possible points, and part two will cover the second half of the course material, with 50 possible points. You will get study guides for both parts of the final exam to know which areas of each chapter you need to review for the exam.

Weekly assignments, including sapling question sets, simulated labs, and discussions will have 300 possible points to take. You will get detailed instructions on what you need to do over the each week to get the full credit for the week. The instructions will be posted on Canvas as weekly announcements.

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

Total				650pts			
Weekly assignments, including question sets, simulated labs, etc 10 x 30 pts							
Final Exam (cumulative) in		0 pts	100 pts				
5 Equally weighted Cumulative Exams							
sessions;							
Final grade will be assigned	d based on the total p	oints that a student earns in	both lecture	and laboratory			

Attendance

- A student who fails to attend the first meeting of a class or does not complete the first week assignment(s) 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, only students enrolled in the class may attend; children are not allowed.

How do I act differently if I have an on-ground class during COVID?

- 1. DO NOT COME TO CAMPUS OR ATTEND AN OFF-CAMPUS CLASS IF YOU FEEL SICK, HAVE A FEVER, OR HAVE A COUGH
 - a. Even if your symptoms are mild, stay home.

- b. Email your instructor to explain why you are missing class.
- c. <u>If you are sick with COVID-19 or think you might have COVID-19</u>, provides CDC guidance.
- d. If you have tested positive for COVID-19, you must self-quarantine for 14 days and then be without symptoms for at least 72 hours. Clearance is required prior to returning to any face-to-face interaction. It is recommended that you undergo a final COVID-19 test to confirm that you are no longer infected.
- e. If you are exposed through direct contact with a person known to be COVID-19 positive, then you must submit negative COVID-19 test results prior to returning to any face-to-face interaction.

2. ARRIVE AT CAMPUS EARLY (at least 15 minutes early is advised).

a. All people entering the IVC campus will need to pass a screening process, which will occur at the gates as your drive onto campus. You will need to take a short questionnaire and get your temperature taken (the screening is completely touchless and will take place while you remain in your car).

3. BRING A MASK TO CLASS (and always wear it).

a. Be sure that your mask covers both your nose and mouth. If your mask is cloth, then wash it each day. If your mask is disposable, then use a new one each day.

4. GO DIRECTLY TO YOUR CLASSROOM.

a. The IVC campus is mostly closed so you should not visit other areas or seek any face-to-face services. Services are available to students online and can be accessed through <u>www.imperial.edu</u>.

5. WASH YOUR HANDS FREQUENTLY (and use the provided sanitation supplies).

a. Your classroom is equipped with cleaning supplies. Use them as needed.

6. BE SURE TO SOCIAL DISTANCE (stay at least 6 feet from other).

a. The number of students in a classroom at any one time is very limited so you have plenty of space to spread and ensure that you stay at least 6 feet from others.

Online Netiquette

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

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.

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Additional Services for Students

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.

- CANVAS LMS. Canvas is Imperial Valley College's main Learning Management System. To log onto Canvas, use this link: Canvas Student Login. The Canvas Student Guides Site provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.
- Learning Services. In order to accommodate students and maximize student success during the COVID-19 Pandemic, all tutoring support is being provided through one Zoom link (<u>IVC online</u> <u>Tutoring</u>). When campus is open again, there are several learning labs to assist students. Whether you need support using computers, or you need a tutor, please consult your <u>Campus Map</u> for the <u>Math Lab</u>; <u>Reading, Writing & Language Labs</u>; and the <u>Study Skills Center</u>.
- <u>Library Services</u>. Visit the Spencer Library's page on the IVC website for a wealth of valuable resources and online access to databases, e-books and more. Contact us so we can help you with instructional and research development skills (for those conducting research and writing academic papers). When campus re-opens, students also have access to tutoring services in the Study Skills Center as well as private study rooms for small study groups. There is more to our library than just books!
- <u>Career Services Center</u>. The Career Services Center is dedicated to serve all IVC students and Alumni. Services include Career Assessments, Resume and Cover Letter Assistance, Interview Preparation, Internship Opportunities and Job Placement.

• <u>Child Development Center</u>. The Preschool and Infant/Toddler Centers are on-campus demonstration lab programs that meet the educational, research, and service needs of the institution and community at large. The Preschool program (children three to five years of age) and the Infant/Toddler program (newborn to three years of age) is in buildings 2200 and 2300. Service is available to families who meet the California Department of Education qualifications for enrollment. <u>The centers are open during COVID</u> from Monday-Friday 7:15-5:30. Breakfast, lunch and snack are provided through the California Adult and Child Food Program. Location: Buildings 2200 and 2300. Phone: (760) 355-6232. Application: <u>https://forms.imperial.edu/view.php?id=150958</u>

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. When campus is open, 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, <u>but you must make an appointment</u>. 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, or when campus reopens, visit Room 1536 for more information.
- Mental Health Counseling Services. Short-term individual, couples, family and group counseling services are available for currently enrolled students. Services are provided in a confidential, supportive, and culturally sensitive environment. Please contact the IVC Mental Health Counseling Services at 760-355-6310 for appointments, or when campus reopens, visit Room 1536 for more information.

Veteran's Center

The mission of the IVC Military and Veteran Success Center is to provide a holistic approach to serving military/veteran students in three key areas: 1) Academics, 2) Health and Wellness, and 3) Camaraderie. The Center also serves as a central hub that connects military/veteran students, as well as their families, to campus and community resources. The goal is to ensure a seamless transition from military to civilian life. When campus reopens, the Center is in Building 600 (Office 624), telephone 760-355-6141.

Extended Opportunity Program and Services (EOPS)

The Extended Opportunity Program and Services (EOPS) offers services such as priority registration, book grants, transportation assistance, individualized counseling, tutoring, and community referrals to eligible students. Our staff is available to assist and support students in navigating personal, psychological, academic, and/or career-related issues through empathy, cultural-competence, and a commitment to equity and social justice. Also under the umbrella of EOPS is the CARE (Cooperative Agency Resources for Education) Program, designed to serve single parents and assist with addressing issues that are particular to this population. Students that are single parents receiving TANF/Cash Aid assistance may qualify for our CARE program. For additional information about the EOPS or CARE Programs please contact our Program Office 760.335-6407 and/or visit our Program website <u>www.imperial.edu/students/eops</u> for eligibility criteria and application procedures. We look forward to serving you! - EOPS/CARE Staff

Student Equity Program

The Student Equity & Achievement Program strives to improve Imperial Valley College's success outcomes, particularly for students who have been historically underrepresented and underserved. The college identifies strategies to monitor and address equity issues, making efforts to mitigate any disproportionate impact on student success and achievement. Our institutional data provides insight surrounding student populations who historically, are not fully represented. SEA addresses disparities and/or disproportionate impact in student success across disaggregated student equity groups including gender, ethnicity, disability status, financial need, LGBTQIA+, Veterans, foster youth, homelessness, and formerly incarcerated students. The SEA Program also houses IVC's Homeless Liaison, Foster Youth Liaison, Formerly Incarcerated Liaison, and Military Affiliated Liaison, who provide direct services and referrals to students in need. SEA strives to empower students experiencing insecurities related to food, housing, transportation, textbooks, and shower access. We recognize that students who struggle meeting their basic needs are also at an academic and economic disadvantage, creating barriers to academic success and wellness. We strive to remove barriers that affect IVC students' access to enrollment, education, degree and certificate completion, and the ability to transfer to a university. SEA also provides outreach at local Imperial County high schools to ensure graduating seniors are successfully matriculated into the college and have a strong support system. Please visit us online for assistance at https://imperial.edu/students/student-equity-and-achievement/ or call us at 760-355-6465 or when campus reopens, visit Building 401.

What if I cannot afford food, books, or need other help?

We have many resources that are available to you. Please tell us what you need by submitting your request(s) here: <u>https://imperial.edu/students/student-equity-and-achievement/</u>

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.

IMPORTANT DATES/DEADLINES TO REMEMBER:

February 26: Deadline to register for full term courses.

Deadline to drop full term courses and be eligible for a refund.

- **February 27**: Deadline to drop without receiving a W on transcript, no refund.
- May 14: Deadline to drop full term courses (with a W and with no refund.)

Anticipated Class Schedule/Calendar

Week & Date	Lecture	Laboratory		
Week 1	Introduction, Syllabus	Refer to Announcement		
Feb 14 – 18	Ch. 1: An Introduction to Physiology. Chemistry of Life	week 1 on Canvas page		
Week 2	Monday, Feb 21: Washington's Day/No Classes			
Feb 22 – 25	Cell Physiology: Ch. 2	Refer to Announcement		
	Plasma membrane and membrane potential: Ch. 3	week 2 on Canvas page		
Week 3	Plasma membrane and membrane potential: Ch. 3	Refer to Announcement		
Feb 28 – Mar 4	Principles of neural and hormonal communication: Ch. 4	week 3 on Canvas page		
Week 4	<u>Tuesday, March 8: Exam 1 (</u> Chapters 1, 2, 3, 4)	Refer to Announcement		
Mar 7 – 11	Central Nervous System: Ch. 5	week 4 on Canvas page		
Week 5	Peripheral Nervous System: Afferent Division; Ch. 6	Refer to Announcement		
Mar 14 – 18		week 5 on Canvas page		
Week 6	Peripheral Nervous System: Efferent Division; Ch. 7	Refer to Announcement		
Mar 21 – 25	Endocrine System: Ch. 18 & 19, part 1	week 6 on Canvas page		
Week 7	Endocrine System, part 2	Refer to Announcement		
Mar 28 – Apr 1	Muscle Physiology: Ch. 8, part 1	week 7 on Canvas page		
Week 8	Tue, April 5: Exam 2 (refer to the study guide.)	Refer to Announcement		
Apr 4 – 8	Muscle Physiology: Ch. 8, part 2	week 8 on Canvas page		
Week 9	Cardiac Physiology: Ch. 9	Refer to Announcement		
Apr 11 – 15	Blood Vessels and Blood Pressure; Ch. 10	week 9 on Canvas page		
	April 18 – 23: SPRING RECESS			
Week 10	Tue, April 26: EXAM 3 (refer to the study guide.)	Refer to Announcement		
Apr 25 – 29	Blood; Ch. 11, Immunity; Ch. 12	week 10 on Canvas page		
Week 11	Respiratory System; Ch. 13	Refer to Announcement		
May 2 – 6	Urinary System: Ch. 14	week 11 on Canvas page		
Week 12	<u>Tuesday, May 10: EXAM 4</u> (Refer to the study guide.)	Refer to Announcement		
May 9 – 13	Fluid and Acid-Base Balance: Ch. 15	week 12 on Canvas page		
Week 13	Digestive System: Ch. 16	Refer to Announcement		
May 16 - 20		week 13 on Canvas page		
Week 14	Energy Balance: Ch. 17	Refer to Announcement		
May 23 – 27	Thursday, May 26: EXAM 5 (Refer to the study guide.)	week 14 on Canvas page		
Week 15	Monday, May 30: Memorial Day, No Classes			
May 31 – Jun 3	Reproductive System: Ch. 20	Refer to Announcement		
	Homeostasis and organ systems' interrelationships	week 15 on Canvas page		
Week 16	FINAL EXAM, part 1			
Jun 6 – 10	FINAL EXAM, part 2			

Tentative, subject to change without prior notice. Students will be informed