BSC 527.01W HUMAN PHYSIOLOGY (CRN: 51461)

COURSE SYLLABUS: Summer II

Online Lecture Schedule*: **TR, 6:00-7:30 PM**
Zoom Meeting in D2L Bright Space

*This schedule is subject to change after consultation with the students. If you are unable to attend the class at the given times, the recorded lectures will be available in the D2L course website after the virtual class, although you will be responsible for learning the course materials covered in the virtual lectures.

INSTRUCTOR INFORMATION

Instructor: Izhar Khan
Office Location: STC 215
Office Hours: In Zoom meetings, or via email when needed
Office Phone: 903-468-3271
University Email Address: izhar.khan@tamuc.edu
Preferred Form of Communication: Email
Communication Response Time: 24 hours

COURSE INFORMATION

Materials – Textbooks, Readings, Supplementary Readings

Textbook: Human Physiology: An Integrated Approach, 8th Edition, 2018, Dee Unglaub Silverthorn. Loose Leaf – ISBN-13: 9780134704203; eText – ISBN-13: 9780135212905.

Course Description

The purpose of this online course in human physiology is to help graduate-level students, especially those who are current instructors of biology or a related discipline to acquire a deeper understanding of the fundamental organization and functions of each of several major organ systems and their integration by the nervous and endocrine systems. Students are expected to learn the basic principles and concepts of human physiology both at the molecular and cellular levels, to learn to reason scientifically, and to understand and describe the cooperative function of multiple organ systems

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in the human body. The emphasis is on understanding mechanisms rather than on memorizing details, but sufficient detail must be included to serve as a basis for later understanding of abnormal function and its consequences in disease states and for understanding rational therapy with drugs and other interventions.

Student Learning Outcomes

Students completing this course will be able to:

1. Explain physiological mechanisms by applying basic principles of physics and chemistry.

2. Describe the fundamental mechanisms underlying normal function of cells, tissues, organs, and organ systems of the human body.

3. Explain the basic mechanisms of homeostasis by integrating the functions of cells, tissues, organs, and organ systems.

4. Apply knowledge of functional mechanisms and their regulation to explain the pathophysiology underlying common diseases.

5. Effectively solve basic problems in physiology and pathophysiology, working independently and in groups if possible.

6. Identify and utilize appropriate reference resources to clarify and expand knowledge of physiology and pathophysiology.

In addition to the SLOs listed above, the students will be expected to synthesize a mini-review paper on a selected topic in physiology or pathophysiology to help improve their scientific writing skills.

COURSE REQUIREMENTS

Minimal Technical Skills Needed
- Proficiency in using the D2L Brightspace Learning Management System in myLeo Online
- Microsoft Word, Excel, and PowerPoint
- Other relevant graphics programs for preparing effective PowerPoint presentations

Instructional Methods

This course is being offered as a "Web Based" course. Check the course website in D2L Brightspace (D2L) frequently for announcements, instructions, and discussions. The course consists of a series of activities and assessments to assist you in achieving the outcomes for all instructional units. In case of any difficulty in accessing or

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understanding any course material, contact me immediately via e-mail. For successful course completion, your active and timely participation is essential. Students should go over the lecture materials, and complete all assignments and tests on regular basis prior to the due date for each assessment. The course website is active 24/7 during the semester.

- Students are expected to read the assigned textbook chapters and lecture files, and comply with the deadlines for all the assignments, quizzes and exams
- PDF files of all lectures will be available on the Content page of the course website in D2L
- All announcements will be posted on the home page of the course for reminders of important due dates
- Exam access will be available only during the pre-announced period of time
- Progress in the class can be monitored using the Grades tab on the course website in D2L

Student Responsibilities or Tips for Success in the Course

- Dedicated study time each week to go over the materials covered in the class and the information in the relevant book chapter(s)
- Regularly checking both *my*LEO Online (D2L) and emails for course related announcements
- Submitting assignments before the deadlines

GRADING

Final grades in this course will be based on the following scale:

A = 89.5%-100%
B = 79.5%-89.4%
C = 69.5%-79.4%
D = 59.5%-69.4%
F = Below 59.5%

Assessments

Three quizzes = 100 points
One mid-term exam = 100 points
One cumulative final exam = 100 points
Writing assignment: Research paper = 100 points
- Topic selection: 10 points
- Introduction and literature citations: 30 points
- Final paper: 60 points
Total = 400 points

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TECHNOLOGY REQUIREMENTS

Browser support

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

Desktop Support

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A

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Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Apple® Safari®	Latest	N/A

Tablet and Mobile Support

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or **point** release of that major version) and the previous major version of iOS (the latest minor or **point** release of that major version). For example, as of June 7, 2017, D2Lsupports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version. Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome, Firefox	Latest of all browsers, and Firefox ESR.

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
    - 512 MB of RAM, 1 GB or more preferred
    - Broadband connection required courses are heavily video intensive
    - Video display capable of high-color 16-bit display 1024 x 768 or higher resolution

- **For YouSeeU Sync Meeting sessions _8 Mbps_ is required.** Additional system requirements found here: https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements

- You must have a:
    - Sound card, which is usually integrated into your desktop or laptop computer
    - Speakers or headphones.

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- o *For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.

- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine. At a minimum Java 7, update 51, is required to support the learning management system. The most current version of Java can be downloaded at: JAVA web site http://www.java.com/en/download/manual.jsp

- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.
    Pop-ups are allowed.
    JavaScript is enabled.
    Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
  - o Adobe Reader https://get.adobe.com/reader/
  - o Adobe Flash Player *(version 17 or later)* https://get.adobe.com/flashplayer/
  - o Adobe Shockwave Player https://get.adobe.com/shockwave/
  - o Apple Quick Time http://www.apple.com/quicktime/download/

- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

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COMMUNICATION AND SUPPORT

Brightspace Support

Need Help?
Student Support

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the **Live Chat** or click on the words "click here" to submit an issue via email.

System Maintenance

D2L runs monthly updates during the last week of the month, usually on Wednesday. The system should remain up during this time unless otherwise specified in an announcement. You may experience minimal impacts to performance and/or look and feel of the environment.

Interaction with Instructor Statement

The grading of the assignments, quizzes, and exams will be completed within 1-5 days depending on the length of the assignment or test. In most cases the grading will be completed within 24 hours and the questions will be discussed during the next class period. Students are encouraged to make an appointment with the instructor outside the office hours to discuss any issue related to the course individually or in groups.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Quizzes and Exams: Quizzes and exams consist of multiple-choice, fill in the blanks, and short answer type questions, and will be taken in the course website in D2L during a designated period specified in the schedule at the end of the syllabus. Any changes to the schedule will be notified in advance by email and the syllabus file will be updated accordingly in the D2L course website.

Writing Assignments
Each student will write a research paper on a selected topic providing a brief overview of the research topic within the field of human physiology and/or pathophysiology (100 points). The first assignment related to the research paper will be topic selection (10 points), followed by the second assignment to complete an Introduction of the research paper (20 points) and relevant citations (10 points). The final research paper should contain approximately 10 pages text, excluding references and any tables and/or figures

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used. Each paper (60 points) should include the following sections (maximum points for each section in parenthesis):

- Abstract (10 points)
- Introduction (10 points)
- Results and Discussion: Divided into multiple subheadings (30 points)
- References: 10-20 relevant references that form the basis of your research overview paper, at least half of which should be original research articles published in peer-reviewed scientific journals (10 points).

Attendance and Absences: Although there is no attendance requirement for this online course, you are expected to complete assignments and take the tests as scheduled. You are also responsible for all information covered in the virtual classes.

Makeup Policy: The student is responsible for requesting a makeup when they are unable to attend the regularly scheduled examination and must schedule the makeup within 2 days of the absence. Makeup exams will be scheduled only in the event of an EXCUSED absence (as defined in the Student's Guidebook). If the test is not made-up, the student will receive a zero for that exam.

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.
http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette
http://www.albion.com/netiquette/corerules.html

TAMUC Attendance

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.
http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

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Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](http://www.tamuc.edu)

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

[Graduate Student Academic Dishonesty 13.99.99.R0.10](http://www.tamuc.edu)

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

ADA Statement

Students with Disabilities

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce
Gee Library- Room 162
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who

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have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:
http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

COURSE OUTLINE/CALENDAR (Jul 11th to Aug 11th)*

Week 1 (Jul 11-15)	07_Introduction to the endocrine system 22_Metabolism and energy balance 23_Endocrine control of growth and metabolism
July 15th *Jul 16th & 17th*	*Topic Selection: Research review paper* **Quiz 1 (Ch: 07, 22, & 23)**
Week 2 (Jul 18-22)	08_Neurons: Cellular and Network Properties 09_The Central Nervous System 11_Efferent Division: Autonomic and Somatic Motor Control
Jul 23rd & 24th	**Quiz 2 (Ch: 08, 09, & 11)**
Week 3 (Jul 25-29)	12_Muscles 14_Cardiovascular Physiology 16_Blood
June 25th & 26th	**Exam 1 (Ch: 07, 22, 23, 08, 09, 11, & 12)**
Week 4 (Aug 1-5)	17_Mechanics of Breathing 19_The Kidneys 21_The Digestive System

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Aug 5th	***Introduction and Citations assignment due***
Aug 6th & 7th	**Quiz 3 (Ch: 14, 16, & 17)**
Week 5 (Aug 8-11)	24_The Immune System 26_Reproduction and Development
Aug 11th	**Final research paper due**
Aug 12th & 13th	**Exam 2 (Final) – Cumulative (50% old questions & 50% from chapters covered after the mid-term exam)**

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