Biology 3301 - Cell Physiology Syllabus - Spring 2017

Instructor

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TAs

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Class Room and Hours LS 119 MWF 10 AM – 10:50 AM

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Course Overview

Cell Physiology (BIOL 3301) is an upper-level biology course, and I assume that you are starting this class with a basic understanding of biology and chemistry concepts, including organelles, transcription, translation, amino acid and protein structure, and cell energetics. Lectures and test questions are based on the expectation that students already possess this prerequisite knowledge. We will move quickly through the course material; the better prepared you are, the better you will do. This course is structured in a "flipped" fashion - i.e., you will study and learn basic course material, at home, *before* coming to class, thus freeing lecture time to discuss real-life applications and explain upper-level concepts.

Although the pace of this course will be fast, research has shown that cramming large quantities of material has many detriments, and actually inhibits students from learning. My approach will be to cover information with less detail, but in more illustrative, engaging, and active ways, so that you experience - - and hopefully become fascinated with - - the course content on a more personal, meaningful level. I teach using modern pedagogy methods, including active learning, implementation of higher order thinking skills (HOTS), and the use of online resources.

The concept of communicating complex scientific information in a way that could be understood by a person who may not have a strong science background is a major theme in this course. Students will be expected to write in a similar fashion.

In addition to studying from your textbook and lecture notes, you will complete two projects and take four exams (including a comprehensive final). Take-home quizzes will usually be handed out, in class, on Fridays, and collected the following Monday. Attendance is required and will count toward your final grade.

Cell phones and laptops are not allowed during lecture.

Student Learning Outcomes

After completing this course, students should possess, and therefore will be tested for, the following knowledge, skills, and attitudes. Students will be able to:

1. Describe the fundamental physiological mechanisms of cell function.

2. Know the scientific methods that are currently being used to explore cell physiology.

3. Read graphs, analyze simple data sets, and draw practical conclusions.

4. Creatively present knowledge acquired in class in the form of infographics; new, original text; pictures; or other forms of creative expression.

5. Use the knowledge acquired in class to independently analyze and explain real life situations, including disease predispositions, diet plans, etc., and to come up with novel solutions to problems. (You don't have to be correct; you just need to have an idea.)6. Reach for - and evaluate the merits of - appropriate external sources when answering questions.

Recommended Reading

As the field of cellular physiology is relatively free of controversy, it is possible to use any number of texts to acquire the necessary knowledge required for this course; all texts

should agree on the points presented. As such, a specific textbook is not required, but is certainly recommended. The required pre-class readings will be assigned as "topics with which to be familiar," rather than as specific pages from a required textbook.

Class Schedule

As the instructor, I reserve the right to adjust the class schedule in any way that serves the educational needs of the students enrolled in this course. The most current schedule will be available via Blackboard.

Expectations for Out-of-Class Study

For every credit hour earned, a student should spend three hours per week working outside of class. Therefore, beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional nine hours per week in course-related activities.

Grades

Course grades will be derived from weekly quizzes, three mid-term exams, two projects, a comprehensive final, and a score based on randomly checked class attendance.

Weekly quizzes will generally be handed out on Fridays, completed outside of class, and turned in the following Monday. Other quizzes - - including quizzes over the class syllabus or other required readings/viewings - - will be completed inclass and may be given without prior announcement. Not all quizzes will be weighted equally.

Mid-term exams will be administered in class and will not include a multiple choice format. Makeup exams will be given only in exceptional circumstances, which must be communicated to the TA/instructor before the exam is taken, not after an unsatisfactory grade has been earned. There will be no exceptions to this policy. If you think you have exceptional circumstances, communicate with us first; do not attempt to take the exam.

A substantial part of your grade comes from a project involving higher order thinking skills (HOTS). Information on Bloom's taxonomy of learning skills will be given in class and e-mailed to you. The HOTS Project will take 40+ hours and will be graded thoroughly. Please, plan accordingly.

Attendance at lectures is required for success in this course. Attendance will be taken multiple times during the semester, and a composite score given. Please be aware that lectures may cover material that is not included in the assigned readings.

Quizzes	100 points
Exam 1	100 points
Exam 2	100 points
Exam 3	100 points
GAP Project	100 points
HOTS Project	150 points
Comprehensive Final	150 points
TOTAL	800 points
Attendance Score	40 points

Grades: A = 720 - 840 points; B = 640 - 719 points; C = 560 - 639 points; D = 480 - 559 points; F = 479 or fewer points. There are an extra 120 points available to students than are required for an A. There will be no curving, grade replacement, dropping of lowest exam, or other grace system.

Students are expected to keep track of their performance throughout the semester and seek guidance from available sources - - including the teaching assistant and the instructor - - if their performance drops below satisfactory levels. A grade of "incomplete" may be assigned for a course if, in the opinion of the instructor, there are extenuating, documented circumstances which prevent the student from completing the required work. The incomplete must be removed by the

end of the final examination period of the following semester, excluding the summer session, for the student to receive credit for the course. If the incomplete is not removed during the allotted time, it will revert automatically to an F.

Exam and Major Assignments Schedule

GAP Project due	Monday, February 13
Exam 1	Monday, February 20
Exam 2	Monday, March 27
HOTS Project due	Monday, April 3
Exam 3	Monday, April 24
Final Exam	Monday, May 8, 8-10:30 AM

Attendance

As the instructor of this course, I have decided to take attendance multiple times throughout the semester and will assign a composite score, based on attendance, that will contribute to the final grade. Further, there are several dates - - including January 25, February 8, and February 17 - - on which attendance is mandatory.

Lecture Recordings

Video recordings of lectures will be available for students to review. This tool can be used to supplement regular class attendance. A link to the uploaded video recordings will be emailed to you during the first few days of class.

Electronic communication

UTA has adopted the university email address as an official means of communication with students. Through the use of email, UTA is able to provide students with relevant and timely information, designed to facilitate student success. All students are assigned an email account and information about activating and using it is available at www.uta.edu/email. Students are responsible for checking their email regularly.

In previous semesters, the vast majority of emails from students either were answered with "Read your syllabus/class schedule/assignment instructions," or required a complex answer best delivered in person. To maximize the productivity of the instructors, students should only email Dr. Wilk and/or Clint for the following two reasons: 1. as a tool to set up a one-on-one meeting with Dr. Wilk and/or Clint, if the posted office hours conflict with your schedule. Use the subject line "meeting request." Your message should include at least two times when you would be available to meet, and a brief, one-sentence description of the reason for the meeting.

2. to alert Dr. Wilk and Clint of exceptional circumstances that will prevent you from completing a major assignment or test. Exceptional circumstances must be communicated to the TA/instructor before the exam is taken, not after an unsatisfactory grade has been earned. There will be no exceptions to this policy. If you think you have exceptional circumstances, communicate with us first; do not attempt to take the exam.

Emails sent for any other reason will not be considered or acknowledged. Grades and/or student's performance issues are not going to be discussed through email.

If email is deemed necessary, email <u>clint.hassell@mavs.uta.edu</u> from your official, UTA MavMail account first. This email account is checked often, but is not constantly monitored. Be patient; do not send duplicate emails. Be professional and courteous.

I strongly encourage you to ask questions about the syllabus and assignments during class time. For more in-depth discussions - such as guidance on assignments - please plan to meet in person. Our face-to-face conversations will both allow us to get to know each other better and foster a more collegial learning atmosphere.

Grade Grievances

Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current undergraduate catalog (http://catalog.uta.edu/academicregulations/grades/#undergraduatetext).

Drop Policy

Per university policy, students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. Students will not be automatically dropped for non-attendance. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<u>http://wweb.uta.edu/ses/fao</u>).

Disability Accomodations

The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including The Americans with Disabilities Act (ADA), The Americans with Disabilities Amendments Act (ADAA), and Section 504 of the Rehabilitation Act. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities (OSD). Students experiencing a range of conditions (physical, learning, chronic health, mental health, and sensory) that may cause diminished performance or other barriers to learning may seek services and of accommodations by contacting:

The Office for Students with Disabilities (OSD)	www.uta.edu/disability	817.272.3364
Counseling and Psychological Services (CAPS)	www.uta.edu/caps	817.272.3671

Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability, or by calling the Office for Students with Disabilities at 817.272.3364.

Title IX

The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit www.uta.edu/eos. For information regarding Title IX, visit www.uta.edu/titleIX.

Academic Integrity

It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. "Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Series 50101, Section 2.2).

All students enrolled in this course are expected to adhere to the UT Arlington Honor Code: I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

Instructors may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents' Rule 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct.

Students who violate the academic integrity policy will automatically receive a grade of "0" in the course.

Student Feedback Survey

At the end of each term, students enrolled in classes categorized as lecture, seminar, or laboratory shall be directed to complete a Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail, approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.

Final Review Week

A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances, and no instructor shall assign any themes, research problems, or exercises of similar scope that have a completion date during or following this week, unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Campus Carry

Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit http://www.uta.edu/news/info/campus-carry/.

Emergency Exit Procedures

Should we experience an emergency event that requires us to vacate the building, students should exit the room by moving toward the nearest exit. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation, and will make arrangements to assist handicapped individuals.

Student Support Services

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at http://www.uta.edu/universitycollege/resources/index.php.