

BSC 1005 Principles of Biology - Fall 2022

MWF 10:30-11:20 (CB2 106) 3 credit hours

Instructor: Dr. Matthew Tye In-person (BIO 301E) Office Hours: MWF 12:20-1PM

Communication: Webcourses Inbox (Zoom) Office Hours: By Appointment

& Announcements

Email: [Matthew.tye@ucf.edu](mailto:Matthew.tye@ucf.edu)

Student Learning Outcomes:

Academic Activity - Course Expectations:

To meet the registrar's requirement for documentation of your participation in this course, please complete the Course Expectations/Syllabus Quiz, found in our Webcourse Quiz section, by 5:00 pm Friday, August 26. Failure to do so will result in a delay in the disbursement of your financial aid.

All students will receive credit for completion of the Course Expectations/Syllabus Quiz.

Course website:

Course Grade: 40% = Best 2 out of 3 Lecture Exams (100 points/exam)

20%= Final Exam

20% = Online Quizzes

20% = Article Discussions

Students are responsible for keeping track of their own grades and identifying issues within 2 weeks of any grade posting in Webcourses.

Letter grades for the semester will be awarded according to the scale below. Letter grades will adhere to this percentage range with no exceptions. There will be no curving of final grades.

A = 90-100% B = 80-89% C = 70-79% D = 60-69% F = 59% and below

Lecture Exams: There will be 4 lecture exams (including the final), each worth 100 points. The lowest score of the 4 lecture exams will be dropped automatically.

Online Content: Each week there will be an online quiz and article posted. You will be responsible for completing the quiz and the discussion questions for the article by midnight Sunday of each week. Quizzes will have unlimited attempts.

Taking Exams:

Exam questions will be multiple choice. You will use scantrons provided by me.

You need to bring a #2 pencil and your UCF ID number to fill in the scantron.

You MUST show your UCF ID card to a proctor when you turn in your exam and scantron.

You may NOT use a phone or calculator during any exam.

If you arrive within 15 minutes after the start of an exam, you will be allowed to take the exam.

However, you must turn in the exam paper at the scheduled end of the exam period. You will not be allowed extra time unless a documentable emergency has occurred (see below).

Scantrons & exams will NOT be returned to students. Exam solution keys will be posted in Webcourses.

Any grade concerns must be resolved during office hours within 2 weeks of posting in Webcourses.

Excused Missed Exams:

If an exam is missed due to an official, documented, University-accepted absence, a make-up exam will be permitted. Excused absences include special curricular requirements (e.g. field trip, professional conference), official UCF business at which your presence is required (e.g.

university sponsored team event), U.S. Military-related business (e.g. Reserve Duty), legal obligation (e.g. jury duty).

You must provide documentation with your name and date affected 1 week prior to exam date. Students are responsible for arranging with me a time to take the makeup exam so that it is completed before exam solution keys are released to all students.

A make-up exam may be permitted if any other legitimate\* documented reason that circumstances beyond your control prevented you from taking the exam (including, but not limited to, your hospitalization, death in the immediate family)

Unexcused Missed Exams: If a student misses an exam for an unexcused event (e.g., forgetting there was an exam, arriving > 15 min late, vacations, family gatherings) or cannot provide acceptable documentation, then they will receive a zero grade for that exam. The first zero grade will be dropped as the lowest scoring exam. Any additional zero exam grades due to unexcused absences will count towards the course grade.

Classroom Conduct: Because of the challenges inherent with a class of this size, please be sure to

arrive and depart on time  
refrain from talking during class  
place cell phone on vibrate

A student who fails to follow these basic courtesy rules will be asked to leave.

In-Class Recording: Students may, without prior notice, record video or audio of a class lecture for a class in which the student is enrolled for their own personal educational use. A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach students about a particular subject. Recording classroom activities other than class lectures, including but not limited to class discussion (except when incidental to and incorporated within a class lecture), academic exercises involving student participation, test or examination administrations, and private conversations is prohibited. Recordings may not include the image or voice of other students in the class, may not be used as a substitute for class participation and class attendance, and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the University's Student Code of Conduct as described in the Golden Rule.

Academic Integrity: As reflected in the UCF creed, integrity and scholarship are core values that should guide our conduct and decisions as members of the UCF community. Plagiarism and cheating contradict these values and are serious academic offenses. Students enrolled at UCF are expected to familiarize themselves and uphold the standards of academic behavior defined in the University's Rules of Conduct (Section UCF-5.008) in the Golden Rule handbook <http://goldenrule.sdes.ucf.edu>Links to an external site..

Students are prohibited from engaging in Academic Misconduct:

Unauthorized assistance: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.

Communication to another through written, visual, electronic, or oral means: The presentation of material which has not been studied or learned, but rather was obtained through someone else's efforts and used as part of an examination, course assignment, or project.

Commercial Use of Academic Material: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor's PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.

Falsifying or misrepresenting the student's own academic work.

Plagiarism: Using or appropriating another's work without any indication of the source, thereby attempting to convey the impression that such work is the student's own.

Multiple Submissions: Submitting the same academic work for credit more than once without the express written permission of the instructor.

Helping another violate academic behavior standards.

Soliciting assistance with academic coursework and/or degree requirements. The solicitation of assistance with an assignment, lab, quiz, test, paper, etc., without authorization of the instructor of record or designee is prohibited. This includes but is not limited to asking for answers to a quiz, trading answers, or offering to pay another to complete an assignment. It is considered Academic Misconduct to solicit assistance with academic coursework and/or degree requirements, even if the solicitation did not yield actual assistance (for example, if there was no response to the solicitation).

Students are prohibited from Possessing and/or Providing False and Misleading Information and/or Falsification of University Records:

Withholding related information or furnishing false or misleading information (oral or written) to University officials, university and non-university law enforcement officers, faculty or staff.

Possession, use or attempted use of any form of fraudulent identification.

Forgery, alteration or misuse of any University document, material, file, record or instrument of identification.

Deliberately and purposefully providing false or misleading verbal or written information about another person.

Falsification, distortion, or misrepresentation of information during an investigation, the Student Conduct Review Process, including knowingly initiating a false complaint.

Unauthorized Use of Websites and Internet Resources: There are many websites claiming to offer study aids to students, but in using such websites, students could find themselves in violation of academic conduct guidelines. These websites include (but are not limited to) Quizlet, Course Hero, Chegg Study, and Clutch Prep. UCF does not endorse the use of these products in an unethical manner, which could lead to a violation of our University's Rules of Conduct. They encourage students to upload course materials, such as test questions, individual assignments, and examples of graded material. Such materials are the intellectual property of instructors, the university, or publishers and may not be distributed without prior authorization. Students who engage in such activity could be found in violation of academic conduct standards and could face course and/or University penalties. Please let me know if you are uncertain about the use of a website so I can determine its legitimacy.

Unauthorized Distribution of Class Notes: Third parties may attempt to connect with you to sell your notes and other course information from this class. Distributing course materials to a third party without my authorization is a violation of our University's Rules of Conduct. Please be aware that such class materials that may have already been given to such third parties may contain errors, which could affect your performance or grade. If a third party should contact you regarding such an offer, I would appreciate your bringing this to my attention. We all play a part in creating a course climate of integrity.

Responses to Academic Dishonesty, Plagiarism, or Cheating: Students should also familiarize themselves with the procedures for academic misconduct in UCF's student handbook, The Golden Rule handbook <http://goldenrule.sdes.ucf.edu>Links to an external site.. UCF faculty members have a responsibility for students' education and the value of a UCF degree, and so seek to prevent unethical behavior and respond to academic misconduct when necessary. Penalties for violating rules, policies, and instructions within this course can range from a zero on the exercise to an "F" letter grade in the course. In addition, an Academic Misconduct report could be filed with the office of Student Conduct and Academic Integrity <https://scai.sdes.ucf.edu>Links to an external site. which could lead to disciplinary warning, disciplinary probation, or deferred suspension or separation from the University through suspension, dismissal, or expulsion with the addition of a "Z" designation on one's transcript.

Being found in violation of academic conduct standards could result in a student having to disclose such behavior on a graduate school application, being removed from a leadership

position within a student organization, the recipient of scholarships, participation in University activities such as study abroad, internships, etc.

Let's avoid any potential misconduct or penalty by demonstrating values of honesty, trust, and integrity. No grade is worth compromising your integrity and moving your moral compass. Stay true to doing the right thing: take the zero, not a shortcut.

Time commitment: For most students striving for B grades or higher, I recommend scheduling about 12 hours per week for engaging with this course. Your background knowledge/experience and other variables may require you to spend additional time. Please plan accordingly by scheduling time on your calendar now. Several factors influence student academic performance and long-term learning. Active engagement in all course activities (e.g., lecture and iClicker polling, textbook readings, Achieve homework and quizzes, End-of-Chapter assessments, classroom Active Learning exercises) will contribute to your learning and to your success in this course.

Course Accessibility and Inclusion: It is my goal that this class be an accessible and welcoming experience for all. UCF and I consider the diversity of our students, faculty, and staff to be a strength and critical to our educational mission. UCF expects every member of the university community to contribute to an inclusive and respectful culture for all in its classrooms, work environments, and at campus events. Dimensions of diversity can include sex, race, age, national origin, ethnicity, gender identity and expression, intellectual and physical ability, sexual orientation, income, faith and non-faith perspectives, socio-economic class, political ideology, education, primary language, family status, military experience, cognitive style, and communication style. The individual intersection of these experiences and characteristics must be valued in our community.

If there are aspects of the design, instruction, or experiences within this course that result in barriers to your inclusion or accurate assessment of achievement, please notify me to discuss reasonable options or adjustments. You may also want to contact SAS <http://sas.sdes.ucf.edu> Links to an external site. (Ferrell Commons 185; 407-823-2371) to talk about academic accommodations.

Help & SARC: Please ask for help if you need it! I am here to answer your questions. Additionally, help is available through SARC (Student Academic Resource Center, Howard Phillips Hall, Room 113: 407-823-5130; <http://sarc.sdes.ucf.edu> Links to an external site.). SARC provides students with free individual and small-group tutoring for Genetics with Supplemental Instruction (SI). Students can also request a Learning Consultation with a Learning Skills Specialist or attend Academic Success Workshops to improve study skills & strategies.

Deployed Active-Duty Military Students: Students who are deployed active-duty military or National Guard personnel and require accommodation should contact their instructors as soon

as possible after the semester begins and/or after they receive notification of deployment to make arrangements.

UCF Cares: UCF and I care not only about your academic success, but also your overall well-being. Please visit [UCFCares.com](http://ucfcare.com) (Links to an external site.)

<http://cares.sdes.ucf.edu/>Links to an external site. if you are seeking resources or support, or if you are worried about a friend or classmate. Free services and information are included for a variety of student concerns, including but not limited to alcohol use, bias incidents, mental health concerns, sexual harassment or assault, and financial challenges. You can also e-mail [ucfcare@ucf.edu](mailto:ucfcare@ucf.edu) with questions or for additional assistance. You can reach a UCF Cares staff member Student Care Services, [http://scs.sdes.ucf.edu](http://scs.sdes.ucf.edu/)Links to an external site., Ferrell Commons 142, between 8 a.m. and 5 p.m. by calling 407-823-5607.

If you are in immediate distress, please call Counseling and Psychological Services (CAPS), Counseling Center 101 [http://caps.sdes.ucf.edu](http://caps.sdes.ucf.edu/)Links to an external site. to speak directly with a counselor 24/7 at 407-823-2811 or call 911.

Academic Services and Resources: A list of available academic support and learning services is available at [UCF Student Services](#)Links to an external site.. Click on "Academic Support and Learning Services" on right-hand side to filter.

Non-Academic Services and Resources: A list of non-academic support and services is also available at [UCF Student Services](#)Links to an external site.. Click on "Support" on the right-hand side to filter.

Campus Safety Statement: Emergencies on campus are rare, but if one should arise in our class, we will all need to work together. Everyone should be aware of the surroundings and familiar with some basic safety and security concepts.

In case of an emergency, dial 911 for assistance.

Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Please make a note of the guide's physical location and consider reviewing the online version at [http://emergency.ucf.edu/emergency\\_guide.html](http://emergency.ucf.edu/emergency_guide.html)Links to an external site..

Familiarize yourself with evacuation routes from each of your classrooms and have a plan for finding safety in case of an emergency.

If there is a medical emergency during class, we may need to access a first aid kit or AED (Automated External Defibrillator). To learn where those items are located in any building, see <http://www.ehs.ucf.edu/AEDlocations-UCF> Links to an external site. (In our building CB2, they are located on the 1st floor near the elevators.)

To stay informed about emergency situations, sign up to receive UCF text alerts by going to [my.ucf.edu](http://my.ucf.edu) Links to an external site. and logging in. Click on “Student Self Service” located on the left side of the screen in the tool bar, scroll down to the blue “Personal Information” heading on your Student Center screen, click on “UCF Alert”, fill out the information, including your e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”

If you have a special need related to emergency situations, please speak with me during office hours.

Consider viewing this video

You CAN survive an active shooter (Links to an external site.)

about how to manage an active shooter situation on campus or elsewhere.

COVID-19: To protect yourself and members of our community, UCF strongly encourages everyone to be vaccinated. Everyone is expected to wear a mask indoors, even if you are fully vaccinated, in accordance with the latest CDC guidelines (Links to an external site.). Wearing a mask protects you, your loved ones and your fellow Knights.

No-cost vaccines are available daily by appointment at the Student Health Center for faculty, staff, and students. You can make an appointment at <https://studenthealth.ucf.edu/portal/> Links to an external site., or click <https://www.vaccines.gov/search/> (Links to an external site.) to find another vaccine location near you.

COVID-19 and Illness Notification – Students who have tested positive for COVID or believe they may have a COVID-19 diagnosis should contact UCF Student Health Services (407-823-2509) so proper contact tracing procedures can take place. CDC guidance for COVID-19 symptoms is located here: (<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html> (Links to an external site.))

In Case of Faculty Illness – If the instructor falls ill during the semester, there may be changes to this course, including having a backup instructor take over the course. Please look for announcements or mail in [Webcourses@UCF](mailto:Webcourses@UCF) or Knights email for any alterations to this course.

## Course Schedule

Units 1&2: Biochemistry and cell biology

Aug 22: Water



Aug 24: Macromolecules

Aug 26: Macromolecules Part 2

Aug 29: Transcription and Translation

Aug 31: Photosynthesis

Sep 2: Cellular Respiration

Sep 7: Cell Organelles

Sep 9: Cell Membrane and Transport

Sep 12: Mitosis

Sep 14: Meiosis

Sept 16: Exam Review

Exam 1 September 19

Units 3+4: Genetics, Evolution and Physiology

Sep 21: Mendel's Laws

Sep 23: General Genetics Concepts

Sep 26: Natural Selection

Sep 28: Genetic Drift, Gene Flow, and Sexual Selection

Sep 30: Domains and Kingdoms

October 3: Prokaryotes

October 5: Fungi and Protists

October 7: Plants

October 10: Plants part 2

October 12: Animals

October 14: Animals part 2

October 17th: Exam Review

Exam 2 October 19th

Unit 5: Ecology

October 21: Population Ecology

October 24: Food webs and Trophic Levels

October 26: Community ecology and succession

October 28: Biomes

October 31: Global Change part 1

November 2: Global Change part 2

Unit 6: Frontiers in Biology

November 4 Gene editing and CRISPR

November 7: Computational Biology and Bioinformatics

November 9: Epidemiology

November 11: No Class (veterans day)

November 14: Sustainability Part 1

November 16: Sustainability Part 2

November 18: Conservation Biology

November 21: Astrobiology

November 23/25: No Class (Thanksgiving)

November 28: Exam Review

November 30: Exam 3

December 2: Course Wrap-Up

Comprehensive Final Exam: Monday, December 5, 2022  
10:00 AM – 12:50 PM