



BSC 1005: Biological Principles
Spring 2021 Syllabus
College of Sciences, Department of Biology

Instructor: Dr. Sasha Hararuk

Lecture Location: virtual via Zoom

Lecture Days and Time: MWF 9:30-10:20 am

Instructor Contact Information

E-mail: ohararuk@ucf.edu

Office Hours: Mon, 10:30 am-12 pm and Thu 12:30-2 pm via Zoom*

*if you cannot make these times, please contact me by email to schedule an appointment

Office Location: Biological Sciences Building, room 402C

Phone: 407-823-4701

Teaching Assistants

- UTA(s): Ansley Blitch
- Email: ansleyblitch@Knights.ucf.edu
- Office Hours: Tue, 10 am-12 pm and Thu, 10 am-12 pm via Zoom

Course Description

Biological Principles: A study of various biological factors which affect the health and survival of man in modern society. Designed for non-majors.

This class is designed for undergraduate students interested in learning basic biological concepts, including cellular biology, human systems, evolution, ecology, and conservation, with a focus on real-world applications in today's society.

Student Learning Outcomes

By the end of the semester, students who complete all assignments and coursework will be able to:

1. Knowledge Application: Define basic biological concepts.
2. Interpretation and Evaluation: Identify reputable sources for biological information.
3. Communication: Apply basic biological concepts to decisions on health and public affairs in today's society.
4. Problem Solving: Understand the scientific method and its applications in biology.

Course Credit Hours

3 credits

Course Prerequisites

None

Course Requirements

- Internet Access, a computer, microphone, and webcam. This is a remotely taught course and all class announcements, lectures, supplementary reading material/websites, quizzes, and assignments will be posted on UCF Webcourses. All assignments will be submitted electronically through UCF Webcourses.
- Textbook (recommended): *Biology: The Essentials* 3rd Edition by Marielle Hoefnagels (ISBN: 978-1260140606). E-books are available in bookstore and www.mheducation.com (Links to an external site.) (Connect option includes Smartbook and e-book).

Course Activities

- Weekly quizzes
- In-class participation assignments
- Exams
- Final Exam

Exams

Three regular exams will be given during the semester. **The lowest regular exam grade will be dropped at the end of the semester and final grade will be calculated with two highest exam grades.**

Final Exam

The final exam will be available on Friday, April 30th, 2021 from 8:30 am to 9:50 am. The final exam will be cumulative and cannot be dropped. Final exams will not be given early.

Weekly Quizzes

All quizzes will be given through Webcourses. You will have a total of 12 quizzes throughout the semester. The quizzes will be given on a weekly basis during the semester (with few exceptions) and the **lowest two quiz scores will be dropped** at the end of the semester prior to final grade calculation. Quizzes must be submitted by 11:59 pm on the due date. Opening and closing dates for each quiz are listed in the class schedule below. For each of the weekly quizzes, you will have two attempts and your highest grade out of the two attempts will be recorded. These quizzes are open book/notes and unlimited time. All quizzes must be completed during scheduled time and no make-up quizzes will be given.

In-Class Participation

In-class participation points will be based on responses submitted to corresponding in-class assignments. In-class participation will include responses to group discussions and quiz style questions. Your **2 lowest participation grades will be dropped** at the end of the semester and participation will comprise 25% of your final grade. There will be no make-ups for missed class participation.

Grade Scale

- A 90% or more
- B 80%-89%
- C 70%-79%
- D 60%-69%
- F less than 60%

Grade Policies

For final letter grades in this course, grade percentages will be rounded to the nearest whole number (less than 0.5 will be rounded down, 0.5 and greater will be rounded up). All grades will be posted on UCF Webcourses. No grades will be given by e-mail. Questions about grades should be addressed during office hours or by appointment to maintain confidentiality. Anyone requiring grade forms signed during the semester must bring form to office hours. No grade forms will be signed before/after lecture or by e-mail. Final grades will be calculated by the instructor using the grading scale described in the syllabus. *****Please note, Webcourses often calculates grades incorrectly and the “final grade” and “current grade” values shown on Webcourses may be inaccurate.**

Your final grade will be based on the following assessments.

Assessment	Maximum Points
Exams (drop lowest grade)	150
Final Exam	150

Weekly Quizzes (drop lowest grade)	150
In-Class Participation (drop 2 missed dates)	150
Total Points for Semester	600

Make-Up Exams and assignments

Per university policy, you are allowed to submit make-up work (or an equivalent, alternate assignment) for authorized university-sponsored activities, religious observances, or legal obligations (such as jury duty). If this participation conflicts with your course assignments, I will offer a reasonable opportunity for you to complete missed assignments and/or exams. The make-up assignment and grading scale will be equivalent to the missed assignment and its grading scale. In the case of an authorized university activity, it is your responsibility to show me a signed copy of the Program Verification Form for which you will be absent, prior to the class in which the absence occurs. In any of these cases, please contact me ahead of time to notify me of upcoming needs. **Absences due to personal reasons, such as travel, family vacations, etc. are not considered excused absences.** No exams will be given early.

Make-Up Assignments for Authorized University Events or Co-curricular Activities

Students who represent the university in an authorized event or activity (for example, student-athletes) and who are unable to meet a course deadline due to a conflict with that event must provide the instructor with documentation in advance to arrange a make-up. No penalty will be applied. For more information, see the UCF policy at <<http://policies.ucf.edu/documents/4-401.1MakeupAssignmentsForAuthorizedUniversityEventsOrCocurricularActivities.pdf>>

Deployed Active Duty Military Students

Students who are deployed active duty military and/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 related arrangements.

University Services and Resources

Academic Services and Resources

A list of available academic support and learning services is available at [UCF Student Services](#). Click on "Support" on the 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](#). Click on "Support" on the right-hand side to filter.

If you are a UCF Online student, please consult the [UCF Online Student Guidelines](#) for more information about your access to non-academic services.

Policy Statements

Academic Integrity

Students should familiarize themselves with [UCF's Rules of Conduct](#). According to Section 1, "Academic Misconduct," students are prohibited from engaging in:

- *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.

For more information about Academic Integrity, students may consult [The Center for Academic Integrity](#).

For more information about plagiarism and misuse of sources, see "[Defining and Avoiding Plagiarism: The WPA Statement on Best Practices](#)".

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](#). UCF faculty members have a responsibility for students' education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary respond to academic misconduct. Penalties can include a failing grade in an assignment or in the course, suspension or expulsion from the university, and/or a "Z Designation" on a student's official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see <http://goldenrule.sdes.ucf.edu/zgrade>.

Course Accessibility Statement

The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. This syllabus is available in alternate formats upon request. Students with disabilities who need specific access in this course, such as accommodations, should contact the professor as soon as possible to discuss various access options. Students should also connect with [Student Accessibility Services](#) (Ferrell Commons, 7F, Room 185, sas@ucf.edu, phone (407) 823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable.

Campus Safety Statement

Fully online course sections (W, V)

Though most emergency situations are primarily relevant to courses that meet in person, such incidents can also impact online students, either when they are on or near campus to participate in other courses or activities or when their course work is affected by off-campus emergencies. The following policies apply to courses in online modalities.

- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <<https://my.ucf.edu>> and logging in. Click on “Student Self Service” located on the left side of the screen in the toolbar, scroll down to the blue “Personal Information” heading on the Student Center screen, click on “UCF Alert”, fill out the information, including e-mail address, cell phone number, and cell phone provider, click “Apply” to save the changes, and then click “OK.”
- Students with special needs related to emergency situations should speak with their instructors outside of class.

Copyright

This course may contain copyright protected materials such as audio or video clips, images, text materials, etc. These items are being used with regard to the Fair Use doctrine in order to enhance the learning environment. Please do not copy, duplicate, download or distribute these items. The use of these materials is strictly reserved for this online classroom environment and your use only. All copyright materials are credited to the copyright holder.

Third-Party Software and FERPA

During this course you might have the opportunity to use public online services and/or software applications sometimes called third-party software such as a blog or wiki. While some of these could be required assignments, you need not make any personally identifying information on a public site. Do not post or provide any private information about yourself or your classmates. Where appropriate you may use a pseudonym or nickname. Some written assignments posted publicly may require personal reflection/comments, but the assignments will not require you to disclose any personally identity-sensitive information. If you have any concerns about this, please contact your instructor.

COVID-19

University-Wide Face Covering Policy for Common Spaces and Face-to-Face Classes

To protect members of our community, everyone is [required](#) to wear a facial covering inside all common spaces on campus including classrooms. Students who choose not to wear facial coverings will be asked to leave the classroom by the instructor. If they refuse to leave the classroom or put on a facial covering, they may be considered disruptive (please see the Golden Rule for student behavior expectations). Faculty have the right to cancel class if the safety and well-being of class members are in jeopardy. Students will be responsible for the material that would have been covered in class as provided by the instructor.

Notifications in Case of Changes to Course Modality

Depending on the course of the pandemic during the semester, the university may make changes to the way classes are offered. If that happens, please look for announcements or messages in Webcourses@UCF or Knights email about changes specific to this course.

COVID-19 and Illness Notification

Students who 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.

Students should not come to campus if they are ill, are experiencing any symptoms of COVID-19, have tested positive for COVID, or if anyone living in their residence has tested positive or is sick with COVID-19 symptoms. CDC guidance for COVID-19 symptoms is located [here](#).

Students should contact their instructor(s) as soon as possible if they miss class for any illness reason to discuss reasonable adjustments that might need to be made. When possible, students should contact their instructor(s) before missing class.

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 or Knights email for any alterations to this course.

Course Accessibility and Disability COVID-19 Supplemental Statement

Students with disabilities should speak with their instructor and should contact sas@ucf.edu to discuss specific accommodations for this or other courses.

NOTE: This syllabus is subject to change based on the needs of the class.

Class Schedule: Class time will include a mix of lecture and active learning assignments

*Schedule subject to change and all changes will be given in class and posted on-line. All assignments are due by 11:59 pm on the dates listed below.

Unit Topic	Date	Lecture	Book Chapters	Assignments
Introductory Material	1/11/2021	Syllabus, course logistics	1	
Unit 1: Science, Chemistry, and Cells	1/13/2021	Intro to Biology, Scientific Study of Life	1	
	1/15/2021	Biodiversity	2	Syllabus Quiz due
	1/18/2021	NO CLASS		MLK Day
	1/20/2021	Chemistry and Molecules of Life	2	Quiz 1 opens
	1/22/2021	A Tour of the Cell	3	
	1/25/2021	The Energy of Life	4	
	1/27/2021	Photosynthesis	5	
Unit 2: Genetics	1/29/2021	Respiration	6	Quiz 1 due, Quiz 2 opens
	2/1/2021	DNA Structure and Gene Function	7	
	2/3/2021	DNA Structure and Gene Function	7	
	2/5/2021	DNA Replication, Binary Fission, and Mitosis	8	Quiz 2 due, Quiz 3 opens
	2/8/2021	Sexual Reproduction and Meiosis	9	
	2/10/2021	Patterns of Inheritance	10	
Review for Exam 1	2/12/2021	Finish and Review Units 1 & 2		Quiz 3 due, Quiz 4 opens
Unit 3: Structure and Function of Organisms	2/15/2021	EXAM 1		
	2/17/2021	Tissues and Organ Systems	23	
	2/19/2021	The Nervous System	24	
	2/22/2021	The Endocrine System	25	Quiz 4 due, Quiz 5 opens
	2/24/2021	The Integument and Movement	26	
	2/26/2021	Circulation and Respiration	27	Quiz 5 due, Quiz 6 opens
	3/1/2021	Digestion and Nutrition	28	

	3/3/2021	Vaccines and the Immune System	29	
Review for Exam 2	3/5/2021	Review of The Body		Quiz 6 due, Quiz 7 opens
	3/8/2021	EXAM 2		
Unit 4: Evolution	3/10/2021	Evidence of Evolution	13	
	3/12/2021	Evidence of Evolution	13	Quiz 7 due, Quiz 8 opens
	3/15/2021	Forces of Evolutionary Change	12	
	3/17/2021	Forces of Evolutionary Change	12	
	3/19/2021	Speciation	14	Quiz 8 due, Quiz 9 opens,
	3/22/2021	Evolution Review		
Unit 5: Ecology	3/24/2021	Populations	18	Quiz 9 due, Quiz 10 opens
	3/26/2021	Communities and Ecosystems	19	
	3/29/2021	Communities and Ecosystems (continued)	19	
	3/31/2021	Preserving Biodiversity	20	Quiz 10 due
	4/2/2021	Biosphere and Human Interaction		Quiz 11 opens
	4/5/2021	Global Change Biology		
	4/7/2021	Review for Exam 3		Quiz 11 due
	4/9/2021	EXAM 3		Quiz 12 opens
Unit 6: Misc. Biology	April 12 - 16	NO CLASS		SPRING BREAK
	4/19/2021	Origin of Life		
	4/21/2021	COVID-19		
	4/23/2021	Biotechnology		Quiz 12 due
Semester wrap-up	4/26/2021	Last day of classes - Semester Wrap-Up		
	4/30/2021	Final Exam (8:30-9:50 am)		Cumulative