



NORTHWEST FLORIDA STATE COLLEGE

100 College Boulevard, E. • Niceville, FL 32578-1347 • (850) 678-5111 • www.nwfsc.edu

INSTRUCTOR INFORMATION

- Professor: Julia Terrell
- Email: terrellj@nwfsc.edu
- Phone: 850-729-5376 (Science & Mathematics Department – Niceville); please use email to communicate with instructor.
- Office Hours: Available before and after class most days. Please email to set up an appointment.
- Class Location: Niceville Campus, Science Building - S (350), Room 302

INSTRUCTOR COMMUNICATION

Your NWFSC email is the official communication medium of the College. Please check your college email regularly for any class and College notifications. I will reply to your emails within 24 hours. Please use your college email from your email application and NOT the email system within Canvas.

COURSE INFORMATION

- Course Name and Number: General Biology / BSC 1005 - 20064
- Class Location (Campus/Room): Niceville Campus/Science Building – S(350)/Room 302
- Class Modality: Hybrid, Session 1: January 12th through May 7th
- Class Day: Tuesday
- Class Times: 5:00 pm – 6:15 pm
- Online Classroom with Gradebook: [Canvas class shell](#)
- Final Exam: Tuesday, May 5th from 5:00 pm to 7:00 pm in the same location as the class

COURSE DESCRIPTION

BSC 1005 - GENERAL BIOLOGY; 3 CREDIT HOURS; (FALL, SPRING, SUMMER)

This course applies the scientific method to critically examine and explain the natural world including but not limited to cells, organisms, genetics, evolution, ecology, and behavior.

Course Goals

The course is split into units that cover will topics from building cells, energy flow and cell division, genetics and evolution, human organisms, to finally ecology and behavior. Specific learning outcomes are listed below.

COURSE-LEVEL STUDENT LEARNING OUTCOMES

BS-1: The student will demonstrate a fundamental understanding of the nature of science and the scientific method, distinguishing between fact, law, hypothesis, and theory. (FL-1; NS-1)

- BS-2: The student will identify the basic characteristics of life and distinguish between the levels of biological organization. (FL-1; FL-2; NS-3; NS-4)
- BS-3: The student will identify the structure, function, and importance of water and the four major types of organic macromolecules (i.e. carbohydrates, proteins, lipids, and nucleic acids). (FL-2; NS-3; NS-4)
- BS-4: The student will explain why cells are the basic unit of life, how the cell theory relates to this, and the basic differences between prokaryotic and eukaryotic cells. (FL-1; FL-2; NS-1; NS-3; NS-4)
- BS-5: The student will distinguish between the two processes that change the number of cells in the body, identify the stages of the cell cycle, and what occurs in each stage. (FL-2; NS-3; NS-4)
- BS-6: The student will summarize the ATP cycle and the role of ATP in the cell. (FL-1; FL-2; NS-3)
- BS-7: The student will describe the purpose of a metabolic pathway and how enzymes help regulate it. (FL-1; FL-2; NS-3; NS-4)
- BS-8: The student will describe the overall equation for cellular respiration, summarize the phases, and indicate where they occur in a cell. (FL-1; FL-2; NS-1; NS-3; NS-4)
- BS-9: The student will describe the overall equation for photosynthesis, summarize the phases, and indicate where they occur in a cell. (FL-1; FL-2; NS-1; NS-3; NS-4)
- BS-10: The student will explain basic Mendelian genetics including concepts relevant to: law of segregation, law of independent assortment, the difference between a gene and an allele, the difference between a genotype and a phenotype, what it means for an allele to be dominant or recessive, and predicting outcome ratios and probabilities for one-trait crosses. (FL-1; FL-2; NS-1; NS-2, NS-3; NS-4)
- BS-11: The student will define biological evolution and demonstrate knowledge of the critical elements of Darwin's theory of natural selection and lines of evidence supporting the theory. (FL-1; FL-2; NS-1; NS-2, NS-3; NS-4)
- BS-12: The student will describe the general characteristics of plants and animals, identify the major groups of each, and explain how each group impacts both humans and the Earth's ecosystems. (FL-1; FL-2; NS-3; NS-4)

COURSE PREREQUISITES

There are no prerequisites for this class.

COURSE MATERIALS

Good news: your textbook for this class is available for free online! Concepts of Biology from OpenStax, Print ISBN 1938168119, Digital ISBN 1947172034, www.openstax.org/details/concepts-biology.

ASSIGNMENTS, GRADING SCHEME AND PROCEDURES

Exam Grade (40%): There will be one exam per unit. Each exam will cover the course material for the chapters listed in the table below. Each exam will be completed in Canvas and will be worth 40% of the unit grade. You will have 75 minutes to complete each exam and you will have only **one** attempt for each exam. The exam is open book and open notes. The unit exams will open on the date in bold in the table (the last lecture day for that unit). Completion dates for each exam are listed in the table below (**at 11:59 pm** on the date listed in the table below)—**NO EXCEPTIONS!** The due date of each exam will be confirmed in class throughout the semester. **There will be NO make-up exams.**

Quiz Grade (40%): Each chapter quiz in the unit will need to complete in Canvas by **11:59 pm** on the date listed in the table—**NO EXCEPTIONS!** You are allowed unlimited attempts for each quiz. Quizzes are untimed. Your highest single grade for each chapter quiz will be used. You are not able to work on any chapter quiz once it has closed (the date listed in the table). Each chapter quiz within the unit will be averaged to calculate a unit quiz grade for each unit that will be 40% of the unit grade.

Participation (20%): Students are expected to attend each class in person. The most successful students attend class. Each absence will result in a deduction of **10 points from that unit participation grade**. Tardiness and leaving early may result in a deduction of **5 points** from the corresponding **participation** grade. You must attend at least one class meeting in each unit to earn participation points in that unit. An absence is an absence, even if excused. Please talk to your instructor if you have extenuating circumstances.

Final Exam: The final exam will be provided **in class on Tuesday, May 5, 2025 from 5:00 pm to 6:15 pm**. The final exam will be a comprehensive exam of the unit exams. The prior exam should serve as study guides for the final exam. If you are satisfied with your grades after completing all the unit work, you do not have to take the final (the final exam is optional and can be used to replace your lowest unit grade (the lowest unit grade may be dropped – one unit exam, quizzes, and participation grade(s)).

Your final grade for the class will be determined by averaging your grades. Letter grades will be assigned using the grading scale listed below.

Assignment Category	Points/Percentage of Grade	Due Date
Unit 1 Participation	50 points / Part of 20% (10 points deducted for each absence & 5 points for each tardy; you must show up at least once to earn any points)	Attend Class on each day of Unit 1 (1/13, 1/20, 1/27, 2/3)
Syllabus Quiz	20 points / Part of 40%	11:59 pm on January 27th
Unit 1: Chapters 1, 2, 3 Quizzes	20 points each / Part of 40%	11:59 pm on February 8th
Unit 1 Exam	100 points / Part of 40%	11:59 pm on February 8th
Unit 1 Discussion Post	Up to 10 points / extra credit added to Unit 1 Exam	11:59 pm on February 8th
Unit 2 Participation	50 points / Part of 20% (10 points deducted for each absence & 5 points for each tardy; you must show up at least once to earn any points)	Attend Class on each day of Unit 2 (2/10, 2/17, 2/27, 3/3, 3/10)
Unit 2: Chapters 4, 5, 6, 7, 8, 9 Quizzes	20 points each / Part of 40%	11:59 pm on March 15 th
Unit 2 Exam	100 points / Part of 40%	11:59 pm on March 15 th
Unit 2 Discussion Post	Up to 10 points / extra credit added to Unit 2 Exam	11:59 pm on March 15 th
Unit 3 Participation	50 points / Part of 20% (10 points deducted for each absence & 5 points	Attend Class on each day of Unit 3 (3/24, 3/31, 4/7)

	for each tardy; you must show up at least once to earn any points)	
Unit 3: Chapters 11, 12, 13, 14, 15 Quizzes	20 points each / Part of 40%	11:59 pm on April 12 th
Unit 3 Exam	100 points / Part of 40%	11:59 pm on April 12 th
Unit 3 Discussion Post	Up to 10 points / extra credit added to Unit 3 Exam	11:59 pm on April 12 th
Unit 4 Participation	50 points / Part of 20% (10 points deducted for each absence & 5 points for each tardy; you must show up at least once to earn any points)	Attend Class on each day of Unit 4 (4/14, 4/21, 4/28)
Chapters 16, 17 18	20 points each / Part of 40%	11:59 pm on May 3 rd
Unit 4 Exam	100 points / Part of 40%	11:59 pm on May 3 rd
Unit 4 Discussion Post	Up to 10 points / extra credit added to Unit 4 Exam	11:59 pm on May 3 rd
Extra Credit Unit Quizzes 19, 20, 21	20 points each / will replace up to three lowest quizzes	11:59 pm on May 4 th
Extra Credit Exam	100 points / will replace lowest unit exam	11:59 pm on May 4 th
Extra Credit Final Exam	Replaces lowest exam, lowest unit's quizzes, and lowest participation grades	5:00 pm – 7:00 pm on May 5 th
Total	100	

Grading Scheme

Grade	Range
A	90 – 100 %
B	80 – 89 %
C	70 – 79 %
D	60 – 69 %
F	59 and less %

CLASS ATTENDANCE

Students who stop attending class or are not able to pass the course due to attendance expectations stated in the syllabus, may receive a failing grade which may impact the receipt of federal aid in subsequent courses. Students traveling for college approved activities will not be penalized academically but will be responsible for missed work.

Students are expected to attend this class in person each Tuesday and Thursday. The most successful students attend class. Each absence will result in a deduction of **10 points from that unit's participation grade**. Tardiness and leaving early will result in a deduction of **5 points** from that unit's corresponding **participation** grade. You should schedule your appointments or work obligations around this course. Please note that the college does not distinguish between excused or unexcused absences, so please schedule work and appointments around this class. If you need to earn extra points to make up for lost participation points, please review the extra credit section.

ASSIGNMENT SCHEDULE

Quizzes & Exams must be completed by 11:59 PM on the day listed for each Unit. The dates listed in the table are estimates and are subject to change. These dates will be confirmed in class, so ATTENDANCE is required to get any changes.

Unit	TOPICS (Class Lectures – Bold date is when Unit Exam opens)	CHAPTER Quizzes for each Unit Exam	Quizzes/Exam Due By 11:59 PM on this date
1	Introduction to Biology, Chemistry of Life, Cell Structure & Function (1/13, 1/20, 1/27, 2/3)	Syllabus Quiz -due by 1/27, 1, 2, 3- due by 2/8	February 8th
2	How Cells Obtain Energy, Photosynthesis, Reproduction at the Cellular Level, Cellular Basis of Inheritance, Patterns of Inheritance, Molecular Biology, Biotechnology (2/10, 2/17, 2/27, 3/3, 3/10)	4, 5, 6, 7, 8, 9, 10* *Do not have to complete CH 10 quiz	March 15th
3	Evolution, Diversity of Life: Microbes, Fungi, Protists, Plants, & Animals (3/24, 3/31, 4/7)	11, 12, 13, 14, 15	April 12th
4	The Body's Systems (4/14, 4/21, 4/28)	16, 17, 18	May 3rd
Extra Credit	Population & Community Ecology, Ecosystems & the Biosphere, Conservation & Biodiversity** (**This unit will open after unit 1 grades are posted – 2/10)	19, 20, 21	May 4th

Extra Credit – You can earn extra credit or replace low grade using any of the three options listed:

1. There is one extra credit exam and three extra credit chapter quizzes all located in the extra credit unit listed in the table above. Grades earned will replace the lowest or missing respective grade(s) in prior units. Meaning you can replace one exam and up to three quizzes from the prior units.
2. For each unit exam, you can earn 10 points of extra credit by submitting a discussion post for the discussion topic listed in Canvas. **This is due by 11:59 pm on the date listed in the table(s) above.**
3. Finally, you may replace your lowest unit grade (one exam, one set of quizzes, and one participation) by completing the comprehensive final exam. If the final grade is not higher than your lowest unit grades, the final exam will be dropped.

MAKE-UP WORK

There are many options for extra credit or to replace low grades (see extra credit below), therefore **there will be NO make-up work.** All unit exams and chapter quizzes need to be completed by the date and time listed for each unit in the table—**NO EXCEPTIONS!** If you miss a graded element, you will have to complete extra credit (see this section below). There is no make-up work available.

STUDENT EXPECTATIONS AND RESOURCES

NWFSC aims for excellence in education and scholarly pursuits. Campus policies and procedures support this goal by protecting the health, safety, welfare, and property of the College and its students. To view all campus policies, please see the [college catalog](#). Several essential policies are provided below.

NWFSC POLICY	DESCRIPTION
Academic Integrity	Students are expected to behave responsibly as members of the College community and be honest and forthright in their academic endeavors. They are also expected to behave professionally and refrain from disrupting other students' learning environments.
Accommodations	The Accommodation Resource Center at Northwest Florida State College is committed to providing equal access and opportunities for educational success to all students with disabilities as guided by the American Disabilities Act and other disability-related laws.
Attendance	Regular attendance and participation in courses is expected.
Tutoring Services	Tutoring services are available in person and online.
Counseling Services	All actively enrolled students can receive an initial assessment and up to five therapeutic sessions with a Behavioral Health provider at no cost to the student.
Student Code of Conduct	Students are expected to adhere to the rules, regulations, and policies outlined in the Student Code of Conduct.

<p><u>Student Complaints</u></p>	<p>NWFSC desires to resolve student grievances, complaints, and concerns expeditiously, fairly, and in an amicable manner. A student who desires to resolve a grievance may initiate the resolution process using the information in the link provided to the left.</p>
<p><u>Student Rights and Responsibilities</u></p>	<p>Understanding your role as a student.</p>

OTHER IMPORTANT INFORMATION

TECHNICAL SKILLS AND SPECIALIZED TECHNOLOGY

This course is partly online. Students must provide their device(s) to access and complete this class online. In addition to baseline word processing skills and sending/receiving emails with attachments, students will be expected to search the Internet and upload/download files. If you encounter technology challenges using course resources in the Learning Management System, email the Center for Innovative Teaching and Learning at online@nwfsc.edu or call 850-729-6464.

EMERGENCY COLLEGE CLOSURE

This course's schedule, requirements, and procedures are subject to change in the event of unusual or extraordinary circumstances. If the College closes for inclement weather or another emergency, any exams, presentations, or assignments previously scheduled during the closure period will automatically be rescheduled for the first regular class meeting held once the college reopens. If changes to graded activities are required, students will not be penalized due to the adjustments but will be responsible for meeting revised deadlines and course requirements.

ACADEMIC INTEGRITY TOOLS

Northwest Florida State College subscribes to Turnitin, an online plagiarism detection and prevention service. By enrolling in this class, students consent to upload their papers to Turnitin, where they will be checked for plagiarism. Papers submitted to Turnitin may be saved as source documents within these databases to detect plagiarism in other papers. Please note: All assignments submitted in this course are analyzed for plagiarism and originality.

ACADEMIC CONTINUITY PLAN

NWFSC is dedicated to protecting the health and well-being of its students, staff, and faculty. The College is dedicated to working with faculty and students to ensure timely course and program completion during emergencies. In the event of a College closure, the format of this course may be modified to enable completion of the course through other means, including but not limited to online course delivery through online classrooms. Check your RaiderNet College email and LMS classroom online for any updates.

WELCOME TO CLASS

Thank you for choosing NWFSC for your education—and welcome to class!