Jackson COLLEGE

21 Fall Semester

Introductory Biology

BIO 110.I50

Number of Credits: 4 credits
Hybrid Course: Online with face-to-face labs
Meeting Times: Mon & Wed 12:30-2:30pm
Online Office Hours: 9-11am Tues & Thurs

Instructor: Dr. Curt Blankespoor
Contact Email: blankescurtis@jccmi.edu
Contact Phone: 616.401.1848

Course Description

Students will investigate the nature of science and critically analyze scientific data and current biological issues. Basic biological concepts including cell structure and function, context of current issues. This course is designed for non-science majors. This course includes a laboratory component.

Prerequisite(s)

ENG 085 or 090, and MAT 031

Course Focus

The main focus of this course is to improve scientific literacy. Many students fail to see the relevance of science in their lives. To address this, this course will approach science from current topics that you should be able to relate to in your life. We will then need to learn some biology to understand these topics.

Course Objectives

Students successfully completing this course should be able to:

1. Describe the nature of science and how it is a self-correcting process
2. Understand the factors affecting global warming and other human impacts on the environment
3. Identify cell structures and describe their functions
4. Explain the origin of cancer cells and factors affecting their growth
5. Understand the basic structure and function of DNA
6. Understand the mechanisms of evolutionary change and how evolution differs from non-scientific explanations

General Education Outcomes

The course goals and objectives incorporate specific General Education Outcomes (GEOs) established by the JC Board of Trustees, administration, and faculty. These goals are in concert with four-year colleges and universities and reflect input from the professional communities we serve. GEOs guarantee students achieve goals necessary for graduation credit, transferability, and professional skills needed in many certification programs. The GEOs and course objectives addressed in this class include the following:

GEO 4—Demonstrate Scientific Reasoning (addressed through course objectives 1-6)

IMPORTANT: NO TEXTBOOK REQUIRED FOR THIS COURSE

Please review the cost of your required materials fall *all* your classes this semester to determine the best option for you to purchase your materials. See https://www.jccmi.edu/bookstore/textbook-program/ Please note, the opt-out option is for your *entire* semester schedule. You cannot opt out/opt into individual courses. And you must opt out by the due date of your first class, which is the 3rd day after the start of your earliest course.

For account billing questions, please contact the Jackson College Cashier at jccashier@jccmi.edu

Grading Procedure

The course is structured around 7 content modules. Each module contains 7 assignments (a "passport" worksheet, a lab report, a movie worksheet, a deep dive assignment, a position paper, and a summary quiz). Additionally, you must complete 6 outdoor habitat exploration reports. All assignments, with the exception of module quizzes, are graded daily on a S/U (Satisfactory/Unsatisfactory) scale. Each assignment can be resubmitted an unlimited number of times prior to its deadline, but only once on the date it is due.

Late work: Unless special arrangements are made in advance, no credit will be given for late work. In fairness to students who complete their work on time, this policy will be strictly enforced.

Extra Credit: No extra credit will be given/accepted under any circumstance.

Grading Scale

The requirements for a 2.0 grade are found in the table below.

Assessment Category	Number	Requirement
Outdoor Labs (i.e., Habitat Explorations)	6	Must earn an "S" grade on each lab report
Online Labs	6	Must earn an "S" grade on each lab report
Movie Worksheets	6	Must earn an "S" grade on each worksheet
Module "Passport" Worksheets	7	Must earn an "S" grade on each worksheet
Module Quizzes	7	Must score 70% or higher on each quiz

Important note: Failure to achieve a grade of "S" by the due date on any of the assignments above will result in you being immediately dropped from the course (or given a 0.0 grade).

Grade enhancer requirements are found in the table below.

Assessment Category	Requirement	Grade Enhancer
Deep Dives	Must earn an "S" grade on 6 of 7 assignments	+0.5 GPA unit
Position Papers	Must earn an "S" grade on 6 of 7 assignments	+0.5 GPA unit
Module Quizzes	Must have an average score between 80-90% (all 7 quizzes)	+0.5 GPA unit
	Must have average score of 90% or higher (all 7 quizzes)	+1.0 GPA unit

Important notes: All S/U assignments must be completed on or before their due date. You may qualify for more than one grade enhancer.

Failure

The college is required to drop students from classes if they are not participating. Examples of non-participation include:

- Failure to attend the first or second day of class without contacting the instructor
- Failure to complete any required assignment by its due date

Any of these examples of non-participation may result in your immediate dismissal from the course. If you fail to participate after the final reporting period you will not be automatically dropped from the course, but will receive a grade of 0.0 for failing to participate in the course.

Students own the responsibility of the effect of being dropped. Being dropped from the class may affect financial aid or housing status. If you are dropped, the drop status will NOT be changed due to the impact on financial aid, housing status, etc.

Course Management

Incompletes: In accordance with JC's Incomplete Grade policy, a student may request the grade of Incomplete if they are unable to complete the course work for some documentable unforeseen circumstance. The Incomplete will be granted if at least 50% of the assigned work in the course (including both assignments and exams) has been performed with sufficient quality (with an average grade of 2.0) and the student provides documentation of the circumstance. The student will be required to provide a detailed written schedule with due dates for making up the missing work during the following semester.

Academic Honesty Policy

Academic Honesty is defined as ethical behavior that includes student production of their own work and not representing others' work as their own, by cheating or by helping others to do so.

Plagiarism is defined as the failure to give credit for the use of material from outside sources. Plagiarism includes but is not limited to:

- Submitting other's work as your own
- Using data, illustrations, pictures, quotations, or paraphrases from other sources without adequate documentation
- Reusing significant, identical or nearly identical portions of one's own prior work without acknowledging that one is doing so or without citing this original work (self-plagiarism)

Cheating is defined as obtaining answers/material from an outside source without authorization. Cheating includes, but is not limited to:

- Copying
- Falsifying data
- Altering graded work
- Plagiarizing in any form
- Allowing your work to be submitted by others
- Exhibiting other behaviors generally considered unethical
- Using notes/books/electronic material without authorization
- Submitting others' work as your own or submitting your work for others

Any violations of this policy may result in immediate dismissal from the course with a 0.0 grade.

Accessibility

Jackson College understands that cultivating a broadly diverse community is crucial to our educational mission and to our foundational commitment to leadership and service. Jackson College is fully committed to ensuring our courses are accessible to everyone including those with disabilities. We are currently working to increase accessibility and usability of our course materials in order to meet or exceed the requirements of Section 508 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1991 and Web Content Accessibility Guidelines (WCAG) 2.0. For more information about Jackson College's efforts to ensure accessibility please visit the Jackson College accessibility web page.

If you have an accessibility need in any of your classes, please e-mail the Center for Student Success at JCCSS@jccmi.edu or visit the Center for Student Success web page.

At the Center for Student Success (CSS), we are committed to providing all students the opportunity to achieve academic success by providing a variety of support services free of charge to Jackson College students. This

includes, but is not limited to, peer and faculty tutoring, mental health referral, temporary assistance with transportation, various workshops/seminars, and the TRIO program.

In addition, the CSS staff is committed to adapting the College's general services to meet the individual needs of otherwise qualified students with disabilities, for the purpose of providing equal access to all programs and facilities.

If you need any specific accommodations, it is your responsibility to make me aware of those needs as soon as possible so suitable arrangements may be made. Accommodations cannot be applied retroactively.

Attendance Policy

Just as in a traditional classroom course, regular class participation and keeping up on the reading and assignments is strongly correlated with survival in college. It is my recommendation that you plan to do your assignments and take your exams BEFORE the last day they are due. If problems occur, there is time to fix them before the deadline.

In compliance with Federal Title IV funding requirements, as well as college initiatives, I will be monitoring student participation on a regular basis and officially reporting student activity throughout the term to assure compliance with college policy and federal regulations. It is imperative that you log in to the course and actively participate ***within the first couple of days of the term*** to validate your enrollment in the course. After that, not actively participating in class may result in you being withdrawn from the course. Being withdrawn from a course can have an impact on financial aid, billing, athletic eligibility, and housing status. As a college student you are responsible for how your participation impacts your academic progress; the accountability lies with you.

Caveat

The policies included in this document are subject to change at the instructor's discretion. Some minor revisions may be necessary during the semester due to unforeseen circumstances (e.g., weather-related school closings, instructor illness, etc.).

Expectations & Guidelines for Success

- Attend all classes and arrive on time
- When you have an unavoidable absence, contact the instructor for missed assignments
- Read the assigned chapters, either before or after lecture. This will help reinforce the topics covered.
- Study class materials for at least 2 hours outside of class for each hour in class.
- Participate in class discussions.
- Participate in group study sessions, this can be the most effective form of learning for many students
- Do not hesitate to contact the instructor about concerns you may have with the class.
- Make use of the instructor's office hours.
- Review study practices at https://www.jccmi.edu/science/how-to-study-science/

Calendar

Syllabus Revisions/Changes

All schedules and policies contained in this document are tentative and are subject to revision at the instructor's discretion with timely notice.

Course Outline

The course will be divided into 7 modules, each will take 1 week. Details on what is covered and the dates for each module are outlined below.

IMPORTANT: *Note that all modules will start on Monday and finish on a Sunday. After the module ends, you will be required to complete a short exam/quiz within one week. All other assignments must be submitted by the end of the module, by 9:00 PM Sunday. Module 7 has an abbreviated timeline and deadlines.*

Class schedule

WEEK	DATES	MONDAY-THURSDAY	ASSIGNMENTS DEADLINE	QUIZ DEADLINE
1	August 30-September 5	Course Introduction Module 1: Nature of Science	September 5	September 12
2	September 6-12	Module 2: Evolution, Natural Selection	September 12	September 19
3	September 13-19	Module 3: Climate Change	September 19	September 26
4	September 20-26	Module 4: Nutrition, Activity, Wellness	September 26	October 3
5	September 27-October 3	Module 5: Genetics	October 3	October 10
6	October 4-10	Module 6: DNA, Genetic Engineering	October 10	October 17
7	October 11-17	Module 7: Reproduction	October 17	October 17

Laboratory Schedule

WEEK	DATES	MONDAY (OUTDOOR LAB)	WEDNESDAY (IN-PERSON LAB)
1	August 30-September 5	Habitat Exploration 1	The Nature of Science Lab
2	September 6-12	NO CLASS	EvoDots Simulation
3	September 13-19	Habitat Exploration 2	What's your Ecological Footprint?
4	September 20-26	Habitat Exploration 3	Nutrition, Activity, and Wellness Lab
5	September 27-October 3	Habitat Exploration 4	Genetics Lab
6	October 4-10	Habitat Exploration 5	DNA/Genetic Engineering Lab
7	October 11-17	Habitat Exploration 6	NO LAB

Important Dates

DATE	EVENT
AUGUST 30, 2021	SEMESTER BEGINS
AUGUST 30 – OCTOBER 18, 2021	COURSE MEETING DATES
SEPTEMBER 6, 2021	LABOR DAY HOLIDAY-NO CLASSES
DECEMBER 18, 2021	END OF FALL SEMESTER

"No one cares how much you know...once they know how much you care."