

# BSC2010C WI1 – General Biology I with Lab

# Spring 2026 H-Term Dec 10 - Jan 6

Class – Online Lab – Online

# **Instructor Information**

Name: Dr. John Craig, Associate Professor of Biology and Chemistry

Email: john.craig@fgc.edu or through Canvas message. I should respond to your

correspondence within one business day.

Office: Building 9; Office 121

Office Hours: TBD

**Office Phone:** 386-754-4306

Other Available Hours: By Appointment

**Virtual Hours: TBD** 

# **Course Information**

Credits: 4

**Requirements Met:** AATR, GE, GEC **General Education Area:** Group 1 Science

#### Course Description

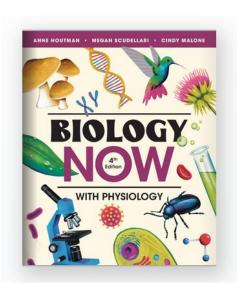
Analysis of the structure, function, and organization of biological molecules into cellular structures, cellular growth, metabolism and its regulation, genetics, including growth, replication, mutation, and repair mechanisms, biotechnology, and evolution of organisms. Course includes a lab component.

## Required Texts/Learning Resources

Biology NOW with Physiology, 4<sup>rd</sup> Edition: Malone, Scudellari with Smartwork and

• ISBN 978-1-324-06094-9

• Ebook ISBN: 978-1-324-06102-1



Houtman, Inquizitive.

## **General Learning Outcome**

• Scientific Reasoning: Students will apply empirical evidence to evaluate natural phenomena.

### Course Learning Outcomes

At the end of the course, you will be able to:

- Demonstrate the ability to identify and evaluate scientific information based on models and methodology to evaluate information on biological phenomena
- Demonstrate and apply the scientific method to identify an issue for experimentation/ research and be able to evaluate, draw inferences, and recognize limitations of models to develop ideas for an original product
- Demonstrate an understanding of proper lab techniques including the proper use of equipment and materials to facilitate an understanding of principles in biology
- Analyze the data by applying scientific quantitative methods to biological phenomena
- Interpret, draw conclusion and recognize limitations from scientific models such as formulas, graphs, tables, and schematics
- Demonstrate and apply knowledge of the major concepts in Biology and integrate the information into a structured understanding and awareness of biological processes and the effect on society.

### Lab Information

Labs will be completed online through <u>Labster</u>, which can be accessed via Canvas. You will need to purchase a voucher containing a 10-digit code in order to access Labster. Vouchers can be purchased at the FGC bookstore. Information on how to obtain a voucher is provided under <u>Modules</u> in Canvas. If you cannot afford a voucher prior to the start of term, Labster may grant you <u>temporary</u> free access to the lab simulations. You will need to purchase a voucher once your free trial period is over in order to obtain further access to Labster.

## Lab Sequence

Below is the lab sequence for BSC2010C:

- 1. Experimental Design
- 2. Introduction to Food Macromolecules
- 3. Microscopy
- 4. Cellular Respiration
- 5. Electron Transport Chain
- 6. Mitosis
- 7. Meiosis
- 8. Mendelian Inheritance
- 9. Polymerase Chain Reaction
- 10. Evolution

# Critical Dates – Winter 2026

Date	Event
Wednesday, December 10	Spring H Term start
Wednesday – Friday, December 10-12	Add/Drop period for Spring H
Monday, December 29	Deadline for student-initiated withdrawals – H
Tuesday, January 6	Course End Date – H

# Schedule of Class Events

Module	Dates	Topic(s)	Coursework
START HERE WEEK	12/10	Course and Syllabus	<ul> <li>Watch Course and Syllabus     Introduction Video and Read syllabus</li> <li>Take syllabus quiz</li> <li>Signup and get started with InQuizative and Smartworks</li> <li>Signup and get started with Labster</li> </ul>
Module 1 And Begin Module 2A in Canvas for Class Project PowerPoint	12/10 – 12/20	<ul> <li>Chapter 1</li> <li>Chapter 2</li> <li>Chapter 3</li> <li>Chapter 4</li> <li>Chapter 5</li> <li>Begin Module 2A:         <ul> <li>Class Project Part 1:</li> <li>7-Day Diet and</li> <li>PowerPoint</li> </ul> </li> </ul>	<ul> <li>Read Chapter 1</li> <li>Chapter 1 InQuizative Assignment</li> <li>Chapter 1 Smartwork Homework</li> <li>Chapter 1 Smartwork Reading Quiz</li> <li>Lab 1: Experimental Design</li> <li>Read Chapter 2</li> <li>Lab 2: Introduction to Food Macromolecules</li> <li>Chapter 2 InQuizative Assignment</li> <li>Chapter 2 Smartwork Homework</li> <li>Chapter 2 Smartwork Reading Quiz</li> <li>Read Rubric Class Project and BEGIN CLASS PROJECT PART 1</li> <li>Read Chapter 3</li> <li>Chapter 3 InQuizative Assignment</li> <li>Chapter 3 Smartwork Homework</li> <li>Chapter 3 Smartwork Reading Quiz</li> <li>Lab 3: Microscopy</li> <li>Read Chapter 4</li> <li>Chapter 4 InQuizative Assignment</li> </ul>

Module	Dates	Topic(s)	Coursework
			<ul> <li>Chapter 4 Smartwork Homework</li> <li>Chapter 4 Smartwork Reading Quiz</li> <li>Read Chapter 5</li> <li>Chapter 5 InQuizative Assignment</li> <li>Chapter 5 Smartwork Homework</li> <li>Chapter 5 Smartwork Reading Quiz</li> <li>Lab 4: Cell Membrane and Transport: Types of transporter proteins</li> <li>Work on Class Project</li> <li>Take Exam 1: Chapters 1-5</li> </ul>
Module 3 And Module 2B in Canvas for Class Project Paper	12/21 – 1/3	<ul> <li>Chapter 6</li> <li>Chapter 7</li> <li>Chapter 8</li> <li>Chapter 9</li> <li>Chapter 10</li> <li>Begin Module 2B:     Class Project Part 2:     <u>Paper on Diet and Lifestyle Analysis vs Blue Zones</u></li> </ul>	<ul> <li>Read Chapter 6</li> <li>Chapter 6 InQuizative Assignment</li> <li>Chapter 6 Smartwork Homework</li> <li>Chapter 6 Smartwork Reading Quiz</li> <li>Read Chapter 7</li> <li>Chapter 7 InQuizative Assignment</li> <li>Chapter 7 Smartwork Homework</li> <li>Chapter 7 Smartwork Reading Quiz</li> <li>Lab 5: Cellular Respiration: Measuring energy consumption during exercise</li> <li>Lab 6: Pigment Extraction: Use photosynthesis to produce biofuel and reduce pollution</li> <li>Complete Quiz Chapter 6 &amp; 7</li> <li>Read Chapter 8</li> <li>Chapter 8 InQuizative Assignment</li> <li>Chapter 8 Smartwork Homework</li> <li>Chapter 9 InQuizative Assignment</li> <li>Chapter 9 Smartwork Homework</li> <li>Chapter 9 Smartwork Homework</li> <li>Chapter 9 Smartwork Reading Quiz</li> <li>Read Chapter 10</li> <li>Chapter 10 InQuizative Assignment</li> <li>Chapter 10 Smartwork Homework</li> <li>Chapter 10 Smartwork Homework</li> <li>Chapter 10 Smartwork Reading Quiz</li> </ul>

Module	Dates	Topic(s)	Coursework
			• Lab 7: Mitosis: Using a toxic compound from the yew tree in cancer therapy
			<ul> <li>Lab 8: Meiosis: Understand how traits are inherited</li> </ul>
			• Lab 9: Mendelian Inheritance: From genes to traits
			• Lab 10: Evolution: Founding theories and principles
			<ul> <li>Class Project Due: Complete and submit Blue Zones Paper</li> </ul>
			• Complete Exam 2 Chapters 6-10
Module 4	1/4 - 1/6	•	Read Chapter 11
			• Chapter 11 InQuizative Assignment
			Chapter 11 Smartwork Homework
			Chapter 11 Smartwork Reading Quiz
			Read Chapter 12
			Chapter 12 InQuizative Assignment
			Chapter 12 Smartwork Homework
			Chapter 12 Smartwork Reading Quiz
			Read Chapter 10
			Chapter13 InQuizative Assignment
			Chapter 13 Smartwork Homework
			Chapter 13 Smartwork Reading Quiz
			• Cumulative Final Exam Chapter 1-10

# **Student Expectations**

## <u>Attendance</u>

You are expected to log into the course each week and complete all assignments on time.

## Courtesy and Student Conduct Code

- 1. Make sure identification is clear in all communications
- 2. Review what you wrote and try to interpret it objectively
- 3. If you wouldn't say it face to face, don't say it online. Being safe behind a screen is no excuse to be ill-mannered or say things you would never say in public.
- 4. Don't assume everyone understands where you're coming from.
- 5. Don't take advantage of your connection with the other students in your online classroom to forward emails and links regarding your political/spiritual beliefs or to sell your services.
- 6. In casual chatroom settings, emoticons can help convey feelings that may otherwise get lost in translation, including humor, exasperation, exhaustion and even confusion.

- 7. Respect others' privacy. Don't give out another student's personal email address without permission.
- 8. Don't share personal information about yourself in a public online forum, especially something that could put your safety or security at risk.
- 9. Follow the rules. Just as your online college posts guidelines related to academic integrity and student expectations, online forums also have rules of conduct. Make a point to read them every time, as they can vary from class to class.
- 10. Forgive and forget. If you're offended by something another student says online, keep in mind that you may have misunderstood their intentions. Give them the benefit of the doubt.

#### Late Work

Late assignments will receive a 5% per day deduction.

## **Grading Policies (Student Performance Measures)**

## **Learning Activities**

#### **Exams**

Each exam is worth 100 points and are OPEN-NOTE (<u>NOT OPEN-BOOK</u>). NO ELECTRIONIC DEVICES. You may any written notes and printed PowerPoints. All exams will be proctored by HonorLock.

Exams 30%: Exams 1-2.

Final Exam 10%: Cumulative over Chapters 1-10. Chapters 11-13 are included with Quizzes and Homework and will not be part of the any exam.

#### **Quizzes**

Quizzes and Homework combined for 30%.

#### **Class Project**

Research Project 20%: Paper on Diet and Lifestyle with Analysis vs Blue Zones. This is the signature assignment for the course. It is heavily weighted and needs to be taken seriously and effort is required. Follow the rubric for both parts 1 and 2.

Labs 10%: Each lab is worth 10 points and completed through Labster.

#### **Grading Scale**

 $\overline{A} - 90\% - 100\%$ 

**B+-** 85% - 89.9%

**B** - 80% - 84.9%

C+- 75% - 79.9%

**C** - 70% - 74.9%

**D** – 65% - 69.9%

**D** - 60% - 64.9%

 $\mathbf{F}$  - 59.9% or below

#### Returning Grades

I will grade most assignments within one week of the due date. For more expansive assignments, I will return them within two weeks. This gives me ample time to provide constructive, useful feedback to help you progress and grow as a student in this course.

# **Student Support and Tech Needs**

This course requires students to have access to a computer and the internet. For those students who do not own a computer, computer labs are available on the FGC campus and in public libraries. Students without internet can come to the FGC campus, go to local public libraries, coffee shops, etc.

Minimal technical skills require for this course include the ability to use Microsoft Office products and navigate the Internet.

If you have any additional questions, please contact IT at 386-754-4408. You can also email the Florida Gateway College helpdesk at <a href="helpdesk@fgc.edu">helpdesk@fgc.edu</a>.

## Florida Gateway College Policies and Statements

## The Library

The Wilson S. Rivers Library is located in Building 200 and also includes millions of e-books and articles (<a href="https://www.fgc.edu/academics/library/">https://www.fgc.edu/academics/library/</a>). The library has more than 70 computers with 50 pages daily of free B&W or Color printing for students. There are also small and large study rooms available for two hours at a time. Click the link above for more information. Librarians are available to assist with research help, and there are helpful videos on library searching and citation help here: (<a href="https://www.fgc.edu/academics/library/research-help-and-guides/">https://www.fgc.edu/academics/library/research-help-and-guides/</a>).

Phone- 386-754-4401 Email- <u>library@fgc.edu</u> Ask-A-Librarian text and chat

Fall & Spring Semester Library Hours Monday – Thursday: 7:30 am – 7:30 pm

Friday: 9:00 am - 4:00 pm

Saturday: CLOSED Sunday: CLOSED

**Summer Semester Library Hours** Monday – Thursday: 7:30 am – 6:30 pm

Friday: CLOSED

Saturday & Sunday: CLOSED

## **Student Success Center (SSC)**

The Student Success Center (SSC) is located in Building 008. The SSC offers a variety of resources for students and faculty. Access to computers and limited printing is available. Copies of reference books, textbooks, access to course specific software, and access to tutors for all levels of math and writing are available in the SSC. Tutoring in other subjects is also offered. The SSC provides space for students to study in subject specific learning groups. Stop by or call the Student Success Center to request the most current tutor schedule (386-754-4382).

#### **Fall Semester SSC Hours**

Monday--Thursday: 8:00am – 7:30 pm

Friday: 9:00am – 4:30pm

#### **Spring Semester SSC Hours**

Monday--Thursday: 8:00am – 6:00 pm

Friday: 9:00am – 4:30pm

#### **Summer Semester SSC Hours**

Monday – Thursday: 7:30 am - 5:00 pm

If you have any questions, you may contact the center by phone at 386-754-4479, 386-754-4382, or by emailing Christina Slater at <a href="mailto:christina.slater@fgc.edu">christina.slater@fgc.edu</a>.

## EAB Navigate

The SSC initiates student progress reports to the entire campus through EAB Navigate. EAB Navigate is an early-alert tool designed to identify students who may be susceptible to falling behind in their course before they actually do.

Twice during the semester, we provide instructors with the opportunity to ALERT students of their course progress. This is done through the FGC Wolves email account. Students may receive an email stating their success may be at risk in a specific course. If you receive this email, DO NOT PANIC. Please contact your instructor directly, your academic advisor, and the SSC. Your instructor's information is provided in the email.

Navigate Student is a mobile app designed to support students during their academic careers at FGC. Navigate Student is the ultimate student resource that acts as a personal advisor and provides students with the information they need, when they need it. Additionally, students may make an appointment with an advisor, view campus events, be alerted on important to-do's, view class schedules, explore their major, and much more.

Please do not allow yourself to struggle. We are here to help you achieve success. The mission of the SSC is to help encourage and promote your educational journey here at FGC and beyond.

## Class Recording

A student shall not make a recording in class unless the recording is limited to the class lecture, and

- 1. the recording is made for the student's personal educational use,
- 2. in connection with a complaint to the college, or
- 3. as evidence in or in preparation for a criminal or civil proceeding.

Students are not permitted to record in class, through any means over any medium, any academic or other activity that is not a class lecture. A recording of any meeting or conversation between students, or between students and faculty, is strictly prohibited unless all parties have consented to such recording. A recording of a class lecture may not be published without the prior express written consent of the recorded faculty member.

#### **Resource Information**

Florida Gateway College has partnered with **BetterMynd**, (<a href="https://www.bettermynd.com/students">https://www.bettermynd.com/students</a>) an online therapy platform for college students, to offer our students access to free video-therapy sessions with their diverse network of licensed mental health counselors.

Florida Gateway College students can now access free online therapy sessions on the BetterMynd platform with the counselor of their choice. These 50-minute, live video-sessions are private, confidential, and can take place from the convenience of your laptop, smartphone, or tablet. Sessions are available during the day, at night, and on the weekends.

To register and get started with a counselor that's a good fit for you, sign-up here. (<a href="https://app.bettermynd.com/register">https://app.bettermynd.com/register</a>)

If you have any questions about these services, you can email BetterMynd at students@bettermynd.com.

If you are in the need of additional resources please contact the Director of Student Life, Amy Dekle, at <a href="mailto:amy.dekle@fgc.edu">amy.dekle@fgc.edu</a>, or by visiting Building 007.

## Academic Appeal; Grievances; General Complaint

If a student wishes to file an academic appeal, grievance, or general complaint, please visit the college's website. Under Students and the Complaints & Appeals section (<a href="https://www.fgc.edu/students/complaints-and-appeals/">https://www.fgc.edu/students/complaints-and-appeals/</a>), information regarding policy, procedure, and forms related to these topics is provided.

## College Course Withdrawal and Drop Process

A course may be dropped only during the published add/drop period. After add/drop, students must withdrawal from their course. Please visit the <u>College Catalog</u> for more detailed information about the drop and withdrawal process.

Students are responsible for withdrawing by the published deadline. Students must allow sufficient time for the process to be completed. The fully approved withdrawal form is due to Registration & Records by 4:30 p.m. on the deadline posted on the Academic Calendar or it is considered late.

To withdraw from a course, the following steps must take place:

- 1. The student will log in to MyFGC and navigate to the Withdrawal form.
- 2. First, click the Student tab; next click Registration; and then click Course Withdrawal Form.
- 3. The student will enter the course information, the instructor's email address, and the advisor's name and email address. Once all information is entered, submit the form.
- 4. The form then routes directly to the instructor for approval and the last date of attendance. Once the instructor has completed their portion, the form will route to the advisor.
- 5. The advisor will complete their portion of the form and submit.
- 6. The form then routes to Registration & Records for processing. The student will receive an email notification to their FGC Wolves email account once this step is completed.
- 7. If the form is denied, the student will be notified by email and should contact the advisor with any questions.

Students are strongly encouraged to begin the withdrawal process the day **before** the withdrawal deadline to allow sufficient time for the process to be completed by all offices involved (Instructor, Advising Services, Financial Aid, Registration & Records).

It is the student's responsibility to understand all financial and academic implications of the withdrawal. Students are permitted a maximum of two (2) withdrawals per course. Upon the third attempt, a student must receive a grade for the course. Absence from class or merely notifying the professor does not constitute withdrawal. A student who stops attending class without withdrawing will receive a grade from the instructor.

#### **Incompletes**

Incomplete grades are reserved for students who are unable to complete a course and the withdrawal date has passed. A student should only be issued an incomplete if at least 75% of the course assignments have been submitted and the student can reasonably complete the remaining assignments within the first three weeks of the next term to earn a passing overall grade. Otherwise, students should be issued the earned letter grade in the course at the end of the current term.

The Incomplete Grade Request Form must be completed and submitted for approval by the <u>FIRST</u> day of Final Exams and BEFORE issuing the "I" grade. The instructor will describe the circumstances leading up to the requested "I" for the course, and list the missing assignments, quizzes,

exams, and any other course requirements needed to satisfactorily complete the course <u>within</u> the first three weeks of the next term. The form must be signed by the instructor, student, and the Dean/Executive Director over the program. Once all participants have signed, an approval email will be sent to the instructor for authorization to assign the "I" grade.

## Student Communication Standards

You are expected to communicate in a professional and respectful tone with the instructor and fellow classmates. All written communication (in email correspondence, discussion forums, assignments, quizzes and exams, etc.) must use proper written English. Please refrain from using online and texting abbreviations and language. Oral communications, if applicable, must be made with a respectful tone and body language. Use proper <u>netiquette</u> throughout!

### Academic Honesty

At Florida Gateway College, we value the development of critical thinking, effective communication, and academic growth. To ensure fairness and uphold the principles of academic integrity, any instances of academic dishonesty (i.e., cheating, plagiarism, bribery, misrepresentation, fabrication, unauthorized use of AI technologies, etc.) are not permitted and will be dealt with severely. Students should make themselves aware of the student code of conduct found in the Student Handbook. We believe in your ability to think critically and develop your own unique perspectives. By adhering to these guidelines and committing to the principles of academic integrity, you will not only enhance your learning experience, but also foster an environment of trust and respect within our academic community.

## **Use of AI Technologies**

The use of AI technologies to generate or assist in the creation and completion of assignments is strictly prohibited, unless explicitly allowed by the instructor as described in the course syllabus. It is your responsibility to read this thoroughly and carefully at the beginning of the semester.

Your assignments should reflect your own thoughts, analysis, and original work. Florida Gateway College employs the use of AI detection tools to assess the authenticity of your assignments. These tools are designed to identify instances of cheating and plagiarism, including the use of AI technologies. Any submissions that violate this policy will be subject to disciplinary action. If you have any questions or concerns regarding the use of AI technologies in your courses, please review your course syllabus or reach out to your instructor for clarification.

## Civil Rights and Compliance Statement

Florida Gateway College does not discriminate in education or employment related decisions on the basis of race, color, ethnicity, national origin, sex, religion, disability, age, marital status, genetic information, sexual orientation, pregnancy, or any other legally protected status in accordance with the law. The Civil Rights & Compliance Officer is Cassie Buckles, Associate Vice President of Human Resources, Building 001, Room 116, 149 SE College Place, Lake City, FL 32025, and may be reached at <a href="mailto:cassandra.buckles@fgc.edu">cassandra.buckles@fgc.edu</a> or by phone at 386-754-4313.

## **Disability Statement**

The Office of Accessibility Services (OAS) is a resource for both students with disabilities as well as faculty. Students with disabilities in need of academic accommodations must first be registered with the OAS to verify the disability, establish eligibility, and determine reasonable academic accommodations.

After registering with the OAS, students must request their academic accommodation letters be sent to them each semester to share with their instructors. Upon receipt of the letter, the instructor will be available during office hours or via email to discuss the accommodations a student will need during the course.

Students with disabilities who are not registered with the OAS or faculty who may have questions or concerns regarding an accommodation, please contact the office at the following:

**In person:** Building 007, Room 107

**Phone:** (386) 754-4393

Email: Accessibility.Services@fgc.edu

#### FERPA Statement

The Family Educational Rights and Privacy Act (FERPA) provides certain privacy rights to students related to educational records. This information can be found in the College Catalog, at the Registration & Records Office in Building 015 or on the Florida Gateway College website (www.fgc.edu/students/registration-and-records/ferpa/).

#### SACSCOC Statement

Florida Gateway College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate and associate degrees. Florida Gateway College also may offer credentials such as certificates and diplomas at approved degree levels. Questions about the accreditation of Florida Gateway College may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404) 679-4500, or by using information available on SACSCOC's website (<a href="https://www.sacscoc.org">www.sacscoc.org</a>).

#### **Honorlock Statement**

Florida Gateway College has partnered with Honorlock, an online testing proctoring service. If off-campus remote proctoring is required during any course, Honorlock will be the online proctoring service that allows you to take your exam. You **DO NOT** need to create an account, download software or schedule an appointment in advance. Honorlock is available 24/7 and all that is needed is a computer, a working webcam, and a stable Internet connection.

To get started, you will need to download the Honorlock Chrome Extension using Google Chrome. You can download the extension on the Honorlock website (<a href="www.honorlock.com/install/extension/">www.honorlock.com/install/extension/</a>). When you are ready to test, log into the LMS, go to your course, and click on your exam. Clicking Launch Proctoring will begin the Honorlock authentication process, where you will take a picture of

yourself, show your ID, and complete a scan of your room. Honorlock will be recording your exam session by webcam as well as recording your screen. Honorlock also has an integrity algorithm that can detect search-engine use, so please do not attempt to search for answers, even if it's on a secondary device.

Honorlock support is available 24/7/365. If you encounter any issues, you may contact Honorlock by live chat, by phone at 844-243-2500, and/or by email at <a href="mailto:support@honorlock.com">support@honorlock.com</a>.

If you encounter a Canvas issue, please contact Canvas via the Canvas Help menu or by clicking the Canvas Support link within your course(s).

## **Turnitin Statement**

Instructors may require writing assignments to be submitted to Turnitin when uploaded to Canvas. Turnitin is an internet-based service that looks for similarities and potential plagiarism by comparing your assignment submissions with its massive database of student work (including previous student submissions at Florida Gateway College), the Internet, and its entire archive, books, and journal and reference publications. Turnitin generates a <u>similarity report</u>, which can help you and your instructor determine whether you used sources fairly and ethically, cited correctly, and paraphrased effectively.

You are encouraged to submit your written work to Turnitin prior to assignment deadlines, whether through Canvas or <u>Draft Coach</u>. If needed, that would allow you time to review the <u>library's research and help guides</u> or seek writing assistance from your instructor or a tutor in the Student Success Center.

#### Mission Statement

The mission of Florida Gateway College is to provide superior instruction, nurture individual development, foster career readiness, and enrich the diverse communities it serves through affordable, quality higher education programs and lifelong learning opportunities.