Principles of Biology I: Bio111
Fall 2026
Sections 5-8
4 credit hours

Dr. Kristy L. Tuttle
Department of Biology
Ball State University, Muncie IN
Contact and office hours available on Canvas

Feedback Policy:
I will try to return email from your official BSU address, within 24 hours during business days and within 48 hours on the weekend. I will make every effort to grade your quizzes, assignments, and discussions no later than within 5 business days of submission. Please feel free to email me before that time if you have any questions or concerns about your performance in class.

COURSE OVERVIEW & OBJECTIVES:

About BIO 111:
This course serves as an introduction to the chemical, molecular, and cellular basis of life and its processes, as well as the process of scientific investigation. Upon completion of the course, students should be able to: generate scientific hypotheses; design valid, well-controlled experiments; identify the chemical structure/organization of biological molecules; describe how the interaction of those molecules determines cellular structure and function; describe cellular energy accumulation and utilization; and the genetic information flow within cellular systems.

Prerequisites: To be enrolled in this course, students must have taken one year of high school chemistry, or one semester of college chemistry/equivalent, or be concurrently enrolled in chemistry. If you have any concerns about this or feel your chemistry knowledge may need some brushing up, please come see me so I can connect you to appropriate review resources.

Material in this course is divided into five units:

Unit 1: You will be able to identify and relate the properties of life and living organisms including homeostatic interactions, and the methods by which scientists investigate those processes. You will be able to apply concepts of atomic organization and chemical bonding in order to examine the chemical basis of biomolecules and predict how these biomolecules interact and organize into more complex structures.

Unit 2: You will compare the structural organization of prokaryotic and eukaryotic organisms, and relate that organization to the functioning of specific cellular organelles

including the cell membrane.

Unit 3: You will examine concepts of thermodynamics, bioenergetics and energy acquisition to diagram & describe energy flow within cellular systems.

Unit 4: You will describe concepts of heredity and Mendelian inheritance. You will be able to evaluate these concepts at the molecular, chromosomal, and organismal levels, and be able interpret their role to evolutionary processes.

Unit 5: You will explain the regulation of gene expression. You will be able to evaluate these concepts at the molecular and chromosomal levels, and be able interpret their role to evolutionary processes.

Required Course Materials:

We will be using a FREE, open-access textbook called **BIOLOGY 2e**. It is available from OpenStax. The print version listed in the bookstore is OPTIONAL—you do NOT have to buy it if you don't want it! Two access links are posted in the Canvas start here module: one to the digital online version & one a download PDF for offline reading.

We will also be using a courseware platform called **Codon Learning,** which is designed to help you practice concepts and skills for this class and use research-backed study strategies. You will need this to complete assignments and study for tests.
COST: included with the Ball State First Day opt-in; $62.40 from bookstore for access code
TEMPORARY ACCESS: You have 21 days from the first day of class until you need to pay $48 for the subscription using a credit card.
More Info on how to get started can be found in the Canvas "start here" module page

If you cannot afford to obtain these materials, please contact me as soon as possible. I can connect you to campus resources so that this barrier does not affect your ability to fully engage in this course.

Required Technology:

Fully functioning laptop or tablet: Trying to complete this course using a smartphone will be very frustrating to you and you will struggle to meet your full academic potential.
All content for the course is in Canvas access so this is necessary to access that content.
All quizzes & exams are taken on a computer. PCs or MACs are preferred over Chromebooks for optimal functioning, but Chromebooks will work if that is all you have.
Internet Access: High-speed internet connections, such as DSL or a cable modem, is critical for accessing course content via Canvas.
Respondus LockDown Browser: This browser will be used for all quizzes and exams. It

ensures the integrity of these assessments while still allowing me to give timely feedback in the most convenient mode to students. Instructions on how to download & install the browser can be found on Canvas "start here" module page.
Audio & webcam: In the event of instructor illness, weather closings, or other unforeseen events, lectures may be held and recorded on the BSU zoom video platform. If this happens, you will be notified via Canvas announcements and BSU email. As a student in this class, your participation in live class discussions may be recorded. These recordings typically will be made available only to students enrolled in the class, to assist those who cannot attend the live session or to serve as a resource for those who would like to review content that was presented. Students who prefer to participate via audio only will be allowed to disable their video camera so only audio will be captured. Students who prefer to listen only must disable their audio capability and visual camera.

COURSE ASSESSMENTS:

Assignment details, including instructions, relevant readings, due dates, and grading criteria/rubrics will be posted and updated on Canvas. Please check Canvas regularly to stay informed and on track.

In-class activities (ICA):

Each week you will be provided opportunities to assess your learning using in-class activities. These activities are sometimes done individually and sometimes as part of a team. They promote engaging with the content and each other, thus you must complete them to earn the points. ICA activities begin in week 2 and are evenly split between Tuesday & Thursday class sessions. Each non-exam week will have 10 pts of ICA and Exam weeks will have 5 pts of ICA available. Whether ICA comes from individual or team activities on any given day will be at the instructor's discretion.

DUE: by the end of class
POINT VALUE: 5 pts per class session; 90 pts total
LATE POLICY: You must be in class to submit. No credit can be given for missed attendance. **Every student will have the lowest four ICA scores from the semester dropped from their final grade.** This means you can miss class up to 4 times with no need to explain yourself or provide documentation. If you find yourself missing more than 4 classes, please come talk with me so I can connect you to resources that may help your situation.
Team-based work forms the other portion of ICA/ You will be meeting with this team weekly to work through activities that challenge your knowledge of the content. Consider the impact your missing class will have on the success of your team.

Codon Readiness Readings (RR):

These pre-class assignments are completed in the Codon Learning Platform. "Readiness Readings" are designed to provide you with information on a given topic, along with check-in questions that you can complete as you read." They essentially replace a textbook, though we will supplement with free Biology 2e text. Most include vocabulary quizzes to help you learn key terms, & reflection questions to help you adjust to college. They are meant to help you arrive to class prepared & ready to participate.

DUE: every Tuesday & Thursday @ 12:30 pm (excepting exam days)
POINT VALUE: 5 pts each; 120 pts TOTAL
GRADING POLICY: unlimited attempts to answer for full credit
LATE POLICY: 1 day late with 0% deduction; no credit after this
Every student will have the lowest 4 RR scores from the semester dropped from their final grade. This means you can miss RRs up to 4 times with no need to explain yourself or provide documentation. If you find yourself missing more than 4 RRs, please come talk with me so I can connect you to resources that may help your situation.

Codon Homework (HW):

Weekly assignments that help you practice content covered in class. All questions are tagged to specific class-level learning objectives. These are generally harder concept questions compared to the readiness readings. Every Codon Learning question will ask you whether the concept covered in each question is Muddy or Clear. This is an opportunity for you to practice metacognition (thinking about your thinking). Clicking Muddy or Clear will NOT affect your grade or add any required work down the line, but it will help you find and review questions you found confusing later on when you study.

DUE: Fridays @ 11:59 pm; **any point recapture must occur by this due date**
POINT VALUE: 15 pts each; 210 pts TOTAL
GRADING POLICY: 10% pt deduction per incorrect attempt, starting on 2nd attempt.

POINT RECAPTURE: "Point recapture allows you to continue earning points by retrying questions you've missed. Point recapture primarily happens in the Study Path so that you can identify and reflect on the learning objectives and topics associated with questions you missed." **Point recapture is due by the homework due date**
LATE POLICY: 3 days @ a 20% deduction; you can be 5 min or 3 days late, it's 20% off. This is meant to encourage you not to rush if you need to catch up & complete it.

Codon Study Path (SP):
"The Codon Learning Study Path is designed to help you focus your studying efforts on the topics and learning objectives you found challenging and boost your knowledge with effective study strategies like self-testing."

POINT VALUE: 10 pts for each unit Prep Me & 10 pts per each unit Test Me; 100 pts TOTAL
DUE: last Sunday of each unit by 11:59 pm
GRADING POLICY: Prep ME-10% pt deduction per incorrect attempt, starting on 2nd attempt. TestME- credit for completion, even if incorrect
LATE POLICY: not accepted late

Unit Concept Checks (CC):
Unit concept checks are one important aspect of this course, meant to prepare you for future academic work and/or entrance exams and professional certification related to a career. They are one of the tools used to evaluate your learning but are not the sole determiner of grades.

POINT VALUE: 100 pts for each of 5 unit concept checks
LATE POLICY: no late policy; documentation must be provided if an exam is missed. To ensure you stay on task in the course and do not fall behind, students are expected to schedule the make-up exam the same week as the original exam date unless health circumstances and doctor's orders state otherwise.
FORMAT: All concept checks will be taken in-class and will be administered using Canvas/Respondus Lockdown Browser.

- It is important that you arrive on Concept check day prepared and ready to be successful. This means coming to class with:
  - ✓ a fully charged laptop/tablet & a charger for just in case
  - ✓ a phone or other means of using 2-factor authentication (DUO).
  - ✓ A pencil or pen if you would like to use the provided scratch paper
- I will bring a few printed copies of the exam in case of technological emergencies. If having a device presents a hardship, please come speak to me so we can plan alternate arrangements.
- Students with accommodations should speak to with me well before the first exam, so we can plan together how to best meet the accommodation.
- Exam dates are given well in advance so please plan accordingly. **Missing the exam for work, medical/dental appointments or similar events will NOT be excused.**
- If you are attending a funeral, athletic event, BSU sanctioned event, are ill, or have an unforeseen extenuating circumstance please contact me BEFORE the exam starts with appropriate documentation. We will work to schedule a time that I may proctor your exam in person in a quiet testing room.
- To ensure you stay on task in the course and do not fall behind, students are expected to schedule the make-up exam within one week of the original exam date unless health circumstances and doctor's orders state otherwise.

Extra Credit:

I will be offering **5, short extra credit opportunities** throughout the semester, one for each unit. Each one is worth 10 pts, for a total of 50 pts of extra credit. The specific design of these assignments is at my discretion, and they will not be accepted past the due date

SCHEDULE:

Tentative Schedule Fall 2026

The information in this syllabus, and the tentative course schedule, is subject to change at the instructor's discretion. You will be notified of any changes in class, on Canvas, or by email. A detailed schedule is posted in Canvas under the **"Start Here"** module, and in the Canvas sidebar Syllabus link.

To help you stay prepared, our exam schedule is below:

Exam	Date
Unit 1 Concept Check	9/8
Unit 2 Concept Check	9/29
Unit 3 Concept Check	10/27
Unit 4 Concept Check	11/17
Unit 5 Concept Check	12/8

"When is my stuff due?"
RR (Readiness Readings) due before class @ 12:30 PM
HW (Homework) due Fridays @ 11:59 pm
Point Recapture-due at the HW date
Study Path-Prep Me & Test-Me due last Sunday of the unit @ 11:59 pm

Lab:

The main focus of the lab component is to give students hands on experience in the process of science. Labs meet at the day & time indicated by your section number, and you will have a separate lab instructor. You will receive a separate syllabus for the lab portion of this course explaining how your progress in lab will be assessed. Any grade for lab will be entered into the same Canvas gradebook as the lecture assessments.

COURSE POLICIES:

Attendance:

Please plan to attend class regularly, including lab. By being present in class, you can fully participate in your learning—you can ask questions, learn from your peers, and learn something not in the textbook! You will also be part of a team and they will be depending on your input. While I do not give points for merely being present in class, I do keep track of attendance. If I notice you've been missing a lot, I will reach out to see if I can help or direct you to needed resources.

What if I am absent?

- **Every student can miss up to 4 classes with no impact on their grade**
- Students who want to know exactly what was covered in class are responsible for obtaining lecture notes from a fellow student.
- If you are unable to attend lecture due to BSU-sanctioned travel or being a student-athlete, you should notify the appropriate instructor ahead of time. In these situations, I will work with you to make up missing work and address questions on missed content.
- After your 4 absences and you fall ill, have a family emergency, or have some other documentable reason for missing, contact me asap.
- Lab is hands on & you must be there to do lab; See the lab syllabus for lab attendance Policies

Participation:

Please check your BSU email and Canvas accounts regularly. Doing so will allow you to view announcements, participate in class activities, prepare for and complete assignments and assessments.

During lecture: Bring a digital or hard-copy of lecture slides to take notes on, and bring your device for attendance

- I make every effort (but no guarantee) to post slides before class for this purpose. However, you will be responsible for all material that is discussed during lecture sessions, regardless of whether it appears in the uploaded presentation files.
- Attempt all questions posed team activities. Actively engage with your classmates during these in-class activities. Hearing from your peers is a very valuable way to learn.

Outside of class: Spend time working with the material to improve your understanding. Write down questions you have or topics you are struggling with and ask me (or tutoring) early & often about them.

Complete assignments by their due date. A module on Canvas explains when each assignment category is due. Our course content builds on itself, i.e. you need to know week 1 content for week 2 to make any sense. Falling behind makes it very difficult to learn, and you will feel overwhelmed.

- It is also your responsibility to ensure your assignments are submitted and that you have submitted the correct assignment. After clicking submit, the refreshed screen will show a green **√Turned In!** on the right-hand side, along with the date/time and file name. **Please take a screenshot of this to keep for your records**. It will be required for proof of submission if there are discrepancies.
- If submitting using the Canvas App on a mobile device, please take screenshots of every submission for your records. These are required as proof if your submission does not appear on my end- it happens.
- I strongly advise you NOT to submit using the Canvas app on your phone.

Please submit assignments using the indicated document format (.doc or .docx; .ppt or .pptx; .pdf, etc.) I use a PC, so if you don't follow the requested format I might not be able to view your submission which means I can't evaluate it.

Late Policy:

Everything in this course has a specific due date. I deduct 20% off per day late past the due date for Homework. Exams and extra credit are not eligible for the late policy.

Grade Policy:

Final course grades are determined by the total number of points accumulated from the above assignment categories. At the end of the semester, your total percentage will be rounded to the nearest whole number, following standard rounding rules. I do not curve exams or final grades. There are plenty of opportunities outside of exams for students to build their knowledge and improve their grades.

Grading Scale:

A 93-100%	C 73-76%
A- 90-92%	C- 70-72%
B+ 87-89%	D+ 67-69%
B 83-86%	D 63-66%
B- 80-82%	D- 60-62%
C+ 77-79%	F <59%

POINTS BREAKDOWN	
Unit Concept Checks	**500 pts**
Readiness Readings (RR)	**120 pts**
Homework (HW)	**210 pts**
Study Path-Prep Me	**50 pts**
Study Path-Test Me	**50 pts**
In-class Activities (ICA)	**90 pts**
Lab	**550 pts**

ACADEMIC SUPPORT SERVICES:

Students can benefit from free tutoring and coaching at the **Learning Center**, writing practice and feedback at the **Writing Center**, mental health assistance at the **Counseling Center**, assistance with basic needs at the **Basic Needs Hub**, and public speaking assistance at the **Speaking Center**. Please see the **Canvas Resources Module: Where to get help for this class** for more information.

Embedded Tutoring:

Embedded tutoring is an academic support program designed for large lecture classes and/or historically-difficult courses. An embedded tutor—a student who has already taken the class and has been trained in academic assistance—will attend class with you each day and provide in-class support for your daily group work and active learning assignments. Your embedded tutor will hold weekly walk-in hours for assistance outside of class.

https://www.bsu.edu/academics/collegesanddepartments/universitycollege/learningcenter/tutoring/get-a-tutor/embedded-tutoring

UNIVERSITY POLICIES:

Freedom of Expression

Freedom of expression is enshrined in the First Amendment to the United States Constitution and Ball State University's Bill of Rights and Responsibilities. Therefore, Ball State University is committed to free and open inquiry in all matters, and our University guarantees all members of the University community—including students, faculty, staff, and visitors—the broadest possible latitude to speak, write, listen, challenge, and learn. https://www.bsu.edu/about/freedom-of-expression/freedom-of-expression-statement.

Please review Ball State University's Statement on Freedom of Expression, the resources on Ball State's Freedom of Expression webpage, and Ball State's Beneficence Pledge. Ball State University aspires to attract and retain a diverse faculty, staff, and student body. We are committed to ensuring that all members of the community are welcome, through valuing the various experiences and worldviews represented at Ball State and among those we serve. We promote a culture of respect and civil discourse as expressed in our https://www.bsu.edu/about/beneficence and university resources https://www.bsu.edu/campuslife/multicultural-center/resources

University Statement:
We are committed to ensuring that all members of the community are welcome, through valuing the various experiences and worldviews represented at Ball State and among those we serve. We promote a culture of respect and civil discourse.

Disability Statement:
If you need course adaptations or accommodations because of a disability, please contact the instructor of record as soon as possible. Ball State's Disability Services office coordinates services for students with disabilities; documentation of a disability needs to be on file in that office before any accommodations can be provided. Disability Services can be contacted at 765-285--5293 or dsd@bsu.edu.

FERPA:
The Family Educational Rights and Privacy Act (FERPA) insures the security and confidentiality of your student information, including your grades. As you are adults, I may not discuss your performance in this course with anyone outside of the University without your explicit written permission. More information on your rights and student authorization documents can be found at BSU FERPA.

Academic Integrity:
Honesty, trust, and personal responsibility are fundamental attributes of the university community. Academic dishonesty and other forms of academic misconduct threaten the foundation of an institution dedicated to the pursuit of knowledge and will not be tolerated. To maintain its credibility and reputation, and to equitably assign evaluations of scholastic and creative performance, Ball State University is committed to maintaining a climate that upholds and values the highest standards of academic integrity. Visit the VPAA's academic integrity website for resources on understanding academic integrity, citing sources properly, and avoiding inadvertent academic dishonesty. To learn about BSU's academic integrity expectations and students' rights, please read the University Student Academic Ethics Policy.

An ethics violation, depending on the severity, can lead to a zero for the assignment at the minimum, failure of the course, and suspension or expulsion from BSU. Academic dishonesty by a student will be treated in accordance with the BSU Student Code. You are expected to be familiarwith and abide by both the: Code of Student Rights and Responsibilities and Academic Ethics Policy. If academic honesty is suspected, the instructor will notify the student within 5 days to request a meeting. Failure to respond will

be treated as an admission of responsibility. Upon meeting with the student, an Ethics Reporting form will be submitted to the Office of the Vice Provost for Academic Affairs and the student will have the opportunity to deny or appeal the allegation.

Academic integrity violations include giving or receiving an unfair academic advantage (cheating), presenting someone else's ideas or work as your own (plagiarism), and falsifying academic records. Unless otherwise indicated, you must work independently by yourself. Check with me if you are unsure whether something constitutes academic dishonesty. Examples of academic integrity violations include but are not limited to:

- Using resources not authorized by the faculty member (including devices, AI tools, hidden notes, and open books)
- Using commercial study websites to find answers to graded assignments (Chegg, Course Hero, StudyPool, OneClass, etc.).
- Without the instructor's written permission, giving away, buying, or selling graded assignments class notes, exams, study guides, or other course materials to other students or to third-party vendors (Course Hero, Chegg, 24HourAnswers, etc.).
- Working with another person on any assignment other than authorized group projects.
- Sharing or allowing others to access your files, whether done with permission or not.
- Reusing your own work from another semester, course, or section.
- Sharing answers with others during exams (passing notes, texting, whispering, gesturing)
- Discussing exam questions and answers with students who have not taken the exam.
- Soliciting others to complete work for you.

Generative AI Statement

All work produced and/or submitted in this course should reflect your own ideas and demonstrate your current knowledge, abilities, and skills. Therefore, GenAI should not be used to complete any portion of the assignment(s). Doing so constitutes a violation of Ball State University's Student Academic Ethics Policy.

I the instructor will not use AI to grade or assign grades to any portion of any class assignment or assessment.