



## COURSE SYLLABUS

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### BIO 135 1 –Principles of Biology I

#### **Self-Paced Course - Web Based Format Option**

Session begins on the 1<sup>st</sup> day of enrollment month and ends on the last day of the 6<sup>th</sup> month

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#### Instructor Information

**Instructor Name:** [faculty member]

**Contact Information:** For questions, comments, or concerns please contact the Self-Paced Degree Program office:

Telephone: 563-425-5200 or 1-800-553-4150

E-mail: [selfpaced@uiu.edu](mailto:selfpaced@uiu.edu)

Address: Upper Iowa University, PO Box 1857, Fayette, IA 52142

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#### Course Description

**Semester Credits:** 4 semester credits

**Catalog Course Description:** This course introduces students to fundamental concepts in biomolecular structure, cell biology and genetics. This course is the first part of a two-course introductory biology sequence for majors in the biological sciences.

**Prerequisites:** None

**Credit Hours:** As a requirement of HLC Accreditation, all UIU courses, regardless of meeting schedule or instructional mode, follow the Federal Credit Hour Definition. As such, each credit hour earned at UIU is equivalent to a minimum of 45 hours of student engagement.

For more information on how specific instructional modes meet this requirement, please see *UIU's Policy Guidelines for Instructional Time Expectations*: [UIU Policies](#).

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## Course Materials

It is the student's responsibility to make sure she/he has access to all required course materials by the start of the session.

### Required Textbooks

Raven's Biology, including Connect, 13<sup>th</sup> Edition

ISBN: 9781264754021.

### Recommended Resources

UIU Tutor Center

- Email: [tutorcenter@uiu.edu](mailto:tutorcenter@uiu.edu)
- Phone: (563) 425-5272

UIU Academic Success

- Email: [academicsuccess@uiu.edu](mailto:academicsuccess@uiu.edu)
- Phone: (563) 425-5264

### Ordering Textbooks

Purchase your textbook through the online university bookstore, [BNC Virtual](#), or by phone at (800) 325-3252.

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## Course Outcomes

- Students will be able to investigate and create an experiment using the scientific method to investigate a biological problem.
- Students will be able to investigate and describe the atomic makeup and features of biological molecules and the cellular structure of life.
- Students will be able to explain cellular energetics, thermodynamics, and enzyme activity.

- Students will be able to summarize the steps associated with aerobic respiration, fermentation, photosynthesis, the cell cycle, mitosis and meiosis.
- Students will be able to describe mechanisms of genetic transmission and gene expression.
- Students will be able to distinguish between living organisms and non-living organisms such as viruses, viroids, and prions.
- General Education Outcome: Students will be able to apply scientific methodology to problems or investigations in science.

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## Program Student Learning Outcomes

Biology 2a and Conservation Management 3a: Students will apply scientific methodology, including observation, hypothesis and experiment, to support conclusions involving biological problem

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## General Education Assessment

Upper Iowa University is committed to ensuring that all undergraduate students participating in its general education program receive a broad education, while gaining essential professional skills across multiple disciplines. The Peacock Professional Experience provides nine learning outcomes, each of which articulates a specific skill students should gain, and are supported by knowledge provided by the courses students choose to take within the guidelines of the program. The outcome assessed in this course is the last outcome listed under Course Outcomes.

- General Education Outcome: Students will be able to apply scientific methodology to problems or investigations in science.

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## Course Requirements and Grading Criteria

### Course Requirements

1. Review the **entire** course syllabus before beginning the course. Be sure you understand the course procedures and objectives. Procedures do change, so please review **ALL** requirements and policies even if this is not your first course including, but

not limited to, administrative withdrawal. Your course status will be affected if policies are not followed.

2. Students who develop a regular time schedule and set goals for unit completion are most successful in completing courses within a specific timeframe.
3. The feedback you receive from the instructor of your work is **critical** to your success on subsequent lessons. These comments allow you to improve and modify the next units if necessary.
4. Assignments are submitted using uiuLearn. Please complete all assignments and modules in order.
5. If the information in your syllabus is not clear or if units are not graded within a reasonable period of time, please contact your instructor using uiuLearn's email tool, if that doesn't work contact the Self-Paced Program office. We would like the opportunity to address concerns, however, we may not know unless we hear from YOU!
6. **ALWAYS** keep a copy of your completed work when submitting it for grading.

## Grading Criteria

Criteria	Points
Exams	400 points
Quizzes	65 points
Smartbook Assignments	135 points
Virtual Lab activities	85 points
Other lab activities	90 points
<b>Total</b>	<b>775 points</b>

## Grading Scale

Letter Grade	Percent	Letter Grade	Percent	Letter Grade	Percent
A	100-93	B-	81-80	D+	68-69
A-	92-90	C+	79-78	D	64-67
B+	89-88	C	77-72	D-	60-63

Letter Grade	Percent	Letter Grade	Percent	Letter Grade	Percent
B	87-82	C-	71-72	F	59-0

## Grades and Feedback

This syllabus contains all assignments necessary for completing your self-paced course.

Submit your completed assignments via uiuLearn. Only submitted assignments will be graded. You must complete your smartbook assignments and virtual labs or your scores to be submitted to the gradebook. Please be sure to complete works so the points may be transferred.

If you need academic assistance with the course, please feel free to contact the Self-Paced Degree Program office.

To protect the integrity of the final assessment/exam, you only receive your final grade on the exam; you do not receive any feedback on the answers to the exam questions. The answers to the questions on the exam are not shared with students. Please remember to stay academically honest.

## Turnitin

Turnitin is a tool for both teachers and students to ensure academic integrity by checking the originality of submitted papers to avoid issues of plagiarism and academic dishonesty.

Students should be aware that Turnitin scans submitted work and compares it to ALL other sources on file.

## Extension Policy

Students will be allowed to request an extension and receive an 'X' (extension grade) at the end of their original six-month enrollment period if:

- A minimum of one assignment has been received for grading per guidelines **AND**
- All course units and exams are not completed and submitted **OR**
- A course withdrawal has not been initiated.

Note: The fee for a self-paced extension is \$99 per course. The request for an extension must be submitted no earlier than one month before the end of the course and no later than a week before the end of the course.

## Extension grade details

- When the extension is granted and an “X” grade is issued, the student will receive a four-month enrollment period to complete the course.
- Students do not have the option to withdraw from a course after the initial six-month enrollment period.
- An ‘X’ grade posted to the student’s official record will be replaced with a final letter grade; however, the extension will remain on the official transcript as a notation.
- If the course is not completed by the end of the extension period, the instructor will assign a final grade (A-F) based on work completed in relation to the total course requirements.
- If credit is not earned by the end of the extension period, students can re-enroll and repeat the entire course for credit.

Note: Students are not reported as enrolled during the extension period and are not eligible for student loan deferment. No more than one extension will be granted.

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## Course Schedule

Please work through the course in from top to bottom in the learning management system (uiuLearn). Please do be sure to complete the units in order displayed below. Remember there are items that are informational, and others are worth points. Be sure to see the modules

### Unit 1

PowerPoint Files (Review files and Read e-book)	Chapter 1 The science of biology; Chapter 2 The nature of molecules and the properties of water; Chapter 3 The chemical building blocks of life; Chapter 4 Cells
Smartbook Assignments	Chapter 1 The science of biology; Chapter 2 The nature of molecules and the properties of water; Chapter 3 The chemical building blocks of life; Chapter 4 Cells
Virtual Labs	VL-1 <sup>st</sup> lab tutorial, VL: lab Safety Simulation, VL—Chemical Comp-Test for Sugars, VL Chemical Composition of proteins, VL microscopy, VL examining plant and animal cells
Other lab Assignments	Scientific Method Worksheet-General Education and Program Assessment
Syllabus quiz	Review the syllabus before taking—start here

PowerPoint Files (Review files and Read e-book)	Chapter 1 The science of biology; Chapter 2 The nature of molecules and the properties of water; Chapter 3 The chemical building blocks of life; Chapter 4 Cells
Smartbook Assignments	Chapter 1 The science of biology; Chapter 2 The nature of molecules and the properties of water; Chapter 3 The chemical building blocks of life; Chapter 4 Cells
Unit 1 Quiz	Unit 1 Quiz—Chapters 1, 2, 3, 4
Unit 1 Exam	Unit 1 Exam—Chapters 1, 2, 3, 4

## Unit 2

PowerPoint Files (Review files and Read e-book)	Chapter 5 Membranes, Chapter 6 Energy and Metabolism, Chapter 7 How Cells Harvest Energy, Chapter 8 Photosynthesis
Smartbook Assignments	Chapter 5 Membranes, Chapter 6 Energy and Metabolism, Chapter 7 How Cells Harvest Energy, Chapter 8 Photosynthesis
Virtual Labs (VL)	VL osmosis in red blood cells, VL enzyme function and temperature, VL photosynthesis CO <sub>2</sub> , VL Cellular Respiration yeast fermentation
Other lab assignments	Scientific Method Project Unit 2-General Education and Program Assessment
Unit 2 Quiz	Unit 2 Quiz—Chapter 5, 6, 7, 8
Unit 2 Exam	Unit 2 Exam—Chapter 5, 6, 7, 8

## Unit 3

PowerPoint Files (Review files and read Ebook)	Chapter 10 How Cells Divide, Chapter 11 Sexual Reproduction and Meiosis, Chapter 12 Patterns of Inheritance, Chapter 13.1, 13.2 The Chromosomal Basis of Inheritance and Human Genetics
Smartbook assignments	Chapter 10 How Cells Divide, Chapter 11 Sexual Reproduction and Meiosis, Chapter 12 Patterns of Inheritance, Chapter 13.1, 13.2 The Chromosomal Basis of Inheritance and Human Genetics
Virtual labs (VL)	VL Cell Division-Examining Mitosis, VL Cell Division—Examining Meiosis, VL on Monohybrid cross flies
Other lab assignments	Scientific Method Project Unit 3-General Education and Program Assessment
Unit 3 Quiz	Unit 3 Quiz—Chapter 10, 11, 12, 13.1, 13.2
Unit 3 Exam	Unit 3 Exam—Chapter 10, 11, 12, 13.1, 13.2

## Unit 4

PowerPoint Files (Review files and read Ebook)	Chapter 14 DNA the genetic material, Chapter 15 Genes and how they work, Review past chapters
Smartbook assignments	Chapter 14 DNA the genetic material, Chapter 15 Genes and how they work, Recharge past chapters as you need

PowerPoint Files (Review files and read Ebook)	Chapter 14 DNA the genetic material, Chapter 15 Genes and how they work, Review past chapters
Virtual labs (VL)	VL on DNA and RNA structure, VL DNA technology and Isolation of DNA, VL on Transcription, Translation, and Mutation
Other lab assignments	Scientific Method Project Unit 4-General Education and Program Assessment
Unit 4 Quiz	Unit 4 Quiz—Chapter 14, 15 and comprehensive portion over all of the remaining chapters
Unit 4 Exam	Unit 4 Exam—Chapter 14 and 15 and comprehensive portion over all of the chapters

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## Course Expectations

### Artificial Intelligence

For the duration of this course, the use of generative artificial intelligence (such as ChatGPT) in assignments is strictly prohibited. Assignments are opportunities for personal growth, critical thinking, and applying your acquired knowledge. Your individual effort and creativity are essential in demonstrating your understanding of the course material. Dependence on AI undermines these objectives and compromises the integrity of the learning process. I appreciate your commitment to academic honesty and dedication to upholding this course's principles by refraining from using Generative AI in your assignments.

### Late Work

Late work is not accepted without obtaining an official extension ('X' grade) from the University. See the syllabus policy on Extensions for details. Work that is not submitted or completed from external learning tools, or uiuLearn, will earn a grade of a 0 if official extensions are not sought.

### Professional Writing and Speaking Guidelines

Communications in class and online should follow the Student Conduct and Discipline, Respect for the University Environment, and Code of Student Responsibility in the [Student Handbook](#) (pg. 20 and 21). Respect the opinions of others using appropriate language and communications.

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## University Policies

### Withdrawal (W)

If a student decides to withdraw from a course before the end of an enrollment period, the student's charges, financial aid, tuition assistance, and/or veteran benefits could be affected. All students should consult with the Business Office and Financial Aid Office to understand the financial impact of withdrawing prior to initiating the withdrawal process.

Students who have registered for this course through our partnership are required to follow the withdrawal policy outlined on the partnership website. Please refer to the partnership site for official withdrawal procedures and deadlines.

Tuition adjustments are independent from academic and financial aid deadlines. Upon receiving a request for withdrawal, using the number of lessons submitted as compared to the total due, a refund of tuition is made according to the following guideline.

On or before the first day of the enrollment period\* 100%

After the first lesson through 10% of the enrollment period 90%

After the first 10% through the first 25% of the enrollment period 50%

After the first 25% of the enrollment period 0%

\*Enrollment is measured by the number of assignments to be submitted during a six-month period of time, as determined by the University, during which semester credits are earned toward graduation. The refund/repayments shall be calculated using the percentages noted above as determined using the number of assignments completed and the number of assignments yet to be submitted.

For example, if a student submitted 2 of 17 assignments, they completed 11.76% of the class assignments. The student would be refunded 50% of the tuition cost.

For students from Wisconsin, Maryland, Georgia, Oregon, or Arizona, state laws apply. For students enrolled through the cpacredits.com program, no refund is allowed after the first two weeks.

Students who withdraw from a course prior to submitting the first assignment, or who are administratively withdrawn for non-submission of assignments, will be charged an administrative fee of \$99.

Course withdrawal may impact financial aid eligibility. A financial aid counselor is available to discuss this decision.

Upper Iowa University is required to use a pro rata schedule to determine the amount of Title IV aid the student has earned at the time of withdrawal. If financial aid funds have been released to the student because of a credit balance on the student's account at Upper Iowa University, the student may be required to repay some or all of the amount released to the student. This policy is subject to federal regulations. Contact the Financial Aid Office for details.

Withdrawing from a course in progress may result in significant student account charges. Consult with the Business Office before withdrawing. For more information on financial aid implications, go to [uiu.edu/financial aid](http://uiu.edu/financial aid).

### **Administrative Withdrawal (AW)**

A grade of AW (administrative withdrawal) is recorded for any course from which a student is administratively withdrawn. **At least one complete assignment/unit must be received and verified by the instructor within the first 60 days of the enrollment period or the student will be administratively withdrawn from the course.** Students who are administratively withdrawn for non-submission of assignments, will be charged an administrative fee of \$99. Non-Attendance (NA): Never attended grades are not applicable to the Self-Paced Degree Program. A good assignment to consider starting with is the syllabus quiz in unit 1.

### **Academic Accommodations**

It is the policy of Upper Iowa University to ensure equal access to educational and co-curricular activities to students with disabilities as mandated by the Americans with Disabilities Act Amendments Act (ADAAA) and Section 504 of the Rehabilitation Act of 1973. A student seeking accommodations should contact the Director of Student Accessibility Services as early in the session as possible. In order to receive accommodations, students are required to disclose their disability to the Director by completing an application for services that can be found on the Student Accessibility Webpage. In addition to the application packet, the student is required to submit supporting documentation. Submit these to the Student Accessibility Services Office either in person or by email/Fax. A brief interview, in-person, by phone or virtually, with the Director will confirm or deny the accommodations requested. The Student

Accessibility Services Office will email accommodation letters to the appropriate professor, the student, and the student's advisor. Additionally, students should work cooperatively with their instructors throughout the session to make sure that their accommodations are appropriate and effective.

Upper Iowa University (UIU) provides closed captioning/transcriptions in acknowledgment of the Americans Disability Act, Rehabilitation Act, and various state laws. The information displayed is computer generated and not reviewed before being published. UIU makes no representations or warranties and expressly disclaims any responsibility or liability with respect to any errors or omissions in, or the accuracy, reliability, timeliness, or completeness of, any information that appears in a closed caption or transcript.

Contact the Director at (563) 425-5949, [accessibility@uiu.edu](mailto:accessibility@uiu.edu) or stop by the office on the 2nd floor of the Student Center, Office of Student Life, Room 229.

**Emergency Directives:** (Fire, Natural Disaster, Threat on campus, etc.)

In accordance with Upper Iowa University's emergency management plan, any student that requires assistance in the event of an emergency (Fire, natural disaster, threat on campus) is responsible for notifying their instructor of the need for assistance. (Evacuation, and/or indoor safety protocols) This information will be held confidential and only needed in the unlikely event that there is an emergency.

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## Copyright Statement

In recognition of the Copyright Law of the United States (Title 17, United States Code), Upper Iowa University reminds both faculty members and learners that a willful infringement of the law may result in disciplinary action. The University library has available materials discussing the "fair use" concept, along with criteria and guidelines for reproduction and use of copyrighted materials.

**This syllabus is subject to change.**

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