



# BIOL 100 Syllabus

Fundamentals of Biology Spring 2025

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Course Meeting Days and Time	T/Th 1:00
Required Experiential Learning Dates	
Office Hours	[Type your office hours here]

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## Catalog Description:

This class for the non-science major will explore fundamental concepts of Biology and relate them to current social issues. Emphasis will be placed on how science approaches the world. The primary goal of this course is for students to learn basic biological principles so that students may better appreciate how biology is relevant in their everyday lives. 4 credit hours.

## Credit Hour Policy Statement:

"This class meets the federal credit hour policy through a combination of lecture + laboratory (or lecture + practicum) for a total of 45-75 hours of supervised learning activities for each credit." (Def 1 & 2)

## General Education Requirements:

This course meets the General Education requirements for Outcome 8 [Choose an overlay].

## Course Learning Objectives:

- Students will demonstrate a thorough familiarity with important vocabulary, facts, and theories of biology.
- Students will demonstrate an understanding of fundamental scientific principles, relationships and unifying theories of biology.
- Students will demonstrate an ability to reason and solve problems using scientific concepts.
- Students will demonstrate an understanding of the relevance of the scientific discipline to society.

Students will demonstrate an ability to read and follow experimental procedures, analyze data, account for variability and uncertainty in measurement, and use relevant observations to draw conclusions.

## Methods of Instructions:

This class includes traditional lectures, on-line and in-class discussions, laboratory experiments and activities, and will require student collaboration.

We will run a simulation game: a Reacting to the Past module on Darwin's nomination for the Copley Award. In this game, you will each receive a role to play, complete with objectives and assignments (short papers in preparation for your class

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presentations). We'll be transported back to 19<sup>th</sup> century Britain to examine the response to the new idea of evolution, and opinions as to the role and nature of science.

**Textbooks and Required Reading:**

**S. Mader and M. Windelspecht, *Essentials of Biology*. 7<sup>th</sup> Ed., c. 2024, with Connect. ISBN 9781266093593**

Driscoll et al., *Charles Darwin, the Copley Medal, and the Rise of Naturalism*, c. 2010. ISBN 9780393937268

**Course Schedule:**

Week	Topic	Reading
1 and 2	Science, Evolution, <b>Darwin RTTP</b>	Ch. 1, 14, Reacting to the Past
3	Chemistry, cells, Exam 1	Ch. 2, 3, 4
4	Energy	Ch. 6, 7
5	Cell division, Genetics, Exam 2	Ch. 8, 9, 10
6	DNA, Biotechnology	Ch. 11, 12, 13
7	Evolution, Exam 3	Ch. 15, 16
8	Microbes, Coronavirus	Ch. 17, 26
9	Plants, Fungi, Exam 4	Ch. 18, 20, 21
10	Animals, control, reproduction	Ch. 19, 27, 29
11	Population Ecology	Ch. 30
12 and 13	Communities and Ecosystems	Ch. 31
14	Human Impact, Review	Ch. 32



**Labs may include:**

**Identification of botanical specimens ([www.botanicalkeys.co.uk/flora/](http://www.botanicalkeys.co.uk/flora/))(PlantNet app)(iNaturalist Seek app)**

**Genetics using Star Genetics ([star.mit.edu/genetics/index.html](http://star.mit.edu/genetics/index.html))**

**Identification of disease genes (tutorial)**

**Online observation records. Submit observations of wild organisms to the iNaturalist.org site. Records must include date, specific location (by map), and good quality photographs. Take photos as close as possible so organism can be identified.**

**Or count animals in the Serengeti: <http://www.snapshotserengeti.org/>**

**Or count bumble bees ([beewalk.org.uk](http://beewalk.org.uk))**

**Mitosis and Meiosis**

**DNA structure**

**\*Subject to change at the discretion of Dr. Jonas.**

**Grading Criteria:**

The grade you receive in this class is based on the following:

3 Exams (50 pts. each) = 150 pts.

Comprehensive Final Exam = 100 pts.

Reacting to the Past = 50 pts. (Paper(s) = 30 pts., Class participation 20 pts., Winner's bonus 3 pts. extra)

Lab = 100 pts.

Total = 400 pts.

Your final course grade will be determined by the percentage of the 400 pts. you earn.

Extra Credit: You may earn extra credit points by submitting summaries of news articles dealing with biological topics. The summaries should be one typed page (double spaced, 1" margins), summarizing articles from U.K. or European newspapers, news web sites, etc. Try to contrast the coverage with what you might see in the USA. Include a copy of the article. You will receive 5 pts. per each properly done summary, for a maximum of 20 pts. (4 articles), to be added to the points earned for the course.

**Withdrawal and Attendance policies:**

Harlaxton College expects regular class attendance by all students. Students are considered sufficiently mature to appreciate the necessity of regular and punctual attendance, to accept this personal responsibility and to accept the consequences of failure to attend. When absences occur due to emergency or medical reasons, students are expected to notify their instructors of the absence prior to class or to seek the assistance of the College nurse or a member of the Student Experience Team for help in notifying instructors.

Instructors have the authority to grant excused absences for medical, psychological, or personal reasons upon review of appropriate documentation and professional recommendation supporting such a request. In the event of long-term illness, reasonable accommodations will be made to allow a student to complete a course. In these cases, the Dean will need to approve the long term nature of the accommodation.

The Dean of Harlaxton College has the authority to grant excused absences for medical, psychological, or personal reasons.



Each instructor is expected to maintain an attendance policy in keeping with the nature of the Harlaxton program and may consider it in evaluating performance in their courses.

**Policy Governing Unexcused Absences:**

Harlaxton College operates an attendance policy that is binding on all faculty and students. The number of unexcused absences that are allowed before incurring a penalty is related to the number of times a class meets each week. For courses which meet three times a week, students are allowed a maximum of three unexcused absences during the semester without attracting penalty points. For courses meeting twice a week two such absences are permitted, and for courses meeting once a week a single absence is allowed. Additional unexcused absences will attract a grade penalty of a full letter grade deduction (A to B, for example).

**Policy Governing Excused Absences.**

- Excused absences are not given to facilitate student travel independent of College-sponsored travel.
- Students may be permitted to miss class because of participation in academic field trips.
- Instructors must co-ordinate and confirm academic fieldtrips with the Dean, prior to the commencement of the Semester to ensure their inclusion in the Semester timetable.
  
- Where authorization for an academic fieldtrip is requested after the commencement of the semester, the request must be submitted to the Dean.

The following information is required:

- Purpose and brief description of the official Harlaxton event or academic fieldtrip.
- Dates, location, and times (as applicable).
- Alphabetical list of students involved [Last Name/First Name] along with their student identification number.

If approval is granted:

- Instructors affected will be notified at least one week prior to the class period during which absence is anticipated, or as soon as possible.
- Missed class time due to student participation is to be considered an excused absence.
- The grade of a student may not be lowered in any class due to excused absences.
- It is the student's responsibility - to take the initiative by consulting with their instructors before the absence occurs, and - to do what is required by the instructor to make up all missed assignments and/or examinations.
- Instructors are required to assist students in these occasional situations of excused absences.

**Honor Code:**

All students at the University of Evansville agree to the University honor code: *I will neither give nor receive unauthorized aid, nor will I tolerate an environment that condones the use of unauthorized aid.*

**AI may be used only with prior permission or direction by the instructor.**

- All work submitted in this course must be your own.
- The use of generative AI composition tools, such as those offered by ChatGPT, Google Bard etc. is prohibited in this course except for specific assignments and subject to the instructor's guidelines.
- Work generated by such tools without proper attribution is plagiarism and, thereby, a breach of the University's Plagiarism and Academic Honesty policy.

**Disability Policy:**



It is the policy and practice of the University of Evansville to make reasonable accommodations for students with properly documented disabilities. Students should contact Disability Services within the Office of Counseling Services by calling 812-488-2663 to seek services or accommodations for disabilities. Written notification to faculty from Disability Services is required for academic accommodations.

The University of Evansville Disability Services office will share the request for academic accommodations with the Academic Support team at Harlaxton College. Staff members at Harlaxton will meet individually with students to discuss needs and provide additional information related to examinations or other assessments.

Students from partner institutions should provide the appropriate letter of accommodation from their institution to the Academic Support team at Harlaxton College.



### **Non-Discrimination Statement**

The University of Evansville expects all members of its community to treat each other with respect and civility. Harassing behaviors directed towards any member of our community will not be tolerated. As part of its commitment to non-discrimination, the University specifically prohibits harassment based on any other characteristics set forth in its nondiscrimination statement as follows: including race, color, gender, gender identity and expression, sexual orientation, creed or religion, national origin, age, disability, veteran status and all federally protected groups/classes. Any form of harassment undermines the mission of the University and negatively impacts the University community as a whole.

### **Prohibited Conduct and Confidentiality**

The University of Evansville is committed to fostering an atmosphere free from harassment and discrimination. This commitment includes identifying problems that may lead to sexual harassment and misconduct, as well as other forms of harassment and discrimination, by creating an atmosphere in which the entire University community is sensitive to preventing prohibited conduct. Additionally, the University is committed to providing support and resources to individuals who have experienced prohibited conduct. This commitment includes effectively responding when a student, visitor, guest or program participant is the victim of prohibited conduct.

All campus employees, students, and guests are required to abide by the Title IX and Other Sexual Harassment and Misconduct Policy, the Harassment and Discrimination Policy, and the Consensual Sexual or Romantic Relationships Between Employees and Students Policy. Violation of these policies could result in disciplinary action, up to and including expulsion for students and termination for employees.

Faculty members at the University of Evansville are considered “Responsible Employees” under the applicable federal guidelines and the University’s policies. This means that I am unable to offer you confidentiality if you report any incidence of prohibited conduct to me as defined by Title IX statute. If I am made aware of a violation, I am required to report any known information to the Office of Institutional Equity.

You may choose to report the violation yourself the following ways:

Email: · Annie Sills, Assistant Director of Institutional Equity and Title IX Coordinator: [cs175@evansville.edu](mailto:cs175@evansville.edu) ·

Keith Gehlhausen, Executive Director of HR and Institutional Equity: [kg77@evansville.edu](mailto:kg77@evansville.edu) ·

Title IX: [titleix@evansville.edu](mailto:titleix@evansville.edu)

Phone: 812-288-5261

Online: <https://www.evansville.edu/safety/report.cfm>

You may also choose to speak with a Confidential Resource. Confidential Resources are required to maintain confidentiality and cannot report violations to the Office of Institutional Equity:

#### **University of Evansville**

- Counseling Services: [counselingservices@evansville.edu](mailto:counselingservices@evansville.edu), 812-488-2633
- Health Center Professionals: [healthcenter@evansville.edu](mailto:healthcenter@evansville.edu), 812-488-2033
- University Chaplain: [chaplain@evansville.edu](mailto:chaplain@evansville.edu), 812-488-5262

#### **Harlaxton College**

- College Nurse: Lesley Selby, RGN, +44 01476 403027, [lseyby@harlaxton.ac.uk](mailto:lseyby@harlaxton.ac.uk)
- Counselling Services: [counselling@harlaxton.ac.uk](mailto:counselling@harlaxton.ac.uk)