

Introduction to Evolution and Scientific Inquiry

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Student Visiting Hours Wednesday and Thursday 2:30-4 pm in SCI 201D, or by appointment
Course Website <http://users.rowan.edu/~spielman/courses/introevol/>

Course Description:

This course is designed to introduce new Biology majors to our core curriculum. It lays the foundation for this curriculum and introduces students to foundational concepts in evolution. The course will also introduce students to the scientific method and develop the basic skills for collecting, analyzing, and presenting data. Subsequent courses in the core curriculum will introduce other areas of biology and will build upon the foundation of knowledge and skills acquired in this course.

Course Objectives and Student Outcome Goals:

In this course, we will focus on fundamental biological concepts, specifically those relating to organismal diversity, evolution, and adaptation, as well as the development of basic skills for biological inquiry. At the completion of this course, you should have achieved:

- A basic understanding of patterns in organismal diversity and their causes
- Comprehension of evolutionary concepts and an appreciation of their scientific basis and relevance to biological phenomena.
- Familiarity with experimental design, data collection, and basic data analyses.
- Familiarity with both the creation and interpretation of graphs and data tables.
- The development of critical thinking skills.
- Increased ability to function as part of an effective team.

Required Texts:

- *Introduction to the Science of Evolution*, by Luke Holbrook, PhD
 - E-book version available here:
<https://he.kendallhunt.com/product/introduction-science-evolution>
- Supplementary readings either online or PDF will be given when needed on course website
- For certain classes you will need to bring a laptop or tablet to class. If you do not have access to a personal machine, please see me and I will get you one for the semester.

Evaluation:

Your grade will be derived from the following assessments:

Three Midterm Exams	45% (15% each)
Cumulative Final Exam	15%
Assignments	30%

There will be **three midterm exams** during the semester as well as a **cumulative final exam** during finals week. Your midterm exams will take place in-class on the following dates (**These subject to change based on course progress**)

1. Monday February 17th
2. Monday March 29th

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3. Monday April 20th
4. Final Exam May 4th, 10:15 am - 12:15 pm

Part of the grade will be determined by a number of **homework assignments**. You are encouraged to work with classmates on all assignments, but **each student must submit their own assignments written in YOUR OWN WORDS. Any submission of plagiarised text or wording that is not entirely your own will be regarded as a Level Two or Three Academic Integrity Violation and subject to university-level penalties. DON'T TRY IT.**

Your final grade will be converted to a percentage and then to a letter grade according to the table below. These grade boundaries are subject to change, but cutoffs here correspond to the *lowest* letter grade you can receive for the corresponding percentage. Percentages for final grades are rounded; for example, a final grade of 89.5 rounds to an A-, and a final grade of 89.4 rounds to a B+.

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

Course Policies:

Assignment Policy

- All assignments are due **one hour before** class starts on their deadline. For example, if class starts at 11:00 am, that day's assignment is due at 10:00 am. Assignments submitted within one hour of class time will automatically be deducted 10%. Late assignments submitted after the class start start will NOT be accepted without prior permission. If you need an extension on an assignment, you must contact me at least 24 hours in advance of the deadline with a request for an extension explaining why it is merited. If you receive a positive email confirmation in response, you have been granted an extension.
- All students will receive a one-time "free" late assignment that must be submitted within 24 hours of the deadline. You must notify me if/when you use your late assignment no later than the original deadline.
- Your lowest assignment grade will be **dropped!!**

Attendance Policy

- Although you are strongly encouraged to attend class, attendance will not (usually) count towards your grade. You are also strongly encouraged to notify me when you will not be in class and explain why.
- If you miss **FOUR or more classes** over the semester without notifying me, or if you miss **TWO absences within one week** without notifying me (this includes a Friday followed by Monday absence), or any similar "patterns of skipping class", **you may be automatically deducted 5% of your overall semester grade.** To potentially avoid this penalty, you will be required to have a one-on-one meeting

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with me to discuss the circumstances surrounding your absences. Any similar "patterns of skipping class" may have analogous repercussions. **Punchline: Keep me in the loop!**

- You should feel free to have **one _encouraged_ absence as a Personal Wellness Day** whenever you need, to take care of yourself physically, mentally, and emotionally.
- Remember - you are responsible for material discussed in ALL classes.

Cell Phone Policy

- All phones must be on SILENT during class (not vibrate - SILENT!).
- You may use your cell phones to record lecture (audio and/or video) so long as the phone is SILENT.
- Texting is not allowed during class. Excessive texting will be regarded as an absence (see above policy on attendance).
- If you are in a situation where you feel you must be able to use an electronic device during class, please speak to me directly and we will devise a customized plan for how to proceed.

Email Policy

Emails should be reserved for logistical, administrative, or clarifying questions. *I will not answer content-based questions over email.* Compliant with FERPA regulations, I will also not discuss specific grades over email.

Types of questions which you *can* email me include the following:

- Confusion about wording or scope of an assignment or project
- Questions about deadlines
- Notification of any anticipated issue (attendance, late assignment, etc) or request for extension
- Scheduling a meeting outside of normal student visiting hours

I will *not* answer emails in these circumstances:

- Emails of the category "Is my answer correct?" or "How do I do this question?"
You must see me during student visiting hours or schedule an appointment to discuss this type of question.
- Emails requesting grades
- Emails whose answer can be found on the course website or syllabus.

In addition, please do not expect an email response between the hours of 7 pm - 9 am, and anytime on Saturday.

Academic Integrity Policy

Academic integrity is taken **EXTREMELY SERIOUSLY** in this class. You are ALWAYS expected to submit your OWN work. **Any form of cheating or plagiarism is not permitted and WILL BE REPORTED TO THE UNIVERSITY, NO EXCEPTIONS.** As part of this policy, be aware: If you copy another student's homework or answers, BOTH STUDENTS will be subject to penalties.

Make-up Policy

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There are no make-up labs or exams in this course. Special accommodations may be made for students with legitimate, significant reasons that interfere with taking the exam or attending lab during the scheduled time.

Regrade Policy

If you feel that a re-grade of an assignment or project is merited, you must fill out and submit *on paper* a regrade form, which can be found on the course website. To be considered, this form must be submitted *within two weeks* of receiving the disputed grade. If you believe points were incorrectly added for an assignment or there is a similar minor grading error, you can speak with me directly to request a re-grade without this form.

Key University Policies:

As a student at Rowan University, you are expected to adhere fully to all university-wide academic policies outlined here:

<https://confluence.rowan.edu/display/POLICY/Administrative+Policies>.

Key policies to be aware of can be found at the following links:

- Classroom Behavior Policy:
<https://confluence.rowan.edu/display/POLICY/Classroom+Behavior>
- Academic Integrity Policy:
<https://confluence.rowan.edu/display/POLICY/Academic+Integrity+Policy>
- Student Accommodation Policy:
<https://confluence.rowan.edu/display/POLICY/Accommodation+Policy>
- University Attendance Policy:
<https://confluence.rowan.edu/display/POLICY/Attendance+Policy>

Rowan University is required to accommodate students with documented disabilities.

Your academic success is important. If you have a documented disability that may have an impact upon your work in this class, please provide the professor with up-to-date documentation from the Academic Success Center as soon as possible!

Students must provide documentation of their disability to the Academic Success Center in order to receive official University services and accommodations.

The Academic Success Center can be reached at 856-256-4234. The Center is located on the 3rd floor of Savitz Hall. The staff is available to answer questions regarding accommodations or assist you in your pursuit of accommodations. Additional information and resources can be found at this link:

<https://sites.rowan.edu/disabilityresources/>.

Rowan Success Network ("Starfish®"):

The Rowan Success Network powered by Starfish® is designed to make it easier for you to connect with the resources you need to be successful at Rowan. Throughout the term, you may receive email from the Rowan Success Network team (Starfish®) regarding your academic performance. Please pay attention to these emails and consider taking the recommended actions. Utilize the scheduling tools available through RSN to make appointments (tutoring, advising, etc.) at your convenience. Additional information about RSN may be found at www.rowan.edu/rsn.

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Rowan Core:

Starting in Fall 2018, first-year undergraduate students at Rowan University must complete the new general education requirements, known as “RowanCore.” (Continuing students and new transfer students will follow the existing general education requirements.) Students in Rowan Core must complete course requirements in six literacies: Artistic, Communicative, Global, Humanistic, Quantitative and Scientific.

This course belongs to the *Scientific Literacy* category. All students in this course will be assessed on the following Rowan Core Learning Outcomes for this literacy:

- Students can demonstrate knowledge of core ideas and vocabulary of science and the scientific method in written and/or oral work.
- Students can conduct directed experiments including set-up, data collection, data analysis, and interpret results to either “discover” or verify scientific theory.
- Students will apply scientific data to solve a real-world problem.
- Students will conduct, critique and design scientific studies following the standard scientific method.