

Introduction to Evolution and Scientific Inquiry

Course Instructor	Stephanie J. Spielman, PhD (Dr. Spielman or Professor Spielman)
Office	SCI201D
Email	spielman@rowan.edu
Student Visiting Hours	Monday 2:30-4:30 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.

Requirements of the student:

- Participate actively and complete all assignments on time.
- Get a Rowan e-mail account, from Academic Computing, and use it.
- Be prepared for class and otherwise keep informed of what is coming.
- Cooperate with all members of the class and be respectful.
- Be in class, on time, and stay until the class is over.
- Pay attention and avoid distracting or disrupting the class.
- Adhere to university rules and policies (e.g., regarding attendance, behavior, academic integrity, etc.); policies can be found at <http://www.rowan.edu/provost/policies/>.

Requirements of the instructor:

- Facilitate learning opportunities and act as a “sounding board” for your ideas
- Help you find answers to your questions.
- Be responsive, both in the course confines and outside of them.
- Provide timely information on what is coming up in class.
- Provide fair and impartial assessment of student performance in the course.
- Accommodate special needs

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

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Evaluation:

Your grade will be derived from the following assessments:

Three Midterm Exams	45% (15% each)
Cumulative Final Exam	15%
Assignments	25%
Attendance	10%
Rowan Passport	5%

1. 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**)
 - a. Monday September 30th
 - b. Wednesday October 30th. *This exam will take place from 11-12:15.*
 - c. Wednesday November 27th. *This exam will take place from 11-12:15.*
 - d. Final Exam on December 13th, 2:45-4:45 pm
2. 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**. All assignments will be submitted through Blackboard unless otherwise stated. Late assignments will not be considered without sufficient notice and approval. *That said, all students will receive a one-time "free" late assignment that must be submitted within 24 hours of the deadline. You must notify Dr. Spielman if/when you use your late assignment no later than the original deadline.*
3. Your **attendance and participation** in this class will contribute greatly to your success and mastery of material. Attendance is therefore mandatory, with the following grading structure:
 - a. For each class you arrive to late (15 or more minutes after the start time), your attendance grade will be dropped by 2.5%. This drops your overall course grade by 0.25%.
 - b. For each class you do not attend, your attendance grade will be dropped by 5%. This drops your overall course grade by 0.5%.

That said, it is straightforward to receive an *excused* absences and/or tardiness by contacting me via email at least 24 hours in advance (or closer to class time for emergency situations). If you receive a positive email confirmation from me, your absence is excused with no penalty. In certain circumstances, additional information may be required to receive an excused absence. You will also be able to receive *one "free" absence* each semester, provided you give at least 24 hours notice. You may NOT use this absence during one of the formal lab days.
4. As a designated Rowan Seminar class, we will participate in the **Rowan Passport** program. To successfully complete the Rowan Passport components of this course, you must attend a total of **five events** over the course of the semester. Full details about the Rowan Passport program can be found here: <https://sites.rowan.edu/student-success/first-year-programs/ru-passport-program/index.html> . Passport events can be found here: <https://rowan.campuslabs.com/engage/> . To receive credit for attending events, you must submit your Co-curricular Transcript to Blackboard by the last day of the semester December 10th at 11:59 pm.
5. The primary additional factor that may impact your grade is *improper use of electronic devices*, as described under "Course Policies." Inappropriate cell phone usage will result in an absent grade for the day.

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

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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%

Laptops:

Many of our activities and labs will make use of computers. If you have a laptop or tablet, it will be very useful to bring to class, but please keep in mind that during class it should only be used for purposes related to the course (see electronic device policy below). We will use a number of programs that you can download for free. These will be announced one week prior to the relevant lab (pay attention to the weekly updates!). We will additionally make use of spreadsheets (i.e. in Microsoft Excel or Google Sheets) during labs, and you will be using these spreadsheets to perform basic statistics and graphing.

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>

Notably, 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 contact me *the sooner the better*. 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/>. *Note, to receive special accommodations for an exam, you are required to provide me with a formal letter from Disability Resources at least two weeks in advance.*

Please note that it is the STUDENT'S responsibility to arrange extra exam time, not the Professor's. Make sure you coordinate logistics for each exam with Dr. Spielman and/or the Academic Success Center at least ONE WEEK IN ADVANCE OF THE EXAM.

Course Policies:

1. 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 exam
- Questions about deadlines
- Notification of any anticipated issue (attendance, late assignment, etc)

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- 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 in any of the following: Blackboard postings, weekly updates, this syllabus
- Emails pertaining to exam received less the 24 hours before the exam

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

2. **Regrade Policy**

If you feel that a re-grade of an assignment or exam 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, you can speak with me directly to request a re-grade without this form.

3. **Late Assignment Policy**

All assignments are due on the indicated date *before the start of class that day*. In other words, if your class begins at 11:00 am, assignments submitted at 11:01 am will be considered late. Late assignments will not be accepted, although you have one forgiven late assignment during the semester so long as it is handed in within 24 hours of the deadline. You must notify me if/when you intend to use your late assignment. If you feel that there is a compelling reason that you cannot submit an assignment by the deadline, *please email me at least 24 hours before the deadline.*

4. **Electronic Device Policy**

Part of respecting your instructor and your classmates is providing them with your undivided attention and not being distracting or disruptive. Thus, using electronic devices in a manner that distracts you or your classmates from class activities or that causes disruption in the class is forbidden. Such devices should only be used during class time for course-related purposes. You are welcome to use a laptop, provided it is used solely for class purposes during class time. **If you bring a cell phone, pager, or other mobile devices, they must be turned off or to “silence all” (not vibrate) for the duration of the class.** Failure to comply with this policy means you will be marked ABSENT for each instance of electronic device interruption.

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.

5. **Academic Integrity and Plagiarism**

Plagiarism is taken very seriously in this course and at Rowan University as a whole. *You should **always** feel free to contact me before the deadline if you are unsure if your written assignment may contain, perhaps inadvertently, plagiarism. **When in doubt, ask!!!!***

Although you are encouraged to work with one another for assignments, ***all submitted work must be in your own words.*** Changing “just enough” to “distinguish” between your assignment and another student’s is *not* sufficient, and both (or several, as the case may be) assignments

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will be considered plagiarized in this or analogous circumstances. We will discuss what constitutes plagiarism in class.

6. **Make-up Policy**

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.

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.

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.