What are our class meeting times? 
Lecture: 211 (sections 01 & 04) Tues/Thurs 1050-1205
Synchronous on ZOOM
Discussion: D01 Tu 2-5pm & D04 Th 2-5pm on ZOOM
See OAKS for Zoom links. Attend your section’s time.
Credits: Biology 211+Biology211D together 4 credit course.

Who is the professor? 
Dr. Courtney Muren (she/her)

Where to contact me? 
e-mail: murrenc@cofc.edu
(best way to reach me)

Office hours: Wednesday 2-3pm and by appointment. Zoom link on Oaks

This is a synchronous on-line course with engaged & interactive learning. The syllabus is subject to change as new campus-wide policies are announced. UPDATES will be POSTED on Oaks.

What topics will we explore and develop together?

Instructional Objectives – COMMON to ALL BIOLOGY 211 SECTIONS

This course is intended to foster an understanding of the diverse ways that organisms interact with the environment, the fundamental principles of ecology, evolution, and conservation
biology, and to learn about the three domains of biodiversity on Earth. More specifically as a student in this course you will

- review evolution, initially developed by Charles Darwin, and supported by modern data
- explore the modern synthetic view of evolution which integrates genetics, molecular biology and many other areas of biology into an explanation of how evolution occurs.
- explore mechanisms (or processes) of evolution including
  - how populations evolve at the genetic level (evolutionary genetics)
  - how new species arise (speciation)
  - how biologists are revealing the way life diversified on earth and what the current “tree of life” looks like (systematics & phylogeny)
- explore the evidence in support of evolutionary theory and processes.
- explore the features of the diverse species that inhabit the planet to discover
  - the anatomical, physiological and behavioral associations between related groups of organisms
  - the contributions of the diverse groups of living organisms to ecological systems and human welfare
  - an astonishing variety of lifestyles, traits, and solutions to the challenges of life
- explore how populations change in abundance and distribution (population ecology)
- explore ecological interactions between species (community ecology)
- explore processes and changes that occur at the level of ecosystems
- apply evolutionary and ecological concepts and theories to issues related to the conservation of biodiversity on earth (conservation biology)

**Student Learning Outcomes**

At the end of this course, students are expected to be able to:

- describe the processes by which populations of organisms change in size
- explain the forces that lead to evolutionary change in populations and diversification among species
- interpret phylogenetic trees to comprehend the evolutionary relationships they depict
- discuss how interactions with the physical environment and with other organisms influence populations and communities
- build a foundation of knowledge about life’s diversity and its interrelatedness
- apply ecological and evolutionary principles to the conservation of biodiversity
- apply the following skills used by professional biologists: use primary literature, generate scientific questions and pose testable hypotheses, analyze data to evaluate hypotheses, use quantitative models to describe biological processes, and communicate these to a scientific audience.
The first two thirds of the course are conceptual and quantitative in ecology evolution and conservation.

We will graph, model, work with data, problem solve.

Problem sets for practice with peers in class, and quizzes to develop these skills.

In the third section of the course, we will explore the diversity of life on the planet!

We will synthesize knowledge and build understanding of inter-relatedness of species.

We will also talk about COOL CREATURES!

**What are the D sections? ➔ Discussion sessions:**
The discussion sections are where we build *science skills for your major and beyond!*

- We will build skills tools of how scientists (from medicine to ecology) do science.
- We will analyze data, communicate science and write in many formats.
- Students will work both independently and in groups as scientists
  ⇒ skills of scientists to work respectfully with others and work effectively alone.

In the discussion sections, we will conduct research projects and practice science as scientists.

**Prerequisites** for this course include Biology 111, Biology 111L, Biology 112 and Biology 112L. Successful completion of these courses is required for enrollment in 211. Recommended pre/co-req. Math250 or equivalent. Suggested Math knowledge: through algebra or pre-calculus.

**Texts:** Biological Science 6th edition, Freeman* let me know if you have another edition.

**Required Equipment:** Computer with audio AND video capabilities, Adobe Acrobat or other PDF reader, Access to Google Drive, CofC Zoom account. **Headphones recommended**

**Course Policies: Synchronous on-line**

**Lecture attendance:** Attendance in lecture will set you on the road to success in this course as we will be working on problems directly related to course content and the conservation, ecology and evolution themes of our discussion projects.

Prepare ahead of class taking detailed notes on voicethreads. During lecture, we will share examples from the recent literature, discuss ideas and work on real-science problems, work with others in breakout groups.
Scientific Communication (Sci-Comm):
Each student will sign up for a particular class-day for sci-comm/
First half of the semester: Current event.
  Post a link to a news article
  We will start each class with a brief summary of the news article
  Make connections to the global press
  Learn about ecological devastation and successes in sustainability and connection.
Second half of the semester: Cool organism (details to follow).

Note-taking: I consider note taking an important skill to develop as a student. I’ll provide tools and tips to help you succeed with this skill.

Problem sets are opportunities to build proficiency in the topics we are learning in the exciting world of ecology, conservation and biodiversity.

Discussion attendance: Discussion is a required component of this course, and participation is mandatory. Discussion will be a mixture of synchronous group work with your peers, virtual field trips, and workshops. As we are a synchronous course, do not schedule work-hours or other activities during our class-scheduled lecture or discussion. We will be doing active hands-on work and breakout group work during our assigned class times.

BACK TO THE BRICKS https://cofc.edu/back-on-the-bricks. Additionally, we will follow the guidelines on the CofC Back to the Bricks. Questions? Please email me.

Final exams times are designated by the registrar’s office see policy at: https://registrar.cofc.edu/calendars/#FES

Computers: All students are required to have computers. Have a chromebook instead of a laptop? Let me know as some software requires laptop capabilities. Need help accessing a laptop? All assignments will be required to be completed on a word processor. One assignment requires the downloaded desktop version of Excel which is available for download from CofC IT, and one requires Image J a free-online image analysis system.

Covid – We are in a pandemic: With the unexpected nature of COVID for ourselves or others in our care, I will work with students individually to develop a plan to be able to continue to make progress in the course if ill or caring for ill family members. To do so: Please contact me in a timely way should you require accommodations due to COVID related.
If you miss 2 classes without communication or substantial engagement on OAKS, I will activate the campus-wide FAST system to ensure that you get the campus help that you might need (financial, medical, etc services).

What are the solutions to extended quarantine/absence? There are numerous solutions which are student specific and require communication to continue to make progress and be successful in this course. For substantial changes, such as a semester incomplete - the registrar requires both faculty AND student signatures for the paperwork for an end of term incomplete grade of “I”.
Medical W is also available through appropriate paperwork. Please, reach out to discuss if either of these solutions are needed. Please take note of the W date.

**Assignments and late policy:** Many projects are scaffolded such that assignments build upon each other. Turn in assignments on OAKS. Late work will be accepted, however, please note my return of graded work may also be delayed. Meeting deadlines will help with success. In all cases communicate with me regarding delays.

**What happens if Dr. Murren is ill/quarantined?** If I become quarantined at home but otherwise able to function, I will continue to teach via Zoom. If I become ill to the point where I am unable to teach, the department chair Dr. Pritchard has a backup plan in place and will communicate with you on your CofC email.

**Class Courtesies & Netiquette:**
*You belong here. So do each of the registered students in our course. Please show respect for their time, ideas.*

- Be on time, put cell phones, watches and other devices that beep in silent mode, please mute other tabs on your machine.
- Emergency during class, please slip out of the room and return when you are able. A quick private chat to me on Zoom is professional and welcome.
- Do not eat, drink or smoke or vape in the laboratory or on field excursions.

!!! Do study, do ask questions, do participate in class activities, be courteous and respectful to your colleagues. **Bring your enthusiasm – it is contagious!!!!**

**Academic integrity:** COFC Honor code brings respect to our campus, our degrees and to Cougar alumni.

Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when identified, are investigated. Each incident will be examined to determine the degree of deception involved.

Incidents where the instructor determines the student’s actions are related more to a misunderstanding will handled by the instructor. A written intervention designed to help prevent the student from repeating the error will be given to the student. The intervention, submitted by form and signed both by the instructor and the student, will be forwarded to the Dean of Students and placed in the student’s file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XXF in the course, indicating failure of the course due to academic dishonesty. This grade will appear on the student’s transcript for two years after which the student may petition for the XX to be expunged. The F is permanent.

Students should be aware that unauthorized collaboration—working together without permission—is a form of cheating. Unless the instructor specifies that students can work together on an
assignment, quiz and/or test, no collaboration during the completion of the assignment is permitted. Other forms of cheating include possessing or using an unauthorized study aid (which could include accessing information via a cell phone or computer), copying from others’ exams, fabricating data, and giving unauthorized assistance. Research conducted and/or papers written for other classes cannot be used in whole or in part for any assignment in this class without obtaining prior permission from the instructor. Students can find the complete Honor Code and all related processes in the Student Handbook at http://studentaffairs.cofc.edu/honor-system/studenthandbook/index.php

If you have questions on how to properly cite, paraphrase or document literature sources, consult me for assistance – please come to office hours. I’m happy to help!

**Plagiarism will result in a zero, potential failure an honor board referral.**

Honor and respect your colleagues, ask for help from your professor, ask for an extension.

**Communication:**

Questions? Contact me → Zoom office hours and by email.
I will respond to emails and discussion board questions w/in 1 day
Weekends, I will respond as soon as I can no later than Monday.
I will use OAKS extensively to communicate and send all-class emails.

**Connect with other students!**

Networking with your classmates is excellent for science and life!
Feel free to post on the discussion thread or chat window in Zoom if you’re looking to build zoom study groups.

**Mutual respect:** Arrive on time, follow Zoom tips, be polite to others, stay on topic, respect the scientists who conducted the scholarship. Respect opinions if they differ from your own. When in doubt, reply with kindness. Let’s be positive change-makers!

**Lecture Schedule (color coded for themes)**

<table>
<thead>
<tr>
<th>Lecture Schedule (color coded for themes)</th>
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<tbody>
<tr>
<td><strong>Tuesday January 12, 2021 &amp; Thursday January 14, 2021</strong></td>
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<tr>
<td><strong>Introductions</strong> – Ecology of the planet in a changing world.</td>
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<tr>
<td>Readings: Ch 1</td>
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<tr>
<td><strong>Introduction to Conservation Biology and Evolving Populations</strong> –</td>
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<tr>
<td>Readings: Ch 54, 22</td>
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</table>

| **Tuesday January 19, 2021 & Thursday January 21, 2021** |
| **Evolutionary Mechanisms-- Natural Selection**  |
| Readings: Ch 22 |
| **Population Genetics** –  |
| Readings: Ch 23, Bioskills 4 |

| **Tuesday January 26, 2021 & Thursday January 28, 2021** |
| **Evolutionary Mechanisms – Drift, Gene flow, Mutation**  |
| Readings: Ch 23 |
Evolution to Ecology—
Readings: Ch 49 & 51

*February 2, 2021 & February 4, 2021*
Population Growth and Human Ecology—
Readings: Ch 51
Community Ecology and Competition –
Readings: Ch 52

*February 9, 2021 & February 11, 2021*
Predation, Herbivory and Parasitism –
Readings: Ch 52
Parasitism, Mutualism and Communities —
Readings: Ch 52

*February 16, 2021 – EXAM I*

*February 18, 2021*
Community Structure –
Readings: Ch 52 & 54

*February 23, 2021 & February 25, 2021*
Ecosystem Ecology —
Readings: Ch 49 & 53
Biogeochemistry, Climate and Biogeography –
Readings: Ch 53

**REVIEW STUDY DAYS**
March 2, 2021 & March 4, 2021

*March 9, 2021 & March 11, 2021*
Origins of Biodiversity and Phylogeny introduction –
Readings: Ch 24, and Bioskills 13
Phylogenetics and the History of Life –
Readings: Ch 25

*March 16, 2021 & March 18, 2021*
The Domains of Life and Introduction to Bacteria —
Abundant and Diverse – Bacteria – Archaea --
Readings: Ch 26
Bacteria and Archaea –
Readings: Ch 26

*March 23, 2021 & March 25, 2021*
Eukaryotes and Protists –
Readings: Ch 27
Protists and Plants –
Apicomplexans, Parabasalids and Others
Readings: Ch 27, 28

March 30, 2021 & April 1, 2021
Plants – moss, ferns
Readings: Ch 28
Gymnosperms & Angiosperms —
Plants on Land -- Flowers
Readings: Ch 28

April 6, 2021
Fungi and Animal Introduction –
Readings: Ch 29, 30
April 8, 2021 - EXAM II

April 13, 2021 & April 15, 2021
Animals – Major Themes
Readings: Ch 30
Animals: Diploblasts, Acoels and Protostomes
Readings: Ch 30 and 31

April 20, 2021 & April 21, 2021 (NOTE THIS IS A WEDNESDAY)
Protostomes and Deuterostomes
Readings: Ch 31 and 32
Deuterostomes —
Readings: Ch 32

THURSDAY April 29, 2021 FINAL EXAM 8:00 am – 10:00 am

NOTE: Discussion sections begin January 19, 2021

*The syllabus is subject to change. Any changes will be announced in class and via OAKS if there are campus closures due to weather and any other campus-wide policy changes. Assignment due dates are listed above to be submitted on OAKS. Weekly schedule via google docs will be posted on OAKS.

Important campus-wide dates:
- Storm Make up dates (mark your calendars): Feb 13 &14, 2021
  - If these storm-dates are used for CofC learning time, in this course we will employ a-synchronous on-line interaction.
- Last day to Add/Drop: January 19, 2021
- Last day to choose Pass/NotPass grade: January 19, 2021
- Last day to W: March 22, 2021
- Last day of classes: April 21, 2021 (note that this is a Thurs. schedule on a Wed. for all courses)

**Biology 211 & Biology 211D are a 4 credit combined course.**

<table>
<thead>
<tr>
<th>Course requirements &amp; Course Points</th>
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<tbody>
<tr>
<td>In Class Exams:</td>
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<tr>
<td>Final Exam (second half cumulative):</td>
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<tr>
<td>Quizzes (on OAKS)</td>
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<tr>
<td>Discussion activities, in class assignments</td>
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<tr>
<td>Skill development assignments</td>
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<tr>
<td>Discussion Project 1 Community Science</td>
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<tr>
<td>Discussion Project 2 Arabidopsis EcoEvo</td>
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<tr>
<td>Discussion Project 3 Biodiversity local and global</td>
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<tr>
<td>Discussion Presentations</td>
</tr>
</tbody>
</table>

**Total points:** 1000 Pts


**Extra Credit**

A *maximum of 4* campus-professional seminar presentations would count as extra credit. NOTE: These extra credits are a token to encourage general campus/civic scholarly involvement.

To receive credit you must hand in a typed 5+ sentence summary of the seminar that you participated in which also includes a description of what you learned from this seminar. In general, a seminar summary will be worth about 3 points of extra credit.

Biology departmental seminars are online at noon on Mondays via Zoom. Some (not all) speakers’ presentations may be available via link after the event. I will circulate Zoom links regularly.

Extra credit for your first Zoom office hour visit.

Alternative extra credit: Pick up plastic trash off the beach or park. Take a picture of you with your bag and upload onto OAKS. Include a summary of the impact of plastic trash on the ecology of the beach or park including connection to course content. (3 points)

See separate Discussion syllabus for weekly activities and assignments.
CAMPUS WIDE Syllabi Statements
To complement the Policy on Course Syllabi 7.6.10. Relevant policy sections in parentheses.

Mandatory Syllabus Content

Academic Integrity Statement (3.12):
Lying, cheating, attempted cheating, and plagiarism are violations of our Honor Code that, when suspected, are investigated. Each incident will be examined to determine the degree of deception involved.

Incidents where the instructor determines the student’s actions are related more to misunderstanding and confusion will be handled by the instructor. The instructor designs an intervention or assigns a grade reduction to help prevent the student from repeating the error. The response is recorded on a form and signed both by the instructor and the student. It is forwarded to the Office of the Dean of Students and placed in the student’s file.

Cases of suspected academic dishonesty will be reported directly by the instructor and/or others having knowledge of the incident to the Dean of Students. A student found responsible by the Honor Board for academic dishonesty will receive a XXF in the course, indicating failure of the course due to academic dishonesty. This status indicator will appear on the student’s transcript for two years after which the student may petition for the XX to be expunged. The F is permanent.

Students can find the complete Honor Code and all related processes in the Student Handbook at: http://deanofstudents.cofc.edu/honor-system/studenthandbook/.”

Accommodations for Students with Disabilities (3.11; choose one):

1. Any student eligible for and needing accommodations because of a disability is requested to speak with the professor during the first two weeks of class or as soon as the student has been approved for services so that reasonable accommodations can be arranged. Center for Disability Services/SNAP.

2. The College will make reasonable accommodations for persons with documented disabilities. Students should apply for services at the Center for Disability Services/SNAP located on the first floor of the Lightsey Center, Suite 104. Students approved for accommodations are responsible for notifying me as soon as possible and for contacting me one week before accommodation is needed.

3. This College abides by section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. If you have a documented disability that may have some impact on your work in this class and for which you may require accommodations, please see an administrator at the Center of Disability Services/SNAP, 843.953.1431 or me so that such accommodation may be arranged.
OAKS (3.10, for all instructional modalities)
OAKS, including Gradebook, will be used for this course throughout the semester to provide the syllabus and class materials and grades for each assignment, which will be regularly posted.

Inclement Weather, Pandemic or Substantial Interruption of Instruction (3.8)
If in-person classes are suspended, faculty will announce to their students a detailed plan for a change in modality to ensure the continuity of learning. All students must have access to a computer equipped with a web camera, microphone, and Internet access. Resources are available to provide students with these essential tools.

Weather closure:
Over the last 6 years, every fall we have an altered syllabus due to campus closures due to weather.

If the College of Charleston closes and members of the community are evacuated due to inclement weather, students are responsible for taking course materials with them in order to continue with course assignments consistent with instructions provided by faculty. In cases of extended periods of institution-wide closure where students have relocated, instructors may articulate a plan that allows for supplemental academic engagement despite these circumstances. We will work together for safety and to ensure continued learning in our course. To achieve these aims, as power, internet and cellular service allow, I will stay in email communication.

Continuity of Learning (for hybrid classes with face-to-face meetings)
Due to social distancing requirements, this class will include a variety of online and technology enhanced components to reinforce continuity of learning for all enrolled students. Before the drop/add deadline, students should decide whether the course plan on the syllabus matches their own circumstances. [followed by instructor’s detailed plan]

Recording of Classes (via ZOOM)
Class sessions may be recorded via both voice and video recording. By attending and remaining in this class, the student consents to being recorded. Recorded class sessions are for instructional use only and may not be shared with anyone who is not enrolled in the class

Mental & Physical Wellbeing:
At the college, we take every students’ mental and physical wellbeing seriously. If you find yourself experiencing physical illnesses, please reach out to student health services (843.953.5520). And if you find yourself experiencing any mental health challenges (for example, anxiety, depression, stressful life events, sleep deprivation, and/or loneliness/homesickness) please consider contacting either the Counseling Center (professional counselors at http://counseling.cofc.edu or 843.953.5640 3rd Robert Scott Small Building) or the Students 4 Support (certified volunteers through texting "4support" to 839863, visit http://counseling.cofc.edu/cct/index.php, or meet with them in person 3rd Floor Stern Center). These services are there for you to help you cope with difficulties you may be experiencing and to maintain optimal physical and mental health.
Food & Housing Resources:
Many CofC students report experiencing food and housing insecurity. If you are facing challenges in securing food (such as not being able to afford groceries or get sufficient food to eat every day) and housing (such as lacking a safe and stable place to live), please contact the Dean of Students for support (http://studentaffairs.cofc.edu/about/salt.php). Also, you can go to http://studentaffairs.cofc.edu/student-food-housing-insecurity/index.php to learn about food and housing assistance that is available to you. In addition, there are several resources on and off campus to help. You can visit the Cougar Pantry in the Stern Center (2nd floor), a student-run food pantry that provides dry-goods and hygiene products at no charge to any student in need. Please also consider reaching out to Professor Murren if you are comfortable in doing so.

Inclusion:
The College of Charleston offers many resources for LGBTQ+ students, faculty and staff along with their allies.

- Preferred Name and Pronoun Information
- On Campus Gender Inclusive facilities
- Campus Resources
- College of Charleston Reporting Portals
- National Resources for Faculty & Staff
- GSEC Reports
- Documenting LGBTQ Life in the Lowcountry (CofC Addlestone Library Special Collections Project)
- College of Charleston Quality Enhancement Plan (QEP)
- Articles about CofC and LGBTQ+ Issues
“Religious Accommodation for Students” (4.6):  
(Faculty/Administration Manual VIII.A.10)

The College of Charleston community is enriched by students of many faiths that have various religious observances, practices, and beliefs. We value student rights and freedoms, including the right of each student to adhere to individual systems of religion. The College prohibits discrimination against any student because of such student’s religious belief or any absence thereof.

The College acknowledges that religious practices differ from tradition to tradition and that the demands of religious observances in some traditions may cause conflicts with student schedules. In affirming this diversity, like many other colleges and universities, the College supports the concept of “reasonable accommodation for religious observance” in regard to class attendance, and the scheduling of examinations and other academic work requirements, unless the accommodation would create an undue hardship on the College. Faculty are required, as part of their responsibility to students and the College, to ascribe to this policy and to ensure its fair and full implementation.

The accommodation request imposes responsibilities and obligations on both the individual requesting the accommodation and the College. Faculty members are expected to reasonably accommodate individual religious practices. Examples of reasonable accommodations for student absences might include: rescheduling of an exam or giving a make-up exam for the student in question; altering the time of a student’s presentation; allowing extra-credit assignments to substitute for missed class work or arranging for an increased flexibility in assignment dates. Regardless of any accommodation that may be granted, students are responsible for satisfying all academic objectives, requirements and prerequisites as defined by the instructor and by the College.

### 2020 – 2021 Religious Holidays\(^1\)

<table>
<thead>
<tr>
<th>Date</th>
<th>Holiday</th>
<th>Religion</th>
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</thead>
<tbody>
<tr>
<td>September 18, 2020</td>
<td>Rosh Hashanah(^2)</td>
<td>Jewish</td>
</tr>
<tr>
<td>September 28, 2020</td>
<td>Yom Kippur(^2)</td>
<td>Jewish</td>
</tr>
<tr>
<td>October 2 – October 9, 2020</td>
<td>Sukkot(^3)</td>
<td>Jewish</td>
</tr>
<tr>
<td>October 9, 2020</td>
<td>Shemini Atzeret(^2)</td>
<td>Jewish</td>
</tr>
<tr>
<td>October 19 - October 26, 2020</td>
<td>Navaratri</td>
<td>Hindu</td>
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<tr>
<td>October 19, 2020</td>
<td>Birth of Baha’u’llah</td>
<td>Baha’i</td>
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<tr>
<td>January 7, 2021</td>
<td>Christmas(^4)</td>
<td>Orthodox Christian</td>
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<tr>
<td>February 17, 2021</td>
<td>Ash Wednesday (Beginning of Lent)</td>
<td>Christian</td>
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<tr>
<td>February 25-26, 2021</td>
<td>Purim(^2)</td>
<td>Jewish</td>
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<td>March 15, 2021</td>
<td>Great Lent Begins</td>
<td>Christian</td>
</tr>
<tr>
<td>March 20, 2021</td>
<td>Naw-Ruz</td>
<td>Baha’i</td>
</tr>
<tr>
<td>April 2, 2021</td>
<td>Good Friday</td>
<td>Christian</td>
</tr>
<tr>
<td>March 26 - April 3, 2021</td>
<td>Passover(^3)</td>
<td>Jewish</td>
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<tr>
<td>April 12-May 11, 2021</td>
<td>Ramadan</td>
<td>Muslim</td>
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<tr>
<td>April 30, 2021</td>
<td>Good Friday (Orthodox)(^3)</td>
<td>Orthodox Christian</td>
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<tr>
<td>April 20 and 28, 2021</td>
<td>Ridvan</td>
<td>Baha’i</td>
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</tbody>
</table>

\(^1\) The previously included Islamic holidays of Eid al-Adha and Eid al-Fitr fall outside the regular academic year and are therefore not listed here.  
\(^2\) All Jewish holidays begin at sunset on the evening before the date given.  
\(^3\) Orthodox Christian holidays begin at sunset on the evening before the date given.
<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Discussion Activity</th>
<th>Due in Discussion</th>
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<tbody>
<tr>
<td>1</td>
<td>Jan 19</td>
<td>Welcome</td>
<td></td>
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<td></td>
<td>Jan 21</td>
<td>Introduction to majors/minors in biology</td>
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<td></td>
<td></td>
<td>Asking biological questions (50 questions)</td>
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<tr>
<td></td>
<td>(zoom)</td>
<td>How to write a discussion question</td>
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<td>Your journey as a biologist</td>
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<tr>
<td>2</td>
<td>Jan 26</td>
<td>Plagiarism discussion, primary literature exercise, literature databases work</td>
<td>Read: Suarez and Case (on OAKS), complete discussion questions (DQ) Critical thinking: Hand in categorized biological 50 questions assignment</td>
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<td></td>
<td>Jan 28</td>
<td>&amp; librarian resources</td>
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<tr>
<td></td>
<td>(zoom)</td>
<td>Paper discussion Suarez and Case</td>
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<tr>
<td>3</td>
<td>Feb 2</td>
<td><strong>Project 1 Community Science:</strong></td>
<td>Read: Community Science articles on Oaks (DQ)</td>
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<td></td>
<td>Feb 4</td>
<td>Introduction to community science (video, discussion, online projects)</td>
<td>Growth: Your journey assignment</td>
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<td></td>
<td>(zoom)</td>
<td>Choose science activity</td>
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<td>Build a data collection plan and submit to instructor</td>
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<td>Intro to PowerPoint practices</td>
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<tr>
<td>4</td>
<td>Feb 9</td>
<td><strong>Project 1 Community Science:</strong></td>
<td>Critical thinking: Data collection for community science project</td>
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<tr>
<td></td>
<td>Feb 11</td>
<td>Workshop</td>
<td>Communication: 1pg Writing – put library scholarly references to use</td>
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<tr>
<td></td>
<td>(zoom)</td>
<td>Meet with instructor to discuss community science data collection, also time to</td>
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<td>collect data with your team</td>
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| 5 | Feb 16   | Lightning talks: Answering a biological question (50 questions) PowerPoint  
What goes into an introduction?  
**Project 1 Community Science:** Touch base with community science team |
|   | Feb 18 (zoom) | **Communication:** Conference talk style: Lightning talk Answering a question PowerPoint |
| 6 | Feb 23   | **Project 1:** Group presentations of community science findings |
|   | Feb 25 (zoom) | **Communication:**  
**Project 1: Community science** presentations  
**Communication:** Written introduction for **Project 1 Community Science** |
| 7 | March 2   | Tu & Th of this week are designated CofC Review Study days |
|   | March 4 (zoom) |   |
| 8 | March 9   | **Project 2 Arabidopsis EcoEvo:** Introduction to *Arabidopsis*: collecting early life history plant data, e-lab notebook & data management skills |
|   | March 11 (zoom) | **Read:** *Arabidopsis* background material |
| 9 | March 16   | **Project 2 Arabidopsis EcoEvo:** Skills:  
Graphing rosette plant experiment data, testing hypotheses, gallery walk |
|   | March 18 (zoom) | **Data skills & critical thinking:**  
Graphing videos Bird dataset practice assignment part 1 |
<p>| 10 | March 23  | <strong>Project 2 Arabidopsis EcoEvo:</strong> Plant reproduction measurements, Discuss full project report, graphing <em>Arabidopsis</em> data at maturity. |
|   | March 25 (zoom) | <strong>Project 2 Arabidopsis EcoEvo:</strong> draft of introduction |</p>
<table>
<thead>
<tr>
<th></th>
<th>Date</th>
<th>Event Description</th>
<th>Additional Info</th>
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<tbody>
<tr>
<td>11</td>
<td>March 30</td>
<td><strong>Project 3 Biodiversity</strong>: Biodiversity – hotspots and iNaturalist – Virtual Field trip</td>
<td><strong>Read</strong>: Biodiversity Conservation paper (DQ)</td>
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<td></td>
<td>April 1</td>
<td>(zoom)</td>
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<tr>
<td>12</td>
<td>April 6</td>
<td><strong>Project 2 Arabidopsis EcoEvo</strong>: Stats and Gallery Walk.</td>
<td><strong>Data skills &amp; critical thinking</strong>:</td>
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<td>April 8</td>
<td>(zoom)</td>
<td>Graphing videos Bird dataset practice assignment part 2</td>
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<td>13</td>
<td>April 13</td>
<td><strong>Project 2 Arabidopsis EcoEvo</strong>: Peer review of Arabidopsis draft and data</td>
<td><strong>Communication</strong>: Draft of Project 2</td>
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<td>April 15</td>
<td>Phylogeny: theory and practice</td>
<td>Arabidopsis EcoEvo lab report due for peer review</td>
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<td>(zoom)</td>
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<td>14</td>
<td>April 20</td>
<td><strong>Project 3 Biodiversity</strong>: Project presentations</td>
<td><strong>Communication</strong>: Project 2 Arabidopsis EcoEvo</td>
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<tr>
<td></td>
<td>April 21</td>
<td>(zoom)</td>
<td>Revised version due</td>
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<td><strong>Communication</strong>: Project 3 Biodiversity final project</td>
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