Term Information

Effective Term   Autumn 2022

General Information

Course Bulletin Listing/Subject Area   Evol, Ecology & Organismal Bio
Fiscal Unit/Academic Org   Evolution, Ecology & Org Bio - D0390
College/Academic Group   Arts and Sciences
Level/Career   Graduate, Undergraduate
Course Number/Catalog   5510
Course Title   Interdisciplinary Team Science
Transcript Abbreviation   Team Science
Course Description   This course aims to teach students the necessary skills to lead or participate in scientific or
                                                interdisciplinary teams.
Semester Credit Hours/Units   Fixed: 3

Offering Information

Length Of Course   14 Week
Flexibly Scheduled Course   Never
Does any section of this course have a distance No
education component?
Grading Basis   Letter Grade
Repeatable   No
Course Components   Lecture, Seminar, Workshop
Grade Roster Component   Lecture
Credit Available by Exam   No
Admission Condition Course   No
Off Campus   Never
Campus of Offering   Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites   Open to graduate students in any field, or to final-year undergraduates with permission from the
                                                instructor.
Exclusions   Not open to students with credit for ANTHROP 5510
Electronically Enforced   Yes

Cross-Listings

Cross-Listings   Crosslisted in ANTHROP

Subject/CIP Code

Subject/CIP Code   30.9999
Subsidy Level   Doctoral Course
Intended Rank   Senior, Masters, Doctoral

Requirement/Elective Designation

The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes	• Be familiar with the Science of team science
	• Know the best practices for building and leading interdisciplinary teams
	• Communicate effectively within interdisciplinary teams
	• Lead and collaborate effectively within an interdisciplinary team
	• Build an interdisciplinary team that is intentionally collaborative, diverse, equitable, and inclusive.
	• Create a collaboration plan for an interdisciplinary team
Content Topic List	• Introduction to and History of Team Science
	• Diversity, Equity, and Inclusion
	• Communication Skills
	• Leadership Skills
	• Building Scientific Teams
	• Team Stages: Form, Storm, Norm, Perform
	• Traits of Successful Teams
	• Collaboration Plans
	• Resolving Conflicts
	• Collaborations Outside of Science or Academia
	• Meeting Facilitations
	• Assessment of Team Practices
Sought Concurrence	No

Attachments

• Syllabus EEOB 5510.docx: Syllabus

   (Syllabus. Owner: Hamilton,Ian M)

• EEOB Curriculum Maps October 2021.xlsx: Curriculum Maps

   (Other Supporting Documentation. Owner: Hamilton,Ian M)

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Hamilton,Ian M	10/21/2021 09:36 AM	Submitted for Approval
Approved	Hamilton,Ian M	10/21/2021 09:36 AM	Unit Approval
Approved	Vankeerbergen,Bernadette Chantal	11/03/2021 09:51 AM	College Approval
Pending Approval	Cody,Emily Kathryn Jenkins,Mary Ellen Bigler Hanlin,Deborah Kay Hilty,Michael Vankeerbergen,Bernadette Chantal Steele,Rachel Lea	11/03/2021 09:51 AM	ASCCAO Approval

SYLLABUS: EEOB 5510 INTERDISCIPLINARY TEAM SCIENCE AUTUMN SEMESTER

Course overview

Instructors

Name	email	phone	office hours	office
Alison Bennett	bennett.1242@osu.edu	614-292-6403	by appointment	386 Aronoff
Mark Moritz	moritz.42@osu.edu		by appointment	
Charlene Brenner	brenner.17@osu.edu		by appointment	

Meeting times: T/Th 10:20-11:15

Location: Baker Systems 130

Course description

Funding agencies worldwide, including the NSF, are placing greater emphasis on interdisciplinary research. For example, the NSF has identified "Growing Convergence Research" as one of its 10 Big Ideas. True convergence research requires the development of interdisciplinary scientific teams (groups of 2 or more working collaboratively to solve a problem). However, graduate students are often siloed within programs, and not necessarily trained to engage with others outside their field. This course aims to teach students the necessary skills to lead or participate in scientific or interdisciplinary teams.

This course will be taught (if possible) in-person with two types of classes per week. The first class in a module (usually Tuesday) will more closely follow a lecture style presentation providing information on Team Science topics. The second class will incorporate activities that apply information learned in the prior lecture. The lectures, activities and assignments are designed to provide students with a handbook for building and maintaining a scientific team by the end of the course.

Students will be graded based on their participation in class and class activities (10%), and completion of assignments (90%).

Course learning outcomes

By the end of this course students should…

1. Be familiar with the Science of team science, specifically:
   a. Explain the main objectives and concepts of team science
   b. Describe the history of team science and the science of team science
   c. Explain the challenges and opportunities of team science
   d. Appreciate how a team science approach can improve interdisciplinary teams
2. Know the best practices for building and leading interdisciplinary teams:
   a. Locate resources for best practices in team science
   b. Articulate the traits of successful interdisciplinary teams
   c. Describe the stages of team formation and steps in building successful teams
   d. Describe the key leadership skills useful in interdisciplinary teams
3. Communicate effectively within interdisciplinary teams:
   a. Recognize how disciplinary and personal backgrounds shape how team members approach the team project.
   b. Reflect on how one's own disciplinary and personal background shapes one's own approach to the team project.
   c. Explain clearly key concepts and methods from one's own discipline to team members from other disciplines.
   d. Ask for clairifications from other team members when concepts and methods from other disciplines are not clear or familiar.
   e. Check for agreement on key concepts and methods used in the team project to ensure a shared understanding.
   f. Appreciate diversity in disciplinary and personal backgrounds and how they contribute to the team project.
4. Lead and collaborate effectively within an interdisciplinary team:
   a. Know different leadership styles
   b. Resolve conflicts
   c. Evaluate team practices.
5. Build an interdisciplinary team that is intentionally collaborative, diverse, equitable, and inclusive.
   a. Identify potential team members that represent diverse backgrounds and expertise.
   b. Include team members in the research activity through collaboration in the project design, implementation, and evaluation.
   c. Consider how tasks and responsibilities are administered fairly and equitably among research collaborators and participants.
   d. Recognize how to leverage diverse perspectives and expertise during all project phases.

e. Create trust in interdisciplinary teams by participating in activities, listening to others, demonstrating interest, and representing other perspectives with respect.
6. Create a collaboration plan for an interdisciplinary team.
   a. Formulate a team vision, mission, and objectives.
   b. Describe the roles and responsibilities of the team members.
   c. Describe the management processes for decision-making and conflict resolution
   d. Identify the communication technologies used to support team functioning
   e. Identify potential outputs, including authorship and attribution policies
   f. Develop a plan for implementation and maintenance of the collaboration plan

Course materials

Papers and book chapters will be provided on Carmen to aid in learning skills for Tuesday classes. Any additional materials will be provided on Carmen.

Course schedule

Date	Topic	Faculty Involved	Activity Due
8/24	Introduction to and History of Team Science	Alison Bennett	
8/26	Overview of Course Structure and Themes	Alison Bennett	
8/31	Outcomes		Team Science Elevator Pitch
9/2	Team Science Panel		
9/7	Diversity, Equity, and Inclusion	Leo Taylor and Marcela Hernandez	
9/9	Diversity, Equity, and Inclusion	Leo Taylor and Marcela Hernandez	
9/14	Communication Skills	Kim Landsbergen, Courtney Price	
9/16	Communication Skills applied	Courtney Price	Motivation Assessment
9/21	Leadership Skills	Zoë Plakias	

9/23	Leadership Skills applied	Zoë Plakias	
9/28	Reflection Discussion on above course Themes		
9/30	Building Scientific Teams	Liz Kirby, Risa Pesapane	Reflection Essay (Themes)
10/5	Building Scientific Teams applied		
10/7	Building Scientific Teams	Liz Kirby, Risa Pesapane	
10/12	Building Scientific Teams applied		Reflection Essay (Team Building)
10/14	AUTUMN BREAK		
10/19	Team Stages: Form, Storm, Norm, Perform	Alison Bennett	
10/21	Traits of Successful Teams	Mark Moritz, Alison Bennett	
10/26	Reflection Discussion on Team Formation		
10/28	Collaboration Plans	Charlene Brenner, Jeff Agnoli	Reflection Essay (Team formation)
11/2	Collaboration Plan development		Election Day
11/4	Conflict Resolution	Cathy Ryan, Charlene Brenner	Collaboration Plan
11/9	Resolve conflicts		
11/11	VETERANS DAY		
11/16	Collaborations outside science or academia	Jeff Agnoli, Sam White, Risa Pesapane	
11/18	Collaborations outside science or academia	Jeff Agnoli, Sam White, Risa Pesapane	
11/23	TURKEY DAY		
11/30	Meeting Facilitation	Zoë Plakias, Jeff Agnoli	
12/2	Assessment of Team Practices	Cathy Ryan	

12/7	Develop Assessment Plans		
12/9	Reflection on Team Science Course		Assessment Plan; Reflection Essay due during Finals Week

Course technology

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at https://ocio.osu.edu/help/hours, and support for urgent issues is available 24x7.

- **Self-Service and Chat support:** http://ocio.osu.edu/selfservice
- **Phone:** 614-688-HELP (4357)
- **Email:** 8help@osu.edu
- **TDD:** 614-688-8743

Necessary software

- Microsoft Office 365 ProPlus All Ohio State students are now eligible for free Microsoft Office 365 ProPlus through Microsoft's Student Advantage program. Each student can install Office on five PCs or Macs, five tablets (Windows, iPad® and Android™) and five phones.
  - Students are able to access Word, Excel, PowerPoint, Outlook and other programs, depending on platform. Users will also receive 1 TB of OneDrive for Business storage.
  - Office 365 is installed within your BuckeyeMail account. Full instructions for downloading and installation can be found https://ocio.osu.edu/kb04733.
- PDF viewing software: Preview (Mac) or Adobe Acrobat (PC and Mac)

Grading and faculty response

Grades and Assignments

There will be five sets of assignments and students will receive participation credit if they regularly come to class and participate in class activities.

Motivation Assessment: Students will take the MatricX (https://matricx.net/) Assessment, and receive full credit if they complete the assessment.

Team Science Elevator Pitch: Students will give a one minute elevator pitch on the importance of Team Science.

Assessment Plan: Based on a case study in class, students will develop an assessment plan for a team science project.

Reflection Essays: Students will complete four essays (two page maximum) focused on topics in the course: the four course themes (communication, leadership, outcomes, and diversity equity and inclusion), team building, team formation, and an overall course reflection. A prompt and a rubric will be provided for the essays, and three out of four the essays will follow a reflection discussion in class. The prompt will ask students to comment on the topic or answer questions as well as to answer two questions: 1) What are some core concepts they learned from the modules? and 2) What are the next steps in your learning about the topics covered in the reflection essay?

Collaboration Plan: The capstone assignment is a collaboration plan for your (current or future) interdisciplinary science team with the following sections: (1) team vision, mission, and objectives; (2) people, roles, and responsibilities; (3) team outputs; (4) team culture; (5) team processes and functioning; (6) project management and infrastructure; and (7) implementation and maintenance of the collaboration plan. Detailed instructions will be provided in CarmenCanvas. Students will be expected to spend two hours per week addressing questions in their own teams in order to develop the collaboration plan, and which questions are addressed each week will be provided in CarmenCanvas and introduced in class.

All assignments will be graded by Drs. Bennett and Brenner, but instructors associated with modules covered by the assignment will provide additional comments.

Assignment or category	Percentage
Course participation	**10%**
Motivation Assessment	**10%**
Team Science Elevator Pitch	**10%**
Collaboration Plan	**20%**
Assessment Plan	**10%**
Reflection Essays (10% each)	**40%**
Total	**100%**

Late assignments

Assignment Due Dates will be announced. All students will be given a one time, 3-day extension for late assignments if needed per semester with no questions asked and no penalties. Please contact us to discuss additional accommodations for extenuating circumstances.

Absence Policy. There are two allowed absences.

Grading scale (percentage)

93–100: A
90–92.9: A-
87–89.9: B+
83–86.9: B
80–82.9: B-
77–79.9: C+
73–76.9: C
70 –72.9: C-
67 –69.9: D+
60 –66.9: D
Below 60: E

Faculty feedback and response time

Remember that you can call **614-688-HELP** at any time if you have a technical problem.

Grading and feedback

For most assignments, you can generally expect feedback within **7 days.**

For the proposals, you can generally expect feedback within **14 days.**

E-mail

Instructors and GTAs will reply to e-mails within **24-36 hours, Monday-Friday**.

Carmen questions

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at https://ocio.osu.edu/help/hours, and support for urgent issues is available 24x7.

- **Self-Service and Chat support:** http://ocio.osu.edu/selfservice
- **Phone:** 614-688-HELP (4357)
- **Email:** 8help@osu.edu
- **TDD:** 614-688-8743

Attendance, participation, and discussions

Student participation requirements

Student participation will be based on attendance in class (with up to 2 excused absences), and contribution to discussions when they occur.

Discussion and communication guidelines

The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

- **Writing style**: While there is no need to participate in class discussions as if you were writing a research paper, you should remember to write using good grammar, spelling, and punctuation.
- **Tone and civility**: Let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Remember that sarcasm doesn't always come across online.
- **Citing your sources**: When we have academic discussions, please cite your sources to back up what you say.

Other course policies

Land Acknowledgement

We would like to acknowledge that the land The Ohio State University occupies is the ancestral and contemporary territory of the Shawnee, Potawatomi, Delaware, Miami, Peoria, Seneca, Wyandotte, Ojibwe and Cherokee peoples. Specifically, the university resides on land ceded in the 1795 Treaty of Greeneville and the forced removal of tribes through the Indian Removal Act of 1830. We want to honor the resiliency of these tribal nations and recognize the historical contexts that have and continue to affect the Indigenous peoples of this land.

Academic integrity policy

Policies for this online course

- **Written assignments**: Your written assignments, including discussion posts, should be your own original work. In formal assignments, you should

follow **APA** style to cite the ideas and words of your research sources. You are encouraged to ask a trusted person to proofread your assignments before you turn them in--but no one else should revise or rewrite your work.

- **Summarize your original sources, don't quote or copy**. You should **never** cut and paste text from your original papers (including for figure or table captions). Doing so will result in a severe penalty, even if material is cited. **You must summarize and paraphrase other writers' text**. We will be using originality checking to help us detect sections of text that are not in your own writing. Note that changing a word or two, but otherwise leaving another author's text intact is not sufficient to avoid a penalty (in addition, changing just a word or two often completely alters the meaning of the quoted material). This includes quotations - even if cited properly, you must avoid direct quotations from your source papers. **Under no circumstances may you use a quotation to explain an original source's hypotheses, predictions, results or interpretation of results**.

- **Reusing past work**: In general, you are prohibited in university courses from turning in work from a past class to your current class, even if you modify it. If you want to build on past research or revisit a topic you've explored in previous courses, please discuss the situation with me.

- **Falsifying research or results**: All research you will conduct in this course is intended to be a learning experience; you should never feel tempted to make your results or your library research look more successful than it was.

- **Group projects**: This course includes group projects, which can be stressful for students when it comes to dividing work, taking credit, and receiving grades and feedback. We have attempted to make the guidelines for group work as clear as possible for each activity and assignment, but please let us know if you have any questions.

Ohio State's academic integrity policy

Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's *Code of Student Conduct*, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's *Code of Student*

Conduct is never considered an "excuse" for academic misconduct, so I recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University.

If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me.

Other sources of information on academic misconduct (integrity) to which you can refer include:

- The Committee on Academic Misconduct web pages (COAM Home)
- *Ten Suggestions for Preserving Academic Integrity (Ten Suggestions)*
- *Eight Cardinal Rules of Academic Integrity* (www.northwestern.edu/uacc/8cards.htm)

Copyright disclaimer

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Statement on title IX

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at http://titleix.osu.edu or by contacting the Ohio State Title IX Coordinator, Kellie Brennan, at titleix@osu.edu

Accessibility accommodations for students with disabilities

Requesting accommodations

If you would like to request academic accommodations based on the impact of a disability qualified under the Americans with Disabilities Act and Section 504 of the

Rehabilitation Act of 1973, contact your instructor privately as soon as possible to discuss your specific needs. Discussions are confidential.

In addition to contacting the instructor, please contact the Student Life Disability Services at 614-292-3307 or ods@osu.edu to register for services and/or to coordinate any accommodations you might need in your courses at The Ohio State University.

Go to http://ods.osu.edu for more information.

Accessibility of course technology

This online course requires use of Carmen (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.

- Carmen (Canvas) accessibility
- Streaming audio and video
- Synchronous course tools

Your mental health!

A recent American College Health Survey found stress, sleep problems, anxiety, depression, interpersonal concerns, death of a significant other and alcohol use among the top ten health impediments to academic performance. Students experiencing personal problems or situational crises during the quarter are encouraged to contact the College of Pharmacy Office of Student Services in room 150 Parks Hall (614-292-5001) OR OSU Counseling and Consultation Services (614-292-5766) for assistance, support and advocacy. This service is free and confidential.