4420 - Status: PENDING

Last Updated: Vankeerbergen, Bernadette Chantal 10/18/2024

Term Information

Summer 2025 **Effective Term Previous Value** Summer 2020

Course Change Information

What change is being proposed? (If more than one, what changes are being proposed?)

Modification of course description, removal of Honors designation, adjustment of prerequisites.

What is the rationale for the proposed change(s)?

The description has not been updated in many years. It specifies Panama as a course location and this offering will be in Costa Rica, so we are changing it to

"the Neotropics". Adjustment of prerequisites is in order to be more inclusive while still maintaining a minimum preparation level for success in the course.

What are the programmatic implications of the proposed change(s)?

(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?

None

Is approval of the requrest contingent upon the approval of other course or curricular program request? No

Is this a request to withdraw the course? No

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 Undergraduate

Course Number/Catalog 4420 4420H **Previous Value**

Course Title **Tropical Field Studies Transcript Abbreviation Trop Field Studies**

Course Description A course-based undergraduate research experience (CURE) that will build science literacy and critical

thinking focused on a tropical research system. Immersed in a Neotropical rainforest at a world-renowned field station, students will engage in tropical field studies with an emphasis on evolutionary and

behavioral ecology, while interacting with a global community of field biologists. **Previous Value**

This course will give students first-hand knowledge of tropical biology with an emphasis on evolutionary and behavioral ecology. This is an intensive foreign study tour in Panama, a country renowned for its biological diversity. The course includes travel to several tropical habitats and experiences with common

field methods in ecology and animal behavior.

Semester Credit Hours/Units Fixed: 3

Offering Information

Length Of Course 8 Week, 7 Week, 6 Week, 4 Week

Flexibly Scheduled Course Always Does any section of this course have a distance No education component?

Grading Basis Letter Grade

Repeatable

Course Components Lecture, Field Experience

Grade Roster Component Field Experience

Credit Available by Exam No 4420 - Status: PENDING

Last Updated: Vankeerbergen, Bernadette Chantal 10/18/2024

Admission Condition Course No Off Campus Always Columbus **Campus of Offering**

Prerequisites and Exclusions

Prerequisites/Corequisites Three credits in biological sciences and permission of instructor.

Previous Value Prereq: Honors standing, and 3310 or 3410; or permission of instructor.

Exclusions

Electronically Enforced No

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 26.1301

Subsidy Level Baccalaureate Course Intended Rank Sophomore, Junior, Senior

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

Previous Value

- Students will understand the organismal interactions and evolution in tropical ecosystems
- Students will be able to identify major groups of tropical plants and insects
- Students will understand the organism interactions and evolution in tropical ecosystems
- Students will be able to identify major groups of tropical plants and insects

Content Topic List

- Tropical diversity and taxonomy
- Biotic interactions in tropical communities
- Effect of the environment on ecological communities
- Humans in the tropics
- Research in tropical systems

Sought Concurrence

No

Attachments

EEOB4420H_Syllabus _Tropical Field StudiesCR 6Sept24 v3.docx: syllabus

(Syllabus. Owner: Freudenstein, John Vincent)

EEOB Curriculum Maps Sep 2024.xlsx

(Other Supporting Documentation. Owner: Freudenstein, John Vincent)

Comments

COURSE CHANGE REQUEST

4420 - Status: PENDING

Last Updated: Vankeerbergen,Bernadette Chantal 10/18/2024

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Freudenstein,John Vincent	09/24/2024 12:43 PM	Submitted for Approval
Approved	Freudenstein, John Vincent	09/27/2024 11:18 AM	Unit Approval
Approved	Vankeerbergen,Bernadet te Chantal	10/18/2024 02:19 PM	College Approval
Pending Approval	Jenkins,Mary Ellen Bigler Hanlin,Deborah Kay Hilty,Michael Neff,Jennifer Vankeerbergen,Bernadet te Chantal Steele,Rachel Lea	10/18/2024 02:19 PM	ASCCAO Approval

Tropical Field Studies in Costa Rica

SU 2025 EEOB 4420

Course Information

- Course times and location: May meetings, then June 16-30
- Credit hours: 3
- Mode of delivery: In person

Instructors

- Name: Dr. Rachelle MM Adams
- Email: adams.1970@osu.edu
- Office location: Museum of Biological Biodiversity, MBD 1500, 1315 Kinnear Road, Columbus, OH 43212; 474 Aronoff
- Office hours: By appointment
- Preferred means of communication:
 - My preferred method of communication for questions is email.
 - My class-wide communications will be sent through the Announcements tool in CarmenCanvas. Please check your <u>notification preferences</u> (go.osu.edu/canvasnotifications) to be sure you receive these messages.
- Name: Sammantha Hermman
- Email: herrmann.74@osu.edu
- Office hours: By appointment

Course Prerequisites (none)

Course Description

Curiosity about the natural world is a gateway to developing interest in the analysis of evidence and an appreciation for science. This study abroad program is a course-based undergraduate research experience (CURE) that will build science literacy and critical thinking, by focusing on a research system with close to nothing known about it. While immersed in a Costa Rican Neotropical rainforest you will build a foundation in tropical ecology. With guidance of instructors, the class will dive deep into a recently named tropical ant species and propose and complete novel research projects using Team Science principles. You will have unique opportunities to interact with a global community of scientists and work at the world-renowned La Selva Research



Station (https://tropicalstudies.org/portfolio/la-selva-research-station/). Puerto Viejo de Sarapiquí (10.25'19"N 84°00'54"W)

Learning Outcomes

The course will focus on the scientific method, with structured activities that will teach you how to think like a scientist. You will work in groups to attain shared research goals, which will involve data collection, review of specialized literature, development of methods, and interpretation of the results obtained. Your novel scientific discoveries will result in a unique product communicating your findings.

Upon completion of this course, students will be able to understand and articulate scientific methods used in experimental and descriptive research and the importance of connecting society and nature.

- 1. Describe modern scientific techniques used in field biology;
- 2. Engage in scholarly exploration of the scientific process and recognize it as something interactive, continuous, and collaborative;
- 3. Differentiate the components of a scientific study (e.g., observation, hypothesis, data collection and analysis, interpretation of the results);
- 4. Problem-solve challenges that arise when conducting research;
- 5. Participate in peer-review processes in a team setting, recognizing constructive feedback and effective debate practices;
- 6. Use tools to navigate digital and scientific sources and distinguish peer-reviewed science, pseudoscience, and opinions;
- 7. Describe tropical ecosystems and their importance to the world.
- 8. Recognize the development of ecological and evolutionary processes and how they are influenced by society;
- Demonstrate a sense of self as a member of society positively impacted by scientific discovery;
- 10. Demonstrate understanding of research by formulating clear and objective communication about scientific information and findings using the Message Box approach.

This course-based undergraduate research experience (CURE) will build science literacy and critical thinking by focusing on captivating ecological relationships. Students will develop proficiencies and content knowledge about tropical field biology by researching an understudied ant species, and gain an appreciation for modern principles, theories, methods and modes of inquiry used when studying and protecting nature. Throughout the course, students will participate in various practical activities involving literature review, field research, data analysis, and scientific communication. These high-impact research-focused activities will result in student contributions to public databases and scientific discoveries.

How This Course Works

Mode of delivery: Tin-person. Activities will range from reading scientific literature, group discussions, tutorials, and hands-on field research. Students are required to participate fully and should expect to be outside and in the tropical environment every day. Some work will take place in Carmen/Canvas.

Credit hours and work expectations: This is a **3-credit-hour course**. According to Ohio State policy (go.osu.edu/credithours), students should expect around 12 hours of engagement with the class each week to receive a grade of (C) average. Actual hours spent will vary by student learning habits and the assignments each week.

Attendance and participation requirements: Research show regular participation is one of the highest predictors of success. With that in mind, we have the following expectations for everyone's participation:

Attendance at in-person activities

It is essential that you attend in-person activities throughout the course, as they are crucial to achieving the proposed objectives and producing the expected outcomes. The activities include discussions and fieldwork (involving collection and biological observation). Lectures are in the evenings. watched asynchronously on Fridays.

Required Materials and/or Technologies

- All course materials will be made available in advance on the Carmen platform.
- Access to technologies capable of interacting with the Carmen platform and viewing documents in PDF format will be necessary.

Required Equipment

- **Computer:** current Mac (MacOS) or PC (Windows 10) with high-speed internet connection, including access to webcam and microphone.
- Other: a mobile device (smartphone or tablet) to use for BuckeyePass authentication
- Field equipment: Personal logbook, writing supplies, proper field attire including rubber boots. More details will be provided.

If you do not have access to the technology you need to succeed in this class, review options for technology and internet access at go.osu.edu/student-tech-access.

Required Software

Microsoft Office 365: All Ohio State students are eligible for free Microsoft Office 365. Visit the <u>installing Office 365</u> (go.osu.edu/office365help) help article for full instructions.



SAS: All Ohio State students are eligible for free SAS. Each copy for Windows desktop use is designated for teaching/research use only. For each site license copy purchased you may use a copy on one home computer; software must be returned when you leave Ohio State.

CarmenCanvas Access

You will need to use <u>BuckeyePass</u> (buckeyepass.osu.edu) multi-factor authentication to access your courses in Carmen. To ensure that you are able to connect to Carmen at all times, it is recommended that you do each of the following:

- Register multiple devices in case something happens to your primary device. Visit the <u>BuckeyePass - Adding a Device</u> (go.osu.edu/add-device) help article for step-by-step instructions.
- Request passcodes to keep as a backup authentication option. When you see the Duo login screen on your computer, click Enter a Passcode and then click the Text me new codes button that appears. This will text you ten passcodes good for 365 days that can each be used once.
- Install the Duo Mobile application (go.osu.edu/install-duo) on all of your registered devices
 for the ability to generate one-time codes in the event that you lose cell, data, or Wi-Fi
 service.

If none of these options will meet the needs of your situation, you can contact the IT Service Desk at 614-688-4357 (HELP) and IT support staff will work out a solution with you.

Technology Skills Needed for This Course

- Basic computer and web-browsing skills
- Navigating CarmenCanvas (go.osu.edu/canvasstudent)
- Recording a slide presentation with audio narration and recording, editing and uploading video (go.osu.edu/video-assignment-guide)

Technology Support

For help with your password, university email, CarmenCanvas, or any other technology issues, questions or requests, contact the IT Service Desk, which offers 24-hour support, seven days a week.

Self Service and Chat: go.osu.edu/it

Phone: 614-688-4357 (HELP)
Email: servicedesk@osu.edu



Land Acknowledgement

As willing participants in the institutional community here at Ohio State, we recognize that American settlers took possession of Ohio territories between 1740 and 1803 when it became a state.

Following the American Revolution settlers and land speculators swarmed the area, and some soldiers were given "land grants" in Ohio in lieu of payment for their military service. When Canadians sympathetic to the American Revolution were expelled from their homes, they were permitted to settle in the Refugee Tract (Refugee Road in Pickerington and Columbus). The influx of new settlers stirred Indian resentments, and led to the Northwest Indian War (1785-95), which ended with the Treaty of Greenville. In exchange for goods to the value of \$20,000 (such as blankets, utensils, and domestic animals), the Native American tribes ceded to the United States large parts of modern-day Ohio. Settlement was facilitated by the Public Land Survey System, established following the Northwest Ordinance (1787), which "platted" the territory into uniform sections for sale. With its point of origin in East Liverpool, Ohio ("Seven Ranges"), the PLS allowed the land to be transformed into "real estate," a commodity for sale.



This is a mere snapshot of the history of the land-taking that took place during the inception of what we consider to be "the birth of our nation." As part of the Ohio State University community, we acknowledge the Shawnee, Lenape (Delaware), Miami and Wyandotte nations as the traditional land caretakers of central Ohio and acknowledge that our presence here represents ongoing participation in the systemic oppression of colonialism. This land acknowledgment is a formal statement that recognizes Indigenous Peoples as the traditional stewards of this land and the enduring relationship that exists between Indigenous Peoples and their traditional territories. Recognizing this means grappling with the long-standing history that has brought us to reside on this land and to understand our place within this history.

Grading and Faculty Response

Descriptions of Major Course Assignments



Table 2. Course evaluation description and point assignment (more details will be provided in class and in Canvas)		
Scientific Literacy: Annotated bibliography in Canvas		
Group literature review summary (5 pts for instructor's review and 45 pts for final = 50 pts)		
Together with classmates, you will contribute to the course's primary literature database in Zotero. You will be grouped by research topics and then will complete an annotated bibliography assignment in small groups. This assignments will evaluate your ability to find, collate, and synthesize primary literature.	50	
Group Research Portfolio in PebblePad		
Logbook (5 pts for instructor's review and 15 pts for final = 20 pts)		
Vouchers (5 pts for instructor's review and 15 pts for final = 20 pts)		
Written 300-word group research reflections and activities (10 pts)		
The above will assess your ability to conduct fieldwork, collect, identify taxa, manage data, and maintain accurate records. You will be submitting, a reference collection of ants, a shared electronic logbook, and datasets of ecological data and field observations.		
Group report (50 pts)	450	
This 3–5-page report includes a literature review, methods, data analysis and interpretation of results using SAS, and detailed well-cited discussion. This assignment will evaluate your ability to analyze and interpret data based on a group question. You will use statistical software and interpret results to draw meaningful conclusions.	150	
Communicating science		
Student groups will give a short talk on their research project. (40 pts for presentation; 10 pts for peer-review = 50 pts)		
To complete this these assignments, you will (i) conduct literature reviews (ii) create figures with descriptive captions; (iii) draft and revise; (iv) provide a peer review for classmates.		
Total	200	
*See detailed assignment descriptions and due dates in Canvas		

Written Assignments

Academic integrity and collaboration (also see Academic Misconduct below): Your written assignments, including discussion posts, should be your own original work. In formal assignments, you should follow the section 'Discussion and Communication Guidelines' (see below), 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. We encourage the use of the tool <u>iThenticate</u> to check your work for plagiarism (see <u>OSU Research Misconduct</u> for more details).

All students have important obligations under the <u>Code of Student Conduct</u> to complete all academic and scholarly activities with fairness and honesty. Our professional students also have the responsibility to uphold the professional and ethical standards found in their respective academic honor codes. Specifically, students are not to use "unauthorized assistance in the laboratory, on field work, in scholarship or on a course assignment" unless such assistance has been authorized specifically by the course instructor. In addition, students are not to submit their work without acknowledging any word-for-word use and/or paraphrasing" of writing, ideas or other work that is not your own. These requirements apply to all students — undergraduate, graduate, and professional.

Late Assignments

Please refer to Carmen for due dates. Due dates are set for your grade evaluation as well as to help you stay on pace and allow timely feedback that will help you complete subsequent assignments. Due to the collaborative nature of class, late assignments will receive a zero, unless otherwise stated. The only exceptions will be extensions granted ahead of time or serious documented emergencies.

Instructor Feedback and Response Time

Remember that you can call 614-688-4357 (HELP) at any time if you have a technical problem.

- Preferred contact method: If you have a question, please contact instructors first through our Ohio State email address. We will reply to emails within 24 hours on days when class is in session at the university.
- Class announcements: Instructors will send all important class-wide messages through the Announcements tool in CarmenCanvas. Please check <u>your notification preferences</u> (go.osu.edu/canvas-notifications) to ensure you receive these messages.
- Canvas Forum Discussion board: We will check and comment on messages in the discussion boards several times throughout the semester.
- **Grading and feedback:** For assignments submitted by the due date, we will try to provide feedback and grades within **seven days**. Assignments submitted after the due date may



not be graded (see assignment details in Canvas) or may have reduced feedback, and grades may take longer to be posted.

Grading Scale

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

Other Course Policies

Communication Guidelines

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

- Writing style: Although 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. A more conversational tone is fine for non-academic topics.
- 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. Instructors will provide specific guidance for discussions on controversial or personal topics.
- **Citing your sources**: When we have academic discussions, please cite your sources to support what you say. For the textbook or other course materials, list at least the title and page numbers. For online sources, include a link.
- **Backing up your work**: Consider composing your academic posts in a word processor, where you can save your work, and then copying into Canvas.
- **In-person sessions**: You may be called on to answer questions and share your thoughts about what is being discussed. You can always say "I pass" if you would rather not share.

Academic Integrity Policy

See <u>Carmen/Canvas for Major Course Assignments</u> with specific guidelines about collaboration and academic integrity in the context of this class.

Ohio State's Academic Integrity Policy

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever



committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/csc/.

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 (studentconduct.osu.edu), 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 we recommend that you review the *Code of Student Conduct* and, specifically, the sections dealing with academic misconduct.

If we suspect that a student has committed academic misconduct in this course, we are obligated by university rules to report 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:

- Committee on Academic Misconduct (go.osu.edu/coam)
- <u>Ten Suggestions for Preserving Academic Integrity</u> (go.osu.edu/ten-suggestions)
- Eight Cardinal Rules of Academic Integrity (go.osu.edu/cardinal-rules)

Copyright for Instructional Materials

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.



Creating an Environment Free from Harassment, Discrimination, and Sexual Misconduct

Sexual Misconduct/Relationship Violence

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 at titleix@osu.edu.

The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

- 1. Online reporting form at equity.osu.edu,
- 2. Call 614-247-5838 or TTY 614-688-8605,
- 3. Or email equity@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

Your Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

Accessibility Accommodations for Students with Disabilities

Requesting Accommodations

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are isolating while waiting for a COVID-19 test result, please let me know immediately. Those testing positive for COVID-19 should refer to the <u>Safe and Healthy Buckeyes site</u> for resources. Beyond five days of the required COVID-19 isolation period, I may rely on Student Life Disability Services to establish further reasonable accommodations. You can connect with them at <u>slds@osu.edu</u>; 614-292-3307; or <u>slds.osu.edu</u>.

Disability Services Contact Information

Phone: 614-292-3307

Website: <u>slds.osu.edu</u>

Email: <u>slds@osu.edu</u>

• In person: Baker Hall 098, 113 W. 12th Avenue



Accessibility of Course Technology

This online course requires use of CarmenCanvas (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 as early as possible.

- CarmenCanvas accessibility (go.osu.edu/canvas-accessibility)
- Streaming audio and video
- CarmenZoom accessibility (go.osu.edu/zoom-accessibility)

Religious Accommodations

It is Ohio State's policy to reasonably accommodate the sincerely held religious beliefs and practices of all students. The policy permits a student to be absent for up to three days each academic semester for reasons of faith or religious or spiritual belief.

Students planning to use religious beliefs or practices accommodations for course requirements must inform the instructor in writing no later than 14 days after the course begins. The instructor is then responsible for scheduling an alternative time and date for the course requirement, which may be before or after the original time and date of the course requirement. These alternative accommodations will remain confidential. It is the student's responsibility to ensure that all course assignments are completed.

Course Schedule

Tentative Schedule

(TBD= to be determined)

Group meetings in May [dates not set, will be based on student availability]

(all meetings include time for questions regarding Panama preparation)

May 2, 9–12 am, 104 Aronoff or on zoom LINK

- Introduction to Neotropical ants (Rachelle Adams)
- Introduction to tropical flora and fauna (Andres Vega: Zoom)
- Introduction to XYZ (Sammatha Herrmann)
- Introduction to *Megalomyrmex* research system (Rachelle)
- Tips for reading scientific literature (led by Sam or Rachelle)

May 4, 9-12 am, 422 Aronoff or on zoom LINK

- Group expectations contract (Rachelle)
- How to prepare for Costa Rica (packing, etc.) (Rachelle)
- Brief discussion of what makes a good research question (Rachelle)(slides)

May 16, 9-12am, 104 Aronoff or on zoom LINK

- Course updates (Rachelle)
- Get reading booklet for Costa Rica trip
- Introduction to hypothesis testing (Sam/Rachelle)
- Mind-mapping activity & discuss course research question(s) (Sam)

16 June Monday, ARRIVAL

Rachelle or Sam and students arrive at airport at ###

Evening

Why are there so many species in the tropics? (Janzen-Connell effects)

Readings for tomorrow:

Reproductive strategies in ants [LINK]

17 June Tues

Morning:

- -Introduction to tropical fieldwork
- -How does one prepare for field research? (forest walk)
- -What are the different facilities? (tour)
- -Rachelle: Introduction to searching for ants

Afternoon:

Introduction to La Selva (OTS staff XYZ)

- -2pm La Selva safety seminar
- -Introduction to OET grants and other student opportunities

Evening:

- -Rachelle's talk on her research
- -Planning meeting

Readings for tomorrow: 10 ways to read scientific literature

18 June Wed

Hike on CCC trail –6:30am to 4pm

Evening:

- -Andrea's talk on his research in Costa Rica
- -Sam's talk on her research

Reading discussion: Rachelle led

Readings for tomorrow:

- -An introduction to Animal Communication (6 pgs)
- -The Ecology of Avian Brood Parasitism (6 pgs)
- -Geographic Mosaics (5 pgs)

19 June Thurs

Morning:

-Group research project

Afternoon:

-Group research project

Evening

-Rachelle: How does natural selection shape reproductive strategies?

Reading discussion: Student led

Readings for Sunday:

-Perceptual Worlds and Sensory Ecology

-Semiochemicals

20 June Friday

Morning:

-Group research project

Afternoon:

-Group research project

-Lunch with La Selva Researcher [NAME]

-Talk by La Selva Researcher

Evening:

–Frog night

21 June Saturday

Morning:

Optional fun day out. Additional fees may apply.

Tours near La Selva (rates for 2025)

Tour	Cost per	Transportation
	person	Cost per Group
Boat Tour	\$25	\$115 (guide)

Afternoon:

–group research project

Evening:

Reading discussion: Student led

Readings for tomorrow:

-Evolution is...

-Fungus-farming ants and other mutualisms



22 June Sun

Trip [?]

Morning:

- 8:00
- guided walk
- ~12pm lunch

Afternoon:

- group research project
- Rachelle: Evolutionary history of *Megalomyrmex* (phylogenetics)

Evening:

-Talk by La Selva [Graduate student] (PhD student studying XYZ)

Reading discussion: Student led

Readings for tomorrow: TBD

23 June Mon

Morning:

-Group research project

Afternoon:

- -Lunch with La Selva Researcher [NAME]
- -Talk by La Selva Researcher

Evening: Large group discussion

Reading discussion: Student led

Readings for tomorrow:

- -Global change
- –Conservation of Biodiversity

24 June Tues

Morning:

-Group research project

Afternoon:

-Group research project

Evening: Large group discussion

Reading discussion: Student led

Readings for tomorrow:

-Restoring tropical forest

-Saving endangered species: A case study...

25 June Wed

Morning

- group research project

Afternoon:

-Group research project

-Rachelle: How can science help us protect the natural world?

Evening:

Talk by [XYZ] (OTS Staff Scientist??)

No readings

26 June Thurs

Morning

-group research project

Afternoon:

–Lunch with La Selva Researcher [NAME]

Evening:

-Talk by La Selva Researcher

27 June Fri

Morning

- group research project

Afternoon:

- group research project

Evening:

—Writing



Morning:

- finish data collection

Afternoon:

-Work on take-home exam

Evening:

-Group discussion

29 June Sunday (final class)

Morning:

-Clean up data sheets

Afternoon:

-Visualize and analyze data

Evening:

Debrief and cleanup

30 June Monday DEPARTURE

--??? leave for airport