



IB414 - Tropical Marine field course

Spring 2027

Course Information

Welcome to the IB414 Tropical Marine Biology field course! This course will allow you to gain a comprehensive understanding of tropical marine ecosystems, their ecology and conservation, as well as relevant practical field and experimental skills. The course will take place on the island of Utila in Honduras where you will be based at the Bay Islands College of Diving, giving you the optional opportunity to gain an internationally recognized qualification in Scuba Diving (PADI Open Water Diver).

Science lectures will be given by local marine conservation experts (Operation Wallacea) in conjunction with the course leaders and will be complemented by daily dives to practice underwater field skills, under close supervision of PADI divemaster-trained coral reef conservationists. The course will focus on skills to identify tropical fish as well as corals found in the Caribbean Sea. You will be taught how to collect and record valid quantitative and qualitative data underwater, gain or reinforce your knowledge of experimental design and how to conduct a robust scientific investigation. Finally, you will work in teams to complete your own 3-day research project, culminating in oral presentations at the end of the study abroad period in Utila.

In addition to practical skills, there will be a strong focus on the importance of, and threats to, coral reefs and the local economic impact, as well as challenges to ecosystem conservation, which you will be asked to discuss and evaluate as part of your project presentations. The course leader has a first-class BSc in Marine and Freshwater Biology, alongside more than 500 recorded dives with a PADI Divemaster qualification, and experience of field work in tropical marine ecology in the Philippines.

[Programs-Study Abroad Administration](#) link

- Course Duration: Second half of spring Semester, followed by 14-day trip to Utila, Honduras
- Contact Hours: Meets weekly 3-3:50, 8-weeks, second semester, plus 8 hours of independent student work. Second credit hour derived from approximately 72 hours of contact and 8 hours student work while in Utila.

- Course Format: in-person
- Course Location: On campus - TBC, Utila island, Honduras, Bay Islands College of Diving
- Weekly Hours of Expected Student Work: 1 hour instruction time on campus, 12 days in Utila, additional: 1 hour outside of class per week whilst at UIUC
- Credit Hours: 2

Instructor Information

- Dr. Tanja Hofmann (THF) & Dr Tracy Lawson (TLA)
- Senior Lecturer, Full professor
- School of Integrative Biology
- Instructor contact information: thofmann@illinois.edu
- Instructor office location: 2010 NHB
- Instructor drop-in hours for students: by appointment

Course Description

- The course on campus will run over the last 8 weeks of the spring semester, consisting of one 1-hour lecture per week (see schedule below) in preparation of the field component.
- The course on Utila is scheduled for a total of 14 days, two of which will be spent travelling with overnight stays and transfers from Roatan Island to Utila Island (Honduras). Upon arrival at the field site, you will take part in a Health and Safety/orientation briefing and settle into your accommodation on site. The subsequent 5 days will consist of lectures on specific aspects of coral reef ecology), alongside field techniques, followed by dive training/dives/snorkels to put theory into practice (see below for details). Day 6 and day 12 will be a 'dry' day giving you the opportunity to work in teams of two to design your own research project, formulating hypotheses and planning data collection and analysis strategies. On these days, you will also have the opportunity to explore the island. You will spend 3 days taking part in workshops designing your projects, collecting, analyzing data and preparing presentations, culminating in oral group presentations.

Learning Outcomes

In this course, students will:

- Identify major groups of Caribbean tropical marine taxa
- Describe relationships between tropical marine taxa and explain their importance in ecosystem functioning
- Explain and evaluate threats to coral reefs, conservation challenges and economic impacts
- Explain the importance of mangrove forests and seagrass habitats

- Design an underwater/marine research project, conduct the research collecting valid data, analyze and present data working collaboratively.

Prerequisites

- Students must have the approval of instructor prior to registering for IB414 and ideally have taken IB 150 or an equivalent course.
- Students must **love the ocean and be keen to explore the underwater world**
- Students must be prepared for long hours at the field site with an early start every day
- Scuba diving qualification an advantage but must be keen to complete this (classroom and pool dives prior to field course).
- Students must be proficient swimmers and possess a valid passport (at least 6 months).
- Students with disabilities who require assistance to participate in this class are asked to see the instructor during the first week of class.

Course Materials

Learning Management System (LMS)

Canvas will contain all lecture and assessment material on campus

Resources relevant to local coral reef ecology will be provided on site in Utila.

Course Readings

There is no textbook for this course. All required and recommended reading will consist of scientific publications and links will be provided in Canvas.

Text 1 (recommended): Alongi D.M. Tropical Marine Ecology, Wiley-Blackwell, ISBN:978-1-119-56892-6

Materials

Students will need access to a laptop for the course.

Software

Students are required to use Microsoft Office programs for completion of assignments and lab work. These can be purchased/downloaded from the [Webstore](#) [Microsoft Office](#)

Course Requirements and Policies

Course components and grading breakdown

Instructional Activity	Occurrences	Point Value	Total Points
In-class discussion papers/activities (on campus) – 4 points each	5	200	20%
Taxonomic identification tests – 15 points each	2	300	30%
Research project (25 points) and final oral presentation (25 points)	1	500	50%

Assignments

Most classes on campus will include discussion papers and activities that are graded – see schedule below.

Classes in Utila will include taxonomic identification quizzes for coral, algae and invertebrates and your final research project will be graded based on content and oral presentation.

Exams

There are no exams.

Late Assignment Policy

If you are unable to meet a particular deadline, it is your responsibility to make prior arrangements with the instructors for that given week. 1% will be deducted from total grade each day after due date for each assignment, no points are deducted if instructor is contacted at least 2 days in advance of due date with extenuation circumstances.

Class Attendance

The [Student Code](#) states "Regular class attendance is expected of all students at the university." In class discussions form part of grading (see above) and absences will impact on students' final outcome, unless students follow absence policy as outlined below. Lack of class attendance on campus will result in students being excluded from the field course unless absence policy is followed. Attendance of all sessions on Utila is non-negotiable.

Absence Policy

The [Student Code](#) outlines those circumstances in which a student may be eligible to obtain a letter from the Office of the Dean of Students for missed class. When eligible, students must submit an [absence letter request](#) within two weeks of returning to class following the absence. For known absences, students are expected to email the instructor at least 1 day in advance of the class.

Participation

There are expectations and/or grading based on class participation/discussion – i.e. graded in class paper discussions. See above for how participation will be calculated for the grade.

Final Letter Grades/ Grading Scale

Final letter grades are determined based on [point ranges](#) (see below).

Percentage	Letter Grade
98.00% - 100.00%	A+
93.00% - 97.99%	A
90.00% - 92.99%	A-
87.00% - 89.99%	B+
83.00% - 86.99%	B
80.00% - 82.99%	B-
77.00% - 79.99%	C+
73.00% - 76.99%	C
70.00% - 72.99%	C-
67.00% - 69.99%	D+
63.00% - 66.99%	D
60.00% - 62.99%	D-
59.99% and below	F

Campus Academic Policies & Statements

Academic Integrity

The University of Illinois Urbana-Champaign [Student Code](#) (<https://studentcode.illinois.edu/>) should also be considered as a part of this syllabus. Students should pay particular attention to Article 1, Part 4: Academic Integrity.

Academic dishonesty may result in a failing grade. Every student is expected to review and abide by the [Academic Integrity Policy](#)

(<https://studentcode.illinois.edu/article1/part4/1-401/>). Ignorance is not an excuse for any academic dishonesty. It is your responsibility to read this policy to avoid any misunderstanding. Do not hesitate to ask the instructor(s) if you are ever in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity.

Students with Disabilities

Students with disabilities who require assistance to participate in this class are asked to see the instructor during the first week of class.

The University of Illinois Champaign-Urbana, is committed to ensuring that all students, including students with disabilities, do not experience barriers to learning and participating fully in class. Students who have a letter of accommodation from DRES are advised to share that with instructors as soon as possible to ensure accommodation needs can be discussed and met.

To obtain disability-related academic accommodations, disabled students must contact Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES, please visit 1207 S. Oak Street, Champaign, call (217) 333-1970, email disability@illinois.edu, or visit the [DRES website](https://dres.illinois.edu/) (<https://dres.illinois.edu/>).

Family Educational Rights and Privacy Act (FERPA)

See [FERPA – Office of the Registrar](https://registrar.illinois.edu/academic-records/ferpa/) (<https://registrar.illinois.edu/academic-records/ferpa/>) for more information on the Family Educational Rights and Privacy Act (FERPA).

Mental Health

Significant stress, mood changes, excessive worry, substance/alcohol misuse or interferences in eating or sleep can have an impact on academic performance, social development, and emotional wellbeing. The University of Illinois offers a variety of confidential services including individual and group counseling, crisis intervention, psychiatric services, and specialized screenings which are covered through the Health Service Fee. If you or someone you know experiences any of the above mental health concerns, it is strongly encouraged to contact or visit any of the University's resources provided below. Getting help is a smart and courageous thing to do for yourself and for those who care about you.

- Counseling Center (217) 333-3704
- McKinley Health Center (217) 333-2700
- National Suicide Prevention Lifeline (800) 273-8255
- Rosecrance Crisis Line (815) 720-4953 (available 24/7, 365 days a year)

If you are in immediate danger, call 911.

This statement is approved by the University of Illinois Counseling Center

Community of Care

As members of the Illinois community, we each have a responsibility to express care and concern for one another. If you come across a classmate whose behavior concerns you, whether in regard to their well-being or yours, we encourage you to refer this behavior to the Connie Frank CARE Center (formerly the Student Assistance Center) in the Office of the Dean of Students. You may do so by calling (217) 333-0050 or by submitting an [online referral](https://odos.illinois.edu/community-of-care/referral) (<https://odos.illinois.edu/community-of-care/referral>). Based on your report, staff in the Connie Frank CARE Center will reach out to offer support and assistance.

Further, as a Community of Care, we want to support you in your overall wellness. We know that students sometimes face challenges that can impact academic performance (examples include mental health concerns, food insecurity, homelessness, personal emergencies). Should you find that you are managing such a challenge and that it is interfering with your coursework, you are encouraged to contact the [Connie Frank CARE Center](https://odos.illinois.edu/community-of-care/CAREcenter) (<https://odos.illinois.edu/community-of-care/CAREcenter>) (formerly the Student Assistance Center) in the Office of the Dean of Students for support and referrals to campus and/or community resources.

Disruptive Behavior

Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be required to leave class pending discussion and resolution of the problem and may be reported to the [Office for Student Conflict Resolution](https://go.illinois.edu/ReportMisconduct) (<https://go.illinois.edu/ReportMisconduct>), conflictresolution@illinois.edu, or (217) 333-3680 for disciplinary action.

Emergency Response Recommendations

Emergency response recommendations and campus building floor plans can be found at [Public Safety's Run, Hide, Fight website](https://police.illinois.edu/em/run-hide-fight/) (<https://police.illinois.edu/em/run-hide-fight/>). I encourage you to review this website within the first 10 days of class.

Emergencies can happen anywhere and at any time. It is important to take a minute to prepare for a situation in which our safety or even our lives could depend on our ability to react quickly. When we're faced with almost any kind of emergency – like severe weather or if someone is trying to hurt you – we have three options: run, hide or fight. Please review these guidelines:

<https://police.illinois.edu/wp-content/uploads/2017/08/syllabus-attachment.pdf>

Health and Safety in Honduras

The campus website safetyabroad.illinois.edu provides many resources on pre-departure preparations for taking this course. Important topics from this site concerning safety, security, health and insurance will be reviewed in class. Our trip is hosted by Operation Wallacea, which maintains its own Emergency Team and resources for in-country responses.

COVID-19 **vaccination and boosters are highly recommended** by the University. Current COVID-19 conditions in Honduras can be monitored [here](#). Additional vaccination recommendations for travel to Honduras can be reviewed [here](#).

Religious Observances

It is the policy of the University of Illinois Urbana-Champaign to reasonably accommodate its students' religious beliefs, observances, and practices that conflict with a student's class attendance or participation in a scheduled examination or work requirement, consistent with state and federal law. Students must make requests for accommodation in advance of the conflict to allow time for both consideration of the request and alternate procedures to be prepared. Requests should be directed to the instructor. An optional resource to assist students in making such requests can be found on The Office of the Dean of Students' [Religious Observances website](https://odos.illinois.edu/resources/students/religious-observances) (<https://odos.illinois.edu/resources/students/religious-observances>).

Sexual Misconduct Reporting Obligation

The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX Office. In turn, an individual with the Title IX Office will provide information about rights and options, including supportive measures, resources, the campus disciplinary process, and law enforcement options.

A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found on [We Care Student Resources](https://wecare.illinois.edu/resources/students/#confidential) (<https://wecare.illinois.edu/resources/students/#confidential>).

Other information about resources and reporting is available on [At Illinois We Care](https://wecare.illinois.edu) (<https://wecare.illinois.edu>).

Veterans and Military Students

As a military-friendly institution, and per federal regulations and Illinois statutes, the University of Illinois Urbana-Champaign has established policies and procedures to accommodate military-connected students. In addition to the support available at the [Chez Veterans Center](https://chezveteranscenter.ahs.illinois.edu/) (<https://chezveteranscenter.ahs.illinois.edu/>), members of the National Guard or Reserves and active-duty military personnel with military obligations (e.g., deployments, training, drills) are encouraged to communicate these, in advance whenever possible, to the instructor. For policy details, see the Student Code on [Excused Absences and Departure from the University for U.S. Military or other U.S. National Defense Services](https://studentcode.illinois.edu/article3/part3/3-313) (<https://studentcode.illinois.edu/article3/part3/3-313>).

Course Schedule/Outline

Week	Topics (Tuesday/Thursday)	Instructional Activities/Labs (Friday)
Week 1 (on campus) THF & TLA	Introduction to Utila, preparation for Honduras	
Week 2 (on campus) THF	Introduction to coral reefs	Paper discussion
Week 3 (on campus) THF	Methods of coral reef assessment	Paper discussion
Week 4 (on campus) THF	Species identification introduction	Virtual practical
Week 5 (on campus) TLA	Introduction to Mangroves	Paper discussion
Week 6 (on campus) TLA	Introduction to sea grasses	Paper discussion
Week 7 (on campus) TLA	Scientific method – planning experiments and presenting results	Paper discussion
Week 8 (on campus) THF & TLA	Final preparations, Health & Safety, Q&A	
Utila, Honduras	DATES to be confirmed	
Day 1 23 rd May	Flight from US to Roatan. Overnight stay in Roatan	TBC
Day 2 24 th May	- Transfer to ferry port at Dixon Cove, take ferry to Utila at 2pm. - Arrive at Bay Islands College of Diving	Health & Safety and orientation presentation, settle into accommodation Lecture on Caribbean coral reef ecology (THF)

Week	Topics (Tuesday/Thursday)	Instructional Activities/Labs (Friday)
		Fish identification (OpWall, THF)
Day 3 25 th May	Dive training/referral - theory and 2 orientation dives focusing on dive techniques	Lecture on the importance of coral reefs globally and in a local context (THF) Coral identification (OpWall, THF)
Day 4 26 th May	- Dive training/referral – 2 dives focusing on dive techniques - Qualified divers - 2 dives including fish identification and underwater techniques	Lecture on underwater survey theory and execution (OpWall) Workshop on underwater technique (OpWall, THF, TLA)
Day 5 27 th May	- Dive training/referral – 2 dives focusing on dive techniques - Qualified divers - 2 dives including coral identification and underwater techniques	Lecture on threats to coral reefs and possible solutions (THF)
Day 6 28 th May	2 dives – reef species identification and underwater techniques	Lecture on local coral reef species and interactions (OpWall)
Day 7 29 th May	2 dives – reef species identification underwater field survey techniques	Data collection workshop (THF, TLA)
Day 8 30 th May	Dry day - Project planning workshops, decide on project focus, ½ off	Design data collection strategy for project (THF, TLA)

Week	Topics (Tuesday/Thursday)	Instructional Activities/Labs (Friday)
Day 9 31 st May	2 dives – Project data collection	Data analysis workshop (THF, TLA)
Day 10 1 st June	2 dives – Project data collection	Data presentation workshop (TLA)
Day 11 2 nd June	2 dives – Project data collection	Project write-up and presentation workshop
Day 12 4 th June	Dry day – complete project write-up and presentation, ½ off	Presentations
Day 13 5 th June	Take ferry to Roatan Island, overnight stay	TBC
Day 14 6 th June	Flight back to US	