

Instructors: Rowan Lockwood (she/hers)
Linda Morse (she/hers)

TA: Chloe Obara (she/hers)

Offices: McGI 227 (RL); 213 (LM); 206 (CO)

Phones: 757-585-6456 (RL); 757-303-5757 (LM)

Lectures: R 5-6:20pm in McGI 219

Office hours: W 2-4pm (RL) and Fri in dept. (LM)

Zoom: <https://cwm.zoom.us/my/rowanlockwood>

Class URL: see Blackboard

Emails: rxlock@wm.edu; ldmors@wm.edu; caobara@wm.edu

Course description: This course, which focuses on the geology and marine ecology of the Bahamas, includes a 10-day fieldtrip to San Salvador Island in the Bahamas. In the classroom at W&M, students will learn the basics of marine ecology, paleontology, sedimentology, as well as Bahamian history, culture, and archaeology. In San Salvador, students will explore several marine and terrestrial environments, including coral reefs, sandflats, seagrass, tidal estuaries, limestone caves, blue holes, brackish water lakes, and more. We will investigate 400,000-year-old fossil coral reefs, and quantitatively compare their paleoecology and diversity to modern coral reefs via snorkeling. We will assess the effects of humans and human history on the island and its diversity by examining archaeological sites dating back to the indigenous Lucayans (circa 1000 years ago), historical sites dating back to British colonial rule and the African slave trade (sugar plantation circa early 1800s), and the modern town site (Cockburn Town).

What is a COLL 300 course? COLL 300 is an integral part of the COLL curriculum. COLL 300s are courses that connect you with people, places, and ideas, in order to lift you out of your familiar surroundings and deepen the way you see yourself in the world. These courses ask you to use your knowledge, your emerging expertise in framing questions, and your communication skills to engage the world in a self-reflective, cross-cultural way.

Course communication

Recording and accessing lectures: This semester, we are likely to see a lot of student and faculty absences due to COVID. We will try to be as flexible as possible by: (1) offering all lectures in person and via Zoom, (2) recording all lectures, and (3) providing 5-6 days advanced notice on deadlines. In exchange for this flexibility, We ask that:

- If you're feeling well and not isolating, please attend lecture in person. We've learned, over the past two years, that in-person works better for most W&M students.
- If you attend lecture via Zoom, you must engage by asking questions, answering questions, and allowing us to project your image on the class screen. This allows you to connect fully with us and the rest of the class, to learn the material, and to keep your participation grade high.
- If you don't attend lecture either in person or on Zoom, please watch the recorded lecture within 2-3 days so that you do not miss deadlines or updates. You can miss 1-2 lectures this semester without it affecting your participation grade.

Email: Please check your W&M email account every 1-2 days for course updates and announcements.

Contacting us: The best way to reach us is via email. We'll make every effort to return your emails within 72 hours.

Access to McGI: Please see Merridith Erfe (McGI 228) if your ID card doesn't give you access to McGI 207 and 224. While you're taking this course, you should have 24/7 access to these facilities.

Meeting with us: Feel free to stop by our office hours any time—no appointment needed. If you can't make office hours, please send us an email with 3-4 times that you are available, and we'll email you back to schedule an appointment.

Course information

Fieldtrip dates: May 22-31.

Prerequisites: Geo 322 (Sedimentary Record) OR MSCI 330 (Intro to Marine Science) OR Geo 325/Bio 317 (Paleontology) OR instructor permission.

Tools: Field notebook (preferably waterproof). Merridith Erfe (McGI 228) has hand lenses (\$10) and field notebooks (\$8-9) for sale if you're interested. Please see "Things to Bring" for a detailed list of things to bring on the field trip.

Learning objectives: To introduce you to: (1) the basics of marine ecology, paleontology, and carbonate sedimentology, (2) coral reef environments and the organisms that inhabit them, (3) the culture and history of the Bahamas, its inhabitants, and their effect on the natural world, and (4) the most effective practices for taking fieldnotes.

Course requirements: All students must be able to swim and must have a valid passport. ***Please note that a required swim test will be scheduled during the first three weeks of class.*** Less experienced snorkelers and swimmers are required to attend 5-6 swimming sessions in Adair Pool, which culminate in learning the basic skills of snorkeling and trying out snorkeling gear.

Student responsibilities

1. **Class participation.** You'll be graded on the quality and quantity of your participation—both in the classroom and in the field throughout the semester.
2. **Class preparation.** Please be sure to read the assigned readings and complete assignments before class. Readings on reserve will be posted electronically under the Readings folder on the Blackboard website.
3. **Field notebook, Expert in the Field, Activities, and Quiz.** See below

Grading

Final grades will be assigned based on your performance in the following areas, weighted accordingly:

Participation (class and field)	25%
Field notebook	25%
Field guide	20%
Class activities	20%
Quizzes	10%

There are five types of major **assignments** to be completed in this course. See course schedule below for deadlines. ***You are NOT allowed to seek help from internet sites (e.g., Chegg, Bartleby, etc.) on any assignments for this course.***

- (1) **Participation:** Participation is important in all science courses, but it's phenomenally important in field courses. We'll provide you with a preliminary grade on participation after Spring Break. You can miss 1-2 lectures without it affecting your participation grade. Participation occurs both in the classroom and in the field (**25% of your total grade**).
- In the classroom in Williamsburg and San Salvador, you'll be graded on participation, including asking/answering questions in class, fully engaging in all activities, and discussing primary literature articles.
 - In the field in San Salvador, you'll be graded on your willingness to fully participate in all required field activities, to ask/answer questions, and to be a team player (i.e., helping to carry equipment, clean trucks, follow Rowan's Rules, stay safe, and look out for each other).
- (2) **Field notebook:** You'll be graded on the quality and quantity of notes provided in your individual field notebook. We'll provide you with lots of suggestions re. how to format and organize these notebooks. Notebooks will be turned in for grading during and immediately after the fieldtrip (**25% of your total grade**).
- (3) **Field guide:** After Spring Break, each of you will choose one topic that you'll research in detail and present to the class—in the form of both:
- A written field guide (2 sides of a regular sheet of paper, with references, figures, full color, 12 pt font min) and
 - A short oral presentation in the field (5-8 mins, no AV except written field guide)
- Each of your field guides will be printed in color and bound together—for each of you to take with you to San Salvador. Note that we will make EVERY effort to visit your assigned site during our trip—but if it's not possible, we'll ask you to present your topic at a related site. ***The Field Guide assignment is open book, open note, and open internet. You can ask classmates or friends to serve as peer reviewers BUT you must write your own material (20% of your total grade).***
- (4) **Class activities:** You'll have **two class activities** to complete this semester – which will give you practice with the types of questions that will appear on quizzes and the type of organisms (modern and fossil) that you'll encounter in San Salvador. ***The class activities are open book, open note, open internet and you are welcome to work with 1-2 classmates if you would like.*** If you miss a class, it's your responsibility to talk to your classmates, find out whether you missed a class activity, contact Rowan or Linda, and make it up as soon as possible (**20% of your total grade**).
- (5) **Quizzes:** The quizzes will take 10-20 minutes, will involve specimen or photo identification, and will be fill in the blank and short answer questions. ***The quizzes are closed book, closed note, closed internet, and must be completed individually.*** If you miss a quiz, it's your responsibility to contact Rowan or Linda and make it up as soon as possible (**10% of your total grade**).

Grading scale: >93 = 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+; 63-66.9 = D; 60-62.9 = D-; <60 = F

Course policies (the fine print)

Attendance Policy: In-person attendance is highly recommended to be successful in this class. If you must miss a class, contact us immediately. It's your responsibility to talk to your classmates and find out what material you've missed.

Late Policy: Grades will be docked by 10% for every day that an activity or quiz is late. If an activity or quiz is more than one week late, you will receive a zero for that assignment. If you have a medical/family excuse, please let us know immediately. No exceptions.

Electronic Policy: You're welcome to use laptops and cell phones during class—but only if they are silenced and you are using them specifically for coursework. Please remember that inappropriate electronics use (social media, e-mail, surfing, reading news, playing games, etc.) is distracting to those seated around you and is unprofessional.

Library Help: Research librarians can provide virtual assistance through phone, email, live online chat and more in-depth research consultations by phone or Zoom.

Mental and Physical Well-Being: William & Mary recognizes that students juggle different responsibilities and can face challenges that make learning difficult. There are many resources available at W&M to help students navigate emotional/psychological, physical/medical, material/accessibility concerns. Asking for help is a sign of courage and strength. If you or someone you know is experiencing any of these challenges, we encourage you to reach out to the following offices:

- **For psychological/emotional stress**, please consider reaching out to the W&M Counseling Center <https://www.wm.edu/offices/wellness/counselingcenter/>; or (757) 221-3620, 240 Gooch Dr., 2nd floor. Services are free and confidential.
- **For physical/medical concerns**, please consider reaching out to the W&M Health Center at <https://www.wm.edu/offices/wellness/healthcenter/>; or (757) 221-4386, 240 Gooch Drive.
- **For additional support or resources**, please contact the Dean of Students by submitting a Care Report at <https://www.wm.edu/offices/deanofstudents/services/caresupportservices/index.php>; or by calling 757-221-2510, or by emailing deanofstudents@wm.edu.
- For a list of many other resources available to students, see Health and Wellness Resources for Students

As your professors, we will also ask you to reach out to us if you are facing challenges inside or outside the classroom; We will guide you to appropriate resources on campus.

Community Statement: The W&M Geology Department welcomes, supports, engages, and celebrates the broad range of backgrounds and experiences in our community. We affirm our individual and collective responsibility for creating and fostering a respectful, cooperative, inclusive, and equitable campus environment for all individuals, regardless of race, ethnicity, nationality, culture, religion, political beliefs, gender, gender identity / expression, sexual orientation, age, disability, or marital, parental, or veteran status. All people have the right to be addressed and referred to in accordance with their personal identity. In this class, you will have the chance to indicate the name that you prefer to be called and the pronouns with which you would like to be addressed.

Student Accessibility Services: William & Mary accommodates students with disabilities in accordance with federal laws and university policy. Any student who feels they may need an accommodation based on the impact of a learning, psychiatric, physical, or chronic health diagnosis should contact Student Accessibility Services staff at 757-221-2512 or at sas@wm.edu to determine if accommodations are warranted and to obtain an official letter of accommodation. For more information, please see www.wm.edu/sas.

Honor Code Policy: William & Mary has had an honor code since at least 1779. Academic integrity is at the heart of the university, and we all are responsible for upholding the ideals of honor and integrity. The student-led honor system is responsible for resolving any suspected violations of the Honor Code, and we will report all

suspected instances of academic dishonesty to the honor system. The Student Handbook (www.wm.edu/studenthandbook) includes your responsibilities as a student. Your full participation and observance of the Honor Code is expected. ***Note that we will use a series of tools (e.g., SafeAssign) to check whether students are plagiarizing on class activities and the project pitch.*** To read the Honor Code, see www.wm.edu/honor

Sustainability at W&M: We support sustainability initiatives on the WM campus. To reduce paper use, many of your course documents (including the syllabus, readings, and most assignments) will be provided on the course Blackboard page. Please try to save paper by reading these documents online, if possible. If you must print out documents, please consider printing double-sided and/or with two sheets per page. For more information, please see the Sustainability at W&M website: www.wm.edu/sustainability.

Class schedule

Please note that this schedule is subject to change, with notice provided by email

Dates	Topics	Readings
Jan 27	Welcome to Bahamas field course (all)	Reading on reserve
Feb 3	Geology of the Bahamas (Linda)	Reading on reserve
Feb 4	Add/drop ends	
Feb 10-17	Fundamentals of fossils (Rowan) *** Fossil Activity due Feb 17th ***	Reading on reserve
Feb 24	Studying sand: skeletal particles and mineralogy (Rowan) *** Quiz 1: Fossils ***	Reading on reserve
Mar 3	Coral reef ecology and conservation (Chloe)	Reading on reserve
Mar 10, 17	*** Spring Break: No class ***	
Mar 24	Sand flats, seagrass, and stromatolites (Chloe) *** Coral Reef Activity due ***	Reading on reserve
Mar 28	Last Day to Withdraw with a “W”	
Mar 31	San Sal above sea level: terrestrial plants & animals (Linda) *** Quiz 2: Coral Reef ***	Reading on reserve
Apr 7	Peer review workshop on field guides	
Apr 14	San Salvador archaeology and prehistory: Lucayans (Linda) *** Written field guide draft due ***	Reading on reserve
April 21	Bahamas under British Rule to today (Rowan)	Reading on reserve
April 28	Tour of San Salvador Island (all) *** Written field guide final due ***	
May 5	Final trip logistics (all)	