THE UNIVERSITY OF RHODE ISLAND

COLLEGE OF THE ENVIRONMENT AND LIFE SCIENCES

THINK BIG WE DO

BIO 104 – SUMMER SESSION 2—2026 IN-PERSON lab		Sect 1: Tu & Th @ 4:00-6:20 pm -- CBLS 335 Sect 2: Mo & W @ 4:00-6:20 pm -- CBLS 335		
	DATE	**LAB TOPIC**	**QUIZ - IN LAB**	**ASSIGNMENT - DUE 11PM FRIDAYS**
1	JUNE 22 | 23	Species diversity in coastal RI plankton - A1 data collection.		
2	24 | 25	Graph plankton data. - intro to R & R-Studio.		A1 DRAFT. DUE JUNE 26. SUBMIT ON ELI REVIEW.
3	29 | 30	Mechanisms of Evolution - A2 data collection.		A1 FEEDBACK. **TUES** JUNE 30. REVIEW ON ELI REVIEW.
4	JULY 1 | 2 ONLINE LAB.	Mechanisms of Evolution - data analysis in R-Studio.		A1 FINAL COPY. JULY 3. PLANKTON DATA
5	6 | 7	Plant diversity: Land plants, Algae, Fungi & Lichens	Q1: MECH OF EVOLUTION	
6	8 | 9	Photosynthesis & Algae - spectrophotometer analysis - A3 data collection	Q2: PLANT DIVERSITY	A2 ONLY COPY. JULY 10. MECH OF EVOL. SNAIL DATA
7	13 | 14	Plant form and function	Q3: ALGAE & PS	
8	15 | 16	Plant reproduction: flowers, fruits, & seeds Data lab practical- in class.	Q4: PLANT FORM & FUNCTION **DATA LAB PRACTICAL**	A3 ONLY COPY. JULY 17. SPEC DATA
9	20 | 21	Predator-Prey Interactions & Campus Plant: Walk & Talk	Q5: PLANT REPRO	
10	22 | 23	Carbon footprint	Q6: POPULATION ECOLOGY	CAMPUS PLANT PAPER AND INVASIVE SPECIES PAPER AND ALL EXTRA CREDIT DUE: JULY 24.
Invasive species talk: Students will give 2-4 min talk & presentation during the semester. Campus plant talk: Students will give a 1 min talk on campus plant walk.				

COURSE AND INSTRUCTOR INFORMATION

Course: BIO 104 – Principles of Biology Laboratory II

Credits: 1 credit lab course, taken in conjunction with 3-credit lecture course: BIO 102

Format: In-person, hands-on laboratory experience

Where: CBLS 335, 120 Flagg Road, University of RI, Kingston, RI

Contact: Grad Teaching Assistant **Sect 1 (TuTh): Theresa Easley** theresa.easley@uri.edu

Grad Teaching Assistant **Sect 2 (M W): Flo Fields** ffields@uri.edu

Lab pedagogy specialist: Linda Forrester LindaForrester@uri.edu

COURSE LEARNING OUTCOMES

By the end of the semester, students in BIO 104 should be able to:

Use laboratory equipment effectively to conduct biological experiments (including compound and dissecting microscopes, micropipettes, balances, spectrophotometer).

Apply important biological concepts and draw conclusions from quantifiable data collected from biological experiments.

Write simple computer code to synthesize data and describe lab experiment results.

Summarize and communicate results of experiments.

Extrapolate from lab experiments to describe and explain biological concepts.

COURSE MATERIALS

Text: — BIO 104 Principles of Biology Lab II Manual, available FREE online
OR purchase printed copy from URI Campus Store in URI Memorial Union.
Students must have lab manual (on a device or a hard copy) in class.

Lab equipment: — BIO 104 **does NOT require** students to bring a lab coat, safety glasses, goggles, or gloves. These will be provided as needed.

Online site: BrightSpace — the URI Learning Management System (online education portal)
Announcements, course materials/resources, and grades will be posted to the BrightSpace course site.
It is your responsibility to check the site regularly to stay current with the class.
Your TA will not respond to questions about course material that are covered in this syllabus!

Here are some useful links/tips to help you get started with Brightspace:

➔ Brightspace Login: https://brightspace.uri.edu/ or https://web.uri.edu/brightspace/

➔ Turn on "Notifications" within the course site: log into your BrightSpace account. Click your profile name in the top right corner. Select "Notifications" from the dropdown menu. Turn ON notifications for announcements, assignments, and grades. You can also set whether you receive notifications via email or text.

COURSE REQUIREMENTS AND GRADING

Summary of assessments — This is a 1-credit course, taken in conjunction with BIO 102 lecture.

Course components	Number	Percent of grade
Quizzes	6 quizzes given, lowest score dropped.	50%
Assignments	3 assignments, lowest score dropped.	22%
Lab Data Practical	1 multiple choice quiz about data (5%) 1 write R code quiz – open notes (5%)	10%
Invasive Species Presentation & Report	1	10%
Campus Plant Presentation & Report	1	4%
Attend & participate	Lose 0.1% every lab missed. Lose 1.0% low/no participation.	4%
Extra credit	+1: SELF-ASSESSMENT. 1-PAGE REVIEW BIO104 GRADES WITH STRATEGIES FOR IMPROVEMENT. +1: Carbon footprint paper – in class submission.	+2%
	Total possible score →	102%

A	94
A-	90
B+	87
B	84
B-	80
C+	77
C	74
C-	70
D+	67
D	64
F	< 64

Students missing 4 labs for ANY reason cannot pass this class.
With URI-accepted-documentation, students can request a grade of Incomplete.
Students should discuss their situation with their URI advisers promptly.
Visit the URI Starfish site for adviser contact information.

Grading scale

Students are expected to monitor their grades on the BIO104 BrightSpace site.
Students should report mistakes to GTA or course coordinator.
Grading strictly follows rubrics designed by the course coordinator.

Assignments — Must be submitted to BrightSpace. Late assignments are accepted but with a "10% off per day" penalty, maximum of 50% off. Students must alert TA about a late submission.
Lab assignment data must be analyzed using the coding program, R and R Studio.

Assignments are due at 11pm on Fridays according to the syllabus. Submit assignments early!
Your TA will be happy to help you during the day, but TAs will not be available late Friday night.

Attendance — Attend every lab. Arrive ON TIME.

Students missing 4 or more labs, for ANY reason, **will receive a grade of *Fail*,** or with URI approved documentation, a grade of *Incomplete*.

→ To record any absences, a small penalty of 0.1 point per missed class will be applied regardless of the reason.

COURSE HELP OPTIONS

GTA Help through email — Contact your GTA (see emails above) with questions not covered in this syllabus.

➔ YOU can be successful with EVERYTHING covered in this lab course!

While you may not be familiar with some material **at this time**,
we are confident that YOU CAN LEARN TO BE SUCCESSFUL in this course.
Your TAs are here to help you develop your own strategies to be successful.

Academic Enhancement Center (AEC): Located in Roosevelt Hall.

Attend GTA help hours for direct help with BIO 104 material. For more general help, please visit the **AEC** in Roosevelt Hall.

The AEC offers free face-to-face and web-based services to undergraduate students seeking academic support. Peer tutoring is available for STEM-related courses by appointment online and in-person. The Writing Center offers peer tutoring focused on supporting undergraduate writers at any stage of a writing assignment. The UCS160 course and academic skills consultations offer students strategies and activities aimed at improving their studying and test-taking skills.

Details about all on the AEC website, uri.edu/aec.

STEM Tutoring - for 100 and 200 level math, chemistry, physics & **biology** courses.

The STEM Tutoring program offers free online and limited in-person peer tutoring.
Select from occasional or weekly appointments. Appointments and locations will be visible in the TutorTrac system: aec.uri.edu. More info at uri.edu/aec/tutoring.

USE OF ARTIFICIAL INTELLIGENCE (AI)

Use of AI: Developing competency with AI technologies, such as Chat GPT, is a skill set you need. We want to help you develop AI competency while also learning and understanding the course material. In this course, we allow the use of AI, following this policy. Students not following this policy will be reported to the URI Office of Student Life for plagiarism.

1. **Use AI constructively** -- have AI search for resources on a topic, on which you subsequently follow up. Have AI make suggestions related to the concision and clarity of your answers, which you then thoughtfully consider and use as editorial feedback in a writing process to improve your assignments. Have a dialogue with an AI through which you sharpen your responses or improve your consistency with biological terminology.
   Unconstructive uses -- copy and paste an AI response to assignment questions and turn it in.

2. **Include a statement describing how you used AI.** Whenever you use a generative AI resource (e.g., OpenAI, Chat GPT, Claude, Gemini, etc.), at the end of the assignment, you must list how you used the resource (e.g., to check for spelling/grammar mistakes) and how the resource helped to improve your assignment or your thinking on the topic (e.g., it helped me clarify my response).

   NOTE: the boundary between constructive and unconstructive uses remains vague. There are sure to be borderline cases. You can avoid problems by following #2 above. Include a statement in any assignment you use AI and be SURE you are using AI constructively.
   Constructive use of AI depends on YOUR input in a creative and essential manner.

3. **Students submitting AI content as their own work will lose an additional 10%/day until work is resubmitted.**

STUDENT RESPONSIBILITIES AND RESOURCES

As members of the University of Rhode Island student community, students are held to certain standards and academic policies. There are many URI resources available to help you succeed in your academic work. Review these important standards, policies, and resources, which include:

- Maintaining academic standards.
  Students in lab will share lab data, but every student is expected to create their own assignment reports independently. Students must provide citations for any work obtained from other people or sources. Students should review the University of RI guidelines to avoid cheating and plagiarizing. **GTAs are expected to report any quiz or assignment that is plagiarized *in whole or in part.* Students involved will receive a grade of zero and the student(s) involved will be reported to the Office of Student Life.**

- Notifying appropriate URI resources if you are concerned about fellow students.
  Students may see other exhibiting concerning behaviors. You may be the first contact person who can help another student in need. Being aware of distress signals, ways to intervene, and resources to help a student may assist you in responding effectively to such an event. If you find yourself feeling worried, alarmed, or threatened, take signs of distress seriously. Use this ANCHOR site to determine who to call for assistance, report your concerns to the suggested contact below, or access resources to share with the student.
  You might be the one saving a life by being available in the right place at the right time.

- **Safety—** No food or drink is allowed in the lab EVER. Water bottles may be stored in backpacks but NOT used in the lab room. Wear sensible clothing and use caution to protect yourself from hazardous laboratory equipment and chemicals.
  Notify TA immediately if there is any injury or hazardous activity.
  Students not following safety rules must leave the lab-room.
  BIO 104 **does NOT require** students to bring a lab coat, safety glasses, goggles, or gloves. These will be provided as needed.

STUDENT BELONGING INFORMATION

Our teaching team values every student.
We are committed to a climate of mutual respect and full participation.
Our goal is to create learning environments that are open to all and welcoming.
To help address all learning styles that students possess, we use a strengths-based learning approach.

If there are barriers to your access, accurate assessment, or achievement, please contact the lab pedagogy specialist, LindaForrester@uri.edu, and the URI office of Disability, Access, & Inclusion (DAI) in the Office of Student Life, 330 Memorial Union. Call: 401-874-2098.

Submit your DAI information and letter early in the semester so we can make arrangements.
If you have not yet established services through DAI, contact them to engage in a confidential conversation about the process for requesting what you need in the classroom.
DAI contacts: 401-874-2098 |web.uri.edu/disability | dai@uri.edu

All students **must complete their assessments within two weeks** from the date of the scheduled quiz/practical. Uncompleted assessments will receive a grade of zero.

HELP FOR STUDENTS WITH UNEXPECTED SITUATIONS

Biological Sciences Bereavement OR Unexpected Situation Policy

If life circumstances are affecting your ability to focus on courses and your URI experience (for example, if you are grieving, have extreme illness for you or your immediate family, or have experienced the death of a loved one), the Biological Sciences faculty, staff, and TAs understand and want to support you during this difficult time.

Students are asked to complete the "Student Bereavement Notification Request" form on this link: https://cm.maxient.com/reportingform.php?UnivofRhodeIsland&layout_id=32
The Dean of Students office will alert your instructors regarding your situation.
When you are ready, contact your instructor or GTA to discuss questions about missing class or assignments.

If you want to speak with your dean directly, contact information is listed below.
Dean of **University College**: 401-874-5903.
Dean of **CELS:** Dean Kim Anderson kand@uri.edu 401-874-5026.

Resources for Students Experiencing Distress

Your mental health matters. If you or someone you know is experiencing suicidal thoughts, call the National Suicide Prevention Hotline at 988. If you are in crisis or need support call URI Counseling Center at 401-874-2288 or https://web.uri.edu/counseling/crisis/

The URI Counseling Center service is paid for by your student fees so it will not cost you anything to talk with them. We encourage you to call; it might help you.

The University of Rhode Island is committed to supporting students in their mental health, their psychological and social well-being, and their connection to their academic experience and overall wellness. The university believes that academic, personal, and professional development can flourish only when each member of our community is assured of equitable access to mental health services. The university aims to make access to mental health attainable while fostering a community reflecting equity and diversity and understands that good mental health may lead to personal and professional growth, greater self-awareness, increased social engagement, enhanced academic success, and campus and community involvement. The URI Counseling Center can offer further support.

COURSE EVALUATION AND FEEDBACK

Students will be provided with an opportunity to evaluate instruction in this course. Students are asked to give formal feedback at mid-term and end of term.

Students wishing to give feedback at other times during the semester are asked to write to the course pedagogy specialist, Linda Forrester at LindaForrester@uri.edu, or Office of Community Standards.

UNIVERSITY OF RHODE ISLAND LAND ACKNOWLEDGEMENT

The University of Rhode Island occupies the traditional stomping ground of the Narragansett Nation and the Niantic People. We honor and respect the enduring and continuing relationship between the Indigenous people and this land by teaching and learning more about their history and present-day communities, and by becoming stewards of the land we, too, inhabit.