Rocky Mountain Biological Laboratory (RMBL)
Summer 2024
Introduction to Field Biology for High School

Course Description

The goal of this course is to teach the process of conducting biological research in the natural world. Course activities include making natural history observations, asking research questions, and working with scientists on topics as diverse as plant biology, pollination, stream ecology, and animal behavior. Students will work individually or in small groups to conduct their own research projects under the guidance of instructors.

Instructors

Lizza Vachon
evachon11@gmail.com

Dr. Jill Anderson along with a variety of other RMBL scientists

Logistics

Transportation options:

There is not a public bus to Gothic in Summer 2024. Students are responsible for their own transportation. Students may park in the SAIL parking lot (the first dirt parking lot on the right before the bridge). Often there are folks willing and able to carpool. Please feel free to email Lizza if you need help facilitating this!

High school credit: ½ year science credit for students enrolled in the Gunnison Watershed School District is available. For students enrolled in other districts, inquire with your school as to the process of credit being granted for this course.
Students must attend all class times in order to earn credit for the course.

College credit: Student may receive 2 Credits from Western State University. Registration must occur BEFORE the start of the class through Western's extended studies department. There is an additional $170 for this credit (whether the credit transfers depends on individual colleges and universities).

Supply List:

face masks
daypack
water bottle
snacks
rain gear
hat
sunscreen
sunglasses
warm layer (e.g. fleece jacket)
close-toed, sturdy footgear
watch or other time keeping device
Write in the Rain field notebook (RMBL will provide)
pens and pencils
laptop computer/Tablet (if possible)
USB drive
water shoes (optional)
camera (optional)
binoculars (optional)
hand lens (optional)

Readings: RMBL will provide copies of the daily readings.

Behavior code

Seek the Peak applies here as it does in the Crested Butte Community School community.
Be respectful, Be responsible, Be safe.
Be respectful. Kind words and kind actions with all people. Kind treatment of animals and plants. Treat all equipment in a manner that leaves it in the same state of repair in which you received it OR better. Clean up after yourself, inside and outside. Follow instructions.
Be responsible. Come to every class session on time and prepared with all necessary equipment. Own your learning. Be truthful.
Be safe. Use sun protection. Watch out for getting cold – eat, drink, wear a hat. Be aware of your surroundings. Follow instructions. Stay in bounds. Ask questions.

Technology Policy:
Music and Phone use only permitted during times designated by an instructor. There is limited cell service in Gothic.

Grading

Field journal 15%

Journal should contain a daily record of the course that includes

* Answers to writing prompts given in class
* Field observations and drawings from scientist led activities
* Data Collected from group experiments
* All student generated material for independent projects

Data & analysis (first week) 15%

All data collected in group experiments and activities should be represented in your field journal using appropriate tables and graphs followed by your interpretation of those results.

Participation 20%

All students should be on time and ready to work each morning, actively participating in group activities and discussions and completing nightly assignments

Independent Project 50%

Your project will be graded based on your completion of the following steps of scientific research and the presentation of that research. Final Presentation will include these components:

1) Research Question and Hypothesis
2) Experimental design
3) Data Collection Methods
4) Data Analysis
5) Discussion of Results