Field Science Career Experience



Earth's Classroom (EC) is happy to announce the 17th year of an experiential, 90-hour, field-science, FREE, certification program for high school students! This program has been funded by multiple grants and local sponsors.

The purpose is to provide a program exclusively for high school juniors and seniors who are interested in any science related field that deals with biology, chemistry, or physics. In this certification program EC instructors use natural resources to show biology, chemistry, and physics in action in real-time. It is designed to not only intrigue but to increase your observation skills in science!

This program is called the <u>Field Science Career Experience (FSCE)</u>. EC will be providing three to sixhour, after school, experiential courses, once a month for the 2024-2045 school year (September 2024—April 2025). The core instructors will be from EC, but the FSCE students will also gain knowledge from professionals such as those working for the Missouri Department of Conservation and Department of Natural Resources. Each experiential course will be a different subject related to the field, so that students may see the diversity within the field and understand their personal passion.

By the end of the school year the FSCE participants will be instructed and guided to do an hour solo presentation to an elementary class (April or May 2025) on a subject they felt most passionate about. Thus, not only will this project affect high school students, but *hundreds of elementary students* will be able to share the experience through the eyes and storytelling of the high school students. FSCE's capstone is a 3-day, 2-night Ecology Canoe/Camping Trip on Missouri's most bio-diverse river. (June 2025)

Objectives:

- To inspire young adults to pursue a career field in biology, chemistry, or physics.
- To assist young adults to have a better understanding and appreciation of our local natural resources.
- To provide an experiential educational opportunity not available in the formal school setting.
- To provide a 90- hour, field-science, certificate of achievement to all students who participate...a certificate very worthy on a resume or scholarship application!

The Field Science Career Experience Program:

- <u>High School juniors and seniors of the 2024-2025 school year must have applications</u> turned in by FRIDAY, AUGUST 30th, 2024!!
- EC board members will choose the top students from the essay applicants and applicants will be notified by **phone or e-mail** of acceptance between **September 9**th **or10th, 2024.**
- Starting on Sunday, September 29th, 2024, the following experiential courses will be available to the chosen applicants:

<u>September</u>—GEOLOGY: Welcome to the program and spend 5 hours wild caving in a geologic hidden gem, learning about the interrelationship between the chemistry and biology of this geologic ecosystem.

<u>October</u>---LIMNOLOGY: Learn unique natural history and identification skills related to the life of freshwater ecosystems, and how this life is affected by our local chemistry.

<u>November</u>—MAMMALOGY: Test observation skills through studying wild MO mammal skulls, bones, and furs.

<u>December</u> —NATURAL RESOURCE MANAGEMENT/FIRE ECOLOGY: Visit a native prairie habitat and forest that are managed with control burns to understand the biodiversity they provide and participate in an ecological controlled burn.

<u>January</u>— CULTURAL PRE-HISTORY: Spend time discussing over artifacts and known information about the Native Americans of our area and their interrelationship to the resources, including the differences between anthropology, paleontology and archaeology.

<u>February</u>—SUSTAINABLE TECHNOLOGY: Visit a home that is architecturally designed with passive and active solar and built in a self-sustainable way.

<u>March</u>— ORNITHOLOGY: Learn unique natural history and identification skills (sight and sound) of our native birds with binoculars and spotting scopes. Test your observation skills.

<u>April---</u> HERPETOLOGY: Learn unique natural history of our native reptiles and amphibians and their relationships to the environment around them.

<u>May</u>---ELEMENTARY PRESENTATION: Present to an elementary classroom and interpret a subject you have the most interest in.

<u>June---</u>3-DAY, 2-NIGHT ECOLOGY CANOE TRIP: Discover how studies of all life are put together in a tight interrelationship as we travel and collect samples down the upper Meramec River (most biologically diverse river in Missouri).

Once all 31 hours of course work, 55 hours of ecological learning/canoe trip, and hour presentation is completed (4 hours total), a 90-hour Certificate of Achievement will be awarded. This certificate will carry the EC logo and sponsors' logos and is HIGHLY USED on scholarships and resumes!

<u>NOTE*--</u> A detailed, dated semester schedule will be provided and discussed at the first course on Sunday, September 29th. Again, all applicants will be notified September 9th or 10th if they qualify to participate for FREE. First course (Geology) will start, tentatively, on Sunday, September 29th, 2024! Tentatively, 4 of the courses will be set for weekday evenings, and 4 courses will be set for weekends (we work with the students for best possible dates.) The Ecology Canoe Trip will be set for either the first or second week of June, 2025; Monday-Wednesday.

<u>Field Science Career Experience</u> <u>Application</u>

For Junior and Senior High School Students during the 2024-2025 school year.

Please print in blue or black ink or type.

Please fill out all information with the space that is allowed on these 2 pages.

	Name: Last	Fírst	
Hígh :		hool:	
	Home Address:		
	cíty:	State:Zíp:	
	E-Maí	íl:	
	Phone #(s)		
	What grade are you in for the 2024-2025 school year? 11 th or 12 th Have you been accepted into the NRCE program before? Yes No What high school classes have you taken that are related to the Field Science Career Experience? Examples: Biology, Ecology, Chemistry, Statistics, etc.		períence?
	What clubs do you participate in?		
	What are your hobbies?		
	Would you be able to commit to all April/May presentation? If not, ex	. 8 courses, the 3-day, 2-night Ecology Canoe Trip, , plain.	AND the
	Would you be able to provide your onearly 1-1/2-2 hours? If not, explain	own transportation to all the courses/events, even if in.	you to travel

 What is your c audience. 	omfort level with speaking in public? Give examples of how you have presented to an
- talket Calana	
 What future ca 	areer would you like to pursue and why?
9	ords, in the space given, describe why Earth's Classroom's Board of Directors and tors should pick you for this exciting career experience.
	property of the filled will be adult property of
As a reference while	REFERENCES: to be filled out by adult REFERENCES . support this student in their efforts to be in the FSCE program and feel they would be
ris a reference god	an asset.
#1 Print name	contact info. E-mail or #
#2 Print name	contact info. E-mail or #
DUE Fridau.	AUGUST 30th, 2024, by 6pm to EC's office! Mail to: Earth's Classroom, 3649
	Rosebud, MO 63091 or fax at 208-279-4205. Scan to earthsclassroom@gmail.com.
•	573-437-7628 or <u>earthsclassroom@gmail.com</u> . To learn more about EC visit
	https://earthsclassroom.org/
Applicant	s will be notified Sept. 9th-10th, 2024 and 1st class starts Sept. 29th!!!!!!