

ENV_2500 Introduction to Genetics: current applications.

Field location: El Jobo (Guanacaste).

Objectives:

1. - Learn about different life stages of ray and fish species in the north Pacific of Costa Rica and the scientific monitoring projects as efficient tools to strengthen conservation activities that aim to protect key species.
2. - Learn about how to sampling rays and fish in the field, collection of biological data, and preservation of tissues samples.
3. – Collect some fish specimen for the identification of phenotype characteristics on BIOMOL laboratory and preservation of tissues samples.
4. - Learn how marine biologists, ecologists, and local community members collaborate in conservation studies and actions to protect key species.

El Jobo, FIELDTRIP (November 30th and December 1st - 2nd)

Methodology:

Friday: We leave at 12:00 pm to “El Jobo”. (Please be at Veritas University ON time!!).

16:00 pm. Snack break.

18:00 pm: Arriving to Bahia Salinas.

18:30 pm: Dinner in Kembly’s house.

19:30 - 20:00 pm: Equipo Tora Carey NGO presentation.

Saturday:

6:00 am: Breakfast in Kembly’s house.

7:00 am: Arriving to Playa Raya to sampling rays.

13:00 am: Lunch in Kembly’s house.

15:00 pm: Arriving to Playa Manzanillo to sampling rays.

18:30 pm: Dinner in Kembly's house.

21:30 pm: Resting Time.

Sunday

4:30 am: Arriving to Bahía Salinas to sampling fishes with fishermen.

6:00 am: Breakfast in Kembly's house.

7:00 am: Sample revision and accommodation.

8:30 am: Break on the beach (El Jobo beach).

12:00 am: Typical lunch fried fish in Kembly's house.

14:00 pm: Return to San José.

20:30 pm: Arrive to Veritas University.

Students will need:

-
- Comfortable dark clothes (black or dark green) with long sleeves and long pants.
 - Velcro shoes or water shoes, old tennis, (shoes are going to get wet).
 - Light clothes (shorts).
 - Big hats.
 - Dry bags.
 - Rain covers.
 - White head light.
 - Pencils (at least 2 regular pencils).
 - Field note book (students should take notes all the time during landing process with the fisherman and sea turtle patrolling).
 - Mosquito repellent.
 - Sunblock.
 - Snacks.
 - Water bottle.
 - Cameras!

Lodging and main meals are covered by the course but bring some extra money to buy water and other individual needs. If you have any specific medical condition, bring your medicine and tell the teacher about it.

Include in your Field Trip Video Report only for ENV_2500 Introduction to Genetics: current applications.

(3-5 minutes)

- 1. Title, students name and universities names with the logo.**
- 2. Introduction:** For the field trip report should include information about “El Jobo” location, genetic project for identification of species and population genetics, local community project, etc. Make sure to use references from books, national and international scientific journals, Internet information that you must to refer. Also, include the objectives of the activities.
- 3. Methodology:** Describe the methodology that we use for the observations.
- 4. Results:** Describe and analyze the data obtained, you can use graphs and photos to support, compare your results and previous data collection from the same beach.
- 5. Discussion:** Compare your result with information from books, Internet or scientific journals. Include your conclusions of your personal observations and also recommendations.

Remember review the rubrics in the syllabus.