

Biology 422 – Tropical Ecology: Ecuador –Andes, Amazon, and Galapagos

Extended Summer 2020

Michael Meyer, Ph.D.
Forbes Hall, Room 1021B
michael.meyer@cnu.edu
594-7321

Rick Sherwin, Ph.D.
Forbes Hall, Room 2017
rsherwin@cnu.edu
594-7733

Biology 422 is a study abroad course complementary to materials covered in Biology 430. The course includes international travel where students will have the opportunity to observe and describe biogeographical principles and diversity of a variety of tropical ecosystems. We will spend time exploring the Andes, Amazon, and Galapagos [San Cristobal]. We will study and observe vegetation, wildlife, and human cultures and explore how each of these components are molded by the environment in which they are found.

Learning Outcomes:

1. Develop skills and academic and professional abilities applicable for use in regional and global contexts
2. Develop a better understanding of global environmental issues.
3. Become culturally self-aware.
4. Develop sensitivity to the concerns of indigenous peoples throughout the world.

Grading: Grades will be based on participation, personal conduct, Darwinian journal, a photo journal, and final reflection paper (see below).

Participation: International travel is thrilling, intense, challenging, and often exhausting. We will be very active on our trip and will have a varied schedule, including both tight scheduled and down times. It is absolutely necessary that students remain timely, actively engaged in each activity, and remain attentive to all discussions/instructions. [20 pts possible]

Personal Conduct: The behavior of each participant directly impacts the quality of the trip for other members of the group. Therefore, we expect the highest standard of personal conduct by students. Students are expected to follow all instructions provided by course instructors and guides throughout the entire trip. Students will be warned once for violations of expected conduct, followed by reduction in their grade. Those who continue to violate rules of travel will earn a failing grade for the course and may be sent home. [10 pts possible]

Darwinian Journal: It is expected that all students maintain a daily journal that includes observations and reflections [refer to supplemental material]. Ultimately, this expectation is for students to reflect on long after returning from Fiji. [30 pts]

Photo Journal: Each of you is responsible for a photo journal to be presented at the end of the course. Twelve days of our experience will be represented by an image and caption. [20 pts]

Final Reflection: Each of you is responsible for creating a 4-page document that synthesizes your experience and incorporates material covered in BIOL 430. [20 pts]

Grading: Participation [20 pts], Personal Conduct [10 pts], Darwinian Journal [30 pts], Photo journal [20 pts], Final Reflection [20 pts] = **100 pts total**

Final grades will be determined using a standard scale: **A** 92.6-100, **A-** 89.6-92.5, **B+** 86.6-89.5, **B** 82.6-86.5, **B-** 79.6-82.5, **C+** 76.6-79.5, **C** 72.6-76.5, **C-** 69.6-72.5, **D+** 66.6-69.5, **D** 62.6-66.5, **D-** 59.6-62.5, **F** <59.6

Working in the field: This course requires that we spend a lot of time outside, which means that there are certain safety risks that you should take into consideration. We will be visiting a variety of habitat types, some of which will contain venomous snakes. Please keep this in mind during our experience by always watching where you step and adhering to the no-touching policy. Please be prepared to walk/hike a number of miles each day, as well as deal with the various weather conditions that we will encounter; wear appropriate footwear and clothing, bring sun protection, have plenty of water on hand, etc. Application of insect repellent can ameliorate the risks of contracting illnesses, which may be carried by various organisms that inhabit this region of the Earth. Most importantly, use common sense in all aspects of your experiences in the field.

Students are expected to observe the CNU Honor Code (see Student Handbook). All graded work must be your own. Plagiarism and cheating **will not be tolerated**. These are very serious offenses and will be dealt with appropriately, potentially resulting in expulsion.

<u>Day</u>	<u>Topic</u>	<u>Contact minutes</u>
5.16	Depart Dulles for Quito: Intro Quito culture	120 min
5.17	Explore Quito and local culture	480 min
5.18	Fly from Quito to Coca. Boat to Yasuni National Park [i.e., Amazon]	480 min
5.19	Yasuni NP: explore and engage with river ecosystem and biodiversity	480 min
5.20	Yasuni NP: explore and engage with terrestrial ecosystem and biodiversity	480 min
5.21	Yasuni NP: explore and discuss human impacts on land, climate, and wildlife	480 min
5.22	Boat to Coca and bus to El Chaco [i.e., Andes]	480 min
5.23	Hike to Alto Coca Reserve, an ecological hotspot	480 min
5.24	Alto Coca Reserve – explore and engage with cloud forest/rainforest transition	480 min
5.25	Alco Coca Reserve – explore and engage with ecosystem and biodiversity	480 min
5.26	Bus transfer back to Quito	480 min
5.27	Fly to Galapagos – explore and engage [snorkel] with ecosystem and biodiversity	240 min
5.28	Visit La Loberia – explore and engage [snorkel] with coastal habitat/biodiversity	480 min
5.29	Invasive plant removal and reforestation project. Snorkel Cerro Tijeretas	480 min
5.30	Visit tortoise sanctuary, sustainable farm, and Puerto Chino	480 min
5.31	Transfer to Quito, Departure flight to Dulles [arrive 6.1.20]	Total = 6600 mins