

JAMESTOWN COMMUNITY COLLEGE
State University of New York

INSTITUTIONAL COURSE SYLLABUS

Course Title: Tropical Biology

Course Abbreviation and Number: BIO 2620

Credit Hours: 3

Course Type: Lecture

Course Description: Students will experience "hands-on" learning about South and Central American tropical habitats, including rainforests, coral reefs, mangrove swamps, and Caribbean coastal shore areas, via classroom lectures and travel to Costa Rica, Panama, or other biodiverse sites during spring recess. Animals and plants typical of both marine and terrestrial tropical communities will be explored and identified, and their various habitats will be investigated.

Prerequisite: ENG 1510 and BIO 1551+BIO1552 or BIO 1570 or BIO 1580, and permission of the instructor.

Rigorous physical activities, including swimming, snorkeling, and hiking are required.

General Education Requirements Met

SUNY

Natural Sciences

JCC

Scientific Reasoning

Student Learning Outcomes:

Students who demonstrate understanding can:

1. Demonstrate their ability to observe, evaluate, and record daily discoveries of organisms and habitats encountered in the neotropics of Central America, and to carefully record these observations in a field notebook.
 2. Identify and evaluate the ways in which human activities are altering and impacting the complex interdependencies and ecological functioning of tropical creatures and their habitats.
 3. Recognize, identify and describe typical plants and animals of the neotropics, and relate them to the critical habitats and communities upon which they depend.
 4. Describe and demonstrate, using both written and oral formats, specific scientific knowledge gained through independent research into selected topics related to tropical biology.
 5. Demonstrate awareness of global issues and the impact of individual and collective decisions on life around the world. [JCC Gen Ed – Global Perspectives]
 6. Demonstrate an understanding of the methods scientists use to explore natural phenomena, including observation, hypotheses development, measurement and data collection, experimentation, evaluation of evidence, and employment of data analysis or mathematical modeling. [SUNY Gen Ed – Natural Sciences]
 7. Application of scientific data, concepts, and models in one of the natural sciences. [SUNY Gen Ed – Natural Sciences]
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Topics Covered:

- Introduction (goals); itinerary
 - Preparations for international travel to the neotropics
 - Snorkeling equipment discussion
 - Course mechanics – expectations and grade determination
 - Travel safety and security issues
 - Geography, History, and Climate of Costa Rica
 - Animal life of Costa Rica
 - Botanical life of Costa Rica
 - Environmental issues in Central America
 - Coral Reef and Mangrove habitats
 - Neotropical Amphibia – guest speaker
 - The Sea Turtles of Tortuguero – guest speaker
 - Lessons in Spanish – guest instructor
 - Final flight details and instructions
 - Snorkeling training in pool (mandatory)
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Information for Students

- Expectations of Students
 - [Civility Statement](#)
 - [Student Responsibility Statement](#)
 - [Academic Integrity Statement](#)
- [Accessibility Services](#)

Students who require accommodations to complete the requirements and expectations of this course because of a disability must make their accommodation requests to the Accessibility Services Coordinator.

- [Get Help: JCC & Community Resources](#)
- [Emergency Closing Procedures](#)
- Course grade is determined by the instructor based on a combination of factors, including but not limited to, homework, quizzes, exams, projects, and participation. Final course grade can be translated into a grade point value according to the following:

A=4.0	B+=3.5	B=3	C+=2.5	C=2	D+=1.5	D=1	F=0
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- Veterans and active duty military personnel with special circumstances (e.g., upcoming deployments, drill requirements, VA appointments) are welcome and encouraged to communicate these to the instructor.

Effective Date: Fall 2023