



# Syllabus

**Course Title:** The Ecology and Geology of New Zealand

**Program and Date:** New Zealand December 26, 2026 – January 8, 2027

**Instructor Name:** Denice Robertson and Sarah Johnson

**Instructor Home Institution:** Northern Kentucky University and University of Kentucky

**Instructor Email and Phone:**

<b>Instructors:</b>	Dr. Denice Robertson	Dr. Sarah Johnson
Current Position	Director for The Center for Excellence in Teaching and Learning (CETI)	Assistant Research Professor
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**Academic Department:** Biological Sciences and Geology

## Get to Know Your Professor

Dr. Denice Robertson received her PhD in Marine Ecology and has been a faculty member at NKU since 2001. My teaching has included Intro Biology, Ecology, Ecology Lab, Evolution, Biomathematics, Biometry, and The Ecology and Geology of Coral Reefs in which students travel to Belize to conduct research. My research focus has shifted from marine to terrestrial work where my colleague and I focus on native plant community restoration. We are working currently on a prairie project and a project on Spring ephemerals.

Dr. Sarah Johnson studies geologic hazards like landslides and flooding, and how the Earth's surface changes as tectonic processes, erosion, and topography all interact. I was a faculty member at NKU from 2002 to 2023 and am now at the University of Kentucky. I have taught courses in geomorphology, geographic information systems for geology, structural geology, field methods, economic geology, the ecology and geology of coral reefs, earthquakes and volcanoes, and geologic hazards.



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## Course Description

Experience the dynamic connections between New Zealand's position on the Pacific Ring of Fire and its unique biodiversity through hands-on field investigations across the North Island. Journey from Auckland's volcanic field to Rotorua's active geothermal features, exploring how these powerful forces shape specialized ecosystems. Snorkel Waiheke Island's coastal waters, hike through Tongariro's volcanic landscapes to Taranaki Falls and Craters of the Moon, and investigate Wellington's Waikanae Estuary. Learn field sampling techniques while studying how volcanic soils, geothermal activity, and tectonic processes drive ecological patterns and evolutionary adaptations. Throughout the journey, engage with Māori culture at a traditional hāngī, explore wildlife sanctuaries like Zealandia, and discover how New Zealand's dramatic geology creates habitats found nowhere else on Earth.

## Course Level and Credit Hours

Undergraduate level for 3 credit hours

## Prerequisite(s)

One year of college coursework including completion of basic writing requirement, and a science course (general education level is acceptable)

## Student Learning Outcomes

Upon completion of all coursework with a passing grade and full participation in course activities, students shall be able to:

1. Formulate testable hypotheses connecting geological processes and ecological systems in New Zealand, demonstrating their understanding of the interdisciplinary nature of environmental science.
2. Demonstrate proficiency in the use of field-based data collection methods to investigate New Zealand geology and ecology, adapting their approach to diverse ecosystems from terrestrial to marine.
3. Analyze and interpret collected data using appropriate statistical and visualization techniques to evaluate their hypotheses about New Zealand geological and ecological relationships.
4. Synthesize their findings into a comprehensive presentation, effectively communicating the connections between geological activity and resulting ecological systems in New Zealand to both scientific and non-scientific audiences.



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## Required Readings and Materials

There is no specific text for this course, but readings and websites will be posted on Canvas. In addition, in Canvas you will find a list of required assignments (and full details) including readings, lectures, field journal, site specific mini-challenges, data collection and a final project.

## Assignments and Grades

Assignment 1: Ecology Lecture & Readings and Quiz (Pre-trip) (Individual)  
Assignment 2: Geology Lecture & Readings and Quiz (Pre-trip) (Individual)  
Assignment 3: Daily Journal (Individual)  
Assignment 4: Site Specific Mini-Challenges (Team)  
Assignment 5: Data Sharing and Analysis (Teams)  
Assignment 6: Final Project/Presentation (Team)

Pre-departure Assignments	(10 %)
Daily Field Journal, Data Collection, Site-specific Mini-Challenges	(40%)
Participation	(10%)
Final Project	(40%)
Total	<u>100%</u>

## Grading Scale

The following scale will be used to compute your grade.

A = 90-100 %  
B = 80-89%  
C = 70-79%  
D = 60-69%points  
E (failing grade) = less than 60%

## Onsite Learning Experiences and Activities

Onsite learning experiences in this class will likely include the following site visits. This is a tentative list which will be replaced with a detailed daily itinerary of class meetings and field trips prior to the departure date.

- Rangitoto Island Tour
- Waiheke Island snorkeling and coastal exploration
- Waimangu geothermal hike
- Māori Cultural Experience
- Canopy Forest Tour
- Tongariro National Park hiking
- Coastal hike
- Zealandia Tour
- Waikanae Estuary Tour

## Attendance Policy

Attendance is mandatory at all scheduled activities and class meetings as well as field trip excursions. This includes any virtual meetings before and after the onsite experience. Repeated absences, including for ill health, will require documentation to be excused.

## Academic Integrity Policy

**PLAGIARISM and CHEATING are serious academic offenses.**

**We take academic honesty very seriously and will not tolerate cheating or plagiarism. The academic offense policy for this course is such that charges of an academic offense will be made against any student that cheats or commits plagiarism.** The more severe penalties for such an offense include the assignment of a failing grade for the course in which the offense occurred, suspension or dismissal from university. **We have a zero-tolerance policy regarding academic offenses.**

In this course, **cheating** is defined as follows:

*"Cheating is defined by its general usage. It includes, but is not limited to, the wrongful giving, taking, or presenting any information or material by a student with the intent of aiding himself/herself or another on any academic work which is considered in any way in the determination of the final grade."*

In this course, **plagiarism** is also defined as follows:

*"All academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression.*

*When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgment of the fact, the students are guilty of plagiarism. **\*\*This includes the use of AI: you will be directed specifically where AI work is allowed/not allowed. All use of AI must be cited using the name of the AI tool (ChatGPT, CoPilot etc), the date of use and a link to the conversation.***

*Plagiarism includes reproducing someone else's work..... If the words of someone else are used, the student **MUST** put quotation marks around the passage in question and add an appropriate indication*



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*of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic.*

## **Physical Expectations**

Program requires walking 3-5 miles per day on uneven pavement in all kinds of weather and long periods of standing. Students must be able to carry their own bags and belongings. Ability to participating in boating and snorkeling is required.

## **Disability Accommodation**

CCSA is committed to providing access to education abroad to the extent possible in a study abroad setting. The earlier CCSA and the faculty know the needs, the more likely we can accommodate them. At a minimum, students seeking accommodations are to contact both the CCSA office and the faculty one month in advance of the program's beginning. Students seeking such accommodation must provide CCSA with a copy of the letter on file with their own Office of Disability Services outlining what services they receive on their home campus.

## **Title IX Policy**

Sexual misconduct (including sexual harassment, sexual assault, and any nonconsensual behavior of a sexual nature) and sexual discrimination violate CCSA policies. Students experiencing such behavior may obtain support from the Onsite Program Director or the CCSA Executive Director. To report sexual misconduct or sex discrimination, contact either of these two officers. Disclosure to faculty instructors or CCSA officers of sexual misconduct, domestic violence, dating violence, or sex discrimination occurring on the program or involving a visitor, student or employee is not confidential under Title IX. Faculty and other CCSA employees are required to forward such reports, including names and circumstances, to the CCSA Executive Director.

## **Statement about Final Syllabus**

Please note that all CCSA syllabi are subject to change, but every effort will be made to ensure participants receive notice of such changes in a timely manner.