

Course Title: **Mapping Our Environment**

Course Code: **GESC500**

Descriptor Start Date: **01/01/2023**

Descriptor End Date: **25/02/2024**

POINTS: **15.00**

LEVEL: **5**

PREREQUISITE/S:

COREQUISITE/S:

RESTRICTION/S:

LEARNING HOURS

Hours may include lectures, tutorials, online forums, laboratories. Refer to your timetable and course information in Canvas for detailed information.

Total learning hours: 150

PRESCRIPTOR

Introduces geospatial science, the technologies used, and the types of roles filled by geospatial scientists in the workplace. Explores the fundamental concepts related to spatial data collection, storage, manipulation, analysis in the context of environmental mapping and problem solving. Students will learn to use and create maps to relay essential spatial information to various audiences.

LEARNING OUTCOMES

1. Describe fundamental concepts and tools related to geospatial data, including their collection, storage, display, and analysis, in an environmental context.
2. Describe appropriate methods for basic geospatial data manipulation and mapping.
3. Apply basic geospatial data analyses and communicate outputs via maps.
4. Discuss the role of geospatial science in a variety of workplaces.
5. Present work at the appropriate academic standard.

Disclaimer: Course descriptors may be amended between teaching periods/semesters

CONTENT

Includes but not limited to:

- Computing basics/fundamentals
- Geospatial data concepts, including data models, spatial referencing systems, data file types, data collection, and queries
- Introductory geospatial data manipulation, analysis concepts, and procedures
- Introductory remote-sensing concepts
- Geospatial platforms, including web-based GIS and desktop GIS
- Geospatial science and practice in Aotearoa New Zealand and globally
- Problem solving and troubleshooting in a geospatial context
- Communicating with maps (cartography and data sharing)

LEARNING & TEACHING STRATEGIES

Delivery will include mini-lectures, class exercises, and laboratories. Canvas will be the platform used to provide relevant information including course and supplementary material, timetable, and assessment information. Formative assessments will be offered during the semester.

ASSESSMENT PLAN

Assessment Event	Learning Outcomes
Portfolio	LO1, LO2, LO3, LO4, LO5
Written Assessment (2,000 words)	LO1, LO2, LO3, LO4, LO5
Presentation	LO1, LO2, LO3, LO4, LO5

Grade Map

MAP1

A+ A A- Pass with Distinction
B+ B B- Pass with Merit
C+ C C- Pass
D Fail

Overall requirement/s to pass the course:

Students must pass all learning outcomes at each summative assessment to achieve a passing grade in the course.

LEARNING RESOURCES

Resources will be made available in class and via the Canvas page. Canvas will be used to provide all information relevant to the course, including links to AUT Library resources.

For further information, contact: Te Ara Hauora A Putaiao - Faculty of Health & Environmental Science

Principal Programme: HA1041, Bachelor of Science

Related Programme/s: AK1041 Bachelor of Science
AK3750 Diploma in Applied Science
AK1018 Certificate in Applied Science

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