Overview

GEOS2291 focuses on developing your understanding of how air and water move through the landscape and influence biogeochemical processes and ecosystems—both locally and globally. The course covers global water and energy cycles, measuring air and water quality and fluxes, water geochemical processes, microbiological biochemical reactions and gas production, and monitoring ecosystems for signs of environmental stress.

Measuring air and water quality, gauging fluxes, and assimilating information on biogeochemical processes is critical for improving our knowledge of Earth’s processes, assessing ecosystem health and quantifying the impact of human activities. Many human activities are locally altering air, surface water, soil, and groundwater quality. Case studies will be presented on monitoring the impact of agricultural, manufacturing, mining, coal seam gas, oil, and gas developments. The theory and methods of analysis presented in lectures will be linked to your own field measurements and data interpretation at case study sites in Sydney.

Water fluxes and biogeochemical processes control ecosystems. Example studies will be presented that highlight how river and wetland function under normal climatic variability, and how such ecosystems are stressed by dam construction and alterations to flow regimes.

GEOS2291 will prepare you for research in hydrology, hydrogeology, geochemistry, biogeosciences, and ecosystem sciences, or careers in land and water management, agriculture, contaminated land remediation, greenhouse gas monitoring, and environmental impact assessments of urban, agricultural, mining, oil, and gas developments.

Assumed Knowledge: BIOS1301, GEOS1211, or GEOS1701 are recommended but not required.
**Faculty**
Faculty of Science

**School**
School of Biological, Earth and Environmental Sciences

**Study Level**
Undergraduate

**Offering Terms**
Term 3

**Campus**
Kensington

**Indicative contact hours**
7

**Timetable**
Visit timetable website for details
Conditions for Enrolment

None
Course Outline

To access course outline, please visit:

GEOS2291 Course Outline
Fees

Commonwealth Supported Students  $1191
Domestic Students  $5970
International Students  $5970

DISCLAIMER
Please note that the University reserves the right to vary student fees in line with relevant legislation. This fee information is provided as a guide and more specific information about fees, including fee policy, can be found on the fee website.

For advice about fees for courses with a fee displayed as "Not Applicable", including some Work Experience and UNSW Canberra at ADFA courses, please contact the relevant Faculty.

Where a Commonwealth Supported Students fee is displayed, it does not guarantee such places are available.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

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Authorised by Deputy Vice-Chancellor (Academic)
CRICOS Provider Code 00098G
ABN: 57 195 873 179