MONASH University

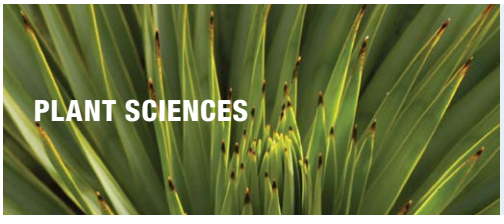
BIOLOGICAL AND LIFE SCIENCES

UNDERGRADUATE COURSES

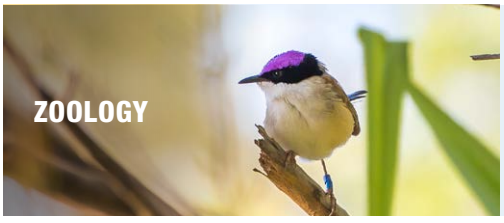
- Bachelor of Science
- Bachelor of Science Advanced (Honours) – Research
- Bachelor of Science Advanced (Honours) – Global Challenges
- 11 Double Degrees with a Bachelor of Science
- Bachelor of Applied Data Science
- Bachelor of Applied Data Science Advanced (Honours)

Ecology explores the interactions between organisms and their environments, which is central to understanding the diversity and organisation of life at the main recognised levels (genes, species and ecosystems). Conservation biology seeks to understand human impacts on these natural patterns and processes.

Genetics focuses on genes, their structure, function, transmission and evolution. Thanks to recent technological advances, we can now sequence entire individual genomes and make powerful comparisons both within and between species. This allows researchers to track evolutionary changes, determine gene function, and assess the impacts of genetic variation. These advances have profound implications for conserving endangered species, securing future food supplies and diagnosing, preventing and treating disease.



Plant sciences is the study of plants, their diversity and structure, and how they function. You will investigate how plants have evolved and adapted to particular environments, the distribution and diversity of plant species and communities and the critical contribution that crops make to human nutrition.



Zoology involves exploring and understanding animals, their diversity, evolution, form, function, behaviour and ecology. Study in zoology can be undertaken at the level of the whole animal down to the level of cell biology, biochemical processes and their genetic control.

Environmental science is a discipline that deals with the rapidly changing environmental issues facing the world today. You will gain a multi-disciplinary perspective of current environmental challenges, such as climate change, water and land management, resource use and sustainability. There are four streams available: General; Ecology; Climate; and Earth sciences.

EXAMPLE FIRST YEAR COURSE MAP

GENETICS AND GENOMICS

Semester 1	**BIO1011**	**CHM1011** OR **CHM1051**	**MTH1020** OR **MTH1030** (OR **MTH1035** depending on VCE background) OR **SCI1020** OR **SCI1022** OR **STA1010**	**Another science sequence** OR **Science elective** OR **Non-science elective**
Semester 2	**BIO1022**	**CHM1022** OR **CHM1052**	**SCI1000** Science communication to influence change	**A unit to complete that science sequence** OR **BIO1042** OR **Science elective** OR **Non-science elective**

Other science sequences:
Computational Science; Earth Atmosphere and Environment; Mathematics; Physics; or Psychology.

Scan here for all other first year example course maps.
monash.edu/science/current-students/manage-your-science-studies/example-by-major

UNIQUE OPPORTUNITIES

Jock Marshall Reserve
An on campus bushland and wetland environment.

Local and International Field Trips
Learn beyond the classroom.

Industry Internships
Apply your skills in the workplace to gain some professional experience.

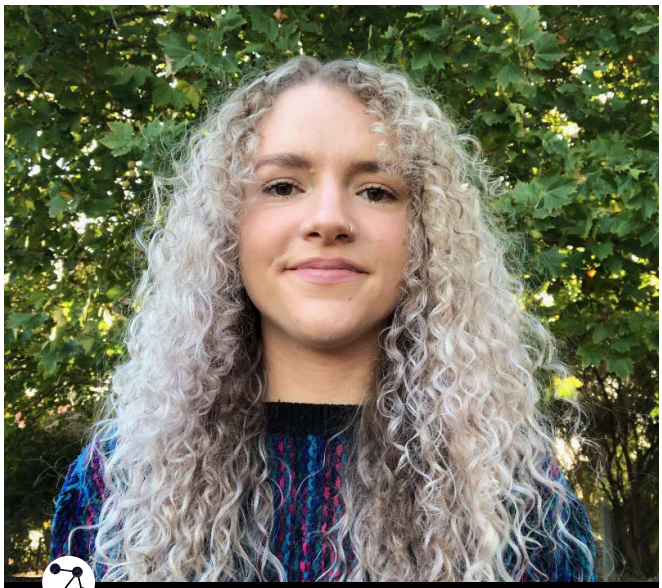
Research Projects
Work closely with an academic supervisor to carry out a research project.

International Experiences
Study overseas through an exchange, study abroad, study tour or Global Immersion Guarantee.

Monash Biological Society
Supplement your studies by joining the dedicated student-run club.

POTENTIAL CAREERS

- Animal technician
- Botanist/ plant scientist
- Bushland Officer
- Data scientist
- Ecologist
- Entomologist
- Environmental/ conservation biologist
- Environmental consultant
- Environmental health promoter
- Evolution and adaptation biologist
- Genetic counsellor
- Laboratory research technician
- Marine/ freshwater biologist
- Museum curator
- Palaeontologist
- Park ranger
- Science journalist
- Science teacher
- Soil scientist
- Viticulturist
- Wildlife manager
- Zoologist



CHELSEA

Degrees: Bachelor of Science (Honours)/Bachelor of Arts

Majors: Environmental Science and International Studies

Job: Graduate Fire and Ecology Project Officer at Department of Energy, Environment and Climate Action

Scan here for the full school brochure.

Your Essential Guide to Monash Science
monash.edu/science/future-students/your-essential-guide-domestic-students