

BIOLOGY, TESTAMUR MAJOR (T053)

Western Sydney University Major Code: T053

Previous Code: MT3042

Available to students in other Western Sydney University programs?
No

This testamur major is available as an elective major for Bachelor of Medical Science students only.

Biology is underpinned by cells, the fundamental units necessary for organisms to grow, reproduce and interact with each other and the environment. Cells are also the basis of emerging computer models and bio-technology innovations. Biologists integrate principles from many disciplines, including chemistry, bio-physics, genetics, biochemistry, physiology and bioinformatics, for a more complete understanding of animal, plant and microbial cell function. Understanding these processes and the principles that govern the organization and function of cells are a necessary framework for creating the next advances in developmental biology and disease mitigation. At WSU, the strong emphasis on hands-on experience gives biology graduates an excellent foundation for careers in: teaching, academia, research, biotechnology, industry, law and administration. The flexibility of the major also enables students to combine their interest with other disciplines including ecology, environment, zoology and agriculture and environmental health..

Location

Campus	Mode	Advice
Campbelltown Campus	Internal	Dr Ryan McQuinn (R.Mcquinn@westernsydney.edu.au)
Hawkesbury Campus	Internal	Dr Ryan McQuinn (R.Mcquinn@westernsydney.edu.au)
Parramatta Campus - Victoria Road	Internal	Dr Ryan McQuinn (R.Mcquinn@westernsydney.edu.au)

Recommended Sequence

Select the link for your program below to see details of the major

Bachelor of Science

Qualification for the award of Bachelor of Science with a major in Biology requires the successful completion of 240 credit points as per the recommended sequence below.

Full-Time

Course	Title	Credit Points
Year 1		
Autumn session		
NATS 1019	Scientific Literacy	10
BIOS 1001	Biodiversity	10
CHEM 1008	Introductory Chemistry	10
Select one elective		10
Credit Points		40
Spring session		
CHEM 1005	Essential Chemistry 2	10
BIOS 1012	Cell Biology	10
Select one of the following:		10
MATH 1026	Quantitative Thinking	

MATH 1014	Mathematics 1A	
Select one elective		10
Credit Points		40
Year 2		
Autumn session		
BIOS 2022	Microbiology 1	10
BIOS 2042	Biochemistry	10
BIOS 2018	Genetics	10
Select one elective		10
Credit Points		40
Spring session		
BIOS 3027	Molecular Biology of the Cell	10
BIOS 2006	Comparative Physiology	10
Select one of the following:		10
NATS 3044	Complex Case Studies in Science	
NATS 3045	Work Internship for Science Professionals	
Select one elective		10
Credit Points		40
Year 3		
Autumn session		
BIOS 3032	Plant Science	10
BIOS 3033	Applied Bioinformatics	10
Select two electives		20
Credit Points		40
Spring session		
BIOS 3034	Molecular Biotechnology	10
BIOS 3012	Conservation Biology	10
Select two electives		20
Credit Points		40
Total Credit Points		240

Bachelor of Science (Pathway to Teaching Primary/Secondary)

Qualification for the Bachelor of Science (Pathway to Teaching Primary/Secondary) with a major in Biology requires the successful completion of 240 credit points as per the recommended sequence for the Bachelor of Science with a major in Biology, given above.

In addition, all students must complete the mandatory 40 credit point minor in Education Studies:

No results found.

Students must meet this requirement by choosing the subjects from the Education Studies minor as electives within their Bachelor of Science program.

Bachelor of Advanced Science

Qualification for the award of Bachelor of Advanced Science with a major in Biology requires the successful completion of 240 credit points as per the recommended sequence below.

Full-Time

Course	Title	Credit Points
Year 1		
Autumn session		
NATS 1019	Scientific Literacy	10
BIOS 1001	Biodiversity	10
CHEM 1008	Introductory Chemistry	10

Select one elective	10
Credit Points	40
Spring session	
CHEM 1005	Essential Chemistry 2 10
BIOS 1012	Cell Biology 10
Select one of the following:	10
MATH 1026	Quantitative Thinking
MATH 1014	Mathematics 1A
Select one elective	10
Credit Points	40
Year 2	
Autumn session	
BIOS 2022	Microbiology 1 10
BIOS 2042	Biochemistry 10
BIOS 2018	Genetics 10
NATS 2001	Advanced Science Project A 10
Credit Points	40
Spring session	
BIOS 3027	Molecular Biology of the Cell 10
NATS 2002	Advanced Science Project B 10
BIOS 2006	Comparative Physiology 10
Select one of the following:	10
NATS 3044	Complex Case Studies in Science
NATS 3045	Work Internship for Science Professionals
Credit Points	40
Year 3	
Autumn session	
BIOS 3032	Plant Science 10
NATS 3043	Advanced Science Research Project C 10
BIOS 3033	Applied Bioinformatics 10
Select one elective	10
Credit Points	40
Spring session	
NATS 3043	Advanced Science Research Project C 10
BIOS 3034	Molecular Biotechnology 10
BIOS 3012	Conservation Biology 10
Select one elective	10
Credit Points	40
Total Credit Points	240

Diploma in Science/Bachelor of Science

Qualification for this award requires the successful completion of 250 credit points which include the subjects listed in the recommended sequence below.

Full-time

Course	Title	Credit Points
Year 1		
Year 1: College Subjects		
Standard 3 term year		
Preparatory Subject:		
CHEM 0001	Chemistry (WSTC Prep)	10
And		
Eight University Level Subjects:		
BIOS 1003	Biodiversity (WSTC)	10
BIOS 1014	Cell Biology (WSTC)	10

CHEM 1006	Essential Chemistry 2 (WSTC)	10
CHEM 1009	Introductory Chemistry (WSTC)	10
BIOS 1023	Introduction to Human Biology (WSTC)	10
MATH 1027	Quantitative Thinking (WSTC)	10
NATS 1020	Scientific Literacy (WSTC)	10
And		
Select one subject from the following (depending on the testamur major chosen):		10
NATS 1002	Concepts in Human Anatomy (WSTC)	
NATS 1021	Concepts in Human Physiology (WSTC)	
ENVL 1003	Environmental Issues and Solutions (WSTC)	
PROC 1003	Food Science 1 (WSTC)	
BIOS 1034	Management of Aquatic Environments (WSTC)	
AGEN 1002	Water Quality Assessment and Management (WSTC)	
Credit Points		90

Year 2		
Autumn session		
BIOS 2022	Microbiology 1	10
BIOS 2042	Biochemistry	10
BIOS 2018	Genetics	10
Select one elective		10
Credit Points		40

Spring session		
BIOS 3027	Molecular Biology of the Cell	10
BIOS 2006	Comparative Physiology	10
Select one of the following:		10
NATS 3044	Complex Case Studies in Science	
NATS 3045	Work Internship for Science Professionals	
Select one elective		10
Credit Points		40

Year 3		
Autumn session		
BIOS 3032	Plant Science	10
BIOS 3033	Applied Bioinformatics	10
Select two electives		20
Credit Points		40

Spring session		
BIOS 3034	Molecular Biotechnology	10
BIOS 3012	Conservation Biology	10
Select two electives		20
Credit Points		40
Total Credit Points		250

Related Programs

Bachelor of Advanced Science (3757) (<https://hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-advanced-science/>)

Bachelor of Medical Science (3755) (<https://hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-medical-science/>)

Bachelor of Science (3754) (<https://hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-science/>)

Bachelor of Science (Pathway to Teaching Primary/Secondary) (3756) (<https://hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-science-pathway-teaching-primary-secondary/>)

Bachelor of Science/Bachelor of Arts (3763) (<https://hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-science-bachelor-arts/>)

Bachelor of Science/Bachelor of Business (4748) (<https://hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-science-bachelor-business/>)

Bachelor of Science/Bachelor of International Studies (3764) (<https://hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-science-bachelor-international-studies/>)

Bachelor of Science/Bachelor of Laws (2743) (<https://hbook.westernsydney.edu.au/archives/2021-2022/programs/bachelor-science-bachelor-laws/>)

Diploma in Science/Bachelor of Medical Science (6042) (<https://hbook.westernsydney.edu.au/archives/2021-2022/programs/diploma-science-bachelor-medical-science/>)

Diploma in Science/Bachelor of Science (6043) (<https://hbook.westernsydney.edu.au/archives/2021-2022/programs/diploma-science-bachelor-science/>)