

Science-credited subjects - new generation B-SCI and B-ENG. Core selective subjects for B-BMED.

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| Year and Campus: | 2012 |
| Coordinator: | Eastern Precinct Student Centre |
| Contact: | <p>Eastern Precinct Student Centre The Eastern Precinct (building 138) (between Doug McDonnell building and Eastern Resource Centre)</p> <p><i>Enquiries</i> Phone: 13 MELB (13 6352) Email: 13MELB@unimelb.edu.au (mailto:13MELB@unimelb.edu.au)</p> |
| Overview: | <p>The subjects listed below are available as</p> <ul style="list-style-type: none"> # science credit for students enrolled in the new generation Bachelor of Science (B-SCI) # elective science subjects the Bachelor of Engineering (B-ENG) # selective subjects in the Bachelor of Biomedicine (B-BMED) <p>Please note: Some of these subjects are not available for B-BMED students. These are highlighted.</p> |
| Objectives: | <p>Refer to relevant course entry</p> <ul style="list-style-type: none"> # Bachelor of Science (B-SCI) # Bachelor of Biomedicine (B-BMED) # Bachelor of Engineering (B-ENG) |
| Structure & Available Subjects: | <p>Subjects are arranged under headings for identified discipline study areas. A subject is listed only once in this section. Refer to related headings for alternative locations of a subject's listing.</p> <p><u>Agricultural Science</u> <u>Anatomy</u> <u>Biochemistry and Molecular Biology</u> <u>Biology (Level 1)</u> <u>Biotechnology</u> <u>Cell Biology</u> <u>Chemistry</u> <u>Computer Science and Software Engineering</u> <u>Domestic Animal Science</u> (includes subjects leading to the Animal Science and Management major) <u>Earth Sciences</u> <u>Ecology</u> <u>Engineering</u> <u>Environments (Level 1)</u> <u>Environmental Science</u> <u>Food Science</u> <u>Genetics</u> <u>Geography</u> <u>Geomatics</u> <u>Informatics</u> <u>Mathematics and Statistics</u> <u>Microbiology and Immunology</u> <u>Neuroscience</u> <u>Pathology</u> <u>Pharmacology</u> <u>Physics</u> <u>Physiology</u> <u>Plant Science</u> <u>Psychology</u> <u>Research Project subjects</u> <u>Science (General)</u> <u>Science Informatics</u></p> |

Veterinary Science
Vision Science (Level 1)
Zoology

Subject Options:

Agricultural Science

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| AGRI20026 Plant Growth Processes | Semester 1 | 12.50 |
| EVSC20002 Soil and Water Resources | Semester 2 | 12.50 |
| AGRI30003 Agricultural Systems Analysis | Semester 2 | 12.50 |
| AGRI30016 Irrigation and Water Management | July | 12.50 |
| AGRI30029 Ecology & Management of Grazing Systems | Semester 2 | 12.50 |
| AGRI30030 Livestock Production Systems | Semester 1 | 12.50 |
| AGRI30031 Crop Production and Management | Semester 2 | 12.50 |
| AGRI30032 Plant Health and Improvement | Semester 1 | 12.50 |
| BTCH30002 Trends & Issues in Agrifood Biotechnolog | Semester 1 | 12.50 |

Anatomy

| Subject | Study Period Commencement: | Credit Points: |
|---|----------------------------|----------------|
| ANAT20006 Principles of Human Structure | Semester 1, Semester 2 | 12.50 |
| ANAT30007 Human Locomotor Systems | Semester 1 | 12.50 |
| ANAT30008 Viscera and Visceral Systems | Semester 2 | 12.50 |
| CEDB30003 Developmental Biology | Semester 2 | 12.50 |

The following subject cannot normally be taken as a selective in the Bachelor of Biomedicine as it is a non-allowed subject to core subjects:

ANAT20006 Principles of Human Structure

An exemption may apply to B-BMED students on exchange in their second year.

Biochemistry and Molecular Biology

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| BCMB20002 Biochemistry and Molecular Biology | Semester 1, Semester 2 | 12.50 |
| BCMB20003 Biochemical Regulation of Cell Function | Semester 2 | 12.50 |
| BCMB20005 Techniques in Molecular Science | Semester 1, Semester 2 | 12.50 |
| BCMB30001 Protein Structure and Function | Semester 2 | 12.50 |
| BCMB30002 Functional Genomics and Bioinformatics | Semester 1 | 12.50 |
| BCMB30003 Molecular Aspects of Cell Biology | Semester 1 | 12.50 |
| BCMB30004 Cell Signalling and Neurochemistry | Semester 2 | 12.50 |
| BCMB30010 Advanced Techniques in Molecular Science | Semester 1, Semester 2 | 12.50 |

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| BCMB30011 Metabolism and Nutrition | Semester 1 | 12.50 |
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The following subject cannot be taken as a selective in the Bachelor of Biomedicine as it is a non-allowed subject to core subjects:

BCMB20002 Biochemistry and Molecular Biology

Biology (Level 1)

| Subject | Study Period Commencement: | Credit Points: |
|---|----------------------------|----------------|
| BIOL10001 Biology of Australian Flora & Fauna | Semester 2 | 12.50 |
| BIOL10004 Biology of Cells and Organisms | Semester 1 | 12.50 |
| BIOL10005 Genetics & The Evolution of Life | Semester 2 | 12.50 |

The following subjects cannot be taken as selectives in the Bachelor of Biomedicine as they are non-allowed subjects to core subjects:

BIOL10004 Biology of Cells and Organisms

BIOL10005 Genetics & The Evolution of Life

Biotechnology

| Subject | Study Period Commencement: | Credit Points: |
|---|----------------------------|----------------|
| BTCH20002 Biotechnology | Semester 2 | 12.50 |
| BTCH30001 Methods in Agrifood Biotechnology | Semester 1 | 12.50 |
| BTCH30003 Biotechnology in Practice | Semester 1 | 12.50 |

Cell Biology

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| CEDB20003 Fundamentals of Cell Biology | Semester 1 | 12.50 |
| CEDB30002 Concepts in Cell & Developmental Biology | Semester 1 | 12.50 |
| CEDB30004 Stem Cells in Development & Regeneration | Semester 2 | 12.50 |

The following subject cannot be taken as a selective in the Bachelor of Biomedicine as it is a non-allowed subject to core subjects:

CEDB20003 Fundamentals of Cell Biology

Chemistry

| Subject | Study Period Commencement: | Credit Points: |
|-------------------------------------|----------------------------|----------------|
| CHEM10003 Chemistry 1 | Semester 1, Semester 2 | 12.50 |
| CHEM10004 Chemistry 2 | Summer Term, Semester 2 | 12.50 |
| CHEM10007 Fundamentals of Chemistry | Semester 1 | 12.50 |
| CHEM20011 Environmental Chemistry | Semester 1 | 12.50 |
| CHEM20018 Reactions and Synthesis | Semester 1 | 12.50 |
| CHEM20019 Practical Chemistry 2 | Semester 2 | 12.50 |

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| CHEM20020 Structure and Properties | Semester 2 | 12.50 |
| CHEM30012 Analytical & Environmental Chemistry | Semester 2 | 12.50 |
| CHEM30013 Chemical Research Project | Summer Term, Semester 2 | 12.50 |
| CHEM30014 Specialised Topics in Chemistry B | Semester 2 | 12.50 |
| CHEM30015 Advanced Practical Chemistry | Semester 1 | 12.50 |
| CHEM30016 Reactivity and Mechanism | Semester 1 | 12.50 |
| CHEM30017 Specialised Topics in Chemistry A | Semester 1 | 12.50 |

The following subjects cannot be taken as selectives in the Bachelor of Biomedicine as they are non-allowed subjects to core subjects:

- # CHEM10003 Chemistry 1
- # CHEM10004 Chemistry 2

Computer Science and Software Engineering

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| COMP10001 Foundations of Computing | Semester 1, Semester 2 | 12.50 |
| COMP10002 Foundations of Algorithms | Semester 2 | 12.50 |
| COMP20003 Algorithms and Data Structures | Semester 1, Semester 2 | 12.50 |
| COMP20004 Discrete Structures | Semester 2 | 12.50 |
| COMP20005 Engineering Computation | Semester 1, Semester 2 | 12.50 |
| COMP20006 Programming the Machine | Semester 1, Semester 2 | 12.50 |
| COMP20007 Design of Algorithms | Not offered 2012 | 12.50 |
| SWEN20003 Object Oriented Software Development | Semester 2 | 12.50 |
| COMP30016 Computer Science Project | Semester 2 | 12.50 |
| COMP30017 Operating Systems and Network Services | Semester 1 | 12.50 |
| COMP30018 Knowledge Technologies | Semester 2 | 12.50 |
| COMP30019 Graphics and Interaction | Semester 2 | 12.50 |
| COMP30020 Declarative Programming | Semester 1 | 12.50 |
| COMP30021 Theoretical Computer Science | Semester 2 | 12.50 |
| SWEN30006 Software Modelling and Design | Semester 1 | 12.50 |
| SWEN30007 Software Systems Project | Semester 2 | 12.50 |
| SWEN90006 Software Engineering Methods | Semester 2 | 12.50 |
| SWEN90008 Software Processes and Management | Semester 1 | 12.50 |

Domestic Animal Science

| Subject | Study Period Commencement: | Credit Points: |
|-------------------------------------|----------------------------|----------------|
| DASC20010 Applied Animal Physiology | Semester 2 | 12.50 |

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| DASC20011 Companion Animal Biology | Semester 1 | 12.50 |
| DASC20012 Comparative Nutrition and Digestion | Semester 1 | 12.50 |
| DASC20013 Topics in Animal Health | Semester 2 | 12.50 |
| DASC30005 Applied Animal Behaviour | Semester 1 | 12.50 |
| DASC30006 Applied Animal Reproduction & Genetics | Semester 1 | 12.50 |
| DASC30013 Animal Systems Analysis | Semester 2 | 12.50 |
| DASC30014 Animal Performance | Semester 1 | 12.50 |
| DASC30015 Animal Welfare and Ethics | Semester 2 | 12.50 |

Earth Sciences

| Subject | Study Period Commencement: | Credit Points: |
|---|----------------------------|----------------|
| ERTH10001 The Global Environment | Semester 1 | 12.50 |
| ERTH10002 Understanding Planet Earth | Semester 2 | 12.50 |
| ATOC20001 Weather and Climate Systems | Semester 1 | 12.50 |
| ATOC20002 Atmospheric Environment Processes | Semester 2 | 12.50 |
| ERTH20001 Dangerous Earth | Semester 2 | 12.50 |
| GEOL20001 Geology of Southeast Australia | February | 12.50 |
| GEOL20002 Structural and Metamorphic Geology | Semester 1 | 12.50 |
| GEOL20003 Earth Composition, Minerals and Magmas | Semester 1 | 12.50 |
| GEOL20004 Field Mapping and Sedimentary Geology | June | 12.50 |
| ATOC30003 Atmosphere Ocean Interaction | Semester 2 | 12.50 |
| ATOC30004 Dynamical Meteorology and Oceanography | Semester 1 | 12.50 |
| ATOC30005 Global Climates of the Past | Semester 1 | 12.50 |
| ATOC30006 Modern and Future Climate | Semester 2 | 12.50 |
| ERTH30001 Hydrogeology/Environmental Geochemistry | Semester 1 | 12.50 |
| GEOL30002 Tectonics & Geodynamics | Semester 1 | 12.50 |
| GEOL30003 Sedimentary Geology | Semester 2 | 12.50 |
| GEOL30004 Geochemistry & Petrogenesis | Semester 1 | 12.50 |
| GEOL30005 Applied Geophysics | Semester 2 | 12.50 |
| GEOL30006 Economic Geology | Semester 2 | 12.50 |
| GEOL30007 Geobiology and Palaeobiology | Semester 1 | 12.50 |
| GEOL30009 Advanced Field Geology | July | 12.50 |

Ecology

| Subject | Study Period Commencement: | Credit Points: |
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| ECOL20003 Ecology | Semester 2 | 12.50 |
| ECOL30005 Applied Ecology | Semester 2 | 12.50 |
| ECOL30006 Ecology in Changing Environments | Semester 1 | 12.50 |
| EVSC30006 Ecology of Urban Landscapes | Semester 1 | 12.50 |

Engineering systems

| Subject | Study Period Commencement: | Credit Points: |
|--|---------------------------------|----------------|
| ENGR10003 Engineering Systems Design 2 | Summer Term, Semester 2 | 12.50 |
| ENGR10004 Engineering Systems Design 1 | Semester 1, Semester 2 | 12.50 |
| CHEN20007 Chemical Process Analysis 1 | Semester 1, Semester 2 | 12.50 |
| CHEN20008 Chemical Process Analysis 2 | Semester 2 | 12.50 |
| CHEN20009 Transport Processes | Semester 2 | 12.50 |
| ELEN20005 Foundations of Electrical Networks | January, Semester 2 | 12.50 |
| ENEN20002 Earth Processes for Engineering | Semester 2 | 12.50 |
| ENGR20003 Engineering Materials | Semester 2 | 12.50 |
| ENGR20004 Engineering Mechanics | January, Semester 1, Semester 2 | 12.50 |
| BIEN30001 Bionanoengineering | Semester 2 | 12.50 |
| BMEN30005 Biomechanics and Biotransport | Semester 1 | 12.50 |
| BMEN30006 Fundamentals of Biosignals | Semester 1 | 12.50 |
| BMEN30007 Biocellular Systems Engineering | Semester 2 | 12.50 |
| BMEN30008 Biosystems Design | Semester 2 | 12.50 |
| CHEN30001 Reactor Engineering | Semester 1 | 12.50 |
| CHEN30005 Heat and Mass Transport Processes | Semester 1 | 12.50 |
| CVEN30008 Risk Analysis | Semester 1 | 12.50 |
| CVEN30009 Structural Theory and Design | Semester 2 | 12.50 |
| CVEN30010 Systems Modelling and Design | Semester 2 | 12.50 |
| ELEN30009 Electrical Network Analysis and Design | Semester 1 | 12.50 |
| ELEN30010 Digital System Design | Semester 1 | 12.50 |
| ELEN30011 Electrical Device Modelling | Semester 2 | 12.50 |
| ELEN30012 Signals and Systems | Semester 2 | 12.50 |
| ELEN30013 Electronic System Implementation | Semester 2 | 12.50 |
| ENGR30001 Fluid Mechanics & Thermodynamics | Semester 1, Semester 2 | 12.50 |
| MCEN30014 Mechanical Design | Semester 2 | 12.50 |

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| MCEN30016 Mechanical Dynamics | Semester 1 | 12.50 |
| MCEN30017 Mechanics & Materials | Semester 1 | 12.50 |
| CHEN30015 Process Engineering Case Studies | Semester 2 | 12.50 |

Environments (Level 1)

| Subject | Study Period Commencement: | Credit Points: |
|--------------------------------|----------------------------|----------------|
| ENVS10001 Natural Environments | Semester 1, Semester 2 | 12.50 |
| ENVS10006 Mapping Environments | Semester 1 | 12.50 |

Environmental Science

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| EVSC20004 Blue Planet-Intro to Marine Environments | Semester 1 | 12.50 |
| EVSC30002 Problem Solving in Environmental Science | Semester 2 | 12.50 |
| EVSC30003 Environmental Risk Assessment | Semester 1 | 12.50 |

Food Science

| Subject | Study Period Commencement: | Credit Points: |
|---|----------------------------|----------------|
| FOOD20003 Food Chemistry, Biology and Nutrition | Semester 1 | 12.50 |
| FOOD20006 Food Microbiology and Safety | Semester 2 | 12.50 |
| FOOD30007 Food Processing & Preservation | Semester 1 | 12.50 |
| FOOD30008 Advanced Food Analysis | Semester 1 | 12.50 |
| FOOD30009 Food Research & Development | Semester 2 | 12.50 |
| FOOD30010 Functional Foods & Nutrition | Semester 2 | 12.50 |

Genetics

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| GENE20001 Principles of Genetics | Semester 1 | 12.50 |
| GENE20002 Genes and Genomes | Semester 2 | 12.50 |
| GENE20003 Experiments in Genetics | Semester 1, Semester 2 | 12.50 |
| GENE30001 Evolutionary Genetics and Genomics | Semester 1 | 12.50 |
| GENE30002 Genes: Organisation and Function | Semester 1 | 12.50 |
| GENE30004 Genetic Analysis | Semester 2 | 12.50 |
| GENE30005 Human and Medical Genetics | Semester 2 | 12.50 |

Geography

| Subject | Study Period Commencement: | Credit Points: |
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| GEOG10001 Famine in the Modern World | Semester 1 | 12.50 |
| ENST20002 Environmental Change Field Class | Semester 2 | 12.50 |
| GEOG20001 Society and Environments | Semester 1 | 12.50 |
| GEOG20002 Understanding Global Landforms | Semester 1 | 12.50 |
| GEOG20003 Environmental Politics and Management | Semester 2 | 12.50 |
| GEOG20009 Geography and Biodiversity of Landscapes | Semester 2 | 12.50 |
| DEVT30001 Africa: Environment, Development, People | Semester 2 | 12.50 |
| GEOG30001 Coastal Landforms & Processes | Semester 1 | 12.50 |
| GEOG30003 Geographical Thought | Semester 1 | 12.50 |
| GEOG30004 Fluvial Geomorphology | Semester 2 | 12.50 |
| GEOG30007 China Field Class | Semester 2 | 25 |
| GEOG30019 Sustainable Development | Semester 1 | 12.50 |
| GEOG30021 The Disaster Resilient City | Semester 2 | 12.50 |
| GEOG30022 Rivers: Hydrology and Ecology | Semester 1 | 12.50 |
| GEOG30023 Global Climate Change in Context | February | 12.50 |

Geomatics

| Subject | Study Period Commencement: | Credit Points: |
|---------------------------------------|----------------------------|----------------|
| GEOM20013 Applications of GIS | Semester 1 | 12.50 |
| GEOM20015 Surveying and Mapping | Semester 2 | 12.50 |
| GEOM30009 Imaging the Environment | Semester 1 | 12.50 |
| GEOM30012 Integrated Spatial Systems | Semester 2 | 12.50 |
| GEOM30013 Land Administration Systems | Semester 2 | 12.50 |

Informatics

Additional subjects are listed under 'Science informatics'.

| Subject | Study Period Commencement: | Credit Points: |
|---|----------------------------|----------------|
| INFO10002 Informatics 2: Programming on the Web | Semester 1 | 12.50 |
| INFO20001 Informatics 3: Content Management | Semester 1 | 12.50 |
| INFO20002 Foundations of Informatics | Not offered 2012 | 12.50 |
| INFO20003 Database Systems | Semester 2 | 12.50 |
| INFO30006 Information Management Techniques | Semester 2 | 12.50 |
| INFO30004 Usability Engineering | Semester 1 | 12.50 |
| INFO30005 Web Information Technologies | Semester 1 | 12.50 |

Mathematics and Statistics

| Subject | Study Period Commencement: | Credit Points: |
|--|-------------------------------------|----------------|
| MAST10005 Calculus 1 | Semester 1, Semester 2 | 12.50 |
| MAST10006 Calculus 2 | Semester 1, Semester 2 | 12.50 |
| MAST10007 Linear Algebra | Summer Term, Semester 1, Semester 2 | 12.50 |
| MAST10008 Accelerated Mathematics 1 | Semester 1 | 12.50 |
| MAST10009 Accelerated Mathematics 2 | Semester 2 | 12.50 |
| MAST10010 Data Analysis 1 | Semester 2 | 12.50 |
| MAST20004 Probability | Semester 1 | 12.50 |
| MAST20005 Statistics | Semester 2 | 12.50 |
| MAST20006 Probability for Statistics | Semester 1 | 12.50 |
| MAST20009 Vector Calculus | Semester 1, Semester 2 | 12.50 |
| MAST20018 Discrete Maths and Operations Research | Semester 2 | 12.50 |
| MAST20019 Dynamical Systems and Chaos | Semester 2 | 12.50 |
| MAST20022 Group Theory and Linear Algebra | Semester 2 | 12.50 |
| MAST20026 Real Analysis with Applications | Semester 1, Semester 2 | 12.50 |
| MAST20029 Engineering Mathematics | Summer Term, Semester 1, Semester 2 | 12.50 |
| MAST30001 Stochastic Modelling | Semester 2 | 12.50 |
| MAST30005 Algebra | Semester 1 | 12.50 |
| MAST30011 Graph Theory | Semester 1 | 12.50 |
| MAST30012 Discrete Mathematics | Semester 2 | 12.50 |
| MAST30013 Techniques in Operations Research | Semester 1 | 12.50 |
| MAST30020 Probability and Statistical Inference | Semester 1 | 12.50 |
| MAST30021 Complex Analysis | Semester 1, Semester 2 | 12.50 |
| MAST30022 Decision Making | Semester 2 | 12.50 |
| MAST30024 Geometry | Semester 2 | 12.50 |
| MAST30025 Linear Statistical Models | Semester 1 | 12.50 |
| MAST30026 Metric and Hilbert Spaces | Semester 2 | 12.50 |
| MAST30027 Modern Applied Statistics | Semester 2 | 12.50 |
| MAST30028 Numerical and Symbolic Mathematics | Semester 1 | 12.50 |
| MAST30029 Partial Differential Equations | Semester 2 | 12.50 |

Microbiology and Immunology

| Subject | Study Period Commencement: | Credit Points: |
|---------|----------------------------|----------------|
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|---|------------------------|-------|
| MIIM20001 Principles of Microbiology & Immunology | Semester 1 | 12.50 |
| MIIM20003 Experimental Microbiology | Semester 1, Semester 2 | 12.50 |
| MIIM30002 Principles of Immunology | Semester 1 | 12.50 |
| MIIM30003 Medical and Applied Immunology | Semester 2 | 12.50 |
| MIIM30011 Medical Microbiology: Bacteriology | Semester 1 | 12.50 |
| MIIM30013 Techniques in Microbiology & Immunology | Semester 1, Semester 2 | 12.50 |
| MIIM30014 Medical Microbiology: Virology | Semester 2 | 12.50 |

The following subject cannot be taken as a selective in the Bachelor of Biomedicine as it is a non-allowed subject to core subjects:

MIIM20001 Principles of Microbiology & Immunology

In addition to these Microbiology and Immunology subjects, the following subject is also available as a selective in the Bachelor of Biomedicine only. It is not available to students in other courses.

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| MIIM20002 Microbes, Infections and Responses | Semester 2 | 12.50 |

Neuroscience

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| NEUR30003 Principles of Neuroscience | Semester 1 | 12.50 |
| NEUR30004 Sensation Movement and Complex Functions | Semester 2 | 12.50 |
| NEUR30005 Developmental Neurobiology | Semester 2 | 12.50 |
| OPTO30007 Visual Neuroscience | Semester 2 | 12.50 |

Pathology

| Subject | Study Period Commencement: | Credit Points: |
|---|----------------------------|----------------|
| PATH20001 Exploring Human Disease - Science | Semester 2 | 12.50 |
| PATH30001 Mechanisms of Human Disease | Semester 1 | 12.50 |
| PATH30002 Techniques for Investigation of Disease | Semester 1 | 12.50 |
| PATH30003 Consequences of Human Disease | Semester 2 | 12.50 |
| PATH30004 Advanced Investigation of Human Disease | Semester 2 | 12.50 |

The following subject cannot be taken as a selective in the Bachelor of Biomedicine as it is a non-allowed subject to core subjects:

PATH20001 Exploring Human Disease - Science

Pharmacology

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| PHRM20001 Pharmacology: How Drugs Work | Semester 2 | 12.50 |
| PHRM30002 Drugs Affecting the Nervous System | Semester 2 | 12.50 |

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|---|------------------------|-------|
| PHRM30003 Drug Treatment of Disease | Semester 2 | 12.50 |
| PHRM30008 Drugs: From Discovery to Market | Semester 1 | 12.50 |
| PHRM30009 Drugs in Biomedical Experiments | Semester 1, Semester 2 | 12.50 |

Physics

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| PHYC10001 Physics 1: Advanced | Semester 1 | 12.50 |
| PHYC10002 Physics 2: Advanced | Semester 2 | 12.50 |
| PHYC10003 Physics 1 | Semester 1 | 12.50 |
| PHYC10004 Physics 2: Physical Science & Technology | Semester 2 | 12.50 |
| PHYC10005 Physics 1: Fundamentals | Semester 1 | 12.50 |
| PHYC10006 Physics 2: Life Sciences & Environment | Semester 2 | 12.50 |
| PHYC20009 Thermal and Classical Physics | Semester 1 | 12.50 |
| PHYC20010 Quantum Mechanics and Special Relativity | Semester 1 | 12.50 |
| PHYC20011 Electromagnetism and Optics | Semester 2 | 12.50 |
| PHYC30011 Sub-atomic Physics | Semester 2 | 12.50 |
| PHYC30012 Computational Physics | Semester 2 | 12.50 |
| PHYC30014 Laboratory Work A | Semester 1, Semester 2 | 12.50 |
| PHYC30015 Laboratory Work B | Semester 1, Semester 2 | 12.50 |
| PHYC30016 Electrodynamics | Semester 1 | 12.50 |
| PHYC30017 Statistical Physics | Semester 2 | 12.50 |
| PHYC30018 Quantum Physics | Semester 1 | 12.50 |
| PHYC30019 Astrophysics | Semester 1 | 12.50 |
| PHYC30020 Quantum Systems | Semester 2 | 12.50 |

Physiology

| Subject | Study Period Commencement: | Credit Points: |
|---|----------------------------|----------------|
| PHYS20008 Human Physiology | Semester 1, Semester 2 | 12.50 |
| PHYS20009 Research-Based Physiology | Semester 1, Semester 2 | 12.50 |
| NEUR30002 Neurophysiology: Neurons and Circuits | Semester 1 | 12.50 |
| PHYS30001 Cardiovascular Health: Genes & Hormones | Semester 2 | 12.50 |
| PHYS30005 Muscle and Exercise Physiology | Semester 1 | 12.50 |
| PHYS30008 Frontiers in Physiology | Semester 2 | 12.50 |

The following subject cannot normally be taken as a selective in the Bachelor of Biomedicine as it is a non-allowed subject to core subjects:

- # PHYS20008 Human Physiology

An exemption may apply to B-BMED students on exchange in their second year.

Plant Science

| Subject | Study Period Commencement: | Credit Points: |
|---|----------------------------|----------------|
| BOTA20001 Plants and the Environment | Semester 1 | 12.50 |
| BOTA20002 Plant Biodiversity | Semester 2 | 12.50 |
| BOTA20004 Flora of Victoria | February | 12.50 |
| BOTA30001 Marine Botany | December | 12.50 |
| BOTA30002 Plant Systematics and Evolution | Semester 1 | 12.50 |
| BOTA30003 Plant Physiological Ecology | Semester 1 | 12.50 |
| BOTA30004 Vegetation Management and Conservation | Semester 2 | 12.50 |
| BOTA30005 Plant Molecular Biology & Biotechnology | Semester 2 | 12.50 |
| BOTA30006 Field Botany | January | 12.50 |
| BOTA30007 Marine Phytoplankton of Australia | November | 12.50 |

Psychology

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| PSYC10003 Mind, Brain & Behaviour 1 | Semester 1 | 12.50 |
| PSYC10004 Mind, Brain and Behaviour 2 | Semester 2 | 12.50 |
| PSYC20006 Biological Psychology | Semester 1 | 12.50 |
| PSYC20007 Cognitive Psychology | Semester 2 | 12.50 |
| PSYC20008 Developmental Psychology | Semester 1 | 12.50 |
| PSYC20009 Personality and Social Psychology | Semester 2 | 12.50 |
| PSYC30012 The Unconscious Mind | Semester 1 | 12.50 |
| PSYC30013 Research Methods for Human Inquiry | Semester 1 | 12.50 |
| PSYC30014 The Psychopathology of Everyday Life | Semester 2 | 12.50 |
| PSYC30015 Organisational Psychology | Semester 2 | 12.50 |
| PSYC30016 Developing Persons in Social Worlds | Semester 1 | 12.50 |
| PSYC30017 Advanced Studies of Human Cognition | Semester 1 | 12.50 |
| PSYC30018 Neuroscience and the Mind | Semester 1 | 12.50 |
| PSYC30019 Development of the Thinking Child | Semester 2 | 12.50 |
| PSYC30020 Psychology of Sleep and Emotions | Semester 2 | 12.50 |
| PSYC30021 Psychological Science: Theory & Practice | Semester 2 | 12.50 |
| PSYC30022 Advanced Personality & Social Psychology | Semester 2 | 12.50 |

The following psychology subjects are also not available as selectives in the Bachelor of Biomedicine (however they are available as breadth)

- # PSYC20008 Developmental Psychology
- # PSYC20009 Personality and Social Psychology
- # PSYC30012 The Unconscious Mind
- # PSYC30015 Organisational Psychology
- # PSYC30016 Developing Persons in Social Worlds
- # PSYC30022 Advanced Personality & Social Psychology

Research Project subjects

| Subject | Study Period Commencement: | Credit Points: |
|---|-------------------------------------|----------------|
| ENST30002 Land And Environment Research Project | Semester 1, Semester 2 | 12.50 |
| SCIE30001 Science Research Project | Summer Term, Semester 1, Semester 2 | 12.50 |
| BIOM30003 Biomedical Science Research Project | Summer Term, Semester 1, Semester 2 | 12.50 |

Science (General)

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| MULT10011 Introduction to Life, Earth and Universe | Semester 1 | 12.50 |

Science informatics

Additional subjects are listed under 'Informatics'.

| Subject | Study Period Commencement: | Credit Points: |
|---|----------------------------|----------------|
| SINF20006 Information Visualisation | Semester 2 | 12.50 |
| SINF30008 Science Informatics in Practice | Semester 2 | 12.50 |

Veterinary Science

A number of Level 3 Veterinary Science subjects will be quota-restricted.

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| VETS20014 Foundations of Animal Health 1 | Semester 1 | 12.50 |
| VETS20015 Foundations of Animal Health 2 | Semester 2 | 12.50 |
| VETS30011 Animal Disease Biotechnology 1 | Semester 1 | 12.50 |
| VETS30012 Animal Disease Biotechnology 2 | Semester 2 | 12.50 |
| VETS30013 Animal Health in Production Systems | Semester 2 | 12.50 |
| VETS30014 Veterinary Bioscience: Cardiovasc System | Semester 2 | 12.50 |
| VETS30015 Veterinary Bioscience: Cells to Systems | Semester 1 | 12.50 |
| VETS30016 Veterinary Bioscience: Digestive System | Semester 1 | 12.50 |
| VETS30017 Veterinary Bioscience: Metab & Excretion | Semester 1 | 12.50 |
| VETS30018 Veterinary Bioscience:Respiratory System | Semester 2 | 12.50 |

Vision Science (Level 1)

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| OPTO10001 Vision: How The Eye Sees The World | Semester 1 | 12.50 |
| OPTO10002 Optics: From Rainbows to Digital Imaging | Semester 2 | 12.50 |

Zoology

| Subject | Study Period Commencement: | Credit Points: |
|--|----------------------------|----------------|
| ZOOL20004 Australian Wildlife Biology | Semester 1 | 12.50 |
| ZOOL20005 Animal Structure and Function | Semester 1 | 12.50 |
| ZOOL20006 Comparative Animal Physiology | Semester 2 | 12.50 |
| BIOL30001 Reproduction | Semester 2 | 12.50 |
| ZOOL30004 Evolution and the Human Condition | Semester 1 | 12.50 |
| ZOOL30006 Animal Behaviour | Semester 1 | 12.50 |
| ZOOL30007 Experimental Animal Behaviour | Semester 1 | 12.50 |
| ZOOL30008 Experimental Marine Biology | February | 12.50 |
| ZOOL30009 Field Biology of Australian Wildlife | Semester 2 | 12.50 |

Related Course(s):

Bachelor of Biomedicine
Bachelor of Science