

Diploma of Science

Course Outline

Campus	Geelong Waurm Ponds Campus
Intake	March, June, October
CRICOS	063387K
Course Duration	The duration of the Diploma course is three trimesters (12 months). There is an option, however, to fast track the course and complete it in two trimesters (8 months).
Teaching Methods	Instruction for all units is classroom based. Generally, four hours of class contact per week are allocated to each unit. Some units have additional laboratory hours/practical classes.
Assessment	Assessment for all units is ongoing and continuous consisting of tests, assignments and case study analysis. Most units have a final two-hour examination.
Course Structure	Eight units must be completed and passed to be awarded the Diploma.
Units	<p>Five core units:</p> <p>SLE123 Physics for the Life Sciences SLE111 Cells and Genes* SLE132 Biology: Form and Function* SLE133 Chemistry in Our World* SLE155 Chemistry for the Professional Sciences**</p> <p>plus three of:</p> <p>HBS107 Understanding Health HBS109 Human Structure and Function HSN101 Foundations of Food Nutrition and Health (available in Trimester 2 2016) SIT194 Introduction to Mathematical Modelling SIT191 Introduction to Statistics and Data Analysis SLE102 Physical Geography* SLE103 Ecology and the Environment SLE112 Fundamentals of Forensic Science* SLE115 Essential Skills in Bioscience</p>



	<p>Note: All Diploma of Science students must complete a Laboratory and Fieldwork Safety Induction Program (SLE010), which is a 50-minute safety training program. This does not count toward your total units. * For SLE111, SLE132, SLE112, SLE155, SLE133 and SLE102 you must complete SLE010 Laboratory and Fieldwork Safety Induction Program as a co-requisite unit ** You must successfully complete SLE133 Chemistry in our World before enrolling in SLE155 Chemistry for the professional sciences (Pre-requisite)</p>
<p>Transfer to Deakin University</p>	<p>The following transfer criteria apply:</p> <ul style="list-style-type: none"> • You must complete and pass eight Deakin College Diploma of Science units*. • You must achieve the required Weighted Average Mark (WAM) for your Deakin College diploma taking into account all units attempted at Deakin College (required WAM's are included under each Deakin degree on the following pages). <p>* Transfer to some degrees requires specific Deakin College units to be completed in order to receive the appropriate credits (see Deakin University degrees below). It is strongly recommended that students consult the Deakin University Handbook to check the academic requirements of their proposed course.</p>

Diploma of Science (Geelong) Example Course Plans for Students

Example Course Plans for Students

The following are a series of example course plans for students studying in the Diploma of Science at Deakin College.

The following course plans should be used as a guide only. In some cases the order of subjects may be varied. However, choosing course plans that are the same or similar to the suggested plans below should, in most cases, minimise clashes and the time taken to complete your diploma.

How to use the Plans

Students need to select or choose which Deakin University Course they wish to transfer into once they have completed their studies at Deakin College. Deakin University offers direct transfer into the following courses

- Bachelor of Science
- Bachelor of Biological Science
- Bachelor of Biomedical Science
- Bachelor of Forensic Science
- Bachelor of Zoology & Animal Science
- Bachelor of Environmental Science (Environmental Management & Sustainability)
- Bachelor of Environmental Science (Wildlife & Conservation Biology)
- Bachelor of Environmental Science (Marine Biology)

Optional Support Program

The Support Program is optional and involves the addition of a foundation level chemistry unit FNDH021 Chemistry to the normal track program in the first trimester. As a consequence the diploma chemistry units (SLE133 and SLE155) occur one trimester later than the normal track program, but can be completed within three trimesters. The Support Program is recommended for those students who wish to establish a stronger basis in chemistry. A fee (up-front) is applicable to FNDH021.

Subject Availability –Diploma of Science (Waurm Ponds)

Please note that all students must complete the following core units as a part of the Diploma of Science

- SLE133 Chemistry in our World
- SLE155 Chemistry for the professional Sciences
- SLE111 Cells and Genes
- SLE132 Biology: Form and Function
- SLE123 Physics for the Life Sciences

Subject	Trimester 1 2017	Trimester 2 2017	Trimester 3 2017
SLE133 Chemistry in our World	✓	✓	✓
SLE155 Chemistry for the Professional Sciences	✓	✓	✓
SLE111 Cells and Genes	✓	✓	✓
SLE132 Biology: Form and Function	✓	✓	✓
SLE123 Physics for the Life Sciences	✓	✓	✓
SLE115 Essential Skills in Bioscience	✓	✓	✓
HBS107 Understanding Health	✓	✓	✓
HBS109 Human Structure and Function	✓	✓	✓
HSN101 Foundations of Food Nutrition and Health		✓	
SIT191 Introduction to Statistics and Data Analysis	✓	✓	✓
SIT194 Introduction to Mathematical Modelling	✓	✓	✓
SLE102 Physical Geography	✓	✓	✓
SLE103 Ecology & the Environment	✓	✓	✓
SLE112 Fundamentals of Forensic Science	✓	✓	✓

Support Units

Subject	Trimester 1 2017	Trimester 2 2017	Trimester 3 2017
FNDH021 Chemistry	✓	✓	✓

When I transfer to Deakin University I want to study:

Bachelor of Science (B, WP, WB)

Entry to Deakin University T1 T2

International Students WAM: **B 50 WP 50**

Australian Students WAM: **B 50 WP 50**

Credits for Transfer: 8

Please note students must complete one of the following majors

- Animal Biology (B,G)
- Cell Biology (B,G)
- Chemistry (G)
- Chemistry and Material Science (B)
- Environmental Science (B)
- Human Biology (B,G)
- Mathematical Modelling (B,G)
- Natural History (B)
- Plant Biology (B)
- Freshwater Biology (G,W)
- Fisheries and Aquaculture (G,W)
- Geography (B)

Fast Track (Completing In 8 months/2 trimesters)					
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SIT191 Introduction to Statistics and Data Analysis	Required Elective SLE103 Ecology and Environment	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	CORE SLE123 Physics for the Life Sciences	Elective	

Normal Track (Completing course in 12 months/ 3 Trimesters)				
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SIT191 Introduction to Statistics and Data Analysis	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	Required Elective SLE103 Ecology and Environment	
3 rd Trimester	CORE SLE123 Physics for the Life Sciences	Elective		

Optional: Support Study Program (Only for Local Australian Students)

Support Program (Completing course in 12 months/ 3 Trimesters – see note 3 below)				
1 st Trimester	SUPPORT FNDH021 Chemistry	CORE SLE111 Cells and Genes*	Required Elective SIT191 Introduction to Statistics and Data Analysis	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE133 Chemistry in our World*	CORE SLE132 Biology: Form and Function*	Required Elective SLE103 Ecology and Environment	
3 rd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE123 Physics for the Life Sciences	Elective	

Electives

Students wishing to major in the following areas should include the following subjects in their electives:

- Environmental Science (B) – SLE102 Physical Geography*
- Mathematical Modelling (B,WP)– SIT194 Introduction to Mathematical Modelling
- Geography (B) – SLE102 Physical Geography*

Other Electives can include any of the following:

- HBS107 Understanding Health
- HBS109 Human Structure and Function
- HSN101 Foundations of Food, Nutrition and Health (available in T2 2017)
- SIT194 Introduction to Mathematical Modelling
- SLE102 Physical Geography*
- SLE115 Essential Skills in Bioscience
- SLE112 Fundamentals of Forensic Science

* For SLE111, SLE132, SLE112, SLE155, SLE133 and SLE102 you must complete SLE010 Laboratory and Fieldwork Safety Induction Program as a co-requisite unit

** You must successfully complete SLE133 Chemistry in our World before enrolling in SLE155 Chemistry for the professional sciences (Pre-requisite)

Additional 1st Year Units to be taken at Deakin University

All students are required to complete STP010 Introduction to Work Placements at Deakin University. Students completing a major in Natural History are required to complete SLE136 Life On An Evolving Planet. Students completing a major in Mathematical Modelling are required to complete SIT192 Discrete Mathematics. Students completing a major in Fisheries and Aquaculture are required to complete SLE134 Recreational Fisheries Science (Tri 3). Students completing a major in Geography are required to complete AIG103 People and Place: An Introduction to Human Geography.

**When I transfer to Deakin University I want to study:
Bachelor of Biological Science (B)
Entry to Deakin University T1 T2**

International Students WAM: **B 50**
Australian Students WAM: **B 70**
Credits for Transfer: 8

Fast Track (Completing In 8 months/2 trimesters)					
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SLE103 Ecology and Environment	Required Elective SLE115 Essential Skills in Bioscience	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	CORE SLE123 Physics for the Life Sciences	Elective	

Normal Track (Completing course in 12 months/ 3 Trimesters)				
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SLE115 Essential Skills in Bioscience	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	Required Elective SLE103 Ecology and Environment	
3 rd Trimester	CORE SLE123 Physics for the Life Sciences	Elective		

Optional: Support Study Program (Only for Local Australian Students)

Support Program (Completing course in 12 months/ 3 Trimesters - see note 3 below)				
1 st Trimester	SUPPORT FNDH021 Chemistry	CORE SLE111 Cells and Genes*	Required Elective SLE115 Essential Skills in Bioscience	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE133 Chemistry in our World*	CORE SLE132 Biology: Form and Function*	Required Elective SLE103 Ecology and Environment	
3 rd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE123 Physics for the Life Sciences	Elective	

Other Electives can include any of the following:

- HBS107 Understanding Health
- HBS109 Human Structure and Function
- HSN101 Foundations of Food, Nutrition and Health (available in T2 2017)
- SIT191 Introduction to Statistics and Data Analysis
- SIT194 Introduction to Mathematical Modelling
- SLE102 Physical Geography*
- SLE112 Fundamentals of Forensic Science

* For SLE111, SLE132, SLE112, SLE155, SLE133 and SLE102 you must complete SLE010 Laboratory and Fieldwork Safety Induction Program as a co-requisite unit

** You must successfully complete SLE133 Chemistry in our World before enrolling in SLE155 Chemistry for the professional sciences (Pre-requisite)

Additional 1st Year Units to be taken at Deakin University

All students are required to complete SLE136 Life On An Evolving Planet at Deakin University

**When I transfer to Deakin University I want to study
Bachelor of Biomedical Science (B G)
Entry to Deakin University T1, T2**

International Students WAM: **B 50 WP 50**
Australian Students WAM: **B 70 WP 60**
Credits for Transfer: 8

- Molecular Life Sciences (B) ● Environmental Health (B,WP) ● Infection and Immunity (B,WP)
- Medical Biotechnology (B,WP) ● Pharmaceutical Science (B,WP)

Fast Track (Completing in 8 months/2 trimesters)					
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SLE115 Essential Skills in Bioscience	Elective	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	CORE SLE123 Physics for the Life Sciences	Elective	

Normal Track (Completing course in 12 months/ 3 Trimesters)				
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SLE115 Essential Skills in Bioscience	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	CORE SLE123 Physics for the Life Sciences	
3 rd Trimester	Elective	Elective		

Optional: Support Study Program (Only for Local Australian Students)

Support Program (Completing course in 12 months/ 3 Trimesters - see note 3 below)				
1 st Trimester	SUPPORT FNDH021 Chemistry	CORE SLE111 Cells and Genes*	Required Elective SLE115 Essential Skills in Bioscience	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE133 Chemistry in our World*	CORE SLE132 Biology: Form and Function*	Elective	
3 rd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE123 Physics for the Life Sciences	Elective	

Electives

Students who are planning to major in Environmental Health (B) should take HBS107 Understanding Health and HSN101 Foundations of Food, Nutrition and Health as their electives

Other Electives can include any of the following:

- HBS107 Understanding Health
- HBS109 Human Structure and Function
- HSN101 Foundations of Food, Nutrition and Health (available in T2 2017)
- SIT191 Introduction to Statistics and Data Analysis
- SIT194 Introduction to Mathematical Modelling
- SLE103 Ecology and the Environment
- SLE102 Physical Geography*
- SLE112 Fundamentals of Forensic Science

* For SLE111, SLE132, SLE112, SLE155, SLE133 and SLE102 you must complete SLE010 Laboratory and Fieldwork Safety Induction Program as a co-requisite unit

** You must successfully complete SLE133 Chemistry in our World before enrolling in SLE155 Chemistry for the professional sciences (Pre-requisite)

Additional 1st Year Units to be taken at Deakin University

Students wishing to undertake the majors listed below will need to complete additional units

Major	Additional Units
Infection and Immunity (WP)	HMM103 Cell Technology and HMM104 Immunology and Haematology
Medical Biotechnology (WP)	HMM101 Introduction to Medical Biotechnology and HMM102 Principles of Gene and Genomic Technology

**When I transfer to Deakin University I want to study:
Bachelor of Forensic Science (WP)
Entry to Deakin University T1 T2**

International Students WAM: **WP 50**
Australian Students WAM: **WP 50**
Credits for Transfer: 8

- Forensic Biology ● Forensic Chemistry

Fast Track (Completing In 8 months/2 trimesters)					
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SIT191 Introduction to Statistics and Data Analysis	Elective	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	CORE SLE123 Physics for the Life Sciences	Required Elective SLE112 Fundamentals of Forensic Science *	

Normal Track (Completing course in 12 months/ 3 Trimesters)				
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SIT191 Introduction to Statistics and Data Analysis	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	Required Elective SLE112 Fundamentals of Forensic Science *	
3 rd Trimester	CORE SLE123 Physics for the Life Sciences	Elective		

Optional: Support Study Program (Only for Local Australian Students)

Support Program (Completing course in 12 months/ 3 Trimesters - see note 3 below)				
1 st Trimester	SUPPORT FNDH021 Chemistry	CORE SLE111 Cells and Genes*	Required Elective SIT191 Introduction to Statistics and Data Analysis	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE133 Chemistry in our World*	CORE SLE132 Biology: Form and Function*	Required Elective SLE112 Fundamentals of Forensic Science*	
3 rd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE123 Physics for the Life Sciences	Elective	

Other Electives can include any of the following:

- HBS107 Understanding Health
- HBS109 Human Structure and Function
- HSN101 Foundations of Food, Nutrition and Health (available in T2 2017)
- SIT194 Introduction to Mathematical Modelling
- SLE103 Ecology and the Environment
- SLE102 Physical Geography*
- SLE115 Essential Skills in Bioscience

* For SLE111, SLE132, SLE112, SLE155, SLE133 and SLE102 you must complete SLE010 Laboratory and Fieldwork Safety Induction Program as a co-requisite unit

** You must successfully complete SLE133 Chemistry in our World before enrolling in SLE155 Chemistry for the professional sciences (Pre-requisite)

Additional 1st Year Units to be taken at Deakin University

All students are required to complete ACR102 Introducing Crime and Criminal Justice and STP010 Introduction to Work Placements (0 credit point) at Deakin University.

**When I transfer to Deakin University I want to study:
Bachelor of Zoology and Animal Science (WP)
Entry to Deakin University T1 T2**

International Students WAM: **WP 50**
Australian Students WAM: **WP 50**
Credits for Transfer: 8

Fast Track (Completing In 8 months/2 trimesters)					
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SLE103 Ecology and Environment	Elective	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	CORE SLE123 Physics for the Life Sciences	Required Elective SLE102 Physical Geography *	

Normal Track (Completing course in 12 months/ 3 Trimesters)				
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SLE103 Ecology and Environment	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	Required Elective SLE102 Physical Geography*	
3 rd Trimester	CORE SLE123 Physics for the Life Sciences	Elective		

Optional: Support Study Program (Only for Local Australian Students)

Support Program (Completing course in 12 months/ 3 Trimesters - see note 3 below)				
1 st Trimester	SUPPORT FNDH021 Chemistry	CORE SLE111 Cells and Genes*	Required Elective SLE103 Ecology and Environment	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE133 Chemistry in our World*	CORE SLE132 Biology: Form and Function*	Required Elective SLE102 Physical Geography*	
3 rd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE123 Physics for the Life Sciences	Elective	

Other Electives can include any of the following:

- HBS107 Understanding Health
- HBS109 Human Structure and Function
- HSN101 Foundations of Food, Nutrition and Health (available in T2 2017)
- SIT191 Introduction to Statistics and Data Analysis
- SIT194 Introduction to Mathematical Modelling
- SLE112 Fundamentals of Forensic Science
- SLE115 Essential Skills in Bioscience

* For SLE111, SLE132, SLE112, SLE155, SLE133 and SLE102 you must complete SLE010 Laboratory and Fieldwork Safety Induction Program as a co-requisite unit

** You must successfully complete SLE133 Chemistry in our World before enrolling in SLE155 Chemistry for the professional sciences (Pre-requisite)

Additional 1st Year Units to be taken at Deakin University

All students are required to complete STP010 Introduction to Work Placements (0 credit point) at Deakin University.

**When I transfer to Deakin University I want to study:
Bachelor of Environmental Science (Environmental Management and Sustainability) (B)
Entry to Deakin University T1 T2**

International Students WAM: **B 50**

Australian Students WAM: **B 50**

Credits for Transfer: 8

Fast Track (Completing In 8 months/2 trimesters)					
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SLE103 Ecology and Environment	Elective	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	CORE SLE123 Physics for the Life Sciences	Required Elective SLE102 Physical Geography *	

Normal Track (Completing course in 12 months/ 3 Trimesters)				
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SLE103 Ecology and Environment	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	Required Elective SLE102 Physical Geography*	
3 rd Trimester	CORE SLE123 Physics for the Life Sciences	Elective		

Optional: Support Study Program (Only for Local Australian Students)

Support Program (Completing course in 12 months/ 3 Trimesters - see note 3 below)				
1 st Trimester	SUPPORT FNDH021 Chemistry	CORE SLE111 Cells and Genes*	Required Elective SLE103 Ecology and Environment	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE133 Chemistry in our World*	CORE SLE132 Biology: Form and Function*	Required Elective SLE102 Physical Geography*	
3 rd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE123 Physics for the Life Sciences	Elective	

Other Electives can include any of the following:

- HBS107 Understanding Health
- HBS109 Human Structure and Function
- HSN101 Foundations of Food, Nutrition and Health (available in T2 2017)
- SIT191 Introduction to Statistics and Data Analysis
- SIT194 Introduction to Mathematical Modelling
- SLE112 Fundamentals of Forensic Science
- SLE115 Essential Skills in Bioscience

* For SLE111, SLE132, SLE112, SLE155, SLE133 and SLE102 you must complete SLE010 Laboratory and Fieldwork Safety Induction Program as a co-requisite unit

** You must successfully complete SLE133 Chemistry in our World before enrolling in SLE155 Chemistry for the professional sciences (Pre-requisite)

Additional 1st Year Units to be taken at Deakin University

All students are required to complete SLE101 Techniques in Environmental Science, SLE121 Environmental Sustainability and STP010 Introduction to Work Placements at Deakin University.

**When I transfer to Deakin University I want to study:
Bachelor of Environmental Science (Wildlife and Conservation Biology) (B)
Entry to Deakin University T1 T2**

International Students WAM: **B 50**
Australian Students WAM: **B 50**
Credits for Transfer: 8

Fast Track (Completing In 8 months/2 trimesters)					
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SLE103 Ecology and Environment	Elective	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	CORE SLE123 Physics for the Life Sciences	Required Elective SLE102 Physical Geography *	

Normal Track (Completing course in 12 months/ 3 Trimesters)				
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SLE103 Ecology and Environment	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	Required Elective SLE102 Physical Geography*	
3 rd Trimester	CORE SLE123 Physics for the Life Sciences	Elective		

Optional: Support Study Program (Only for Local Australian Students)

Support Program (Completing course in 12 months/ 3 Trimesters - see note 3 below)				
1 st Trimester	SUPPORT FNDH021 Chemistry	CORE SLE111 Cells and Genes*	Required Elective SLE103 Ecology and Environment	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE133 Chemistry in our World*	CORE SLE132 Biology: Form and Function*	Required Elective SLE102 Physical Geography*	
3 rd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE123 Physics for the Life Sciences	Elective	

Other Electives can include any of the following:

- HBS107 Understanding Health
- HBS109 Human Structure and Function
- HSN101 Foundations of Food, Nutrition and Health (available in T2 2017)
- SIT191 Introduction to Statistics and Data Analysis
- SIT194 Introduction to Mathematical Modelling
- SLE112 Fundamentals of Forensic Science
- SLE115 Essential Skills in Bioscience

* For SLE111, SLE132, SLE112, SLE155, SLE133 and SLE102 you must complete SLE010 Laboratory and Fieldwork Safety Induction Program as a co-requisite unit

** You must successfully complete SLE133 Chemistry in our World before enrolling in SLE155 Chemistry for the professional sciences (Pre-requisite)

Additional 1st Year Units to be taken at Deakin University

All students are required to complete SLE151 Biodiversity: A Global Perspective, SLE114 Introduction to Parks and Wildlife Conservation and STP010 Introduction to Work Placements at Deakin University.

**When I transfer to Deakin University I want to study:
Bachelor of Environmental Science (Marine Biology) (WP, WB)
Entry to Deakin University T1 T2**

International Students WAM: **WP 50 WB 50**
Australian Students WAM: **WP 50 WB 50**
Credits for Transfer: 8

Fast Track (Completing In 8 months/2 trimesters)					
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SLE103 Ecology and Environment	Required Elective SIT191 Introduction to Statistics and Data Analysis	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	CORE SLE123 Physics for the Life Sciences	Elective	

Normal Track (Completing course in 12 months/ 3 Trimesters)				
1 st Trimester	CORE SLE133 Chemistry in our World*	CORE SLE111 Cells and Genes*	Required Elective SLE103 Ecology and Environment	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE132 Biology: Form and Function*	Required Elective SIT191 Introduction to Statistics and Data Analysis	
3 rd Trimester	CORE SLE123 Physics for the Life Sciences	Elective		

Optional: Support Study Program (Only for Local Australian Students)

Support Program (Completing course in 12 months/ 3 Trimesters - see note 3 below)				
1 st Trimester	SUPPORT FNDH021 Chemistry	CORE SLE111 Cells and Genes*	Required Elective SLE103 Ecology and Environment	Safety Unit (required) SLE010
2 nd Trimester	CORE SLE133 Chemistry in our World*	CORE SLE132 Biology: Form and Function*	Required Elective SIT191 Introduction to Statistics and Data Analysis	
3 rd Trimester	CORE SLE155 Chemistry for the Professional Sciences**	CORE SLE123 Physics for the Life Sciences	Elective	

Other Electives can include any of the following:

- HBS107 Understanding Health
- HBS109 Human Structure and Function
- HSN101 Foundations of Food, Nutrition and Health (available in T2 2017)
- SIT194 Introduction to Mathematical Modelling
- SLE115 Essential Skills in Bioscience
- SLE102 Physical Geography*
- SLE112 Fundamentals of Forensic Science

It is highly recommended that you choose SLE102 Physical Geography or SIT194 Introduction to Mathematical Modelling as your elective.

* For SLE111, SLE132, SLE112, SLE155, SLE133 and SLE102 you must complete SLE010 Laboratory and Fieldwork Safety Induction Program as a co-requisite unit

** You must successfully complete SLE133 Chemistry in our World before enrolling in SLE155 Chemistry for the professional sciences (Pre-requisite)

Additional 1st Year Units to be taken at Deakin University

All students are required to complete SLE105 Human Impacts - Pollution, SLE104 The Blue Planet: Water and Life and STP010 Introduction to Work Placements (0 credit points) at Deakin University

Deakin University Campuses and Trimester codes

B Melbourne Burwood Campus **WP** Geelong Waurm Ponds Campus **WB** Warrnambool Campus

T1 Trimester 1 entry **T2** Trimester 2 entry

NOTE: for Australian students entry is for T1 only. T2 entry is subject to availability of places.

CRICOS Codes: Bachelor of Biological Science 001841F, Bachelor of Biomedical Science 058793E, Bachelor of Environmental Science (Environmental Management and Sustainability) 075361K, Bachelor of Environmental Science (Wildlife and Conservation Biology) 055286D, Bachelor of Forensic Science 073106G, Bachelor of Science 076198G, Bachelor of Zoology and Animal Science 075365F, Bachelor of Environmental Science (Marine Biology) 053749E

Unit Outlines

PLEASE ENSURE YOU CHECK THE TRIMESTER 2 2017 UNIT OUTLINE FOR ANY CONTENT AND ASSESSMENT UPDATES.

HBS107 Understanding Health

This interdisciplinary unit examines a determinants approach to health and wellbeing, including: the complex range of interactions that influence the health of individuals and populations; the determinants of selected health issues in urban and rural Australia, as well as in global contexts, and explores a range of models and approaches and their impact on health outcomes.

Topics include: The concepts of health, the social determinants of health, health systems, the biological and environmental determinants, health promotion, indigenous health, settings for health, marginalised populations and global health.

Assessment: 20% media analysis, 30% health plan Review, 50% final examination

HBS109 Human Structure and Function

This interdisciplinary unit provides an overview of the basic sciences of human anatomy and physiology, exploring issues of relevance to the health sciences. Specific topics to be addressed will include: organisation of the human body, outlining anatomical terms, chemical and structural bases of cell function, body tissues including integument, homeostasis and physiological control via neural and hormonal mechanisms that maintain a constant internal environment. Support and movement through an understanding of the musculo-skeletal system, and maintenance of key systems, including cardiovascular, respiratory, digestive, urinary and immune systems.

Assessment: 40% practical class quizzes, 20% intra trimester tests, 40% final examination

HSN101 Foundations of Food, Nutrition and Health (offered in T2 2017)

This unit provides students with foundation knowledge in food, nutrition and health, including food sources of nutrients, food and nutrient recommendations for health and methods for measuring food intake and behaviour, historical perspective of why we consume the foods we do today and how our scientific knowledge may influence foods we eat in the future. Students also gain an understanding of interactions between the environment, technologies developed to produce and harvest foods and scientific advances in food and nutrition. The topics include: food history, Australian food culture, food production, food sources of nutrients, food and nutrient recommendations and their relationship with health and methods used to measure food intakes and behaviours. Students also have an opportunity to align their interests and values to future career options.

Assessment: 10% multiple-choice tests, 40% assignment, 50% final examination

SLE103 Ecology and the Environment

SLE103 introduces students to the science of ecology, investigating relationships between organisms and the environment. In this unit, students will also explore climate change and energy issues. They will learn about the nature of science and the scientific method and how to use a systems framework to investigate environmental issues. This will equip students with the capacity to study key environmental issues such as climate systems and ecological systems and make a difference.

Assessment: 15% group presentation, 20% mid trimester test, 25% report, 40% final examination

SLE102 Physical Geography

This unit will examine interactions between the major components of planet Earth - the geosphere, hydrosphere, biosphere and atmosphere. A particular emphasis is placed on the study of natural disasters and extreme natural events. Major topics will include the formation and subsequent evolution of the earth; plate tectonics; soils, weathering and erosion; the hydrological cycle - including interactions between oceans, rivers, groundwater and polar ice; Earth weather. Minor topics will include studies in the origin of the universe and solar system; the relationship between earth landforms and climate, global environmental change and the earth's energy and mineral resources.

Assessment: 20% practical tests (2 x 10%), 30% mid trimester test, 20% assignment, 30% final examination

SLE115 Essential Skills in Bioscience

This unit is the first of a sequence of professional practice units designed specifically for students in the first year of biosciences. The unit will focus on the development of generic skills which will be of practical value to students in their bioscience studies. It will draw upon the scientific content of other first year units and utilise this context for skill-building exercises. These exercises will include research data analysis and presentation, library database searching, scientific writing and referencing, numeracy skills and introductory statistics, and basic concepts in pharmacology. Students will be encouraged to investigate career options available to them in the field of bioscience.

Assessment: 20% mid-trimester test; 20% assignments, 10% group assessment, 50% final examination

SLE123 Physics for the Life Sciences

The unit gives an introduction to physics, particularly applying to biological systems. Topics include kinematics, forces, gravity, energy, heat, fluids, waves, sound, optics, electricity, atoms and molecules. The physical principles of each topic are developed, and then applied to a practical understanding of biological systems and appropriate applications.

Assessment: 32% assignments, 18% laboratory work, 50% final examination

SIT194 Introduction to Mathematical Modelling

This unit includes: functions and limits; derivatives and integrals of combinations of polynomials, exponential, logarithmic and trigonometric functions; sequences, series tests and power series; vectors, lines and planes; first order differential equations. Applications studied include graph sketching; approximations to solutions of equations and integrals; formulation of models to solve science and engineering problems.

Assessment: 40% four assignments (4 x 10%), 60% final examination

SLE111 Cells and Genes*

In this unit, students will be able to study the characteristics of life that are fundamental for every field in biology. Upon successful completion of Cells and Genes, students will be able to explore, examine and describe the characteristics of prokaryotic and eukaryotic cells and their molecules, including cell reproduction and communication, membrane organization and metabolism, and apply this knowledge to solve problems and perform and report on the results of experiments. This understanding of molecular cell biology forms the basis for interpreting patterns of inheritance, mechanisms and control of gene expression and the principles of DNA technologies - all of which form the second part of the unit.

Assessment: *Class test 15%, bioinformatics assignment 7%, practical exercises 33%, examination 45%. To obtain a pass in the unit, students must submit and pass at least 4 of the 5 practical class assessments.*

SIT191 Introduction to Statistics and Data Analysis

The unit studies various methods of presenting and summarising data with graphical and numerical techniques. It also addresses data collection by studying sampling methods and experimental design. Sampling distributions and probability theory are studied as the basis of statistical inference. Statistical estimates and hypothesis tests involving one and two means, one and two proportions, correlation, regression and ANOVA are studied. Teaching methods include lectures and problem solving practicals, with most topics supplemented by computer activities using the statistical software SPSS.

The primary aim of this unit is to develop your understanding of the techniques needed in gathering and analysing information. Suitable procedures must be used at all times when dealing with data, or any inferences and conclusions made can be invalid.

Assessment: *30% assignments, 10% class participation, 60% final examination.*

SLE112 Fundamentals of Forensic Science*

SLE112 is a fundamental forensics unit, during which students will explore forensic science in an Australian context and learn the challenges and differences of forensic science in a global context. This includes some of the key principles used to study the science, including Locard's exchange principle, principle of individuality, comparative analysis, and class and individual characteristics. Students will engage in activities that will require them to apply forensic processes from a crime scene to the court. It will also require them to apply introductory forensic analysis including chemical, biological and physical techniques and learn about the legal system including how law is developed, criminal vs civil law, and the laws of evidence.

Assessment: *Two in-class tests (15% each) 30%, a reflective report 25%, practical report and practical skills demonstration (3 x 15%) 45%. To be eligible to obtain a pass in this unit, students must achieve at least 50% in the practical report and practical skills demonstration assessment.*

SLE132 Biology: Form and Function

SLE132 introduces students to animal and plant biology. Students will explore the relationships between animal structures and their functions, and investigate the physiological processes that enable animals to adjust to environmental changes. They will also learn aspects of animal diversity and behaviour. As students progress learning in this unit, they will study the evolutionary diversity of plants, their structure and functions, morphology and growth, reproductive biology, nutrient acquisition and transport, and their applications in biotechnology, with an emphasis on flowering plants. Examples from other plant groups and the non-plant eukaryotes, fungi and algae, will also be used for comparison and as examples during discussion.

Assessment: *15% Mid trimester tests, 35% practical exercises, 10% scientific report; 40% final examination*

SLE133 Chemistry in Our World*

SLE133 is a foundation unit designed to develop and consolidate student understandings and skills in basic chemistry. The learning and assessment activities provide students with the opportunity to study atoms, molecules, and ions, how they change during a chemical reaction and how bonding affects properties such as intermolecular interactions, boiling points, ease of evaporation and the ability of substances to dissolve in water. Students will engage in laboratory work in order to develop their hands on skills in chemical safety and measurement and their ability to perform calculations related to substance measurement. Students will then apply these concepts of bonding, chemical change and measurement to determine the acidity and basicity of substances and the formation of buffers.

This unit can be taken as a stand-alone unit for students who need some awareness of chemistry to broaden their degree, or can be taken as a foundation for further studies in biochemistry, chemistry, and related areas like food and nutrition, molecular biology and science education.

You must have completed SLE010 in the current or a previous trimester, before you can attend any laboratory sessions.

Assessment: Assessment: 20% in-class quizzes, 30% laboratory exercises and reports, 10% active tutorial participation, 40% final examination. To be eligible to obtain a pass in this unit, students must achieve at least 50% in the practical component.

SLE155 Chemistry for the Professional Sciences*

SLE155 builds on the student's previous chemistry knowledge about atoms, molecules, properties, reactions, measurement and acidity. Students will extend their knowledge to more advanced chemical naming, structures, and hypervalent bonding. They will be introduced to additional topics such as, chemical equilibria, solution chemistry, simple organic compounds, chirality and thermochemistry. This unit will lead to further studies in biochemistry, chemistry, and related areas such as food and nutrition, molecular biology and science education. This unit can also be taken as an elective unit for students who want a broader knowledge of chemistry to enhance their degree.

Students must successfully complete SLE133 before enrolling in SLE155.

Assessment: Assessment: 20% in-class quizzes, 40% laboratory exercises and reports, 40% final examination. To be eligible to obtain a pass in this unit, students must achieve at least 50% in the practical component.

SLE010 Laboratory and Fieldwork Safety Induction Program

In SLE010, students will develop an awareness of safety measures and protocols to be followed in scientific laboratory work and fieldwork. The unit encompasses information about biological and chemical hazards, building evacuation procedures, laboratory accident management, first aid procedures and safety work procedures. Attendance in all practical classes and/or field trips may be restricted unless you have passed the online quiz with a mark of 70% or greater. Results for all units requiring the completion of SLE010 as a co-requisite may not be released until the quiz is passed.

Assessment: 100% multiple-choice examination (60 minutes) to be completed by the end of week 2. To be eligible to obtain a pass in this unit students must achieve a minimum mark of 70%. Multiple attempts at the quiz are allowed and students will print a certificate which is valid for three years.