

RECOMMENDED STUDY PLAN

2020-2021

NAME _____ STUDENT NUMBER _____

DEGREE PROGRAM Graduate Diploma of Science STREAM Tropical Biology & Conservation (GDS-TBI)

Course information – Graduate Diploma of Science

The Graduate Diploma of Science degree is structured such that students take sets of (1) foundational '*knowledge*' specific to their major, (2) technical and / or analytical '*skills*' subjects and (3) *elective* subjects. The specific subject sets are aligned to the respective major in the Master of Science program.

Click here to see the relevant JCU Course handbook: <https://www.jcu.edu.au/course-and-subject-handbook/courses/postgraduate-courses/graduate-diploma-of-science>

Tropical Biology & Conservation stream structure:

1. Take 2 of the following '*knowledge*' subjects
 - 1.1. [BZ5215](#):03 Conservation Biology
 - 1.2. [BZ5061](#):03 Behavioural Ecology **or** [BZ5235](#):03 Biological Invasions
 - 1.3. [BZ5220](#):03 Population and Community Ecology **or** [BZ5230](#):03 Ecological Research Methods
 - 1.4. [BZ5740](#):03 Wildlife Ecology and Management **or** [BZ5745](#):03 Tropical Entomology
2. Take 3 '*skills*' subjects for your major
 - 2.1. [SC5202](#):03 Quantitative Methods in Science **or** [SC5502](#):03 Design and Analyses in Ecological Studies
 - 2.2. Plus 2 subjects from **List 1**
3. Take 3 *elective* subjects (see recommended electives list)

Full subject descriptions and timings of all subjects can be found online using the [Subject Search](#) tool. It is generally recommended to take 8 subjects per year, with 3 - 4 in SP1 and SP2 and additional subjects in block mode periods (SP3, SP7, SP10 /11) as necessary. You need to have fulfilled the 'Assumed Knowledge' or Prerequisites for any subject, before you take them. These are listed in the subject's description. For example, EV5502 assumes you have already taken EV5505 or an equivalent at JCU or at your previous university.

RECOMMENDED STUDY PLAN - **TOWNSVILLE**

Colour legend: Pink are core 'major or knowledge' subjects, Grey are skills subjects, White are electives.

Level 5: Year 1 (take 8 subjects / 24 credit points)

SP3	SP1	SP6/7	SP2	SP9/10/11
	Major Core: BZ5215 :03 Conservation Biology TSV + CNS		Major Core: BZ5061 :03 Behavioural Ecology	Skill subject
	Elective: BZ5740 :03 Wildlife Ecology and Management		Elective: BZ5220 :03 Population and Community Ecology	
	Major Core Skill subject: SC5202 :03 Quantitative Methods in Science		Skill subject	
	Elective:			

Notes:

Boxes without specific subjects listed in them may be rearranged to meet your course needs as long as the total number of subjects and degree structure is met. For example, you may choose to move a SP1 elective in Year 1 to SP7 in Year 2.

RECOMMENDED STUDY PLAN - **CAIRNS**

SP3	SP1	SP6/7	SP2	SP9/10/11
	Major Core: BZ5215 :03 Conservation Biology TSV + CNS		Major Core: BZ5230 :03 Ecological Research Methods	Skill subject
	Major Core Skill subject: SC5202 :03 Quantitative Methods in Science		Skill subject	
	Elective		Elective	
	Elective			

Notes:

Boxes without specific subjects listed in them may be rearranged to meet your course needs as long as the total number of subjects and degree structure is met. For example, you may choose to move a SP1 elective in Year 1 to SP7 in Year 2.

Skill Subjects:

In addition to the **Major Core Skill Subject** (SC5202 or SC5502), choose 2 subjects from **List 1**. You must meet the Assumed Knowledge or Prerequisites for any subject selected.

List 1 – Additional Skill Subjects (Select 2)

SP3	SP1	SP6/7	SP2	SP9/SP10/SP11
SC5502:03 Design and Analyses in Ecological Studies	SC5202:03 Quantitative Methods in Science ¹	EA5018:03 Field Studies in Tropical Land and Water Science ²	BC5203:03 Advanced Bioinformatics	AQ5004:03 Aquaculture: Stock Improvement
MB5300:03 Sampling and Experimental Design ³	BS5260:03 Modelling Ecological Dynamics	EA5330:03 Field Techniques ³	BZ5450:03 Ecological and Conservation Genetics	EV5502:03 Advanced Geographic Information Systems - TSV
	EV5020:03 Human Dimensions of Nature, Environment and Conservation	SC5232:03 Marine Sensor Technologies and Applications ⁴	CH5203:03 Analytical Chemistry (Advanced)	EV5506:03 Remote Sensing -CNS LTD (SP9)
		BZ5990:03 Toolkit for the Field Biologist	EV5110:03 Environmental and Social Impact Assessment	EA5640:03 Advanced Marine Geoscience Technologies and Applications
		EA5044:03 Geological Mapping ³	EV5505:03 Introduction to Geographic Information Systems	
			MA5405:03 Data Mining	

¹ SC5202 is a required unit if you have not already completed a statistics subject at university.

² Not intended for students in Marine Biology, Fisheries, Aquaculture or Tropical Biology & Conservation

³ Merged with SC5502 for 2020. SC5202 is a required unit if you have not already completed a statistics subject at university

⁴ Not yet available

Elective subjects:

You can take any Level 5 subject with a prefix subject code of: AQ, BS, BZ, CH, EA, EV, MA, MB, MI, SC or TV. Other subjects can also be approved by your advisor.

Use [Subject Search](#) to review the units and check the study period

Recommended elective subject: These are our recommended elective subject sets for specific career pathways and/or study interests

TOPIC	STUDY PERIOD
<i>Plants</i>	
BZ5615:03 Plant Survival in a land of Fire, Flood and Drought <i>Note- Not offered in 2019.</i>	1
BZ5620:03 Tropical Flora of Australia	7, CNS
BZ5650:03 Australian Land Plants: Recognition, Evolution and Diversity	1,11,2,7 EXT
<i>Taxa specialisations</i>	
BZ5745:03 Tropical Entomology	3 CNS
MB5204:03 Conserving Marine Wildlife: Sea Mammals, Birds and Reptiles	1 TVL
MB5380:03 Invertebrate Biology	2 TVL
<i>Ecology</i>	
BZ5880:03 Ecology: Distribution, Abundance and Diversity	2 CNS
BZ5225:03 Technological Applications in Ecology	2 CNS
BZ5230:03 Ecological Research Methods	2 CNS
BZ5450:03 Ecological and Conservation Genetics	2 TVL
BZ5480:03 Restoration Ecology	1 CNS
MB5160:03 Evolution and Ecology of Reef Fishes	1 TVL
AQ5007:03 Aquatic Animal Ecophysiology	2 TVL
MB5270:03 Coastal, Estuarine & Mangrove Ecosystems	2 TVL
MB5450:03 Behaviour of Marine Animals <i>Note-Offered in odd-numbered years.</i>	7 TVL
<i>Biology</i>	
BZ5808:03 Adapting to Environmental Challenges	2 CNS
MB5160:03 Evolution and Ecology of Reef Fishes	1 TVL
MB5400:03 Life History & Evolution of Reef Corals	1 TVL
MI5003:03 Advanced Marine Microbiology	1 TVL
MB5380:03 Invertebrate Biology	2 TVL
AQ5007:03 Aquatic Animal Ecophysiology	2 TVL
<i>Foundations</i>	
BZ5220:03 Population and Community Ecology	2 TVL
BS5470:03 Evolution	1 TVL
MB5380:03 Invertebrate Biology	2 TVL

BS5460:03 Fundamentals of Ecology	2 TVL
<i>Applied Studies</i>	
MB5310:03 Marine Reserves as Fisheries Management Tools	3 TVL
AQ5006:03 Principles and Practices of Aquaculture	1 TVL
MB5003:03 Fisheries Science	1 TVL
AQ5015:03 Sustainable Aquaculture	3 TVL
MB5610:03 Fishing Gear and Technologies	2 TVL
MB5014:03 Managing Tropical Fisheries	11 TVL
<i>Applications for Conservation</i>	
BZ3215:03 Conservation Biology	1 TVL, CNS
EV5020:03 Human Dimensions of Nature, Environment and Conservation	1 TVL
EV5107:03 International Environmental Policy & Governance	3 TVL
BZ5450:03 Ecological & Conservation Genetics	2 TVL
EV5003:03 Environmental Economics	2 TVL
<i>Coastal Resource Management</i>	
EV5406:03 Coral Reef Geomorphology	1 TVL
MB5204:03 Conserving Marine Wildlife: Sea Mammals, Birds and Reptiles	1 TVL
EV5020:03 Human Dimensions of Nature, Environment and Conservation	1 TVL
MB5270:03 Coastal, Estuarine & Mangrove Ecosystems	2 TVL
<i>Unique Ecosystems</i>	
SC5810:03 Marine Ecology and Upwelling	7 (Galapagos)
MB5001:03 Tropical Marine Ecology and Coastal Impacts	11 (Thailand)