



BIOL13031 *Ecology: Theory and Application*

Term 2 - 2018

Profile information current as at 01/05/2024 05:32 pm

All details in this unit profile for BIOL13031 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

Ecology is the study of the natural world: how organisms interact with one another and with their physical environment, and such knowledge is essential for any study in biology. In this unit, students will study ecology at different levels: the population, community, and evolutionary levels. Practical application of ecology will be emphasised in the study of principles of experimental design, and in the conduct of group research projects.

Details

Career Level: *Undergraduate*

Unit Level: *Level 3*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

(ZOOL11005 Foundation Animal Biology and BOTN11004 Foundation Plant Biology) or (BIOL11099 Living Systems and BIOL11100 Functional Biology)

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

Offerings For Term 2 - 2018

- Distance
- Rockhampton

Attendance Requirements

All on-campus students are expected to attend scheduled classes - in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Residential Schools

This unit has a Compulsory Residential School for distance mode students and the details are:

Click here to see your [Residential School Timetable](#).

Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

[Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

[Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Written Assessment**

Weighting: 15%

2. **Practical and Written Assessment**

Weighting: 25%

3. **Presentation**

Weighting: 10%

4. **Examination**

Weighting: 50%

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the [CQUniversity Policy site](#).

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from Formal unit student evaluations, informal student comment

Feedback

Numerous positive comments regarding course content, structure, and content and assessment authenticity and student centredness and support elements were received.

Recommendation

These components will be maintained, and where possible refined further.

Feedback from Formal unit student evaluation

Feedback

One comment was made (for the first time) suggesting consideration of peer assessment in marking student participation in field work (because of the perception 'not everyone contributed equally').

Recommendation

This will be explored with expert peers and with future student cohorts, because transferable skills (like teamwork) are important for employability.

Feedback from Formal unit student evaluation

Feedback

Whilst student feedback included how well unit information covered real-world ecology well, a student commented some unit content was dated 2010.

Recommendation

This material, even if foundational, will be reviewed and updated, however this is less likely for component foundational animations (due to complexity of the undertaking).

Unit Learning Outcomes

On successful completion of this unit, you will be able to:

1. Comprehend and analyse the elements, concepts, and theories of population and community structure and dynamics.
2. Comprehend and evaluate the selected elements, concepts, and theories of evolutionary ecology.
3. Integrate and apply your knowledge of population, evolutionary, and community ecology to real world situations.
4. Develop further and utilise the skills necessary to undertake ecological fieldwork successfully and to analyse ecological data.
5. Comprehend and apply the concept, and its elements, of good experimental design.
6. Evaluate critically the scientific work of others in ecology.
7. Integrate your comprehension of ecological theory with your comprehension and application of good experimental design to allow you to draw sound conclusions from ecological study.
8. Communicate your knowledge and findings clearly both orally and in writing.

Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes							
	1	2	3	4	5	6	7	8
1 - Written Assessment - 15%				•	•	•		•
2 - Practical and Written Assessment - 25%	•	•	•	•	•		•	•
3 - Presentation - 10%	•	•	•	•	•		•	•
4 - Examination - 50%	•	•	•		•	•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes							
	1	2	3	4	5	6	7	8
1 - Communication	•	•	•	•	•	•	•	•
2 - Problem Solving	•	•	•	•	•	•	•	•
3 - Critical Thinking	•	•	•	•	•	•	•	•
4 - Information Literacy	•	•	•	•	•	•	•	•
5 - Team Work				•	•		•	
6 - Information Technology Competence	•	•	•	•	•	•	•	•
7 - Cross Cultural Competence	•	•	•	•	•	•	•	•
8 - Ethical practice	•	•	•	•	•	•	•	•
9 - Social Innovation								
10 - Aboriginal and Torres Strait Islander Cultures								

Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Written Assessment - 15%	•	•	•	•		•	•	•		
2 - Practical and Written Assessment - 25%	•	•	•	•	•	•	•	•		
3 - Presentation - 10%	•			•	•	•	•	•		
4 - Examination - 50%	•	•	•	•			•	•		

Textbooks and Resources

Textbooks

BIOL13031

Prescribed

Ecology: The Economy of Nature

latest edition (latest edition)

Authors: Ricklefs R & Relyea R

W.H. Freeman and Company

New York , NY , USA

ISBN: ISBN-10: 1-4292-4995-1; ISBN-13: 978-1-4292-4995-9

Binding: Paperback

Additional Textbook Information

Latest edition, or recent edition, is adequate.

[View textbooks at the CQUniversity Bookshop](#)

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- A modern computer of adequate size and power with sufficient hard drive, memory size and processing speed; large sound and video cards; plus adequate Internet access and connection reliability to facilitate significant uploads/downloads/video streaming and sustained lengthy connections (e.g., lecture video downloads, real time online Zoom tutorials) with microphone and speakers (built-in or external) OR microphone+speaker headset (cheap '\$20' set is adequate).
- Recent (not necessarily latest) computer software including Microsoft Word, Excel, Adobe Reader, etc., and capability to download same and other required software to enable Zoom sessions (accessed free via unit Moodle site).

Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Bret Heath Unit Coordinator

b.heath@cqu.edu.au

Schedule

Week 1 - 09 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
Best practice in ecology to get valid answers. (The design of ecological experiments.)	(Relevant parts of textbook (across chapters) for each module are published on the unit Moodle site.)	

Week 2 - 16 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
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What is a 'population' and what do they do?
(Concepts of population growth and regulation.)

Week 3 - 23 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
What determines what a population looks like, and how do we measure them? (Concepts of population regulation (con't.) and sampling populations.)		

Week 4 - 30 Jul 2018

Module/Topic	Chapter	Events and Submissions/Topic
Organisms are patchy in patchy environments, really! (Metapopulation ecology.)		

Week 5 - 06 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
No population occurs or is shaped in isolation. (How interaction factors affect distribution and abundance.)		Journal article critique Due: Week 5 Friday (10 Aug 2018) 11:45 pm AEST

Vacation Week - 13 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic

Week 6 - 20 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
Members shape a population, or species, in patches over time. (Evolution, adaptation, and population ecology.)		

Week 7 - 27 Aug 2018

Module/Topic	Chapter	Events and Submissions/Topic
Life in a mosaic. (Adaptations to heterogenous environments.)		ALL students: attend residential school (combined block practicum) (Thurs 30 Aug - Sat 1 Sept 2018 inclusive), to undertake student field work (towards Field Project Reports assessment item) & presentation of associated seminars (Fire Ecology Project seminar assessment item). Negotiation of submission date for Field Project Reports assessment item will occur.

Week 8 - 03 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
Developing the days of our lives. (Evolutionary ecology of the life histories, sex and mating systems.)		

Week 9 - 10 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
What is a 'community' and what do they do? (The 'community concept', generalised community structure, and sampling communities.)		

Week 10 - 17 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
How do communities recover from disturbance? (Succession and the function of communities.)		

Week 11 - 24 Sep 2018

Module/Topic	Chapter	Events and Submissions/Topic
What determines the diversity of communities? (Biodiversity (theories about diversity).)		

Week 12 - 01 Oct 2018

Module/Topic	Chapter	Events and Submissions/Topic
How do communities operate? (Manipulative experiments at the community level.)		

Review/Exam Week - 08 Oct 2018

Module/Topic	Chapter	Events and Submissions/Topic
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Exam Week - 15 Oct 2018

Module/Topic	Chapter	Events and Submissions/Topic
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Assessment Tasks

1 Journal article critique

Assessment Type

Written Assessment

Task Description

You will need to access the specific requirements, advice, and resources published on our unit Moodle site (click on the appropriate link in the 'Assessment' box), however a general description is published here.

This assignment is a critique of a published scientific paper, nominated by the lecturer, from a reputable journal that publishes papers on ecological topics. Your access to the journal article will be via a link published on our unit Moodle site.

There is no set word limit, however you are encouraged to be as concise as possible (as is good scientific practice). A suggested maximum word limit is 2 000 words, but write as much as it takes you to be comprehensive.

Despite the peer review or refereeing process, plenty of papers containing major flaws (in the experimental design and/or analysis and/or interpretation of the results) appear in reputable journals.

You are asked to referee the nominated paper critically (be very picky) with particular respect to the following features:

1. experimental design,
2. analyses of data (basic level),
3. interpretation of the data, i.e., conclusions drawn, and
4. your added constructive suggestions, with a brief rationale for each, for improvement of these aspects of the paper to support your criticisms.

In brief, you will critique the article for good experimental design and practice.

Writing and presentation styles, and spelling/grammatical or similar errors, found in the journal article will not be critiqued.

Assessment Due Date

Week 5 Friday (10 Aug 2018) 11:45 pm AEST

Return Date to Students

Nominally fifteen working days from submission date.

Weighting

15%

Minimum mark or grade

45% of total marks available for this activity.

Assessment Criteria

Assessment evaluation criteria

Grade	Standard
High Distinction (HD)	(1) Responds fully to assignment. (2) Presents own synthesis of ideas involving rigorous critique and analysis. (3) Comprehension of good ecological experimental design as presented in the BIOL13031 unit materials is clearly evident. (4) Expresses viewpoint clearly and persuasively. (5) Begins and ends effectively. (6) Provides adequate supporting arguments, evidence, examples, and details. (7) Is well organised, sequenced, integrated, and unified. (8) Adequately and correctly acknowledges and documents sources. (9) Original text with no instances of plagiarism or weak paraphrasing. (10) Is free of errors in spelling, word choice, punctuation, grammar, and format. (11) Maintains a consistent level of excellence throughout, and shows appropriate originality and creativity in realising (1) through (10).
Distinction (D)	Realises (1) through (11) fully and completely, and demonstrates overall excellence, but shows little or no independent thought, incomplete critical analysis, or little originality or creativity.
Credit (C)	Realises (1) through (11) adequately, and demonstrates overall competence but contains a few, relatively minor errors or flaws. A Credit essay might show great independent thought, critical analysis, originality, and creativity, but these qualities do not make up for poor or careless writing, or lack of adequate attention to detail. A Credit essay typically looks and reads like a next-to-final draft.
Pass (P)	Fails to realise some elements of (1) through (11) adequately, and contains several, relatively serious, errors or flaws, or many minor ones. A Pass essay typically looks and reads like an early draft.
Fail (F)	Fails to realise several elements of (1) through (11) adequately, and contains many serious errors or flaws, and usually many minor ones too. A Fail essay typically looks and reads like a very rough first draft or even a zero draft.

(Adapted from Angelo, 1998)

A minimum achievement level is set for this assessment activity (i.e., you must equal or exceed this set minimum achievement level for you to be considered for a passing grade for this unit overall, irrespective of your achievement in other assessment components in this unit).

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Submission Instructions

This journal article critique should be submitted on-line electronically only as a Microsoft Word (doc, docx) file by the due date (unless approval is granted for later submission in response to application received via the online 'Assignment extension' system).

Learning Outcomes Assessed

- Develop further and utilise the skills necessary to undertake ecological fieldwork successfully and to analyse ecological data.
- Comprehend and apply the concept, and its elements, of good experimental design.
- Evaluate critically the scientific work of others in ecology.
- Communicate your knowledge and findings clearly both orally and in writing.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

2 Field project reports

Assessment Type

Practical and Written Assessment

Task Description

You will need to access the specific requirements, advice, and resources published on our unit Moodle site (click on the appropriate link in the 'Assessment' box), however a general description is published here.

During our compulsory residential school (combined block practicum or CBP), you will undertake field and laboratory-based data collection that **(a)** will be required to be reported on in written form for assignment submission (submitted online as Field Project Reports assessment item after the CBP), **and (b)** will provide the project findings to be presented orally to the class (as Fire Ecology Project Seminar assessment item) during the CBP.

The field projects, based on relevant trips to field sites, will be undertaken during the CBP as follows:

- a fire ecology (population ecology) project (15%) researching the impacts of fire management in conjunction with Queensland Parks & Wildlife Service (QPWS) in nearby Mount Archer National Park, and
- a community ecology project (10%) describing and comparing two rocky intertidal communities on the nearby Capricorn Coast.

The 'fire ecology' report will take the format of a scientific paper (but not including an Abstract).

The 'rocky intertidal community' report simply will be a series of numerical analyses and graphing treatments, each with a brief sentence or two interpreting the analytical results.

Please note successful completion of both reports will require basic to intermediate skills in the use of Microsoft Word (for tabulating data, inserting photographs/maps etc., constructing and formatting your reports) **and** Microsoft Excel (for spreadsheeting and charting/graphing data). If your skills are not strong in these areas, you are advised to undertake practice, or utilise in-built help sources, and/or Internet videos and other instructions to improve your skills sooner rather than later. A summary presentation of relevant Excel skills will be provided during the CBP by a CQU Academic Learning Centre (ALC) staff member, but you are advised not to be dependent upon this session for your total Excel skill development.

Importantly, while data collection is conducted in teams, each report is to be **an individual's** written report of the ecological field project work. That is, whatever your role in the team or the comparative degree of your contribution to the team (design, data gathering, analysis) the writing up and presentation of data is to be your own original work culminating in **your** report (the exception, of course, are the data used as these should be shared within your team, and any common references cited). Plagiarism and weakly paraphrasing the work of another, even that of a team member, will **not** be acceptable, tolerated, or treated lightly.

Students will be expected to source learning materials/research and read around topics in the unit, as need and interest dictate, using resources such as science journal and magazine publications, other texts, reputable web sites and so on, as part of CQUniversity's focus on lifelong learning and self-directed independent learning.

Assessment Due Date

To be negotiated at residential school (combined block practicum) but typically within three (3) weeks of the end of the BIOL13031 combined block practicum.

Return Date to Students

Review/Exam Week Friday (12 Oct 2018)

Weighting

25%

Minimum mark or grade

45% of total marks available for this activity.

Assessment Criteria

The evaluation of this assessment will be as follows:

1. evaluation of your 'rocky intertidal community' project component will be criterion-referenced according to the number and accuracy of prescribed (at residential school) treatments applied to your data, and
2. evaluation of your 'fire ecology' project report will be according to the assignment evaluation criteria published below.

Grade	Standard
High Distinction (HD)	(1) Responds fully to assignment. (2) Presents own synthesis of ideas involving rigorous critique and analysis. (3) Comprehension of good ecological experimental design as presented in the <i>BIOL13031</i> unit materials is clearly evident. (4) Expresses viewpoint clearly and persuasively. (5) Begins and ends effectively. (6) Provides adequate supporting arguments, evidence, examples, and details. (7) Is well organised, sequenced, integrated, and unified. (8) Adequately and correctly acknowledges and documents sources. (9) Original text with no instances of plagiarism or weak paraphrasing. (10) Is free of errors in spelling, word choice, punctuation, grammar, and format. (11) Maintains a level of excellence throughout, and shows originality and creativity in realising (1) through (10).
Distinction (D)	Realises (1) through (11) fully and completely, and demonstrates overall excellence, but shows little or no independent thought, incomplete critical analysis, or little originality or creativity.
Credit (C)	Realises (1) through (11) adequately, and demonstrates overall competence but contains a few, relatively minor errors or flaws. A Credit submission might show great independent thought, critical analysis, originality, and creativity, but these qualities do not make up for poor or careless writing, or lack of adequate attention to detail. A Credit work typically looks and reads like a next-to-final draft.
Pass (P)	Fails to realise some elements of (1) through (11) adequately, and contains several, relatively serious, errors or flaws, or many minor ones. A Pass submission typically looks and reads like an early draft.
Fail (F)	Fails to realise several elements of (1) through (11) adequately, and contains many serious errors or flaws, and usually many minor ones too. A Fail submission typically looks and reads like a very rough first draft or even a zero draft.

(Adapted from Angelo, 1998)

Please note a minimum achievement level is set for this assessment item (i.e., you must equal or exceed this set minimum achievement level for you to be considered for a passing grade for this unit overall, irrespective of your achievement in other assessment components in this unit).

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Submission Instructions

These field project reports should be submitted online electronically as a single Word document (only doc or docx file), by the due date (unless approval is granted for later submission in response to application received by email before the due date to the lecturer).

Learning Outcomes Assessed

- Comprehend and analyse the elements, concepts, and theories of population and community structure and dynamics.
- Comprehend and evaluate the selected elements, concepts, and theories of evolutionary ecology.
- Integrate and apply your knowledge of population, evolutionary, and community ecology to real world situations.
- Develop further and utilise the skills necessary to undertake ecological fieldwork successfully and to analyse ecological data.
- Comprehend and apply the concept, and its elements, of good experimental design.
- Integrate your comprehension of ecological theory with your comprehension and application of good experimental design to allow you to draw sound conclusions from ecological study.
- Communicate your knowledge and findings clearly both orally and in writing.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

3 'Fire ecology' project seminar

Assessment Type

Presentation

Task Description

You will need to access the specific requirements, advice, and resources published on our unit Moodle site (click on the appropriate link in the 'Assessment' box), however a general description is published here.

In the closing stages of our residential school (combined block practicum or CBP), students in their project teams will present their findings from their 'fire ecology' fieldwork projects. Students will present as a team, sharing the presentation duties equally among team members, in the form of a relaxed research seminar, to the class in a lecture theatre. Seminar format should approximate the primary sections of a scientific paper (i.e., Materials & Methods, Results, Discussion (including deficiencies, sources of error, improvements, further research), and Conclusion), and include suitable acknowledgement of literature sources and team members. In any case, this assessment is meant to occur in as relaxed, informal, and stress-free an environment as possible, and still be professional and informative.

Time is built in to our CBP for preparation for this activity, and bringing your own laptop is most helpful in this (rather than needing to access university computer labs).

Success in this activity is not based on the elaborateness or 'prettiness' of presentations but rather their content, and effectiveness in communication.

Students will be expected to source learning materials/research and read around topics in the unit, as need and interest dictate, using resources such as science journal and magazine publications, other texts, reputable web sites and so on, as part of CQUniversity's focus on lifelong learning and self-directed independent learning.

Assessment Due Date

During the final stages of the residential school (combined block practicum) 30 Aug - 1 Sept 2018).

Return Date to Students

At the close of the residential school (combined block practicum) 30 Aug - 1 Sept 2018).

Weighting

10%

Minimum mark or grade

45% of total marks available for this activity.

Assessment Criteria

Students will be expected to source learning materials/research and read around topics in the unit, as need and interest dictate, using resources such as science journal and magazine publications, other texts, reputable web sites and so on, as part of CQUniversity's focus on lifelong learning and self-directed independent learning.

Each team member will be evaluated against a maximum total of 30 marks. While students in a team are expected to present as a team (dividing the presentation equally among team members), individual performances will be evaluated according to the following criteria: presentation quality (mark out of 10), and handling of questions (mark out of 10). The team as a whole will be judged for overall seminar content (mark out of 10), and this mark will be applied to all team members. Thus each team member will initially receive a mark out of 30 which will be divided by 3 to produce a mark out of 10 (to scale achievement to the 10% weighting for this activity).

A minimum achievement level is set for this assessment activity (i.e., you must equal or exceed this set minimum achievement level for you to be considered for a passing grade for this unit overall, irrespective of your achievement in other assessment components in this unit).

The mark sheet used to evaluate the presentations is published on the unit Moodle site, and summarised below.

Seminar assessment form

Group members' names	Presentation* (/10)	Overall seminar content (/10)	Handling of questions** (/10)	TOTAL (/30)	MARK (/10)

Project title:

Marker's comments:

Note

*'Presentation' to include consideration of conciseness, clarity, delivery, effectiveness of use of any aids (e.g. PowerPoint, OHPs, drawings on board, etc.), and completion in the time allotted.

***Handling of questions' to include consideration of confidence shown, good recall of work done, not unsettled by unexpected questions, not defensive but a respectful and scientific approach, not being afraid to say 'I don't know', appropriate reference to reported 'areas for further work' and/or 'areas for improvement'/'sources of possible error', and general participation/enthusiasm/ teamwork in answering questions.

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Offline Group

Submission Instructions

Presentation is delivered live during the final stages of the residential school (combined block practicum) 30 Aug - 1 Sept 2018).

Learning Outcomes Assessed

- Comprehend and analyse the elements, concepts, and theories of population and community structure and dynamics.
- Comprehend and evaluate the selected elements, concepts, and theories of evolutionary ecology.
- Integrate and apply your knowledge of population, evolutionary, and community ecology to real world situations.
- Develop further and utilise the skills necessary to undertake ecological fieldwork successfully and to analyse ecological data.
- Comprehend and apply the concept, and its elements, of good experimental design.
- Integrate your comprehension of ecological theory with your comprehension and application of good experimental design to allow you to draw sound conclusions from ecological study.
- Communicate your knowledge and findings clearly both orally and in writing.

Graduate Attributes

- Communication
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

Examination

Outline

Complete an invigilated examination.

Date

During the examination period at a CQUniversity examination centre.

Weighting

50%

Length

120 minutes

Minimum mark or grade

45% of total marks available for this activity.

Exam Conditions

Closed Book.

Materials

Dictionary - non-electronic, concise, direct translation only (dictionary must not contain any notes or comments).

No calculators permitted

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?



Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem