

Ngā whakamārama / Course outline - 2024

BIOL305-24SU1 (C)

Practical Field Botany

0.125 EFTS 15 te hua / 15 points

Summer Course

Whakamahuki / Course description

Practical Field Botany is an intensive, 8-day summer course designed to teach students and professionals basic skills in field botany. It is targeted at students who intend to seek employment in areas such as field ecology, conservation, biosecurity, taxonomy and systematics. It is also of interest to members of the workforce who need to acquire or upgrade taxonomic skills, e.g., from Crown Research Institutes, the Department of Conservation, local and regional councils, and botanic gardens, and those with employment in horticulture or education. The course is designed to accommodate participants with various entry levels: from students with limited plant knowledge to experienced career professionals. BIOL305 is a ‘flipped-classroom’ course in which traditional lectures are replaced by field-based projects and associated workshops and discussions.



Āhuatanga Taura / Graduate Profile

This course will provide students with an opportunity to develop these UC Graduate Attributes (GP) and Kaupapa (K) (www.canterbury.ac.nz/study/graduate-profile/students/what-are-the-graduate-attributes/):

- GP1 Critically competent in a core academic discipline.
- GP2 Employable, innovative and enterprising.
- GP3 Biculturally competent and confident: K3 Traditional and contemporary realities of Māori society.
- GP4 Community engagement.

Hua ako / Course learning outcomes and Aromatawai / Associated assessment

At the end of the course, students are expected to be able to:

- Explain the role of New Zealand plant species in Te Ao Māori, using examples (*assessment: pre-course assignment; GP3: K3*).
- Spot-identify c. 80 species that are commonly found in various ecosystems in the Southern Alps (*assessment: mid-course test and final exam; GP1&2*).
- Use traditional and online taxonomic keys to identify plants and to confirm identifications using an herbarium collection, literature and online resources (*assessment: mid-course test and final exam; GP1&2*).
- Construct taxonomic keys (*assessment: assignment during workshop; GP1*).

- Collect and prepare botanical specimens for scientific purposes and to record associated ecological data (*assessment: Assignment 1: Collecting and preparing herbarium specimens*; GP1&2).
- Independently prepare and develop a reference collection with notes about diagnostic characters and ecological characteristics that serves as a practical aid to plant identification and recognition (*assessment: Assignment 2: The portable reference collection*; GP1&2).
- Make decisions regarding plant collecting that are in accordance with regulations and ethical considerations and that minimise environmental impact (*assessment: final exam*; GP2).
- Find the currently accepted scientific name for a plant, understand classifications and name changes and use names to access information about New Zealand plants (*assessment: final exam*; GP1&2).
- Taking and editing high-quality photographs of plants for scientific purposes and plant identification, and engaging with the INaturalist community (*assessment: final exam and Assignment 3: Plant photography*; GP1,2&4).
- Understand basic ecological and systematic concepts and processes that are relevant to understanding patterns of botanical diversity in the Southern Alps (*assessment: final exam*; GP1).

Pūkenga ngaio / Transferable skills

The following skills are developed in this course:

- Collecting biological field data. Important for research and in governmental and non-governmental organizations (GP1&2).
- Plant identification. Essential in organismal biology, conservation, and biosecurity (GP1&2).
- Collecting, documenting, and preserving biological specimens. Key in, amongst others, ecology, systematics and conservation (GP1&2).
- Independent and self-motivated learning. A life-skill that is important in any career (GP2).
- Finding, understanding, and using information in literature and on the internet. These are very general skills that are essential in many careers (GP2).
- Verbal communication. Expressing yourself clearly and concisely is important when you are attending meetings, having a telephone conversation, giving presentations, or teaching/training (GP2).
- Written communication. Many employers require employees to have good written communication skills (GP2&4).

Aromatawai / Assessment

Mid-course test:	5%
Final exam:	60%
Assignment 1: Collecting and preparing herbarium specimens	10%
Assignment 2: The portable reference collection	20%
Assignment 3: Plant photography	5%

Venue and area

The venue for the Practical Field Botany course is the University of Canterbury Cass Mountain Research Area, 105 km west of Christchurch in the mountains of the Waimakariri Basin. It is located near a wide range of habitats with a huge diversity of plants and animals. The field station provides comfortable accommodation, laboratory facilities, and internet access with the natural world at the doorstep. The course includes field excursions to the Waimakariri Basin, Southern Beech forest, Temple Basin or Otira Valley, and the Cragieburn Forest Park.

Wātaka / Timetable

9 – 16 January 2024: reading of course materials as preparation for the course (at home).

16 January 2024, afternoon: travel from UC campus to Cass.

17 – 23 January 2024: field excursions and other course work

24 January 2024, morning: final exam and handing in course work; afternoon: travel back to UC campus.

25 January – 5 February 2024: completing and submitting plant photography assignment (at home).

(UC provides all transportation to, from, and at the Cass region)



Recommendations

"I cannot state strongly enough how professional, informative, supportive and enjoyable this course was. The lecturer and other staff were able to convey information in an incredibly intense time frame to a range of students with widely varied levels of understanding in the subject. This course and the teaching involved surpassed any positive expectations I had before enrolling" 2017 Student in teaching evaluation.

"It was a great introduction to alpine botany and was good preparation for vegetation monitoring work for DOC. It gave me much more confidence with keying out plants": Briar Smith, DOC.

"Thanks again for your part in the delivery of Biol305, it was a wonderful course and highly relevant to many of our work projects": Samantha Gale, DOC.

"I'm totally hooked on botany now, I absolutely loved the course! I have my first botanical survey to do next week, great timing!": Marcia Dale, Ryder Consulting Limited.



Teaching survey results

(Score out of 5)

	2022	2021	2020	2019	2018
Well organised	4.36	4.47	4.75	4.71	4.73
Communicates well	4.55	4.53	4.81	5.00	4.93
Stimulated interest	4.91	4.60	4.75	4.71	4.80
Good attitude	4.64	4.53	4.94	4.86	5.00
Overall effective lecturer	4.73	4.60	4.94	5.00	4.93

Fees (include all course materials, transportation, accommodation, and food)

- Domestic course fee: see <https://www.canterbury.ac.nz/courseinfo/Mygetcourses.aspx>.
- Student Services levy: see <https://www.canterbury.ac.nz/get-started/fees/student-services-levy/>.

Pūkenga / Teaching staff

- Assoc. Prof. Pieter Pelsler (*kairuruku akoranga* / course coordinator), Julius Von Haast rm 530, +64 3 3695228; pieter.pelsler@canterbury.ac.nz
- Matt Walters, Julius Von Haast rm 432, +64 3 3695211; matt.walters@canterbury.ac.nz

Enrolment opens 1 October 2023

<https://www.canterbury.ac.nz/get-started/summer-school/how-to-enrol/>



Information about some of the plants featured in the course

- An illustrated checklist of the flora of the University of Canterbury Cass Mountain Research Area: <https://www.canterbury.ac.nz/life/facilities/field/cass/flora/>
- BIOL305 INaturalist observations: <https://www.inaturalist.org/projects/uc-biology-305-practical-field-botany/>

RULES, REGULATIONS, AND WHAT TO DO WHEN THINGS GO WRONG

[updated March 2023]

If in doubt: ASK! The course coordinator is happy to answer questions. All staff involved in the course are available for advice on specific issues.

What do I do if I have to miss a test/exam or if my performance was impaired?

In Biological Sciences, we require a satisfactory level of achievement in both the theoretical aspects of the discipline and in practical activities. **This means you must attend all class activities (labs, tutorials, fieldtrips)** and submit all items of assessment unless you have a very good reason not to (e.g. medical reasons) and if this has been approved by your course coordinator.

If you feel that **illness, injury, bereavement or other extenuating circumstances beyond your control** prevented you from completing a **test/exam** worth 10% or more of the total course assessment, or if these circumstances affected your performance in such assessments, you should apply for Special Consideration. Applications for Special Consideration should be submitted via the Special Consideration website <http://www.canterbury.ac.nz/study/special-consideration/> *within five working days* of the assessment or its due date. You should also notify the course coordinator. If you apply for Special Consideration because of medical reasons, you should visit a doctor within a reasonable timeframe (application form available on the website above or from the Student Health Centre).

The Special Consideration provisions are intended to assist students who have covered the work of a course but have been prevented by illness or other critical circumstances from demonstrating their mastery of the material or skills at the time of a test/exam – **they do not excuse you from doing the test/exam** within a reasonable time agreed with the course coordinator.

What do I do if I have to miss a quiz or assignment or if I need an extension?

You cannot apply for Special Consideration if you miss an assessment that is not a test/exam, such as a quiz, lab report, essay, literature review or other assignment, or if the test/exam is worth less than 10% or more of the total course assessment. If this happens or if you need an extension because of **illness, injury, bereavement or other extenuating circumstances beyond your control**, please contact the course coordinator and arrange an alternate activity and/or submission date. You should also do this if you have to miss a laboratory, tutorial or field trip.

What are other valid reasons to miss an assessment or mandatory course activity?

The Special Considerations policy (<https://www.canterbury.ac.nz/about/governance/ucpolicy/student/special-consideration-procedures-and-guidelines/>) outlines only a few kinds of activities that UC considers valid reasons for missing an assessment or mandatory course activity other than those outlined above. These include **involvement in international or national representative sport or cultural groups**. Holiday trips, birthday parties, weddings, work-related commitments etc. are not given special status in this University policy. Please contact your course coordinator to ask for an alternate activity and/or submission date if you are eligible.

Special Consideration for late discontinuation of a course

Students prevented by **extenuating circumstances** from completing the course after the final date for withdrawing, may apply for Special Consideration for late discontinuation of the course. Applications must be submitted via <http://www.canterbury.ac.nz/study/special-consideration/> no later than five working days after the examination period has finished.

Academic Integrity

It is the responsibility of each student to be familiar with the definitions, policies and procedures concerning academic misconduct/dishonest behaviour. Instances of academic misconduct will be dealt with in a serious and appropriate manner. Students should refer to: <https://www.canterbury.ac.nz/about/ako/academic-quality/academic-integrity/>

Plagiarism

It is essential that you are aware that plagiarism is considered a very serious offence by the academic community, the University and the School of Biological Sciences. Plagiarism is defined as taking content from another work or author and presenting it, without attribution, as if it is your own work. Content here includes text (sentences or major parts of sentences), display items (graphs and tables), and overall structure (the detailed sequence of ideas). Plagiarism includes:

- re-use of previous assignments (even if each individual sentence has been rephrased to say the same thing in different words, if the overall structure is re-used).
- copying of another student's work (with or without their consent).
- the unreferenced use of published material or material from the internet, e.g. cutting and pasting of paragraphs or pages into an essay.
- the generation of text using artificial intelligence technology without disclosure and when it is not intended to be part of an assignment.

For most pieces of in-term assessment you will be given information concerning the use of direct and indirect quotes from previously published work. If you have any doubt about the appropriate use of published material, please speak with an academic staff member. If you are unsure what plagiarism is, seek advice.

It is a School policy that courses will likely that you submit work electronically for subsequent analysis of originality using *Turnitin*. Students agree that by taking courses in BIOL, assessments may be submitted to Turnitin.com for textual similarity review. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Terms and Conditions of Use as posted on the Turnitin.com site.

Where do I hand in assignments and then collect them once marked?

All assignments should be submitted as directed by the course coordinator. Typically, this will be electronically via Learn for on-line grading and for analysis in *Turnitin*. If a hard copy is requested, assignments should be placed in the designated collection boxes in the foyer of the 2nd floor of the School of Biological Sciences (Julius von Haast building, at the top of the stairs). All assignments must be accompanied by a cover sheet signed by you stating that the submitted work is not plagiarised. Cover sheets are available on top of the collection boxes, or you can download one from the Biology website (<http://www.canterbury.ac.nz/media/documents/science-documents/assignment-coversheet.pdf>).

Marked assignments will be returned through Learn or, if in hard copy, can be collected from the School of Biological Sciences reception, unless directed otherwise by the course coordinator. Teaching staff will endeavour to return work as soon as possible, and should contact you if there are likely to be any delays that will prevent return within the maximum 4-week timeframe.

What if I can't get it finished in time?

Reports and assignments should be handed in on time. Extensions may be granted if you have a valid reason (see above). **If you require an extension, you should request one from the course coordinator** (or the lecturer responsible for marking the work), with as much notice as possible. Please do this BEFORE the deadline for the assignment. **If you have been given an extension and you have been asked to submit a hard-copy of your work, you should hand the work DIRECTLY to the course coordinator** (do not put it in the drop box as it may not be cleared after the due date).

If an extension has not been granted:

- work handed in within 1 hour of the deadline: penalty of up to 5 percentage points of the mark for the assignment (e.g., a mark of 75% might be reduced to 70%).
- work handed in 1 – 24 hours after the deadline: penalty of 10 percentage points of the mark for the assignment (e.g., a mark of 75% is reduced to 65%).
- work handed in 1 – 7 days after the deadline: penalty of 15 percentage points of the mark for the assignment (e.g., a mark of 75% is reduced to 60%).
- work handed in more than 7 days after the deadline will not be marked or earn credit.

What if I have written more than the word or page limit?

If there is a word limit on an assignment, it is usually there to stop you doing too much work and to encourage you to write succinctly. You can be up to 10% over without too much worry, but if the length increases beyond that your mark may suffer due to failure to follow the requirements. If you find yourself way over the word limit talk to the lecturer concerned about how to get your assignment to an acceptable length. Unless specifically advised that there is flexibility, you must adhere to the word limit indicated.

What if I fail part of the course?

In Biological Sciences, we require a satisfactory level of achievement in both the theoretical aspects of the discipline and in practical activities. This means you must attend all class activities and submit all items of assessment unless you have a very good reason not to (e.g. medical reasons). **A student must attain an average score of at least 40% for in-course assessments (e.g. assignments, reports, quizzes) and an average score of at least 40% in the exam and/or tests, AND score at least 50% overall for the course, to be awarded a passing grade. See the course outlines for clarification of the assessment items included in each category and ask the coordinator if you are still unsure.**

What's the best way to give feedback?

We welcome constructive feedback at all times – help us to make this a valuable course for you. We endeavour to remain approachable at all times. If you would rather give feedback anonymously, please use the online course survey or talk to lab demonstrators, or your class rep (who will all report back to the staff-student liaison committee that includes a representative from each of the undergraduate classes). Class representatives will be selected from each class at the start of course.

What's the best way to complain?

If you feel you have not been fairly treated during this course, please raise the issue with the lecturer or course coordinator in the first instance. Other avenues include your class rep., who can raise issues anonymously, or the UCSA education coordinator.

Grading

A+	90% or above
A	85 – 90
A-	80 – 84
B+	75 – 79
B	70 – 74
B-	65 – 69
C+	60 – 64
C	55 – 59
C-	50 – 54

A restricted pass (R) **may** be awarded to those who are close to a pass (i.e. an overall score of 48-49.9%) AND who have achieved at least a 40% overall score in both in-course assessment and tests/exams. If an R grade is awarded you gain credit for the course but **cannot continue into papers that require this course as a pre-requisite**. NB. The R grade is only available at 100 and 200 level - it cannot be awarded for third year papers.

Failing grades: D 40-49 E 0-39