

EART 29200 Professional Development and Project Preparation: Semester 2

Welcome back to the second semester of your second year. In the first semester, your tutorials mainly focused on learning how to write a good scientific report. This semester, the tutorials will focus on preparing for your Year 3 (or Year 4) independent project. While it may seem early to be starting this, it takes time to research your chosen area of interest, and to develop a sensible research question and to plan what tools or techniques you might use to address it.

The aim of this semester's tutorials will be to select a theme for your individual research project, and to produce a report containing a critical literature review and project proposal. The submission deadline is **09:00 on Friday 3 May 2024**. Turnitin submission portals for each programme are on Blackboard, under the Assessment and Feedback tab.

Date week beginning	Week no.	General topic	Homework
29 Jan	20	Introduction to research projects and project selection process. Discussion of what makes a good independent project.	Review the project selection booklet
5 Feb	21	Discuss research interests and project topics. How to formulate a project plan or budget.	Think about project selection. Contact potential supervisors
12 Feb	22	How to formulate a research question, aims and objectives.	Discuss your top three or four project choices with potential supervisors
19 Feb	23	Discussion of analytical or computational techniques, health and safety, risk assessments, logistics.	Friday 23 February – Deadline for submitting Project Selection Form.
26 Feb	24	<i>Tutorial – as decided by your academic tutor.</i>	<i>Programme directors review project selection forms and allocate projects.</i>
4 Mar	25	LECTURE: An Introduction to Writing Introductions and Critical Literature Reviews. <i>Tutorial – as decided by your academic tutor. Discussion of key references for project, and structure of report.</i>	Monday 4 March – check your assigned project. Begin literature searching and reading
11 Mar	26	LECTURE: How to Cite and Reference the Scientific Literature. <i>Tutorial – as decided by your academic tutor. Opportunity to request help and/or feedback</i>	Literature searching and reading
18 Mar	27	Non-regular teaching week	Literature searching and reading. Report drafting
25 Mar-7 Apr	28-29	<i>Easter break</i>	<i>Literature searching and reading. Report drafting</i>
8 Apr	30	<i>Field courses</i>	
15 Apr	31	Individual meetings for advice and feedback on progress	Report drafting and writing
22 Apr	32	Individual meetings for advice and feedback on progress	Report writing
29 Apr	33		Report submission deadline 09:00 on Friday 3 May

How to make your project choices

Use the project selection booklet (available on Blackboard) to identify three or four projects that you are interested in. It is your responsibility to arrange to discuss these projects with the named supervisor(s) to find out more about what they will involve. Then complete a project selection form indicating your top three project choices in ranked order of preference. The link to the project selection form will be on the EART 29200 Blackboard main page and will be available from Monday 12 February.

The deadline for ALL students to submit the Project Selection Form is **Friday 23 February 2023**, the end of Teaching Week 4. *If your form is submitted late, you will miss the project allocation process and you risk missing out on your preferred choice(s) of project. If you do not complete a Project Selection Form, your programme director will assign you to a project tailored to your pathway.*

In Teaching Week 5, the Programme Directors will review student choices and match students to the available projects. Each academic supervisor will be able to supervise up to a maximum number of students; for most academics this will be **six**, but for others it is one or two students. You may want to take this into account when making your project selections.

Based on past experience we anticipate that some projects or supervisors will be over-subscribed. When this occurs, students will be matched to projects using a lottery approach. We are using a lottery system because your student representatives on the Student-Staff Liaison Committee told us that you thought a lottery system would be fairer than a first-come first-served system. We will endeavour to honour students' ranked project selection preferences wherever possible, but please note that because of the lottery system we can't guarantee that every student will be allocated one of their three ranked preferences. If we're not able to offer one of your three preferred titles then your programme director will contact you to offer alternative options that match your skills and interests.

Students will be notified of their allocated project at the start of Teaching Week 6.

Preparing your report: General guidelines and suggested structure

Report length: minimum 2500 words, maximum 3000 words (excluding figures, tables, captions and references).

The exact content and structure of your report will vary depending on your chosen project topic. Anticipate that about two thirds of your report will be literature review, and about one third will focus on your project proposal. A suggested report structure is provided below.

- Title: An appropriate and engaging title for your report
- Introduction (background, problem statement, response to the problem statement including the purpose of the report, scope of the report, structure of the rest of the report) *[300–400 words]*
- Critical literature review *[1600–1800 words]*
 - A synthesis of the published literature on the topic/theme of your project divided into suitable subsections
 - Discuss, evaluate, and synthesise the current state of scientific knowledge, any areas of controversy or competing hypotheses, and any areas of current uncertainty
 - Summarize future directions for scientific research and enquiry leading to your science question
- Project proposal *[600–800 words]*
 - Introduce the science question that your project will try to answer
 - Make it clear how your project follows from the scientific framework discussed in your literature synthesis and evaluation
 - Your aims and objectives
 - A brief description (and justification) of the techniques you will apply
 - A preliminary work plan, such as a Gantt chart
- References *[The majority of your references should be primary literature from peer-reviewed journals]*

Figures and tables within the text are encouraged.

Your project proposal may also need to include some logistical information, such as a completed risk assessment, COSHH forms, and/or ethics approval. Risk assessments are essential for field work and lab-based activities. COSHH forms are to do with any hazardous materials you plan to use in the lab. You should discuss these details with your academic tutor and nominated project supervisor. Most of the logistics information will be submitted as part of your project selection form.

EART 29200 Grade descriptors for literature-based project proposals: Guidance notes

% Mark	Literature review, analysis and interpretation	Project proposal	Resources, references and citations	Organisation and presentation
	<ul style="list-style-type: none"> • Thoroughness (breadth and depth) and originality in the treatment of the topic • Relevance of the information and accuracy of interpretation • Evidence of critical analysis • Discussion of gaps or opportunities for the proposed research project 	<ul style="list-style-type: none"> • Clarity of research question, aims and objectives • Framing of research question in the context of the literature review • Description of scientific approach (data collection, proposed methods) • Evidence of project management plan, e.g. Gantt chart 	<ul style="list-style-type: none"> • Range and balance of published literature and other resources • Appropriate citations to relevant literature • Accuracy of references and citations throughout the text and reference list • Correct format of citations and reference 	<ul style="list-style-type: none"> • Organisation and logical structuring of the review • Balance between sub-sections • Use and presentation of figures and tables • Coherent writing that flows • Precise and concise scientific writing • Use of English, and attention to detail (formatting, spelling, grammar, punctuation, etc.)
>90	Outstanding in all areas; clear evidence of critical analysis throughout; thorough and justified project proposal; exceeds the standard that would be expected for second-year students.			
80–89	Excellent in all areas; evidence of critical analysis throughout; detailed project proposal; work of a very high standard.			
70–79	Very good in all or most areas; evidence of critical review; detailed project proposal; but with minor errors or deficiencies in accuracy of information or use of resources.			
60–69	Good overall, with the focus more on reporting the literature rather than critical review of it. Some errors or deficiencies such as irrelevant information, inappropriate weighting of some sections, a few errors in citation of references, inadequate quality of some figures or tables.			
50–59	Satisfactory in all or most areas demonstrating some effort to understand and report the topic and explain the project proposal, although there may be irrelevant information and errors and deficiencies in content, references, figures and tables.			
40–49	Meets the basic criteria , but coverage of the topic is too vague, with deficiencies and errors in the use and citation of resources; little explanation of project proposal; little attention to detail and organisation.			
30–39	Poor in most or many areas, demonstrating a lack of understanding of the topic, with little effort to review the literature; minimal explanation of project proposal; minimal use of resources; little attention to detail.			
20–29	Unsatisfactory overall, with serious deficiencies; very little content of substance and little effort to use available resources; unsatisfactory project proposal; very poor attention to detail.			
<20	Fails to meet even the most basic criteria ; most information will be missing, irrelevant and incorrect; no project proposal; no literature or referencing; no attention to detail.			