

PARTNERS ACADEMIC SUMMER SCHOOL 2024 Syllabus for Biological Sciences

Subject Area

This syllabus is for PARTNERS applicants seeking to progress to the degrees of:

BSc (Hons) Biology

BSc (Hons) Biology (Cellular and Molecular)

BSc (Hons) Biology (Ecology and Environmental)

BSc (Hons) Zoology

BSc (Hons) Marine Biology

BSc (Hons) Marine Zoology

BSc (Hons) Marine Biology and Oceanography

BSc (Hons) Animal Science

BSc (Hons) Agriculture

BSc (Hons) Agriculture with Honours in Farm Business Management

BSc Hons Sustainable Land & Business Mng

BSc (Hons) Earth Science

BSc (Hons) Environmental Science

Aims

To allow students to demonstrate their potential to succeed in specified degree programmes by showing a grasp of entry-level subject-specific knowledge, understanding, cognitive and subject-specific skills.

To provide students with a range of activities (lectures, seminars, virtual learning environment and independent study), at a level appropriate for those about to enter a Degree Programme, which will extend their biological sciences knowledge and skills beyond those learned and taught previously. Through which they can demonstrate their ability to grasp new concepts, appreciate the variety of biological sciences disciplines and the interdisciplinarity of their chosen degree and carry out practical biological investigations, assimilate and communicate biological information. It will also be an opportunity to work in groups.

Learning Outcomes

A good knowledge and understanding of ...

• The biological topics covered during the summer school, including an appreciation of the breadth of biological systems, including agriculture and marine, their diversity and application.

The ability to apply this knowledge and critical understanding to...

- The completion of the formatively assessed "Biological Project Report" which will require students to search for, assimilate, comment on and present information on biological topics some of which will require research and background reading, not covered in the taught element of the Summer School.
- The ability to acquire and evaluate biological knowledge from a variety of sources, e.g. lectures, laboratory classes and through independent study; develop hypotheses and test these experimentally; interpret biological information obtained from experiments or published data; communicate biological knowledge in written form

Competence in...

- Awareness of basic field/laboratory skills including preparation of reports detailing experimental results and conclusions; data manipulation and presentation
- Awareness of the correct use of specific items of scientific equipment.
- team working and communication will be developed in readiness for group work and seminars at university

Summer School Syllabus

Essentially, you will be studying the subjects of Biology, Marine Biology; Zoology; Animal Science; Plant Biology; Environmental Science and many over-laps with e.g. Agriculture especially on the field trip to the farm. You will get a flavour from your own degree programme, but also an interesting insight into many of the other allied disciplines within the School of Natural and Environmental Science (SNES), all the while developing skills to help you succeed in Higher Education (University). Your timetable shows you the sessions on campus on Monday and Tuesday. You must attend those in-person at the correct time. There is some independent personal study to do. Sometimes this is clearly defined on Canvas (our virtual learning environment that you will have access to), e.g. Environmental Science 1 or it may be a chance for you to catch up with some additional reading, research or an assignment, or look back over your notes.

On the days that you are not on campus there are resources online for you to work through. We give suggested slots for you to do the work, to help you structure your day, but there is some flexibility. There are some online zoom 'synchronous' sessions for 'question and answer' so if you have any questions, you must be there online at that time.

The Canvas pages for the Biological strand will have full details of what you will be learning and how you will be engaging with the lectures/quizzes/preparation etc, and there are 'office hours' for questions and clarification with Dr Catherine Douglas most days (or you will see her or a member of staff on the day) if you need to ask anything (optional).

When you gain access to Canvas please have a look around to familiarise yourself with the virtual learning environment platform.

Activities for Personal Study

Personal study will include, preparation for academic sessions (where instructed); follow up to academic sessions e.g. directed reading; library search; Canvas quizzes; it may include:

- Preparing for seminars (usually a little interesting reading / research and jotting down notes of interest to feed back to small groups of other students)
- Reading for writing reports on laboratory work
- Literature searching and preparation of text to incorporate in the above report
- Manipulation and presentation of data
- Revision of taught material
- Completion of for example Canvas quizzes.
- Engaging with discussion boards

On-Campus Teaching:

Sunday 30th June (PM), Monday 1st July & Tuesday 2nd July

Online Teaching:

Wednesday 3rd, Thursday 4th & Friday 5th (AM only) July

Formative Assessment Details

The formative assessment will mainly consist of a laboratory report based on your field trip. It will also include completion of the canvas quizzes associated with the different subjects you will be studying.

You will submit a laboratory report based around your field trip. Approximately 1000 words

You will have an opportunity to discuss tips to ensure a good quality submission and how to avoid common mistakes that often students at University make.

You will then submit your assessment to a portal within Canvas (full guidance will be given on the report and how to submit it).

You will receive your formative feedback (pointers to identify good aspects and highlight areas to enhance to help you improve) via the same portal where you submitted your work (Speedgrader in Canvas). Full details will be given on how to access the speech mark comments and the rubric (marking grid). Accessing this feedback is also a condition of the offer.

Hand-in Method Digital

Assessment deadline

Tuesday 9th July 5pm