

MODULE SPECIFICATION TEMPLATE

See the Code of Practice for Quality Assurance for Taught Programmes: Annex B before completing this template - available on <http://www.ukc.ac.uk/registry/quality/code2001/annexb.html> - and the relevant Faculty notes of guidance.

To use this template, download the file and insert text in the sections provided. You should consult your Department Director of Learning and Teaching when preparing a proposal. Directors of Learning and Teaching are required to sign off proposals before submission to the Faculty Learning and Teaching Committee. Please delete all the sections in italics before submission to the Faculty Officer.

- 1 The title of the module
BI600 Final Year Project
- 2 The Department which will be responsible for management of the module
Biosciences
- 3 The Start Date of the Module
January 2005
- 4 The number of students expected to take the module
80
- 5 Modules to be withdrawn on the introduction of this proposed module and consultation with other relevant Departments and Faculties regarding the withdrawal
None - this is an update of the existing BI600 module to incorporate a new type of Final Year Project
- 6 The level of the module (eg Certificate [C], Intermediate [I], Honours [H] or Postgraduate [M])
H
- 7 The number of credits which the module represents
Note: undergraduate full-time students take modules amounting to 120 credits per year and postgraduate full-time students take modules amounting to 180 credits per year for a Masters award
30
- 8 Which term(s) the module is to be taught in (or other teaching pattern)
Spring
- 9 Prerequisite and co-requisite modules
None
- 10 The programmes of study to which the module contributes
Biochemistry
Biochemistry with a Sandwich Year
Biochemistry with a Year in Europe
Biochemistry with Medical Biosciences
Biochemistry with Cell and Molecular Biology
Biochemistry with Biotechnology
Molecular and Cellular Biology
Molecular and Cellular Biology with a Sandwich Year
Molecular and Cellular Biology with a Year in Europe
Microbiology

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Microbiology with Medical Biosciences
Microbiology with Biotechnology
Microbiology with a Sandwich Year
Biomedical Sciences
Biomedical Sciences with a Sandwich Year
Forensic Biology
Biology

- 11 The intended subject specific learning outcomes and, as appropriate, their relationship to programme learning outcomes

Students taking laboratory projects should, in addition to generic learning outcomes 1-5 below, have

- An understanding of how to design and execute an experiment and how to record data
- Enhanced existing and acquired new experimental skills
- Developed abilities to identify and solve practical problems
- An awareness of the safety implications of laboratory work and knowledge of good laboratory practice

Students taking dissertation projects should, in addition to generic learning outcomes 1-5 below, have

- Developed and in-depth understanding of an advanced research topic within the fields of Biochemistry, Microbiology, Cell and Molecular Biology or Biomedical Sciences
- Developed a clear and concise style of scientific writing that is both informative and lucid
- Developed skills in the retrieval of scientific information from journals and through electronic searches
- Developed ideas for novel experiments, clearly designed to address specific questions within the chosen topic. Furthermore, to understand the limitations and the practicability of the experimental process

Students taking computing/web projects should, in addition to generic learning outcomes 1-5 below, have

- Acquired more advanced computing and bioinformatics skills

Students undertaking business projects should, in addition to generic learning outcomes 1-5 below, have

- An appreciation of how scientific research may be translated into business ideas
- An understanding of the factors that are important in planning and preparing a business plan

Students taking communication projects should, in addition to generic learning outcomes 1-5 below, have

- Developed an in-depth understanding of an advanced research topic within the fields of Biochemistry, Microbiology, Biomedical Sciences or Cell and Molecular Biology.
- Developed a clear and concise style of scientific writing which is both informative and lucid
- Developed ability to simplify complex information
- Gained an appreciation of how knowledge must be adapted to suit the audience
- Gained experience of presenting scientific information to a general audience
- Developed ways to make science accessible, interesting and fun

- 12 The intended generic learning outcomes and, as appropriate, their relationship to programme learning outcomes

On completion of projects students should have:

1. An appreciation of how research leads to knowledge

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2. An understanding of how technologies may be applied/adapted to address a research question
3. Developed their abilities to work independently and as part of a team - self-motivation, diplomacy, planning and organisational skills and time management
4. Developed skills in retrieving, appraising critically and integrating information
5. Developed skills in communicating science (oral, written or web formats) and in making and defending scientific arguments

13 A synopsis of the curriculum

Projects are designed by individual members of staff in keeping with their research interests and fall into one of five categories:

1. Laboratory: practical research undertaken in the teaching laboratories, followed by preparation of a written report
2. Dissertation: library-based research leading to production of a report in the style of a scientific review
3. Computing/Web: similar to dissertation projects but including a significant component of computing/bioinformatics work
4. Business: development of a biotechnology business plan
5. Communication: similar to dissertation projects but with an emphasis on presenting the scientific topic to a general, non-scientist audience

14 Indicative Reading List

Reading is entirely project-specific to be discussed with supervisor

- 15 Learning and Teaching Methods, including the nature and number of contact hours and the total study hours which will be expected of students, and how these relate to achievement of the intended learning outcomes

Early in the Autumn term, projects are assigned to students by the project co-ordinator (a member of academic staff), where possible in accordance with student choice. Students then meet individually or in small groups with their project supervisor to discuss the objectives of the project and obtain guidance on background reading. During the Autumn term students write a brief literature review on the project topic (assessed as part of Stage 3 "Skills" modules) providing them with a good background before embarking on the project work.

The main project activities take place in the Spring term. Students taking laboratory projects spend 192 hours (24 hours per week for 8 weeks) in the lab planning, carrying out and documenting experiments. A further 108 hours are allowed for background reading and report writing. There are informal opportunities to discuss the project work and relevant literature with the supervisor and other laboratory staff. Formal meetings may be arranged at the discretion of the student and supervisor. Students undertaking non-laboratory projects are based in the library or, occasionally, in the laboratory; they are expected to dedicate 300 hours to their project work. Non-laboratory students are strongly encouraged to meet with the supervisor at least once a week to discuss progress and ideas and to resolve problems. At the end of the formal project time, students are allowed time to complete the final project report, although they are encouraged to start writing as early as possible during the Spring term. The supervisor reads a draft of the report, provided it is handed in by an agreed time, and provides feedback on content and style.

- 16 Assessment methods and how these relate to testing achievement of the intended learning outcomes

All projects are assessed under the following headings with the distribution of marks reflecting the nature of the project:

1. Supervisor's rating of student performance: 30% (lab and computer projects), 15% (dissertation and communication projects)

