**MODULE CODE** BIO1324  
**MODULE TITLE** Fundamental Skills for Biosciences  
**LECTURER(S)** Dr Sara Burton (co-ordinator), Dr Nicky King, Dr James Cresswell  
**CREDIT VALUE** 15  
**ECTS VALUE** 7.5  
**PRE-REQUISITES** None  
**CO-REQUISITES** None  
**DURATION OF MODULE** 1 semester  
**TOTAL STUDENT STUDY TIME** 150 hours

**AIMS**
This module aims to equip stage 1 students with a variety of practical and transferable skills in areas including teamwork, scientific writing (including referencing and avoiding plagiarism), study skills (including essay writing, lecture note taking, use of library and databases, use of subject specific software and databases e.g. for BLAST searches), basic laboratory skills and safety issues, experimental design, data handling, display and interpretation, basic statistical analysis, PDP (Personal Development Planning), and employment/career issues. All of these are necessary skills to enhance performance at stage 1-3 (course assessment work and exams, laboratory practicals and research projects), as well as to improve employability. This module is an essential pre-requisite for all stage 2 modules.

**INTENDED LEARNING OUTCOMES**
After completing the teaching and learning activities within this module you should be able to:

**Module specific and discipline specific skills**
1. Demonstrate knowledge and understanding in general laboratory investigations in biosciences.
2. Demonstrate knowledge of essential facts and theory in experimental design and data analysis.
3. Describe and begin to evaluate aspects of research in the biosciences with reference to textbooks.
4. With some guidance, deploy established techniques of analysis, practical investigation and enquiry within the biosciences.

**Personal and key skills**
5. Communicate ideas effectively by written and visual means.
6. With guidance, study autonomously.
7. With guidance, select and properly manage information drawn from books, journals and the internet.
8. Interact effectively in a group and understand team work issues.

**LEARNING/TEACHING METHODS**
The module will be delivered by: 10 x 1 h lectures, 4 x 3 h lab practicals, 4 x 1 h tutorials, 4 h Team Development Programme.

**ASSIGNMENTS & ASSESSMENTS**
Team Development Programme (half day) and various tutorial tasks including data display and interpretation, library and database use.

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<tr>
<th>Component</th>
<th>%</th>
<th>ILOs tested</th>
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<tbody>
<tr>
<td>Laboratory practicals - group worksheet and competency sign-off</td>
<td>33</td>
<td>1,4,8</td>
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<tr>
<td>Scientific essay (1000 words)</td>
<td>33</td>
<td>3, 5-7</td>
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<tr>
<td>1 h C.A.Test (MCQ)</td>
<td>34</td>
<td>1-3,6,7</td>
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<tr>
<td>MCQ Test on plagiarism</td>
<td>Pass req’d.</td>
<td>6,7</td>
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**SYLLABUS PLAN**
4 h Team Development Programme
10 x 1 h lectures covering: general study skills, general laboratory procedures, lab books, units and calculations; safety; presentation skills; data handling & statistics, time management, employability issues.
4 x 1 h tutorials covering generic skills in biosciences (e.g. lecture note-taking, library and database use, data display and interpretation, essay writing, revision styles).
5 x 3 h laboratory practicals covering: chemical preparation, basic lab techniques, GLP, standardisation and safety aspects of laboratory work, experimental design and execution, aseptic technique and microscopy.
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<thead>
<tr>
<th>INDICATIVE BASIC READING LIST</th>
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<tbody>
<tr>
<td>Practical skills in Biosciences, a custom book for Exeter University BIO1324 students compiled by Dr Burton and Dr King published by Pearson Education</td>
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<td>DATE OF LAST REVISION</td>
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