

Semester 1 Studies

In recognition of the fact that some candidates may not have studied a full range of sciences at “A” level, we have introduced a module – Foundation Science - for all students in the first semester (except MNutr, Environmental Science and Environmental Biology) to provide further help and guidance in these specific areas. Subjects covered in this module will be introductory level Chemistry, Physics, Mathematics and Statistics together with some practical data manipulation skills. The level at which these subjects are taught will allow revision and will re-introduce some of the concepts dealt within an A-level course. These sciences will be applied subsequently in the specialist subjects you will study from Semester 2 onwards.

In response to suggestions from previous cohorts of first year students, we have put together a book list of relevant texts to support three of the four core modules for the majority of students entering the School of Biosciences. **Please note that some of the modules listed below are not core for all degrees (see foot notes).**

If you wish to undertake some background reading before entering University, it would be best to start with one or more of the below texts. We recommend that students (except BSc Agricultural and Environmental Science, Environmental Science and Environmental Biology) have access to their own copy of “Biology” by Solomon, Berg and Martin during the first year of their course. **However, please note that you are not required to have bought or read these books in advance of your arrival.**

Module	Suggested Reading
D211P1 Genes and Cell ¹	“Biology” Edited by Solomon, Berg and Martin (International Student Version) Tenth edition ISBN 0538741430 Thompson Publishing Services Peter J. Russell, iGenetics: Pearson New International Edition: A Molecular Approach (3 rd Edition) Pearson, 2013. ISBN-10: 1292026332
D21BF2 Foundation Science ²	In this compulsory module you will be studying basic Physics, Chemistry, Mathematics and Statistics. Standard A-Level textbooks in these disciplines will provide useful background reading, although the syllabus does not follow a specific text since the content is designed to meet the future requirements of studying for a degree in the School of Biosciences. For mathematics we recommend: “Understanding Mathematics” by Keith Gregson. The libraries at Sutton Bonington and University Park have many copies as well as an electronic version. Parts of the Chemistry Syllabus are based on the book: “Essential Chemistry for Biochemistry” (Wood, E.J. & Myers, A) which can be found on-line at: http://www.biochemistry.org/Portals/0/Education/Docs/BASC01_full.pdf . Many useful web resources are posted on the Moodle site for the module.
D211F3 The Biosciences and Global Food Security ³	“Biology” Edited by Solomon, Berg and Martin (International Student Version) Tenth edition ISBN-13: 978-1285423586. Thompson Publishing Services Any A-level Physics, Chemistry or Mathematics text books
Environmental Science Students:	
C111E1 Global Environmental Processes	Earth System Science (Jacobson, Charlson, Rodhe and Orians) Academic Press 2000 or Schlesinger W.H. & Bernhardt E.S (2013). Biogeochemistry, An analysis of global change. Third Edition. Published by Academic Press, Elsevier. ISBN 978-0-12-385874-0
C111E5 Environmental Geoscience	Skinner B.J., Porter S.C. and Park J. Dynamic Earth: An introduction to Physical Geology. Published by Wiley.

Environmental Biology

Students studying Environmental Biology will be advised of key texts during the first semester

¹ Module is not taken by BSc Agriculture (Business Pathway) BSc Environmental Biology, BSc Environmental Science, BSc Food Science, BSc Nutrition and Food Science students

² Module is not taken by MNutr (Dietetics), BSc Environmental Biology, BSc Environmental Science students

³ Module is not taken by BSc Environmental Science, BSc Environmental Biology students