MODULE DESCRIPTOR

Module Title	**Disease and Immunity**
Course Title	BSc (Hons) Bioscience
School	☒ ASC ☐ ACI ☐ BEA ☐ BUS ☐ ENG ☐ HSC ☐ LSS
Division	Human Sciences
Parent Course (if applicable)	
Level	5
Module Code *(showing level)*	ASC_5_441
JACS Code (completed by the QA)	2172
Credit Value	20 credit points
Student Study Hours	Contact hours: 51 Student managed learning hours: 149
Pre-requisite Learning	120 credit points at level 4
Co-requisites	None
Excluded combinations	None
Module co-ordinator	Name: Jin Luo Email: Luoj4@lsbu.ac.uk
Short Description (max. 100 words)	The module looks at various types of disease, including Infectious, congenital (genetic and acquired), degenerative, metabolic (endocrine and nutritional), immunological (auto immune, allergic, inflammatory) and nepotistic. The module also covers the basics of the immune system and diagnosis and therapy
Aims	The aims of this module are: • To give the students an appreciation of the role of disease in history and the perceptions of what is health and ill health. • To transmit a body of factual knowledge on basic immunology. • Survey the various types of disease and methods used to study them including epidemiology, diagnosis and therapy.

Learning Outcomes (4 to 6 outcomes)	Knowledge and Understanding: • Appreciate the many types of disease and the methods of diagnosis and therapy. • Understand the basic structure and function of the immune system. Intellectual Skills: • Learning how to learn - there are numerous aspects to this skill which will be developed e.g. time management, finding information, analysing information critically. • Ability in critical analysis - this key intellectual skill is a major learning outcome of this module and a main indicator of attainment of graduate status. In the module the practical classes will develop this skill. Practical Skills: • Use of information and communication technology - the use of internet data bases and the Internet and CD-ROMs will be expected. Transferable Skills: • Communication skills; oral communication will be required during scheduled classes and practical sessions.
Employability	Immunological research form one of the foundation stones of modern Biotechnology and represent an essential sector of Biotechnological market. Immunological knowledge empowers future graduates and considerably broadens their employment opportunities. Understanding the principles of human diseases and the basics of the underlying pathological processes is crucial for those seeking future employment and career development in the areas of health and medical research and practice.
Teaching and learning pattern	Contact hours includes the following: (please click on the checkboxes as appropriate) √ Lectures ☐ Group Work: ☐ Seminars ☒ Tutorial: ☐ Laboratory ☐ Workshops ☒ Practical ☐ VLE Activities
Indicative content	***Health and Disease.*** Theories of health and ill health in different cultures and times. Types of Disease: infectious, congenital (genetic and acquired), degenerative, metabolic (endocrine and nutritional), immunological (autoimmune, allergic, inflammatory), nepotistic. ***Immunology.*** The non-specific immune system and inflammation. Specific immunity: B cells and antibodies, T cells. Clinical aspects: vaccination, immunodeficiency, hypersensitivity and autoimmunity. Using antibodies: immunoassays and monoclonal antibodies. ***Recovery from disease.*** Immunological aspects and chemotherapy.
Assessment method (Please give details – of components, weightings, sequence of components, final component)	Formative assessment: Summative assessment: This module is assessed via 100% Coursework made up of 2 sub-components as follows: 1. Written report (1500 words) on a disease (student choice) 60% 2. Oral presentation of report 40%

Mode of resit assessment (if applicable)	Formative assessment: Summative assessment: 1. Written report (2000 words) on a disease (student choice) 100%
Indicative Sources ***(Reading lists)***	Core materials: • Janeway's immunobiology - Murphy, Kenneth, Travers, Paul, Walport, Mark, Janeway, Charles c2012 • Prescott's microbiology - Willey, Joanne M., Sherwood, Linda, Woolverton, Christopher J. 2014 • Biology - Reece, Jane B., Campbell, Neil A. 2014 Optional reading: • Immunology: a short course - Benjamini, Eli, Leskowitz, Sidney, Sunshine, Geoffrey 1996 • Investigating disease patterns: the science of epidemiology - Stolley, Paul D., Lasky, Tamar 1998 • Introducing immunology - Staines, Norman A., Brostoff, Jonathan, James, Keith 1993 • Roitt's essential immunology - Delves, Peter J., Roitt, Ivan M. 2011 • Practical skills in biology - Weyers, Jonathan D. B., Reed, Robert, Jones, A. M. 2011
Other Learning Resources	This information will be provided during the course of study.