

BSC (HONS) GENETICS - CK405

Programme Requirements

Code	Title	Credits
Year 1		
Students take 60 credits as follows:		
<i>Core Modules</i>		
BC1001	Introduction to Biochemistry and the Biological Basis of Disease	5
BL1002	Cells, Biomolecules, Genetics and Evolution	5
BT1001	Introduction to Biotechnology	5
CM1200	Fundamentals of Modern Chemistry Part 1	10
GN1001	Principles and Methods in Genetics	10
MB1003	Microbiology in Society	5
MA1001	Calculus for Science Part 1	5
MA1002	Calculus for Science Part 2	5
PY1010	Physics for Biological and Chemical Sciences	10
Year 2		
Students take 60 credits as follows - all listed core modules (55 credits) and 5 credits of elective modules:		
<i>Core Modules</i>		
Biochemistry		
BC2001	Biomolecules	5
BC2002	Principles of Metabolic Pathways	5
Chemistry		
CM2201	Fundamentals of Modern Chemistry Part 2b	10
Genetics		
GN2001	Current Perspectives in Genetics	5
Microbiology		
MB2005	Fundamentals of Microbiology	5
MB2006	Principles of Microbiology	5
Molecular Biology		
ML2001	Introductory Molecular Biology	5
Plant Science		
PS2001	Introduction to Plant Biotechnology	5
Statistics		
ST2001	Introduction to Biostatistics	5
Zoology		
ZY2000	Vertebrate Diversity	5
<i>Elective Modules</i>		
Students take modules to the value of 5 credits from the following:		
Anatomy/Neuroscience		
AN2020	Introduction to Neuroscience, the Brain and Behaviour (5)	5
Plant Science		
PS2002	Ecological Plant Physiology (5)	5
Year 3		
Students take 60 credits as follows:		
<i>Core Modules</i>		
Biochemistry		

BC3001	Structural and Experimental Biochemistry	5
BC3004	Cell Signalling	5
BC3006	Molecular Biology	5
BC3007	Principles of Medical Genetics	5
BC3010	Bioinformatics	5
Plant Science		
PS4006	Sustainable Plant Biotechnology with New Genomic Techniques	5
Genetics		
GN3002	Literature Project on Genetics	5
GN3003	Population and Evolutionary Genetics	5
Microbiology		
MB3006	Genetic Engineering and Molecular Biotechnology	5
MB3007	Molecular Genetics and Genomics	5
MB3008	Immunology: Host Response to Pathogens.	5
Statistics		
ST3001	Biostatistics I	5
Year 4 ¹		
Students take 60 credits as follows - all listed core modules (35 credits), a Research Project (15 credits) and 10 credits of elective modules:		
<i>Core Modules</i>		
Biochemistry		
BC4009	Cancer Biology	5
Genetics		
GN4001	Developmental Genetics	5
GN4003	Genomics and Applications	5
GN4004	Genetics and Society	5
Microbiology		
MB4019	Computational Biology	5
MB4025	Eukaryotic Molecular Genetics	5
Statistics		
ST4001	Biostatistics II	5
Research Project		
GN4002	Research Project	15
<i>Elective Modules</i>		
Students take modules to the value of 10 credits from the following:		
Molecular Microbiology		
MB3001	Medical Microbiology (5)	5
MB4030	Advanced Medical Microbiology and Immunology (5)	5
MB4031	Advanced Virology and Antiviral Immunity (5)	5
Molecular Oncology		
BC4001	Advanced Cell Biology (5)	5
Total Credits		240

¹ **Note:** Specialisation in specific areas is possible.

Examinations

Full details and regulations governing Examinations for each programme will be contained in the *Marks and Standards Book* and for each module in the *Book of Modules*.