**Flowchart** Updated SF Apr21 \*\* Units may be subject to changes each year\*\* Year One **Year Two Year Three** Year Four PH10007 PH20107 PH30031 PH30025 M1.1 Mathematical methods for M2.1 Mathematical methods for Physics M3.1 Simulation Mathematical Physics techniques methods **MATHEMATICS** MUST HAVE A LEVEL MATHS AND THIS STREAM FOR PHYSICS STU. **BE TAKING PHYSICS OPTIONS** MA10202 MA10201 MA30047 MA30063 XX20231 Modelling the Modelling the M3.3 Mathematical Mathematical M1.2 M2.2 dynamics of dynamics of life Mathematical & Statistical Methods biology 1 biology 2 life 1 2 CAN ONLY TAKE ONE STREAM OF MATHS BB40078 Entrepreneurial BB40048 BB30162 BB40109 biology BIOCHEMISTRY Enzymes: BB10263 BB20020 BB20018 Protein Structural biol. In BC4 BC1 BC2 BC3 Mechanisms. Protein structure Enzymology Synthesis, folding BB40083 Biochemistry biotech & evolution and Enzymes in and turnover medicine control biotech, and **MUST ALSO TAKE LS1.1** MUST ALSO TAKE B2.3 OR B2.5 medicine MUST ALSO TAKE B3.3 OR B3.5 **CANNOT TAKE B2.4 WITH Biochem.** CANNOT TAKE B3.4 or B4.4 WITH BB40130 Stream Final Year Project (18 Credit) Biochem. Stream CANNOT TAKE B1.1 OR B1.2 **CANNOT TAKE B2.1, B2.2** Plus 12 credits of biochemistry BC3 plus 6 credits of CANNOT TAKE B3.1, B3.2, B4.1, B4.2 biology from LS1.1 stream in the semester opposite to when you are taking your project BB30161 BB40118 BB40102 BB20160 BB10264 BB20024 BB30045 Systems and Gene regulation Ls1.1 B2.3 The Dynamic B3.3 B4.3 Mol. mechanics Cell biology Dynamic cell 1 Cell membranes & cell developmental cell 2 of disease neurobiology differentialtion **CELL BIOLOGY** BB20219 BB20220 BB30231 BB30169 BB40134 BB40117 Genomics 2 Genomics 1 B2.4 B3.4 Concepts in B4.4 (Not if taking (Not if taking Human Molecular Microbial biochem). systems biology phylogenetics evolution biochem) genomics **GENOMICS** BB40102 BB40164 Mol. mech. of BB30067 Methods of BB20149 BB20028 BB30044 disease B2.5 Mol. genetics of Mol. & cellular B3.5 Mol. & medical Advanced dev. B4.5 researching OR vertebrate dev. neurodegenneuroscience neuroscience genetics BB40082 eration Frontiers of neuro **NEUROSCIENCE** BIOLOGY One of: BB40177 Field course BB30131 BB40128 BB20226 -Microbial evolution BB30208 Evolution in Evolution of OR BB20040 Portugal BB10265 Evolutionary deep time genetic systems BB40193 B2.1 B3.1 B1.1 Concepts in OR Ecology & evolution B4.1 quantitative OR OR Sexual confict BB20173 evolution OR BB40134 BB30132 genetics Behaviour and BB40195 Molecular Sexual conflict **ECOLOGY** ecology Conservation phylogenetics biology BB30129 BB40140 BB40133 BB20032 BB20031 Sensory & BB10266 Plant B3.2 Plant responses B1.2 B2.2 Plant symbiosis Plant signalling B4.2 biotechnology & Life on earth & pathology biotechnology to abiotic stress networks in the env. **PLANT SCIENCE** plants **CANNOT TAKE MORE THAN 3 CANNOT TAKE MORE THAN 2 CANNOT TAKE MORE THAN 3** BB40130 STRANDS OF BIOLOGY IN TOTAL STRANDS OF BIOLOGY IN TOTAL STRANDS OF BIOLOGY IN TOTAL Final Year Project (18 Credit) Plus 18 credits of biology (2 streams) nb. Drop 6 credits from one stream in whichever semester you are taking your project If taking BB40133, choose BB40130 in Semester1. **CANNOT TAKE MORE THAN 2** Choose 2: STRANDS OF CHEMISTRY IN TOTAL CH30211 CH30128 CH40206 CH40037 Chemistry Topics in org 2 Tops in org. Synthesis of Beyond the CH20150 medicinal AND CH10135 chemistry Molecule Organic synthesis, reaction C4.1 CH40098 compounds C1.1 C2.1 C3.1 AND CH30065 Fundamentals of organic mechanisms, & spectroscopy for Techniques in CH40068 Biosynthesis and chemistry CH30235 Physical organic **Natural Scientists** drug discovery Org. chem of biotransformation chemistry CH30230 biomolecules DNA and the Modern World CH40205 CH40162 CH30231 Topics in Advanced CH30127 CH20148 Porous materials inorganic organometallic CH10133 Topics in inorganic Inorganic synthesis, structure & CH30086 chemistry 2 chemistry C1.2 Atomic structure, bonding & C2.2 C3.2 chemistry 1 C4.2 CHEMISTRY reactivity CH40212 Inorganic CH40155 the periodic table CH30203 for Natural Scientists Chemistry in Advanced Contemporary Radiochemistry Structural **Biological Systems** main group Methods chemistry CH30239 CH40207 CH40158 CH30129 Introduction to Topics in Chemistry of Topics in physical Computational physical functional CH20152 chemistry 1 Chemistry for CH10137 chemistry 2 materials C1.3 C3.3 CH30218 C4.3 C2.3 Principles of physical chemistry **Natural Scientists** From molecule to materials CH40222 CH40220 for Natural Scientists Analytical CH30227 Chemical Advanced Chemistry for Advanced theoretical thermodynamics **Natural Scientists** spectroscopic methods in context techniques CH30187 CH30186 CH40165 C3.4 C4.4 Lab Chemistry for Lab Chemistry for Chemistry research 1 (24 credits) Natural Scientists Natural Scientists CH40196 ONLY TAKE C3.4 IF YOU PLAN TO TAKE Chemistry research project (12 C4.4 C4.4 - 24 CREDIT CHEMISTRY PROJECT credits) IN FINAL YEAR

