

Date: 17/03/21

### Exam Panel

- Most exams will be 24 hours open-book.
- Essay plans
- Referencing software
- Further reading
- Past papers
- Drawing figures

### Module Options

Module	Assessment	Notes
BIOC0021 - Advanced Investigative Project in Molecular Biosciences (30)	<ul style="list-style-type: none"><li>- 7500 word literature review on a topic of your choice (90%)</li><li>- Presentation on your review (10%)</li></ul>	<ul style="list-style-type: none"><li>- Assigned a supervisor in an area of interest to you, the project is based around their expertise.</li><li>- Final deadline is mid-term 2.</li><li>- Have 2 internal deadlines: contents page and 2000 word draft.</li><li>- Start early!</li></ul>
BIOC0023 - Specialist Research Project in Metagenomics (30)	<ul style="list-style-type: none"><li>- Coursework (10%)</li><li>- Test (30%)</li><li>- Paper (60%)</li></ul>	<ul style="list-style-type: none"><li>- Course run by Dr Toryn Poolman for the first time so different</li><li>- Coursework - very easy</li><li>- Test - should be based on lab techniques (this year based on analysis for the paper)</li><li>- Lab: sequence microbiome in samples and analyse</li><li>- Uses some coding, but Toryn is very helpful, you don't need to know how to code</li></ul>
BIOC0029 - Specialist Research Project in Protein Folding (30)	<ul style="list-style-type: none"><li>- Test (30%)</li><li>- Paper (45%)</li><li>- Presentation (25%)</li></ul>	<ul style="list-style-type: none"><li>- Very lab heavy (pre-covid)</li><li>- Well organised, the module organiser is attentive and helpful</li><li>- Good if you want to go into academia - reflects</li></ul>

		<p>working in a real lab.</p> <ul style="list-style-type: none"> <li>- Limited places (only 30) - if more than 30 sign up then BIOC0008 result is used as a decider.</li> <li>- Uses python for data analysis (but taught for beginners)</li> <li>- Express and characterise a protein e.g. T4 lysozyme.</li> <li>- Not provided instructions for the lab, you are expected to be more self-sufficient.</li> </ul>
<p>BIOC0014 - Mechanisms of Molecular Machines - 15.</p> <p>Msci Module (choose 2/3)</p>	<ul style="list-style-type: none"> <li>- 40% moodle test</li> <li>- 30% Essay</li> <li>- 30% data analysis exercise</li> </ul>	<ul style="list-style-type: none"> <li>- The 'flagship' module of SMB.</li> <li>- Well-organised</li> <li>- Covers a lot of recent research from lecturers at the forefront of their field.</li> <li>- Follows on nicely from BIOC0008.</li> <li>- 100% c/w so can be a bit stressful during term time (but essay due around examtime)</li> <li>- Great lecture content covering a range of topics.</li> <li>- Very useful for those considering going into traditional biochemical research.</li> <li>- A lot of additional reading is examinable.</li> </ul>
<p>BIOC0015 - Molecular Biology for Biotechnology and therapeutics</p> <p>Msci Module (choose 2/3)</p>	<ul style="list-style-type: none"> <li>- Test (30%)</li> <li>- Website (70%)</li> </ul>	<ul style="list-style-type: none"> <li>- 100% in-course assessment if you don't like exams.</li> <li>- The lectures are random pieces of research from the department with some hints of translational research.</li> <li>- Mostly traditional biochemistry.</li> <li>- You get to make a website which is something you might use in the future.</li> </ul>

		<ul style="list-style-type: none"> <li>- Additional reading is important for the test.</li> </ul>
BIOC0016 - Bioinformatics, computational and systems biology (15)	<ul style="list-style-type: none"> <li>- Coursework (20%)</li> <li>- Exam (80%)</li> </ul>	<ul style="list-style-type: none"> <li>- Very computational</li> <li>- As no module covers these topics in earlier years, the concepts are presented at the surface level and are quite easy to understand. (continuation of bioinformatics practicals in BIOC0003 and antibiotics lectures in BIOC0008)</li> <li>- Online practicals on machine learning, using databases, a little bit of coding</li> <li>- Coursework - analyse mystery sequence</li> <li>- Well-organised</li> <li>- Useful if wanting to go into research - everything is computational now!</li> </ul>
BIOC0017 - Cancer Biology (15)	<ul style="list-style-type: none"> <li>- Questions on research article (20%)</li> <li>- MCQ test (10%)</li> <li>- Exam (70%)</li> </ul>	<ul style="list-style-type: none"> <li>- Run by Matilda Katan (first year proteins) but she is very good at this module</li> <li>- Content is quite a lot but interesting</li> <li>- Tests seem relatively easy</li> </ul>
BIOC0019 - Cellular and Molecular Aspects of Cardiovascular Disease (15)	<ul style="list-style-type: none"> <li>- Journal Club presentation (10%)</li> <li>- Summary of a research article (20%)</li> <li>- Exam (70%)</li> </ul>	<ul style="list-style-type: none"> <li>- Run by Professor Srail (think metal metabolism)</li> <li>- Very content heavy (not sure if just this year)</li> <li>- Have to do a presentation which is quite time consuming and several workshops</li> <li>- Seems like the marking is strict but not certain</li> </ul>
BIOC0020 - Molecular Mechanisms of Gene Regulation and Expression (15)	<ul style="list-style-type: none"> <li>- Coursework (10%)</li> <li>- Exam (90%)</li> </ul>	<ul style="list-style-type: none"> <li>- Coursework - 1000 word analysis of a paper</li> <li>- Similar to BIOC0005</li> <li>- Covers ncRNA, CRISPR (basically all the 'cool' molecular biology)</li> </ul>

		<ul style="list-style-type: none"> <li>- Lecture scheduling can be a bit erratic (5 lectures in 1 week and 1 in another)</li> <li>- Lots of overlap with BIOC0014 and BIOC0030</li> </ul>
<p>BIOC0030 - Advanced Molecular Biology of Protein Regulatory Networks (15)</p> <p>Msci Module (choose 2/3)</p>	<ul style="list-style-type: none"> <li>- Coursework (20%)</li> <li>- Exam (80%)</li> </ul>	<ul style="list-style-type: none"> <li>- Child of CELL0010/11 and BIOC0005.</li> <li>- Coursework is answering questions about a research paper - very strict word counts.</li> <li>- Poorly organised (Ivan Gout)</li> <li>- Gives an overview of common techniques and model organisms used in molecular biology.</li> <li>- More 'traditional' molecular biology.</li> </ul>
<p>BIOL0027 - Diseases of Ageing (15)</p>	<ul style="list-style-type: none"> <li>- Short essay (15%)</li> <li>- MCQ x 3 (15%)</li> <li>- Exam (70%)</li> </ul>	<ul style="list-style-type: none"> <li>- Interesting topic, more theoretical than molecular modules you usually do in biochem</li> <li>- MCQs are very chill, read an article and answer questions on them then have tutorials to go through them</li> <li>- Starts gradually, so you get a good overview - not overwhelming</li> <li>- Not a lot of guidance on the essay</li> <li>- Q and As weren't particularly well organised</li> </ul>
<p>INIM0034 - Molecular Virology (15)</p>	<ul style="list-style-type: none"> <li>- Essay (20%)</li> <li>- Exam (80%)</li> </ul>	<ul style="list-style-type: none"> <li>- Run by Richard Milne (best lecturer imo)</li> <li>- Content is really interesting</li> <li>- Not too heavy</li> <li>- Essay is a very broad title and lets you do it on whatever interests you</li> <li>- All lecturers were very helpful at the Q&amp;As and made it interesting</li> </ul>

<p>INIM0030 - Immunodeficiency and therapeutics</p>	<ul style="list-style-type: none"> <li>- Essay (30%)</li> <li>- Exam (70%)</li> </ul>	<ul style="list-style-type: none"> <li>- The essay has a very open title so you are free to write about whatever interests you</li> <li>- Exam consists of two parts: for part A you write one essay from a choice of six titles. For part B you answer one data interpretation question from a choice of two.</li> <li>- Must have studied INIM0005 but you are at no disadvantage if you haven't studied any other immunology module</li> <li>- Very friendly, helpful module organiser. They are open to suggestions and very organised.</li> <li>- Work load is spread evenly across the term, although you can have up to 3 or 4 lectures a week on an odd week (normally 2 / 3).</li> <li>- Covers basic immunology but focuses mostly on immune deficiencies and their consequence in terms of infections.</li> </ul>
<p>CELL0014 - Dynamic Biological Systems</p>	<ul style="list-style-type: none"> <li>-5% assignment</li> <li>-5% assignment</li> <li>-10% assignment</li> <li>-27% assignment</li> <li>-53% assignment</li> </ul>	<ul style="list-style-type: none"> <li>- Coding background is highly advised, not necessarily in Python, but at least some coding.</li> <li>- Maths is involved, although it's not harder than A-levels Maths.</li> <li>- Very intense module running in term 2, you always have deadlines.</li> <li>- Very cool if looking to stay in fields such as systems biology, synthetic biology, quantitative biology, epidemiology etc.</li> <li>- The professor managing it is amazing and always helpful.</li> </ul>

MSIN0044 - Business for Biosciences	-50% assignment -50% assignment	<ul style="list-style-type: none"> <li>- Pretty relaxed module, no business knowledge needed.</li> <li>- Participation is valued and there is 1 seminar per week.</li> <li>- Quite fun if you don't have any business knowledge but want to explore the interface of business and bioscience.</li> <li>- There is one big groupwork worth 50% of the module.</li> <li>- Grading is pretty harsh though.</li> </ul>

Other modules:

- Biology of aging
- Languages (though have to have done it in 2nd year / be at a certain level).