

**School of Mathematical and Physical Sciences
Department of Mathematics
Foundation Year Handbook**

Introduction

Welcome to the Department of Mathematics, in the School of Mathematical and Physical Sciences (MPS), at the University of Sussex.

This booklet concentrates on the content, teaching and assessment of those foundation-year modules for students of Mathematics that are the responsibility of the Department of Mathematics. This information is also available from other sources and you are particularly encouraged you to make use of the Department's website. There are a number of people who will be able to help you if you have any questions including your Academic Advisor, the Senior Tutor, student mentors, student advisors the MPS School Office staff or myself. We all want you to settle in quickly and get the best out of your time here.

***Professor Michael Melgaard
Head of Mathematics Department***

Course Leader

Dr Carole Becker

c.s.becker@sussex.ac.uk

Mathematics Department Lecturers

All lecturers in MPS have offices in Pevensey 2 or Pevensey 3.

For a full list please see here

<http://www.sussex.ac.uk/mps/internal/people>

MPS School Office

The School Office is located on the ground floor of Pevensey 2 in the foyer.

NB: During Autumn 2020, the office is open Mon-Fri 10:00-15:00.

[In ordinary circumstances the office is open Mon-Fri 09:00-17:00 during term time.]

Details of office staff is listed here:

<http://www.sussex.ac.uk/mps/internal/people>

Telephone number: 01273 873254

Email: mps@sussex.ac.uk

Term Dates and assessment periods

<http://www.sussex.ac.uk/about/term-dates>

All MPS Students Canvas site

There is lots of useful information and announcements on the All MPS Students Canvas site. Join it by following this link:

<https://canvas.sussex.ac.uk/enroll/NJ3A9H>

Teaching and Learning

NB: During the current exceptional global health crisis, many of our normal procedures have been modified for at least the Autumn 2020 term, and may also persist throughout the 2020-2021 academic year. These temporary adjustments are mentioned in red below.

1. Modules

Each module has a number of lectures each week, supported by regular workshops. Some modules also make use of computing labs. The purpose of the lectures is to motivate and explain the module content. Take notes during lectures. **Each module also has either lecture notes online and/or a set book. Lecture notes are available online in Canvas: <https://canvas.sussex.ac.uk/>.** Use these, any handouts and the recommended textbooks to help you tackle the worksheets distributed in lectures. The lectures are given by the academic staff.

2. The essence

You can only become proficient at mathematics if you spend a lot of time with pen and paper working at problems.

3. Workshops

These are given by Tutors, who are mostly postgraduate Mathematics students. You should recognise that the workshops are your main opportunity to get help. Tutors will give guidance, but you are encouraged to discuss the problems with other students.

On each worksheet there will be some problems that are handed in, marked and contribute towards the final mark, as well as extra practice questions which are not marked. **To get the best out of a workshop or exercise class try the problems before you arrive there.**

4. Handing in work

You should always hand in all your coursework, whether you think it perfect or not.

It should be submitted to the module Canvas page via the Assessments tab. This is marked by the tutors and you can view your feedback online. If you do not understand the tutor's comments, please discuss them with the tutor or lecturer.

5. Meeting with your Academic Advisor

NB: During Autumn 2020 these meetings will typically be virtual, via online Zoom. In your first semester you will meet your Academic Advisor in a small group every 1-2 weeks, or on an individual basis, to discuss various aspects of settling in to academic life. The topics can range from attending lectures, studying and working on worksheets with other students, to online learning and preparing for exams. This is also an opportunity to ask any questions you might have in a small group setting about studying at university, and to meet other students.

6. Attendance **NB: During Autumn 2020 attendance will be largely 'virtual', and will be monitored via online activity.**

Attendance at lectures, workshops, computing labs, and meetings with your Academic Advisor is obligatory. If you are ill or know you will be absent, please inform the MPS School Office.

7. Help

ASK when you need help! Students enter university with diverse backgrounds and should never feel afraid to confess ignorance of some notation, fact or technique.

Apart from your workshop tutors and your Academic Advisor, the other main source of mathematical help is via faculty Office Hours. All faculty set aside one hour per week for each module they teach, when they are available in their offices **[NB: During Autumn 2020 Office Hours will typically be 'virtual'(online), via Zoom]**, to give help to any student. The individual times will be displayed on the module Canvas sites and/or on Sussex Direct.

8. Progress

All your marks appear on Sussex Direct at <https://direct.sussex.ac.uk/mle/login.php> Just log in using your IT services username and password.

9. Study skills

The University's S3 guide to study skills gives advice. Visit <http://sussex.ac.uk/S3> and make use of the resources there. The Skills Clouds project explores the idea of using tags and tag clouds to present skills information to students in a visually appealing way. This will be useful in thinking about your future career. Visit <http://www.sussex.ac.uk/tldu/studentskills/skillclouds>

10. Assessment

NB: During Autumn 2020 the following applies:

Foundation Mathematics A (core module) – your module mark will be divided as follows: 20% will come from four problem sets (5% each) and the remaining 80% will come from a final exam.

In ordinary circumstances: as above, similarly for Foundation Mathematics B in the Spring term.

Further Mathematics A (core module) - your module mark will be divided as follows: 12% will come from four exercise sheets (3% each), 8% will come from the average of 10 weekly quizzes (this Mark will appear as POF on Sussex Direct), and the remaining 80% will come from a final exam.

In ordinary circumstances: 16% from 8 exercise sheets (2% each), a mid term test (4%) and a final exam (80%), similarly for Further Mathematics B in the Spring term.

Statistics and Decision Mathematics (core module) – your module mark will be divided as follows: 16% will come from a mid term test, 8% will come from the average of 10 weekly quizzes (this Mark will appear as POF on Sussex Direct), and the remaining 60% will come from a final exam.

In ordinary circumstances: 40% from 2 practical exams (20% each), and a final exam (60%).

Elective module - the assessment for your elective module will depend on the choice you make, and details will be found in the link to the modules page in the section below.

In ordinary circumstances: see individual modules, similarly for the elective module in the Spring Term.

Project (core module in the Spring term) – your module mark will be divided as follows: 30% will come from a 3000 word essay, 10% will come from a Presentation, and the remaining 60% will come from a 6000 word essay.

In ordinary circumstances: the presentation is given to your academic adviser and fellow advises.

The exams for the Autumn term modules will take place in January (Mid-year assessment period), the exams for Spring term modules will take place in May/June (Year-end assessment period).

The pass mark is 40% (out of 100%) for all core modules. The elective module mark may be condoned (accepted at a lower mark) as long as the Stage Mean (the average mark over all modules) is at least 40%.

In ordinary circumstances: written Mathematics exams are held in January (mid-year assessment period) or May/June (Year-end assessment period); tests and other work may also contribute to assessment.

Retakes, where necessary, are taken in May/June (Autumn term modules) and July/August (Spring term modules).

You can also find information on assessment on the Student Systems and Records Office webpage at <http://www.sussex.ac.uk/ssro/studentassessment>.

Module Listing Mathematics degrees (with a Foundation Year)

The details of modules are listed here

<http://www.sussex.ac.uk/mps/internal/departments/mathematics/ug/ugcourses/2017/G1042U>

Select the Assessment tab for full details of all assessments.

On Sussex Direct, your assessment timetable will show you all deadlines and submission points (e.g. School Office). Sometimes, assessment may be based on work to be handed in by a particular deadline. It is important that such deadlines are met: the University applies a system of penalties to assessments that are handed in late. Details can be found in the Assessment and Examination Handbook for Undergraduate Students available on the University website at <http://www.sussex.ac.uk/adqe/standards/examsandassessment>

Extensions are not granted. Past exam papers can be obtained from the web. Foundation Year assessment is for progression purposes only and does not contribute to your degree classification.

You may not enter the First Year unless you successfully complete the Foundation Year.

To qualify for progress to the MMath, you must achieve:

- (i.a) at least 55% overall in the Foundation Year (weighted averaged);
- (i.b) not less than 40% in each module.

To qualify for progress to the BSc, you must achieve:

- (a) at least 40% overall in the Foundation Year (weighted average);
- (b) not less than 40% in each module.

Feedback on your modules

Towards the end of each term you will be asked to fill in an online *course evaluation questionnaire*. The link allowing you to do this will appear on your Sussex Direct page. We have used questionnaires for many years to obtain feedback on our teaching. Student responses have led to changes in method, content and organisation.

Communication

We will use e-mail to send you messages always using your **University email address**. There are also pigeonholes in the Foyer of the Pevensey II Building, which you should check regularly. External mail addressed to you at "Mathematics" at Sussex will be placed in these pigeonholes.

In ordinary circumstances: Marked work not collected from workshops is kept by the lecturer and can be collected at their feedback/office hour or by arrangement. For reasons of confidentiality, please do not leave work in pigeonholes. If the School Office is not open, there is a locked drop-box you can use. To get in touch with a member of staff use e-mail. All staff also have pigeonholes near the foyer in the Pevensey II Building. The postal address is Department of Mathematics, Pevensey II Building, University of Sussex, Brighton, BN1 9QH.

Please visit the Maths web pages

<http://www.sussex.ac.uk/mps/internal/departments/mathematics> regularly. If you change your address, local or home, or your telephone number, please inform the MPS School Office.

Sussex Direct

Go to <https://direct.sussex.ac.uk/mle/page.php?realm=home> and login with your username and password. Sussex Direct contains your timetable, curriculum and module marks to date. Throughout your time at Sussex you can track your progress and results here.

Canvas

Go to <https://canvas.sussex.ac.uk/> and login with your username and password. Canvas is your online resource for lecture notes and other information about the modules you are taking.

Further Documentation

You can find the syllabus for each Maths module in the on-line Module Directory at <http://www.sussex.ac.uk/mps/internal/departments/mathematics/modules>

The written *module document* provided by the lecturer will give extra information:

- a book list;

- the nature and frequency of workshops;
- how the solutions to set exercises will be made available;
- information about any tests that will be set;
- the formal assessment arrangements.

The lecturer will also give out worksheets, indicating which questions you should hand in for marking.

Books and Equipment

You are required to purchase (or access as an ebook from the library) a copy of Bostock and Chandler's book 'Pure Mathematics 1' published by Nelson Thornes, and G James' book 'Modern Engineering Mathematics' published by Pearson (2001). You may find it helpful to purchase other books recommended by lecturers. You can also borrow books from the University Library. You are expected to provide your own file paper (lined and graph).

Calculators and Computing

During the term, you may use any calculators or computers you like when you are learning the material. But only a very restricted list of calculators (see the Assessment and Examinations Handbook for Undergraduate Students for more details) can be used in formal examinations. In particular, calculators with text or graphics capability, that you may already own, will NOT be permitted in the exam room even though you may use them for coursework beforehand. The University has an extensive network of computers; many of them are open access, 24 hours a day. Do take the opportunity this offers to become even more computer literate and proficient than you already are. You will be given an e-mail address and you should check your e-mail box frequently as this route will be used to send you messages, both individually and as a group. You will find that all lecturers will put material, such as solutions to exercises, or lecture notes, on the web sites linked to their modules. The University's computing system supports many packages, including MATLAB and MAPLE; these enable calculations to be done efficiently and also symbolic manipulation to be performed.

Maths Society/Mathematics Staff Student Committee (MSSC)

The Maths Society aims to run social and academic events for students in the department as well as giving a forum for the Maths student reps and lecturers to meet to discuss any concerns regarding teaching and curriculum. The Maths Society Committee meets every two to three weeks during term time and aims to arrange at least one social event per term for both students and staff, including a Maths ball in the spring term. If you are interested in joining the Committee or becoming a student rep please contact the Society. The Maths Society has a Facebook group:

<https://www.facebook.com/SussexUniversityMathsSociety>

Help on Academic Issues: Your Academic Advisor & Senior Tutor

You will be assigned a member of faculty who will normally be your Academic Advisor throughout your time as an undergraduate. Your Academic Advisor is likely to be the lecturer on one or more modules, but will also be a source of advice throughout your studies and after. You will probably want your Academic Advisor to act as a referee when you apply for jobs so make sure that he/she gets to know you. At the end of each term your Academic Advisor will fix a time to discuss your progress with you. It is important that you receive this feedback on your progress, to identify your strengths and weaknesses. If you want to request a change of Academic Adviser please contact the School Office. The Senior Tutor

(Professor James Hirschfeld) oversees the work of Academic Advisors and is also available to all undergraduates for consultation on academic matters.

Change of elective module

Arrange an interview with your academic adviser, who will check if such a change is feasible. This is usually straightforward if done early enough.

Change of degree course to another School

Arrange to see the Admissions Tutor of the School or Department that you wish to transfer into. He/she will explain the procedures and conditions or refer you to the appropriate person who handles transfers or admissions. Some Schools and Departments may consider transfers only at certain times of the year.

Academic misconduct

<http://www.sussex.ac.uk/adqe/standards/academicmisconduct>

- *Plagiarism*

Do not copy solutions to exercises from some website or other source. Equally, when writing essays or a dissertation, do not copy it from elsewhere.

- *Collusion*

It is permissible to work with other students on the exercise sheets handed out by the lecturers. Just copying someone else's solution is not permitted.

- *Examinations*

NB: During Autumn 2020, all exams will be conducted online, and certain outside materials such as lecture notes are allowed to be used during the exam. The academic misconduct rules related to these will be clearly explained on the School's Canvas pages.

In ordinary circumstances: You may not cheat by taking any written or electronic material into exams.

Plagiarism, collusion, and cheating in exams are all forms of academic misconduct which the University takes very seriously. Every year, some students commit academic misconduct unintentionally because they did not know what was expected of them. The consequences for committing academic misconduct can be severe, so it is important that you familiarise yourself with what it is and how to avoid it. The University's S3 guide to study skills gives advice on writing well, including hints and tips on how to avoid making serious mistakes. Visit: <http://www.sussex.ac.uk/s3/?id=1> and make use of the resources there. You will also find helpful guides to referencing properly and improving your critical writing skills. If you are dealing with difficult circumstances, such as illness or bereavement, do not try to rush your work or hand in something which may be in breach of the rules. Instead you should seek confidential advice from the Student Life Centre.

The full University rules on academic misconduct are set out in the Undergraduate Examination and Assessment Handbook; see

<http://www.sussex.ac.uk/adqe/standards/examsandassessment>

Help on non-academic issues: The Student Life Centre

The Student Life Team will be the first port of call dealing with:

- Personal Concerns
- Student Funding

- Access to Learning Fund
- All Scholarships, Bursaries and Vice Chancellors loans.
- Temporary withdrawal
- Permanent withdrawal
- Help with understanding University procedures

The Centre is located in Bramber House and is open Monday - Friday 9am - 5pm. Please use the contact details below to make an appointment to discuss any of the above issues with a student advisor:

Tel: 01273 87 6767

Fax: 01273 87 3344

Text 'slcentre' to 88020

Web: sussex.ac.uk/studentlifecentre

Email: studentlifecentre@sussex.ac.uk.

Exceptional Circumstances

Extensions on formal assessments and submissions are not granted. If there are exceptional and unforeseen circumstances for late or non-submission you need to claim for exceptional circumstances via your Sussex Direct study pages. This should be done as early as possible and in all cases before final deadlines set by the University. For further information on exceptional circumstances you will need to consult with the Student Life Centre:

<http://www.sussex.ac.uk/studentlifecentre/circumstances>

The general University student handbook can be found at

http://www.sussex.ac.uk/students/essentials/student_handbook/ where useful information can be found, such as University regulations and policy, student discipline, data protection and record keeping, feedback and student representation, the Sussex Student Charter, safety, academic matters, examination arrangements, marking and feedback, mitigating evidence, study abroad, graduation, support and services, student life centre, library, health centre, shops, banks, Careers and Employability Centre, etc.

Disclaimer

The information given in this Handbook should prove useful to all members of the Department, although it is primarily for the benefit of the new Foundation Year students. As far as possible it is accurate and up to date but, as the contents are naturally subject to change, the accuracy cannot be guaranteed.