2019 Mathematics Induction Meeting PG2.01



Monday 9th September 10.00am to 11.00am

What this meeting is for

One goal of this session is to outline the framework for the coming academic year but it is mainly to get you to your first week of lectures successfully.

- Welcome by Prof Andy White, Head of Maths.
- Presentation by Prof Mark V Lawson, First-year Co-ordinator, Mathematics.

Details about individual lecture courses will be provided in the first lecture of each course.

Who am I?

Prof Mark V Lawson

Room: Colin Maclaurin G12

Ext: 3210

Email: m.v.lawson@hw.ac.uk

My role is to oversee your academic progress during your first year.

Your personal tutor will deal mainly with non-academic matters.

However, you can contact me about any issue during your first year here: either I shall be able to help you or direct you to someone who can.

When

This is Welcome Week (week 0).

Next week (beginning 16th September) is week 1 when lectures begin.

The semester ends on 20th December (end of week 14)

Where

You are a student in the Mathematics Department.

The Mathematics Department, the Actuarial Mathematics and Statistics Department (which is a separate department), and the Computer Science Department together form the School of Mathematics, Actuarial Maths and Computer Science known as **MACS.**

These are housed in two connecting buildings: **Colin Maclaurin (CM)**, where the two maths departments live, and **Earl Mountbatten (EM)**, where CS lives.

Your personal tutor

You have each been assigned a personal tutor. During your firstyear, you **MUST** meet your tutor for the following meetings. Just email your tutor to arrange mutually convenient times.

Dates	Purpose
Sem	lester 1
Week 0. September 10 to 13	First meeting
Week 2. September 23 to 27	Check-up
Week 8. November 4 to 8	Progress review/ Pre-exam review
Sem	lester 2
Week 2.	Semester 1 review
Week 8.	Progress review/ Pre-exam review

If you arrange to see your personal tutor and, for some reason, cannot make the appointment, you should contact your tutor as a matter of courtesy to explain why and arrange an alternative appointment.

Communication

- Email. You will be assigned a university email address. This is the only one we shall use in contacting you. If you have problems, please contact the *IT Helpdesk in the library*. It may take a day or two for your emails to work so don't panic!
- For all **IT issues** you should contact the IT Helpdesk which you can do by phone, online or by a personal visit.
- You are expected to check your University email everyday for important messages.
- DO NOT REPLY TO ANY EMAILS REQUIRING INFORMATION OF ANY KIND FROM YOU.
- DO NOT OPEN ANY ATTACHMENTS OF EMAILS FROM PEOPLE YOU DO NOT KNOW.
- If in doubt check with the IS Helpdesk on IShelp@hw.ac.uk.

When your university email address is working, please email me using it.

Information

All the information you need to know about your mathematics degree is posted online at

http://www.macs.hw.ac.uk/students/maths/

The students' guide to mathematics degrees contains all the information about studying mathematics at Heriot-Watt.

I have also set up a **first-year website** where I have posted useful links

http://www.ma.hw.ac.uk/~markl/firstinfo.html

You can also access the guide from there.

PLEASE READ THIS GUIDE CAREFULLY

You have also been provided with a more general guide that also contains information about University rules and regulations.

The easiest way to get information about this university or maths in general is to use a search engine like Bing, Google, Yahoo! etc

For example, if you type in my name you will get access to my homepage. If you type in *mathematics department Heriot-Watt* you will get access to the Department's homepage.

ALL INFORMATION IS ONLINE

Your degree

- A *programme* is the name of a degree. Apart from the MMath degree, all programmes run for 4 years.
- Each year consists of *two semesters* during which all teaching and assessment takes place.
- Within each semester you will study *4 courses*. The exams for each course are at the end of the semester where it was taught.
- Most lecture courses consist of three lectures a week and one tutorial.
- All tutorials start in week 2 unless you are told otherwise.
- Therefore during your first year at university you will take 8 courses: 4 in the first semester and 4 in the second semester.

Lectures.

These have a number of important functions.

- They cover all the material you will be examined on.
- They provide motivation and examples.
- They enable you to pace your studies.

Tutorials.

These also have a number of important functions.

- They provide you with opportunities to ask questions.
- They provide you with opportunities to practice new techniques and deepen your understanding.
- They provide essential exam preparation.
- They provide **feedback** on your progress.

Private study.

You are *expected* to do any work needed to keep up with a course and understand all the material. As a rule of thumb, for each hour in a lecture you should allocate between 2 and 3 hours of private study. In each lecture course, you will receive a list of recommended books where you can find alternative approaches and further exercises.

University v. School

University is not school. Universities operate according to different rules from those in school. It is important not to assume that they are the same.

You are students not pupils. In particular, you are adults and are here because you choose to be.

Your lecturers are not school teachers. They are professional mathematicians (and theoretical physicists) who are all actively engaged in research.

This is your degree. You are not working for us but working for yourself. We are here to help you achieve your goals.

You are *expected* to be here the entire semester.

You are *expected* to attend all lectures and tutorials.

You are *expected* to sit all tests and exams.

You are *expected* not to cheat and to behave in a professional way.

First year programmes For details see *The students' guide to mathematics degrees* (Your time-table lists only first semester courses)

F111 BSc (Hons) in Mathematics			
Year/ Stage	Course Code	Semester	Course Title
1	F17CA	1	Calculus A
1	F17CC	1	Introduction to University Mathematics
1	F77SA	1	Introduction to Statistical Science A
1	F17GC	1	Mathematics in Context
1	F17CB	2	Calculus B
1	F17GA	2	Problem Solving
1	F77SB	2	Introduction to Statistical Science B
2	F17SC	2	Discrete Mathematics

F1H1	MMath (Hons) in Mathematics (5 years)	
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This currently differs from the BSc degree in the first year in requiring higher grades to pass.

Year/ Stage	Course Code	Semester	Course Title
1	F17CA	1	Calculus A
1	F17CC	1	Introduction to University Mathematics
1	F77SA	1	Introduction to Statistical Science A
1	F17GC	1	Mathematics in Context
1	F17CB	2	Calculus B
1	F17GA	2	Problem Solving
1	F77SB	2	Introduction to Statistical Science B
2	F17SC	2	Discrete Mathematics

F1I1	BSc (Hons) in Mathematical Studies
Consult the Course Director	Dr Martin Youngson (M.A.Youngson@ma.hw.ac.uk)

F141 BSc (Hons) in Mathematics with Physics			
Year/ Stage	Course Code	Semester	Course Title
1	B27MW	1	Mechanics and Waves
1	F17CA	1	Calculus A
1	F17CC	1	Introduction to University Mathematics
1	F77SA	1	Introduction to Statistical Science A
1	B27FF	2	Fields and Forces
1	F17CB	2	Calculus B
1	F17GA	2	Problem Solving
1	F77SB	2	Introduction to Statistical Science B

F181 BSc (Hons) in Mathematics with Computer Science (75% and 25% over four years)			
Year/ Stage	Course Code	Semester	Course Title
1	F17CA	1	Calculus A
1	F17CC	1	Introduction to University Mathematics
1	F27SA	1	Software Development 1
1	F77SA	1	Introduction to Statistical Science A
1	F17CB	2	Calculus B
1	F77SB	2	Introduction to Statistical Science B
1	F27SB	2	Software Development 2
1	F17SC	2	Discrete Maths

	F1G1 BSc (Hons) in Mathematics and Computer Science (50% and 50% over four years)			
Year/ Stage	Course Code	Semester	Course Title	
1	F17CA	1	Calculus A	
1	F17CC	1	Introduction to University Mathematics	
1	F27SA	1	Software Development 1	
1	F27IS	1	Interactive Systems	
1	F17CB	2	Calculus B	
1	F27SB	2	Software Development 2	
1	F17SC	2	Discrete Maths	
1	F27CS	2	Introduction to Computer Systems	

F191 BSc (Hons) in Mathematics with a European Language FRENCH			
Year/ Stage	Course Code	Semester	Course Title
1	F17CA	1	Calculus A
1	F17CC	1	Introduction to University Mathematics
1	F77SA	1	Introduction to Statistical Science A
1	C47LF	1	French Intermediate 1
1	F17CB	2	Calculus B
1	F17GA	2	Problem Solving
1	F77SB	2	Introduction to Statistical Science B
1	C47MF	2	French Intermediate 2

F191 BSc (Hons) in Mathematics with a European Language			
Year/ Stage	Course Code	Semester	Course Title
1	F17CA	1	Calculus A
1	F17CC	1	Introduction to University Mathematics
1	F77SA	1	Introduction to Statistical Science A
1	C47LG	1	German Intermediate 1
1	F17CB	2	Calculus B
1	F17GA	2	Problem Solving
1	F77SB	2	Introduction to Statistical Science B
1	C47MG	2	German Intermediate 2

F191 BSc (Hons) in Mathematics with a European Language SPANISH			
Year/ Stage	Course Code	Semester	Course Title
1	F17CA	1	Calculus A
1	F17CC	1	Introduction to University Mathematics
1	F77SA	1	Introduction to Statistical Science A
1	C47LE	1	Spanish Intermediate 1
1	F17CB	2	Calculus B
1	F17GA	2	Problem Solving
1	F77SB	2	Introduction to Statistical Science B
1	C47ME	2	Spanish Intermediate 2

	F1A1 BSc (Hons) in Mathematics with Statistics			
Year/ Stage	Course Code	Semester	Course Title	
1	F17CA	1	Calculus A	
1	F17CC	1	Introduction to University Mathematics	
1	F77SA	1	Introduction to Statistical Science A	
1	F17GC	1	Mathematics in Context	
1	F17CB	2	Calculus B	
1	F17GA	2	Problem Solving	
1	F77SB	2	Introduction to Statistical Science B	
2	F17SC	2	Discrete Mathematics	

F1B1 BSc (Hons) in Mathematics with Finance					
and also F1K1+ Dip					
Year/	Course	Semester	Course Title		
Stage	Code				
1	F17CA	1	Calculus A		
1	F17CC	1	Introduction to University Mathematics		
1	F77SA	1	Introduction to Statistical Science A		
1	C27IE	1	Introductory Economics		
1	F17CB	2	Calculus B		
1	F17GA	2	Problem Solving		
1	F77SB	2	Introduction to Statistical Science B		
1	C37FF	2	Finance and Financial reporting		

F1F1 BSc (Hons) in Mathematical, Statistical and Actuarial Sciences (known as MSAS) and also F1J1+Dip				
Year/ Stage	Course Code	Semester	Course Title	
1	F17CA	1	Calculus A	
1	F17CC	1	Introduction to University Mathematics	
1	F77SA	1	Introduction to Statistical Science A	
1	C27IE	1	Introductory Economics	
1	F17CB	2	Calculus B	
1	F77SB	2	Introduction to Statistical Science B	
1	F77PD	2	Professional Development Planning	
1	C37FF	2	Finance and Financial reporting	

Language electives

If you are taking Maths, MMaths or Maths with Statistics **only** you can if you wish replace **both** Mathematics in context (F17GC) (first semester) **and** Discrete Mathematics (F17SC) (second semester) with **one** language at an appropriate level.

- If you are interested in this option it is vital that you talk to me first and please do so THIS WEEK.
- You will then have to fill in a change of course form to update your records.
- We will treat your language options in exactly the same way as we treat your mathematics options.
- You will be examined in accordance with the rules and regulations of the School of Social Sciences (SoSS). These differ from those in MACS.

PROGRESSION: VERY IMPORTANT

At school you moved from one year to the next automatically. This is not true at university. Moving from one year to the next is called *progression*. In order to progress you have to meet minimum standards which are described in the undergraduate maths guide. But in summary they are as follows.

- You **must** obtain 120 credits. This means no Fs.
- You must gain a minimum grade D in all core maths courses you take. The core maths courses are: F17CA (Calculus A), F17CB (Calculus B), F17CC (Introduction to university mathematics).
 IF YOU DO NOT, YOU WILL NOT BE ALLOWED TO CONTINUE WITH YOUR DEGREE.
- **MMath** and **MSAS** have higher progression requirements than the standard maths degrees.
- If you do not meet the minimum standards for your programme you will not be allowed to progress.
- You **cannot** resit the first-year if it goes badly.
- Please read the course guides for details.

A degree is a certificate of attainment

not a certificate of attendance

When things go wrong

- For *personal problems*, the campus medical centre and student welfare are there to help you with trained professionals.
- Illness, bereavement, and depression are the commonest issues and affect everyone at some times in their lives.
- For *financial problems*, please talk to student welfare and get good advice before you get embroiled with loan-sharks and people who have "henchmen".
- For *academic problems*, please talk to your lecturers, tutors or me.

For one-off problems that might affect your performance in tests or exams, you should complete a *mitigating circumstance form* available from the School Office. Google: *Heriot Watt mitigating circumstances.*

For on-going issues that might affect your studies, you should contact Student Welfare in the first instance.

One of your responsibilities is to keep us informed of anything that may affect your studies. This can either be directly to me or via your tutor.

The Mathematics Society (MathSoc)

This is as active as the people who run it. If you are interested in being involved please email me.

Student Representatives

We need two volunteers to attend the Staff-Student Committee once a semester. The Students' Union provides some training. The School Officer deals with this.

Checklist

1. Ensure that you are enrolled for the correct courses for your programme. Ask your tutor. If in doubt: see me. This is important because if you are wrongly enrolled you will go to the wrong courses and sit the wrong exams.

2. Ensure that your university email (a.non@hw.ac.uk) is working. All communications between the University and you will take place mainly using email. You must check your emails every day and reply to questions.

3. Meet your personal tutor and arrange your next meeting. Your tutor will be the member of staff who will get to know you best and will most likely be writing references for you.

4. Ensure that you have easy access to the following two websites where ALL information can be found:

http://www.macs.hw.ac.uk/students/maths/

http://www.macs.hw.ac.uk/~markl/firstinfo.html

All information you need about your maths degree is available online.

5. Download the myHWU app from then App Store or Google play. This is your gateway to a lot of online information.

6. Ensure that you know what VISION is and how to access it. This is where you will find all course specific information. It can be accessed via myHWU app.

7. Ensure that you understand your timetable (ask your personal tutor if in doubt).

8. Ensure that you know where your lecture theatres are.

REMEMBER!

Check that you are properly enrolled.

Get your University email up and running.

We hope that you will enjoy studying mathematics with us and wish you every success over the next four years!