



UNSW Course Outline

MATH1031 Mathematics for Life Sciences - 2024

Published on the 07 Feb 2024

General Course Information

Course Code : MATH1031

Year : 2024

Term : Term 1

Teaching Period : T1

Is a multi-term course? : No

Faculty : Faculty of Science

Academic Unit : School of Mathematics & Statistics

Delivery Mode : Multimodal

Delivery Format : Standard

Delivery Location : Kensington

Campus : Sydney

Study Level : Undergraduate

Units of Credit : 6

Useful Links

[Handbook Class Timetable](#)

Course Details & Outcomes

Course Description

MATH1031 provides a foundation in techniques in Calculus and Linear Algebra used for mathematical modelling in the life sciences and other disciplines. Applications are presented in interdisciplinary contexts through lectures, videos, and tutorial exercises. This course enhances

students' analytical thinking and problem-solving skills through illustrative examples in lectures, problem-based tutorials and an assignment. Communication skills are developed through active participation in tutorials, by writing clear and logical arguments in the assignment and when solving tutorial problems.

This course is designed for students who need to use mathematical techniques for applications in the life and social sciences and other disciplines and who do not intend to continue to further studies in Mathematics. Although students who do intend to study Mathematics beyond first year can take MATH1031 as a preparation for MATH1131, which does provide the foundation for further study in mathematics.

Course Aims

The aim of MATH1031 is to provide students with an introduction to the most common mathematical techniques used in modelling of real-world problems with an emphasis on applications in the life sciences. Students will learn how to use software as an aid in mathematical modelling and problem solving and gain experience in effective communication of mathematical ideas using technology, in the assignment, and orally in the tutorials.

Relationship to Other Courses

Exclusion(s): MATH1011, MATH1131, MATH1141, MATH1151, DPST1031, ECON1202

This course is not intended for students who propose to study a substantial amount of Mathematics beyond first year level, although it may be taken as preparation for students who need to take MATH1131 but do not have the assumed knowledge requirement.

Course Learning Outcomes

Course Learning Outcomes
CL01 : Apply the concepts and techniques from Algebra and Calculus to solve mathematical problems.
CL02 : Formulate mathematical models using Algebra and Calculus from real world scenarios.
CL03 : Use Algebra and Calculus to solve problems in other disciplines.
CL04 : Use technology as an aid for both routine calculation and solving appropriate mathematical modelling problems.
CL05 : Communicate mathematical ideas, techniques, and results effectively in written form.

Course Learning Outcomes	Assessment Item
CLO1 : Apply the concepts and techniques from Algebra and Calculus to solve mathematical problems.	<ul style="list-style-type: none"> • Mastery tests • Online tests • Assignment • End of term exam
CLO2 : Formulate mathematical models using Algebra and Calculus from real world scenarios.	<ul style="list-style-type: none"> • Mastery tests • Online tests • Assignment • End of term exam
CLO3 : Use Algebra and Calculus to solve problems in other disciplines.	<ul style="list-style-type: none"> • Assignment • End of term exam
CLO4 : Use technology as an aid for both routine calculation and solving appropriate mathematical modelling problems.	<ul style="list-style-type: none"> • Mastery tests • Online tests • End of term exam
CLO5 : Communicate mathematical ideas, techniques, and results effectively in written form.	<ul style="list-style-type: none"> • Assignment • End of term exam

Learning and Teaching Technologies

Moodle - Learning Management System | Blackboard Collaborate | Echo 360 | Möbius Platform, Maple Application

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Mastery tests Assessment Format: Individual	45%	Start Date: Practice tests will be released at least one week before each test. Due Date: See the EXM class in your myUNSW timetable for your Mastery Test time.
Online tests Assessment Format: Individual	10%	Due Date: Expected to complete weekly from Week 2
Assignment Assessment Format: Individual	10%	Start Date: End of Week 5 Due Date: Written submission due Week 8 Friday 4pm; Peer assessment due Week 9 Friday 4pm
End of term exam Assessment Format: Individual	35%	Start Date: During the exam period Due Date: See Moodle for details of your exam date and time.

Assessment Details

Mastery tests

Assessment Overview

The largest component of the assessment in MATH1031 is the Mastery Tests. The Mastery Tests will be supervised on campus during weeks 4, 7 and 10 and are each worth 15% of the overall course mark. You will be provided with the question bank used in these tests at least one week in advance of the test so that you can practice. The practice questions will provide instant feedback during practice and unlimited attempts, and you will be expected to practice solving these questions quickly and accurately so that you can obtain a near perfect score in each Mastery Test. You will be provided with feedback immediately when you complete each Mastery Test.

These Mastery Tests make up 45 of 65 pre-exam marks. If you have not achieved a score of 50/65 or greater in the pre-exam assessments (Mastery Tests + Online Tests + Assignment) by the end of the last week of teaching, you will be offered additional opportunities to re-sit these tests and improve your pre-exam mark up to a maximum of 50/65.

Course Learning Outcomes

- CL01 : Apply the concepts and techniques from Algebra and Calculus to solve mathematical problems.
- CL02 : Formulate mathematical models using Algebra and Calculus from real world scenarios.
- CL04 : Use technology as an aid for both routine calculation and solving appropriate mathematical modelling problems.

Detailed Assessment Description

The largest component of the assessment in MATH1031 is the Mastery Tests (MTs, 15% each). The Mastery Tests will be in-person and taken place in weeks 4, 7 and 10. Information for about how the tests will be posted on Moodle.

- The three Mastery Test 1, 2, 3 will contain a selection of questions from the Mastery Test components in OT1 to OT3, OT4 to OT5, OT6 to OT8, respectively.
- A mark of 80% in each of the Mastery Tests is considered to be a passing level.
- If your pre-exam mark (composed of marks from the online tests, the assignment and the Mastery tests) is less than 50, there will be an opportunity to re-sit each of the Mastery Tests to increase your pre-exam mark up to a maximum of 50 out of 65.
- After the resit opportunity, eligibility to sit the final exam will be determined. Students who at this time have not achieved 50 of the 65 pre-exam marks will not be able to take the final exam but will be permitted to retake any of the Mastery Tests at the same time as the scheduled final exam. In that case the student's final mark will be capped at 50.

Assessment Length

40 minutes

Submission notes

Möbius Platform

Assignment submission Turnitin type

This is not a Turnitin assignment

Online tests

Assessment Overview

You will complete a sequence of 8 weekly Online Tests that are designed to follow the weekly lecture material. Although you are expected to complete these each week in sync with the lectures, you can continue to work on these tests until a final deadline at the end of week 10 and your best 6 of the 8 weeks will count towards your final mark. The Online Tests cover basic skills and include questions requiring the use of the Maple computer algebra system. They provide instant feedback and unlimited attempts, so you are expected to achieve a perfect score in these tests.

Course Learning Outcomes

- CL01 : Apply the concepts and techniques from Algebra and Calculus to solve mathematical problems.
- CL02 : Formulate mathematical models using Algebra and Calculus from real world scenarios.
- CL04 : Use technology as an aid for both routine calculation and solving appropriate mathematical modelling problems.

Submission notes

Möbius Platform

Assignment submission Turnitin type

This is not a Turnitin assignment

Assignment

Assessment Overview

The purpose of the assignment is to improve your mathematical writing by providing feedback on your writing and helping you to identify good mathematical writing. The assignment will be in two parts.

In part A, you will watch several short videos on how the mathematics you are studying in MATH1031 is being used by someone working in a non-mathematical field. You will choose one of these and write a few paragraphs about the video.

In part B, exam style questions will be presented to you on Möbius and your task will be to write solutions to these questions. You will be able to check the correctness of some parts of your answer using Möbius so your main task will be to present your answers well with good explanations of your working.

Your assignment will be due in Week 8 and will complete a peer and self-review in Week 9. Your work will be typed (not handwritten) and you will submit your work online through links on Moodle. After submission you will assess your own work and the work of other students. Tutors will also grade your submission and provide feedback on your writing within two weeks of your submission.

Course Learning Outcomes

- CL01 : Apply the concepts and techniques from Algebra and Calculus to solve mathematical problems.
- CL02 : Formulate mathematical models using Algebra and Calculus from real world scenarios.
- CL03 : Use Algebra and Calculus to solve problems in other disciplines.
- CL05 : Communicate mathematical ideas, techniques, and results effectively in written form.

Assessment information

Standard late submission penalties apply (see *Submission of Assessment Tasks in Other Useful Information*).

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students do not see Turnitin similarity reports.

End of term exam

Assessment Overview

The end of term exam will be a supervised exam during the official exam period and is aimed at students who are seeking a credit or above. In this exam you will demonstrate higher level skills such as solving problems that require techniques from more than one topic area, constructing and solving mathematical models and applying techniques learnt during the term in a novel context.

Hurdle: If you have obtained 50 of the 65 marks from assessments during the term, that is, the sum of the Mastery Tests, Online Tests and Assignment, you will be eligible to sit the end of term exam. If your pre-exam score is less than 50/65, you will be offered further opportunities at the Mastery Tests and Online Tests to improve to pass with a final mark capped at 50.

Course Learning Outcomes

- CL01 : Apply the concepts and techniques from Algebra and Calculus to solve mathematical problems.
- CL02 : Formulate mathematical models using Algebra and Calculus from real world scenarios.
- CL03 : Use Algebra and Calculus to solve problems in other disciplines.
- CL04 : Use technology as an aid for both routine calculation and solving appropriate mathematical modelling problems.
- CL05 : Communicate mathematical ideas, techniques, and results effectively in written form.

Detailed Assessment Description

The Final Examination will be conducted using Möbius. The exam will be conducted in-person in the Anita B. Lawrence Centre Computing Labs. The approximate date and time will be available on myUNSW. Your actual precise date, time and location will be provided on Moodle. Further details of the exam arrangements will be available on Moodle after the final exam timetable is released.

The exam will be marked out of 40. The mark for the exam will be moderated so that a student obtaining a close to full marks in the pre-exam assessment and about half of the marks in the exam will receive a distinction. This means that 20/40 in the exam will be moderated to approximately 10/35. See the General Assessment Information more details of this moderation.

Assessment Length

2 hours

Assignment submission Turnitin type

This is not a Turnitin assignment

General Assessment Information

The assessment structure in MATH1031 is designed so that a pass level is demonstrated in the pre-exam assessment which consists of the Online Tests, the Mastery Tests and the Assignment. The Online Test assesses basic skills and ability to use mathematical software. The Mastery Tests assess basic skills, and the assignment assesses critical thinking, mathematical writing and applications of the basic skills to extended problems

To pass, you must score 50/65 in the pre-exam assessment. There is no requirement to attend the final exam to pass the course.

To obtain a credit, you are expected to easily meet the pass level and do well, but not perfectly, in about one third of the exam. For example, a raw exam mark of 10/40 would be moderated to 5/35 and combine with a pre-exam mark of 60/65 to give a final mark of 65.

To obtain a distinction, you are expected to have a near perfect score in the pre-exam assessment and obtain about half of the exam marks. For example, a raw exam mark of 20/40 would be moderated to 10/35 and combine with 65/65 to give 75.

To obtain a high distinction, you are expected to have a near perfect score in the pre-exam assessment and obtain about 3 quarters of the exam marks. For example, a raw exam mark of 30/40 would be moderated to 20/35 and combine with 65/65 to give 85.

Note:

- You will be able to view your final exam timetable on myUNSW. Details of when this timetable will be released is available on the university website.
<https://student.unsw.edu.au/dates-and-timetables>
- It is important that you understand UNSW's rules for the conduct of assessments and the penalties for academic misconduct. This information can be accessed through myUNSW at:
<https://student.unsw.edu.au/conduct>
- UNSW assesses students under a standards-based assessment policy. For more information on how this policy is applied within the School of Mathematics and Statistics, please refer to the following website:
<https://www.unsw.edu.au/science/our-schools/maths/student-life-resources/student-services/assessment-policies>
- For more information on how UNSW implements special consideration policies for assessments during the term and the Final Examination, please refer to the following website:
<https://student.unsw.edu.au/special-consideration>

Grading Basis

Standard

Requirements to pass course

A mark of 50/65 in the pre-exam assessments, that is, Mastery Tests (45) + Online Tests (10) + Assignment (10), is required to pass this course.

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 12 February - 18 February	Lecture	Lectures begin in Week 1 and continue until Week 10. Week 1 lectures cover: <ul style="list-style-type: none"> • Introduction • Matrix algebra • Matrix applications • Inverse, identity and zero matrices • Matrix equations
	Tutorial	Tutorials begin in Week 1 and continue until Week 10. You have two tutorials each week. Tutorial 1A: Welcome; Revision of basic algebra and trigonometry Tutorial 1B: About online tests; Matrix Algebra
	Online Activity	Start work on the Online Tests and complete one per week for the rest of the term.
Week 2 : 19 February - 25 February	Lecture	<ul style="list-style-type: none"> • Functions • Further trigonometry • Special functions • Limits and continuity • Differentiation
	Tutorial	Tutorial 2A: Matrix applications; Inverse, identity and zero matrices Tutorial 2B: Matrix equations; Functions/further trigonometry
Week 3 : 26 February - 3 March	Homework	Prepare for Mastery Test 1 which is next week.
	Lecture	<ul style="list-style-type: none"> • Calculus of the special functions • Curve sketching • Maxima and minima • Modelling with the exponential function • Revision
	Tutorial	Tutorial 3A: Special functions; Limits and continuity Tutorial 3B: Differentiation; Calculus of the special functions
Week 4 : 4 March - 10 March	Assessment	Mastery Test 1 is this week. The time and location of your test is shown in your timetable on myUNSW as the EXM class
	Lecture	<ul style="list-style-type: none"> • Modelling with the trigonometric functions • Least squares line of best fit • Semi-log plots • Log-log plots • Points, lines and planes in space
	Tutorial	Tutorial 4A: Curve sketching; Maxima and minima Tutorial 4B: Modelling with the exponential function; Modelling with the trigonometric functions
Week 5 : 11 March - 17 March	Homework	Prepare for Mastery Test 2 which is in Week 7.
	Assessment	Assignment questions and information released by the end of Week 5.
	Lecture	<ul style="list-style-type: none"> • Echelon form and row operations • Systems of linear equations with unique solutions • Applications of systems with unique solutions • Systems of linear equations with non-unique solutions • Applications of systems with non-unique solutions
	Tutorial	Tutorial 5A: Least squares line of best fit; Semi-log plots/log-log plots Tutorial 5B: Points lines and planes in space; Echelon form and row operations
Week 6 : 18 March - 24 March	Other	Flexibility Week: There are no classes or assessment deadlines in Week 6.
Week 7 : 25 March - 31 March	Assessment	Mastery Test 2 is this week. The time and location of your test is shown in your timetable on myUNSW as the EXM class.
	Lecture	<ul style="list-style-type: none"> • Matrix transformations • Markov processes • Long term and steady state solutions • First and second order difference equations • Implicit and parametric differentiation
	Tutorial	Tutorial 7A: Systems of linear equations with unique solutions; Applications of systems with unique solutions Tutorial 7B: Systems of linear equations with non-unique solutions; Applications of systems with non-unique solutions
Week 8 : 1 April - 7 April	Assessment	Assignment written submission due Week 8 Friday 4pm. Assignment peer assessment opens Week 8 Friday 5pm.
	Lecture	<ul style="list-style-type: none"> • Related rates • Applications of the integral • Integration by substitution • Integration by parts • Separable differential equations

	Tutorial	Tutorial 8A: Matrix transformations; Markov processes/long term and steady state solutions Tutorial 8B: First and second order difference equations; Implicit and parametric differentiation/related rates
Week 9 : 8 April - 14 April	Assessment	Assignment peer assessment deadline is Week 9 Friday 4pm.
	Homework	Prepare for Mastery Test 3 which is in Week 10.
	Lecture	<ul style="list-style-type: none"> • Linear first order differential equations • Modelling with first order differential equations • Homogeneous second order differential equations • Non-homogeneous second order differential equations • Systems of differential equations - competing species
	Tutorial	Tutorial 9A: Applications of integration; Integration by substitution/integration by parts Tutorial 9B: Separable/first order differential equations; Modelling with first order differential equations
Week 10 : 15 April - 21 April	Assessment	Mastery Test 3 is this week. The time and location of your test is shown in your timetable on myUNSW as the EXM class.
	Lecture	<ul style="list-style-type: none"> • Newton's method - bisection of the interval • Maclaurin series • Partial differentiation • Local maxima and minima in space • Revision
	Tutorial	Tutorial 10A: Homogeneous and non-homogeneous second order differential equations/systems of differential equations Tutorial 10B: Newton's method - bisection of the interval; Maclaurin series

Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

Course Resources

Recommended Resources

Staff Consultations

From Week 2, there will be a roster which shows for each hour of the week a list of names of members of staff who are available to help students in first-year mathematics courses, no appointment necessary. This roster will be announced on the course Moodle and linked in the page on Moodle called "Student Life - Support Resources". See also below: <https://www.unsw.edu.au/science/our-schools/maths/student-life-resources/student-services/consultation-mathematics-staff>

Mathematics Drop-in Centre

The Mathematics Drop-in Centre also provides free help to students with certain first, and second, year mathematics and statistics courses. All first-year MATH courses are supported. In Term 1 2024, the Drop-in Centre will be available both in-person in H13 Lawrence East Lab G12B and online on the Drop-in Centre Moodle page (via Blackboard Collaborate).

The Mathematics Drop-in Centre schedule will be available on Moodle by the end of Week 1.

Please note that no appointment is necessary, this is a drop-in arrangement to obtain one-on-one help from tutors. See also below: <https://www.unsw.edu.au/science/our-schools/maths/student-life-resources/student-services/mathematics-drop-in-centre>

Lab Consultants

For help with the Maple computing component of the first-year courses, consultants will be available via the Drop-in Centre. For more details, see below: <https://www.unsw.edu.au/science/our-schools/maths/student-life-resources/student-services/computing-information/maple-lab-consultants>

Course Evaluation and Development

Feedback will be collected at the end of term via myExperience forms. Your feedback informs our decisions about course organisation and individual lecturer and tutor practices.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Dinh Tran		H13 Anita Lawrence Building East 5107		Tuesday to Friday	No	Yes
Year coordinator	Jonathan Kress		H13 Anita Lawrence Building East 3073			No	No
Administrator	Hilda Cahya		H13 Anita Lawrence Building East 3072			Yes	No
Lecturer	Amandine Schaeffer		H13 Anita Lawrence Building East 4102			No	No
	Thomas Britz		H13 Anita Lawrence Building East 5111			No	No

Other Useful Information

Academic Information

Upon your enrolment at UNSW, you share responsibility with us for maintaining a safe, harmonious and tolerant University environment.

You are required to:

- Comply with the University's conditions of enrolment.
- Act responsibly, ethically, safely and with integrity.
- Observe standards of equity and respect in dealing with every member of the UNSW community.

- Engage in lawful behaviour.
- Use and care for University resources in a responsible and appropriate manner.
- Maintain the University's reputation and good standing.

For more information, visit the [UNSW Student Code of Conduct Website](#).

Academic Honesty and Plagiarism

Referencing is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism.

Further information about referencing styles can be located at <https://student.unsw.edu.au/referencing>

Academic integrity is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage. At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.

Further information about academic integrity, plagiarism and the use of AI in assessments can be located at:

- The [Current Students site](#),
- The [ELISE training site](#), and
- The [Use of AI for assessments](#) site.

The Student Conduct and Integrity Unit provides further resources to assist you to understand your conduct obligations as a student: <https://student.unsw.edu.au/conduct>

Submission of Assessment Tasks

Penalty for Late Submissions

UNSW has a standard late submission penalty of:

- 5% per day,
- for all assessments where a penalty applies,
- capped at five days (120 hours) from the assessment deadline, after which a student cannot submit an assessment, and
- no permitted variation.

Any variations to the above will be explicitly stated in the Course Outline for a given course or

assessment task.

Students are expected to manage their time to meet deadlines and to request extensions as early as possible before the deadline.

Special Consideration

If circumstances prevent you from attending/completing an assessment task, you must officially apply for special consideration, usually within 3 days of the sitting date/due date. You can apply by logging onto myUNSW and following the link in the My Student Profile Tab. Medical documentation or other documentation explaining your absence must be submitted with your application. Once your application has been assessed, you will be contacted via your student email address to be advised of the official outcome and any actions that need to be taken from there. For more information about special consideration, please visit: <https://student.unsw.edu.au/special-consideration>

Important note: UNSW has a “fit to sit/submit” rule, which means that if you sit an exam or submit a piece of assessment, you are declaring yourself fit to do so and cannot later apply for Special Consideration. This is to ensure that if you feel unwell or are faced with significant circumstances beyond your control that affect your ability to study, you do not sit an examination or submit an assessment that does not reflect your best performance. Instead, you should apply for Special Consideration as soon as you realise you are not well enough or are otherwise unable to sit or submit an assessment.

Faculty-specific Information

Additional support for students

- [The Current Students Gateway](#)
- [Student Support](#)
- [Academic Skills and Support](#)
- [Student Wellbeing, Health and Safety](#)
- [Equitable Learning Services](#)
- [UNSW IT Service Centre](#)
- Science EDI Student [Initiatives](#), [Offerings](#) and [Guidelines](#)

School-specific Information

School of Mathematics and Statistics and UNSW Policies

The School of Mathematics and Statistics has adopted a number of policies relating to enrolment, attendance, assessment, plagiarism, cheating, special consideration etc. These are in addition to the Policies of The University of New South Wales. Individual courses may also adopt other policies in addition to or replacing some of the School ones. These will be clearly notified in the Course Initial Handout and on the Course Home Pages on the Maths Stats web site. Students in courses run by the School of Mathematics and Statistics should be aware of the School and Course policies by reading the appropriate pages on the web site starting at: [The School of Mathematics and Statistics assessment policies](#)

The School of Mathematics and Statistics will assume that all its students have read and understood the School policies on the above pages and any individual course policies on the Course Initial Handout and Course Home Page. Lack of knowledge about a policy will not be an excuse for failing to follow the procedure in it.

Special Consideration - Short Extension Policy

The School of Mathematics and Statistics has carefully reviewed its range of assignments and projects to determine their suitability for automatic short extensions as set out by the UNSW Short Extension Policy. Upon comprehensive examination of our course offerings that incorporate these types of assessments, we have concluded that our current deadline structures already accommodate the possibility of unexpected circumstances that may lead students to require additional days for submission. Consequently, the School of Mathematics and Statistics has decided to universally opt out of the Short Extension provision for all its courses, having pre-emptively integrated flexibility into our assessment deadlines. The decision is subject to revision in response to the introduction of new course offerings. Students may still apply for Special Consideration via the usual procedures.

Computing Lab

The main computing laboratory is room G012 of the Anita B. Lawrence Centre (formerly Red Centre). You can get to this lab by entering the building through the main entrance to the School of Mathematics (on the Mezzanine Level) and then going down the stairs to the Ground Level. A second smaller lab is Room M020, located on the mezzanine level through the glass door (and along the corridor) opposite the School's entrance.

For more information, including opening hours, see the [computing facilities webpage](#). Remember that there will always be unscheduled periods when the computers are not working because of

equipment problems and that this is not a valid excuse for not completing assessments on time.

School Contact Information

School Contact Information

Please visit the [School of Mathematics and Statistics website](#) for a range of information.

For information on Courses, please go to "Student life & resources" and either Undergraduate and/or Postgraduate and respective "Undergraduate courses" and "Postgraduate courses" for information on all course offerings.

All school policies, forms and help for students can be located by going to the "Student Services" within "Student life & resources" page. We also post notices in "Student noticeboard" for your information. Please familiarise yourself with the information found in these locations. If you cannot find the answer to your queries on the web you are welcome to contact the Student Services Office directly.

Undergraduate

E: ug.mathsstats@unsw.edu.au

P: 9385 7011 or 9385 7053

Postgraduate

E: pg.mathsstats@unsw.edu.au

P: 9385 7053

Should we need to contact you, we will use your official UNSW email address of in the first instance. **It is your responsibility to regularly check your university email account. Please use your UNSW student email and state your student number in all emails to us.**