UNSW SCIENCE

School of Maths and Statistics

Course outline

MATH5505

Combinatorics

Term 3, 2022

Staff

Position	Name	Email	Room
Lecturer-in-charge	Anita Liebenau	a.liebenau@unsw.edu.au	RC-6105

Please refer to your Timetable on MyUNSW for your Lecture Tut, Lab enrolment days and times.
Timetable weblink: https://timetable.unsw.edu.au/2022/MATH5505.html#S3S

Administrative Contacts

Please visit the School of Mathematics and Statistics website for a range of information on School Policies, Forms and Help for Students.

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

The "Student Notice Board" can be located by going to the "Student Life & resources" page; Notices are posted regularly for your information here. Please familiarise yourself with the information found in these locations. The School web page is: https://www.maths.unsw.edu.au

If you cannot find the answer to your queries on the web you are welcome to contact the Student Services Office directly.

By email   Postgraduate   pg.mathsstats@unsw.edu.au
By phone: 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 state your student number in all emails.*

Course Information

Assumed knowledge / Pre-Requisite: 24 units of level III mathematics or a degree in a numerate discipline or permission of the Head of Department. Note: Course not offered every year - contact School for more information.

Exclusions:

We are aware some course exclusions on the Handbook may be different to the School website. We are in the process of updating this information. Meanwhile, students should be following the Handbook course information with the School website information as a supplement.

Course Aims

This course will present beautiful topics from classical combinatorics, including, but not limited to, the Pigeonhole Principle, Ramsey Theory, matching theory, Latin squares, graphs algorithms, the Inclusion-Exclusion Principle, generating functions, and Polya counting.

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Course Learning Outcomes (CLO)

- CLO1   Demonstrate an appreciation of many combinatorial techniques for counting and enumeration
- CLO2   Show improvement in their ability to select the appropriate technique to solve simple

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Additionally, if you have suffered significant misadventure that affects your ability to complete the course, please contact your Lecturer-in-charge in the first instance.

Academic Skills Support and the Learning Centre

The Learning Centre offers academic support programs to all students at UNSW Australia. We assist students to develop approaches to learning that will enable them to succeed in their academic study. For further information on these programs please go to: