

COURSE OUTLINE

MATH 222 [A01; CNR 12229]: Discrete and Combinatorial Mathematics

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General Course Information

Number of Units 1.5

Pre-requisites MATH 100 and MATH 122; or permission of the department

Lectures, Office Hours, and Assistance

Lectures 1:30 - 2:20 pm Tuesday, Wednesday, and Friday in COR A125 [Lecture begins on September 5 and ends on December 5.]

Office Hours 2:30 - 3:30 pm Wednesday and 10:00 - 11:00 am Friday (DTB A549) [or by appointment (send email to book one)]

Other Help The Mathematics & Statistics Assistance Centre is a large space where students can go to work, on their own or in groups, and to discuss math & stats problems. The Centre is staffed with talented Teaching Assistants who are happy to discuss primarily first and second year course material with you. Please see <http://www.math.uvic.ca/~msassist/index.html> for more information.

Math Club Students in Undergraduate Mathematics and Statistics (SUMS) was founded in 2014 as the reincarnation of a previous undergraduate course union that had been inactive for a few years. Please see <http://www.uvic.ca/science/math-statistics/undergraduate/sums/index.php> for more information.

Course Material and Online Resources

Textbook Introduction to Combinatorics and Graph Theory, Custom Edition for the University of Victoria [which is available at UVic Bookstore]

Course webpage Look at www.uvic.ca/science/math-statistics → Current Students → Undergraduate → Courses → 222; this page contains all the information about the course.

Calculator The only acceptable calculator is the Sharp EL-510R or the Sharp EL-510RNB. It may be purchased at the UVic Bookstore or elsewhere for about \$12. A calculator is permitted in this course.



Syllabus

Chapters 1 - 6; graph theory, basic counting techniques, principle of inclusion and exclusion, orders and relations, generating functions, and recurrence relations. Some topics may be added or omitted, as time permits.

Evaluation and Grading

Your final percentage grade will be computed according to the following scheme.

Homework Assignments	Midterms	Final Exam
Bi-weekly	Oct. 12 , Nov. 23	TBA
30%	24%	46%

Missing Work

If you miss an assignment or a test due to a legitimate reason such as illness, accident or family affliction, you should notify me as soon as possible, and provide a written request to be excused accompanied by supporting documentation. In that case we will apply the following scheme to recover the percentage of the missed work; the percentage of the missed assignments will be added to the midterm(s) if at least one midterm is written; if exactly one midterm is missed then the percentage 12% of the missed midterm will be added to the final examination; if both midterms are missed then the student needs to write a make-up test worth 12% plus the percentage of the missed assignments and 12% will be added to the final examination. If you have any question or concern about your scores on assignments/tests, you need to bring it to my attention within seven calendar days of the date when the assignments/tests are returned to class.

Accessibility Students with diverse learning styles and needs are welcome in this course.

In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the Centre for Accessible Learning (CAL) as soon as possible. The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations <http://uvic.ca/cal>. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

Grading Percentage scores will be converted to letter grades according to the university-wide standard table (Undergraduate: <http://web.uvic.ca/calendar/undergrad/info/regulations/grading.html#>). (Graduate: <http://web.uvic.ca/calendar/grad/academic-regulations/grading.html#>).

Final Examination Off-schedule final examinations (i.e., deferred examinations) are given only in accordance with the university policy as outlined in the Calendar. If you are unable to write a final examination due to illness, accident or family affliction, please refer to the following webpages for detailed instructions how to proceed: Undergraduate: <http://web.uvic.ca/calendar/undergrad/info/regulations/concessions>.



html Graduate: <http://web.uvic.ca/calendar/grad/registration/concessions.html>
Students are **strongly advised not to make plans for travel or employment during the final examination period** as special arrangements will not be made for examinations that conflict with such plans.

Supplemental Examinations. The Department of Mathematics and Statistics does not award 'E' grades or offer Supplemental Examinations in any of its courses.

Policies and Ethics

Attendance The university Calendar states 'Students are expected to attend all classes in which they are enrolled.' (see <http://web.uvic.ca/calendar2014/FACS/UnIn/UARe/AcCo.html>). Our courses are conducted on that basis. If you miss an announcement (information concerning midterms, corrections to assignment, etc.) because you did not attend class, you must accept the consequences of not having learned of the change.

Guidelines on Religious Observances Where classes or examinations are scheduled on the holy days of a religion, students may notify their instructors, at least two weeks in advance, of their intention to observe the holy day(s) by absenting themselves from classes or examinations. Instructors will provide reasonable opportunities for such students to make up work or missed examinations.

Academic Integrity Academic integrity is intellectual honesty and responsibility for academic work that you submit individual or group work. It involves commitment to the values of honesty, trust, and responsibility. It is expected that students will respect these ethical values in all activities related to learning, teaching, research, and service. Therefore, plagiarism and other acts against academic integrity are serious academic offenses.

The responsibility of the institution

Instructors and academic units have the responsibility to ensure that standards of academic honesty are met. By doing so, the institution recognizes students for their hard work and assures them that other students do not have an unfair advantage through cheating on essays, exams, and projects.

The responsibility of the student

Plagiarism sometimes occurs due to a misunderstanding regarding the rules of academic integrity, but it is the responsibility of the student to know them. If you are unsure about the standards for citations or for referencing your sources, ask your instructor. Depending on the severity of the case, penalties include a warning, a failing grade, a record on the students transcript, or a suspension.

It is your responsibility to understand the University's policy on academic integrity: <http://web.uvic.ca/calendar2014/FACS/UnIn/UARe/PoAcI.html>

