

Math 362 Course Outline, Fall 2019; CRN 12189

Web Page: www.math.uvic.ca. Look under course pages, then Math 362.

Days: Tuesday, Wednesday, Friday **Time:** 8:30 – 9:20 **Room:** ECS 124

Instructor: Dr. Kieka Mynhardt

Office: (David Turpin Building) DTP-A541

Office Hours and Assistance

Tuesday, Wednesday	2:30 – 3:30
Friday	10:00 – 11:00

or by appointment (or take your chances with a drop-in), except on Mondays

Centre for Accessible Learning (CAL): Students with diverse learning styles and needs are welcome in Math 362. In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and CAL as soon as possible. The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations. See <https://www.uvic.ca/services/cal/>.

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. See <https://www.uvic.ca/science/math-statistics/current-students/undergraduate/sums/index.php>.

Course Material and Resources

Text: U. Dudley, *Elementary Number Theory* (Second Edition). Dover Publications, Inc., Mineola, NY, 2008.

Topics: Sections 1 – 13, 15 – 18, plus extra material on cryptography (with Section 9) and continued fractions. Topics include: Division and Euclidean algorithms (revision), Unique Factorization Theorem, Linear Diophantine Equations, Linear Congruences and the Chinese Remainder Theorem, Fermat's and Wilson's Theorems, Divisors of an Integer, Perfect Numbers, Euler's Theorem and Function, the RSA algorithm, Primitive Roots, Quadratic Congruences, Quadratic Reciprocity, Numbers in Other Bases, Decimals, Pythagorean Triangles, Infinite Descent and Fermat's Conjecture, Sums of Squares, The Prime Number Theorem (without proof), Continued Fractions.

Calculators: The Sharp EL-510-R/RNB/RTB, are the standard, *and only*, calculators permitted for classroom use in MATH 362. The latest model may be purchased at the UVic Bookstore.

Please note: All lecture notes and course materials that I make available to you, and all exams and quizzes, are my intellectual property, and are made available to you for instructional purposes only. You may not distribute my lecture notes or any exams or quizzes from the course without my permission. To do so, through note-sharing sites or other means, violates the **University Policy on Academic Integrity**. See <https://web.uvic.ca/calendar2019-09/undergrad/info/regulations/academic-integrity.html>

Evaluation and Grading

Assignments: Assignments must be **submitted in class before the lecture starts** on the days they are due, which will be approximately once every two weeks (6 assignments of roughly equal weight). No late submissions will be accepted. Once marked, they will be returned in class.

Discussing work with classmates, including homework to be submitted for marks, is a useful and mathematically healthy practice. The work you submit must be written independently in your own words and reflect your understanding.

Mark for missed or late assignment: 0 (with the exceptions below – see Policies and Ethics).

Approximate assignment dates:

A1	A2	A3	A4	A5	A6
Sept 18	Oct 2	Oct 16	Oct 30	Nov 15	Nov 27

Midterm exam dates:

Midterm 1	Midterm 2
Friday, October 11	Friday, November 15

Final exam entrance requirement:

Students require an average of at least 40% on the midterms to be allowed to attempt the final exam.

Composition of final mark: The final mark will be computed as tabled below; however,

students require an average of at least 50% on the midterms and the final exam to pass the course.

Homework	Midterm 1	Midterm 2	Final
20	16	16	48

Conversion from course percentage to letter grade: For the purpose of GPA calculations, percentage scores will be converted to letter grades according to the university-wide standard table – see

<https://web.uvic.ca/calendar2019-09/undergrad/info/regulations/grading.html>.

Final exam: 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 web pages for detailed instructions how to proceed:

<https://web.uvic.ca/calendar2019-09/undergrad/info/regulations/concessions.html>

Students are strongly advised not to make final plans for travel or employment during the final examination period since special arrangements will not be made for examinations that may conflict with such plans.

Supplemental exams: The Department of Mathematics and Statistics does not award “E” grades or offer supplemental examinations in any of its courses.

Policies and Ethics

Missed work: Academic concessions are available to students who, through no fault of their own, are prevented by circumstances from completing an assignment, writing a midterm, or writing the final exam. Concessions for term work are limited to work of value totalling at most 20% of the course grade. In accordance with UVic policy, academic concessions are considered only in cases of illness, accident or affliction: see

<https://web.uvic.ca/calendar2019-09/undergrad/info/regulations/concessions.html>.

- If an academic concession is granted for term work, your rank on assignment averages (for missed assignments) or rank on the final exam and other midterm combined (for a missed midterm) will be used to estimate a mark for the missed work.
- If you miss a test or assignment due to illness, accident or family affliction, you should notify me as soon as possible and provide a written request to be excused.
- If you have a question or concern about your mark on a test or assignment, you must bring it to my attention **within seven calendar days** of the date when it was returned in class.

Attendance: The university Calendar states “Students are expected to attend all classes in which they are enrolled.” See

<https://web.uvic.ca/calendar2019-09/undergrad/info/regulations/attendance.html>.

Our courses are conducted on this 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: Please let me know at least two weeks in advance if a test or exam has been scheduled on a holy day of your religion.

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 you 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 your responsibility to know them. 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:**

<https://web.uvic.ca/calendar2019-09/undergrad/info/regulations/academic-integrity.html>

Please also see the following web page for important course policy information:

<https://www.uvic.ca/science/math-statistics/current-students/undergraduate/course-policies/index.php>

Course Experience Survey (CES): I value your feedback on this course. When it is time for you to complete the survey you will receive an email inviting you to do so. You will need to use your UVic netlink ID to access the survey, which can be done on your laptop, tablet, or mobile device. Please think about your experience during the course.

Important dates

- Last day for withdrawing with 100% fee reduction: **Tuesday September 17**
- Last day for adding courses: **Friday September 20**
- Last day for withdrawing with 50% fee reduction: **Tuesday October 8**
- Last day for withdrawing without penalty of failure: **Thursday October 31**
- Last day of classes – **Wednesday, December 4**
- Examination period – **December 7 – 21**