Objectives To develop the vocabulary, techniques and analytical skills associated with reading and writing proofs. Emphasis will be placed on understanding basic logical structures, recognition and command over common proof techniques, and precision in language. These skills will be developed through working with number theory, complex numbers and polynomials.

Website Announcements, the course schedule, assignments and other important information will be available on LEARN. It is expected that you will visit the course website at least once per day.

Textbook The course will closely follow the textbook *Language and Proofs in Algebra: An Introduction*. This is the only required reference. A printed copy may be purchased from the UW BookStore located at South Campus Hall. A free PDF of the notes is available on LEARN. You should use version 1.1.

Discussion Forum We will not be using the discussion forum on LEARN. A discussion board has been set up for the course on Piazza. We encourage you to use the forum to discuss course material and solutions to recommended problems. It is also a place to seek clarification on assignment problems but the posting of full or partial answers to assignments is not permitted.

Lectures There are no tutorials. Instructors will lead four hours of lecture per week. It is vital that you attend class regularly. Lecture dates, times and rooms are available online.

Final grade calculation Assignments 10%, Midterm 30%, Final exam 60%.

Assignments There are 11 assignments. Each assignment is worth 1% of your course grade. Only the best 10 assignment grades will count towards your final mark.

Assignments must be scanned and submitted electronically via Crowdmark. Instructions will be provided and students are expected to follow them carefully.

<table>
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<tr>
<th>Assignment</th>
<th>Due Date</th>
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<tr>
<td>Assignment 0</td>
<td>Friday, January 10</td>
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<td>Assignment 1</td>
<td>Friday, January 17</td>
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<td>Assignment 2</td>
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<td>Assignment 5</td>
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<td>Assignment 10</td>
<td>Friday, April 3</td>
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Assignment 0 is due at 5:00pm, and Assignment 1-10 are due at 8:25am. No late submissions will be accepted, regardless of circumstances.

Assignments will normally be available at least one week before they are due and solutions will be posted shortly after the submission deadline. We will mark all of your submitted solutions. Our goal is to provide your grade and our feedback within one week of the submission deadline.

While you are encouraged to work together to solve the assignment problems, the solutions that you submit must be your own work and so should be written up without any consultation with your colleagues. Do not look up full or partial solutions on the internet or in printed sources.
Midterm Exam  A midterm examination will be held from 7:00pm to 8:50pm on Monday, February 10. Details about the midterm will be announced closer to the date. No calculator is allowed.

Final Exam  A 2.5 hour cumulative final examination will be scheduled by the Registrar’s Office during the examination period. No calculator is allowed.

Missed Exams  If you become seriously ill and are forced to miss an exam, you must immediately inform your instructor by email. Once your health has improved, you must also promptly submit a Verification of Illness Form (VIF) to the Mathematics Undergraduate Office (MC 4022). Absence from the midterm will result in its weight being shifted to your final exam. If the final exam is missed and you have obtained a grade of at least 20 out of the possible 40 marks available through the midterm and assignments, then you are eligible for an INC grade.

Obtaining Help  Students are strongly encouraged to seek help if they are struggling with a particular problem or the course material more generally. Instructors’ office hours will be posted on LEARN. The First Year Tutorial Center in MC 3022 and the MKV, V1 or CMH multipurpose room will be staffed by both undergraduate and graduate students to provide assistance on a drop-in basis. The schedules will be linked from LEARN by the end of the second week of lectures.

Academic Integrity  In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. Check the Office of Academic Integrity for more information.

Grievance  A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70, Student Petitions and Grievances, Section 4. When in doubt please be certain to contact the Math Undergraduate Office who will provide further assistance.

Discipline  A student is expected to know what constitutes academic integrity to avoid committing academic offenses and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offense, or who needs help in learning how to avoid offenses (e.g., plagiarism, cheating) or about “rules” for group work/collaboration should seek guidance from the course professor, academic advisor, or the undergraduate associate dean. For information on categories of offenses and types of penalties, students should refer to Policy 71, Student Discipline. For typical penalties check Guidelines for the Assessment of Penalties.

Appeals  A decision made or penalty imposed under Policy 70, Student Petitions and Grievances (other than a petition) or Policy 71, Student Discipline may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72, Student Appeals.

Note for students with disabilities  AccessAbility Services, located in Needles Hall, Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the AccessAbility Office at the beginning of each academic term.

Mental health  If you or anyone you know experiences academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support.

On-campus Resources

- Campus Wellness
- Centre for Mental Health Research and Treatment: Accessible, mental health services for adults, adolescents, children and families in the Region of Waterloo
- Counselling Services: 519-888-4567, extension 32655, Needles Hall North 2nd floor, (NH 2401): counsellingervices@uwaterloo.ca
- MATES: one-to-one peer support program offered by Federation of Students (FEDS) and Counselling Services: mates@uwaterloo.ca
- Health Services: located across the creek from Student Life Centre, 519-888-4096
Off-campus Resources

- **Good2Talk (24/7):** Free confidential helpline for post-secondary students. Phone: 1-866-925-5454
- **Here 24/7:** Mental Health and Crisis Service Team. Phone: 1-844-437-3247
- **OK2BME:** Set of support services for lesbian, gay, bisexual, transgender or questioning teens in Kitchener-Waterloo. Phone: 519-884-0000, extension 213

**Diversity** It is our intent that students from all backgrounds and perspectives be well served, and that students learning needs be addressed both in and out of class. We recognize the immense value of the diversity in identities, perspectives, and contributions that students bring, and the benefit it has on our educational environment.

In particular:

- We will honour students’ requests to be addressed by alternate/preferred names or gender pronouns.
- We will honour students’ religious holidays and celebrations.
- We will follow AccessAbility Services guidelines and protocols on how to best support students with different learning needs.

*We acknowledge that we live and work on the traditional territory of the Attawandaron (Neutral), Anishinaabeg and Haudenosaunee peoples. The University of Waterloo is situated on the Haldimand Tract, the land promised to the Six Nations that includes ten kilometers on each side of the Grand River.*