



MATH511B - Algebra

Tuesday and Thursday, 12:30-1:45pm, MATH 501

Inclusive Excellence is a fundamental part of the University of Arizona's strategic plan and culture. As part of this initiative, the institution embraces and practices diversity and inclusiveness. These values are expected, respected and welcomed in this course.

Description of Course

This is the second semester of a one-year sequence on algebra.

Course Prerequisites or Co-requisites

MATH511A

Contact Information

Instructor: Jack Hall

e-mail: instructorfirstnamelastname at math dot arizona dot edu

Super Teaching Assistant: Anthony Kling

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Course Objectives and Expected Learning Outcomes

The goal for this semester is to learn Galois theory. The remainder of the course will be spent on topics in algebra of interest to the participants (e.g., homological algebra, representation theory, multilinear algebra).

Absence and Class Participation Policy

The UA's policy concerning Class Attendance, Participation, and Administrative Drops is available at <http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop>.

The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable, <http://policy.arizona.edu/human-resources/religious-accommodation-policy>.

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored. See <https://deanofstudents.arizona.edu/absences>.

Required Texts or Readings

For the section on Galois Theory, we will closely follow Lang's *Algebra*. There are many sources that cover similar material. Some standard ones are:

-Dummit & Foote, *Abstract Algebra*:

<http://www.wiley.com/WileyCDA/WileyTitle/productCd-0471433349.html>

-Notes available on Milne's website jmilne.org

-Grove, *Algebra*:

<http://store.doverpublications.com/048643947x.html>.

This one is also available as an e-book through the UA library.

Assignments and Examinations: Schedule/Due Dates

There will be 10 graded homeworks. They will each have 5-10 problems. Of these 10 homeworks, the best 8 of them will count equally towards your final grade.

There will be two midterm exams. Both of these will be in-class and count equally towards your final grade. Tentative dates: Thursdays, February 22 and March 29

There will be a final exam.

Grading Scale and Policies

I will be assigning letter grades. It will be determined from your problem sets (40%), midterm exams (15+15%), and final exam (30%).

Requests for incomplete (I) or withdrawal (W) must be made in accordance with University policies, which are available at <http://catalog.arizona.edu/policy/grades-and-grading-system#incomplete> and <http://catalog.arizona.edu/policy/grades-and-grading-system#Withdrawal>, respectively.

Dispute of Grade Policy: Grades can be disputed up to 1 week after grading.

Honors Credit

Students wishing to contract this course for Honors Credit should email me to set up an appointment to discuss the terms of the contract. Information on Honors Contracts can be found at <http://www.honors.arizona.edu/faculty-and-advisors/contracts>.

Elective Name and Pronoun Usage

This course supports elective gender pronoun use and self-identification; rosters indicating such choices will be updated throughout the semester, upon student request. As the course includes group work and in-class discussion, it is vitally important for us to create an educational environment of inclusion and mutual respect.

Classroom Behavior Policy

To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the tasks at hand and not on extraneous activities (e.g., texting, chatting, reading a newspaper, making phone calls, web surfing, etc.).

Threatening Behavior Policy

The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See <http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students>.

Accessibility and Accommodations

Our goal in this classroom is that learning experiences be as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, please let me know immediately so that we can discuss options. You are also welcome to contact the Disability Resource Center (520-621-3268) to establish reasonable accommodations. For additional information on the Disability Resource Center and reasonable accommodations, please visit <http://drc.arizona.edu>.

If you have reasonable accommodations, please plan to meet with me by appointment or during office hours to discuss accommodations and how my course requirements and activities may impact your ability to fully participate.

Please be aware that the accessible table and chairs in this room should remain available for students who find that standard classroom seating is not usable.

Code of Academic Integrity

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See <http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity>.

The University Libraries have some excellent tips for avoiding plagiarism, available at <http://www.library.arizona.edu/help/tutorials/plagiarism/index.html>.

Selling class notes and/or other course materials to other students or to a third party for resale is not permitted without the instructor's express written consent. Violations to this and other course rules are subject to the Code of Academic Integrity and may result in course sanctions. Additionally, students who use D2L or UA e-mail to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of student e-mail addresses. This conduct may also constitute copyright infringement.

UA Nondiscrimination and Anti-harassment Policy

The University is committed to creating and maintaining an environment free of discrimination; see <http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>.

Our classroom is a place where everyone is encouraged to express well-formed opinions and their reasons for those opinions. We also want to create a tolerant and open environment where such opinions can be expressed without resorting to bullying or discrimination of others.

Additional Resources for Students

UA Academic policies and procedures are available at <http://catalog.arizona.edu/policies>.

Student Assistance and Advocacy information is available at <http://deanofstudents.arizona.edu/student-assistance/students/student-assistance>.

Office of Diversity: <http://diversity.arizona.edu/>

If you need to talk to someone:

<http://www.health.arizona.edu/counseling-and-psych-services>

http://oasis.health.arizona.edu/hpps_oasis_program.htm

Confidentiality of Student Records

<http://www.registrar.arizona.edu/personal-information/family-educational-rights-and-privacy-act-1974-ferpa?topic=ferpa>

Subject to Change Statement

Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.