Course: Math 415A/515A - Introduction to Abstract Algebra Class Times: Mon/Wed/Fri 11:00am - 11:50am Location: Cesar E Chavez Building, Room 104 Course Website: Available through D2L

Instructor: Jay Taylor Office: Math 315 Phone: (520)-621-2389 Email: jaytaylor@math.arizona.edu Personal Webpage: http://math.arizona.edu/~jaytaylor

Office Hours: Students wishing to speak to the instructor should either come during office hours or arrange an appointment (by email). The following office hours will be in effect from Monday August 20th until Friday December 7th. There will be no office hours on University recognised holidays.

- Monday 3:00pm 4:00pm in Math 315,
- Wednesday 1:00pm 2:00pm in Math 315,
- Thursday 11:00am 12:00pm in Math 220.

Course Text: We will be using "Contemporary Abstract Algebra" by Joseph A. Gallian, 8th Edition.

Course Description: We aim to cover Part 2 of the text, or Chapters 1 through 11, concerning group theory. If time permits we also will cover Chapters 12 and 13, the introduction to basic ring theory.

Communication with Students: It is the student's responsibility to keep informed of any announcements, syllabus adjustments or policy changes made during scheduled classes, by email, or through D2L. Preferably all communication with the instructor should be via email.

Attendance: Students are expected to attend every scheduled class. In addition to this guidance the following constitutes this courses policy towards attendance.

- The UA's policy concerning Class Attendance, Participation, and Administrative Drops will be adhered to.
- The UA's policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable.
- Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored, see http://deanofstudents.arizona.edu/absences for more information.
- Any student missing the first two class meetings or having more than three unauthorised absences may be administratively dropped from the course.

It is the student's responsibility to notify the instructor in advance of an absence related to religious observation or an activity for which a Dean's excuse has been granted, and to arrange for how any missed work will be handled. It is also the student's responsibility to keep informed of any announcements, syllabus adjustments or policy changes made during scheduled classes.

Classroom Behaviour: 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 (texting, chatting, reading a newspaper, making phone calls, web surfing). Use of electronic devices during class time is permitted with the expectation that they are used as a constructive learning tool and not for the aforementioned extraneous activities. All mobile phones are expected to be set to <u>SILENT</u> mode (not simply vibrate).

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.

Grading and Assessment: Your performance in the course is assessed via a mixture of homework, in-class quizzes, midterm exams, and a final exam, broken down as follows.

• **Homework**: (100 points) Homework will be assigned regularly and posted on D2L. Selected homework will be graded and a final score equivalent to 100 points will be assigned. Homework is an essential component of the course. Some homework problems may require the computer algebra system GAP, which can be downloaded for free from the GAP Website.

Your homework will be judged not only on the validity of the proposed solution but also on the quality of the exposition. Your solutions should be well thought out and communicated concisely, with appropriately chosen notation.

Homework will be announced in advance and will not be accepted late. It is permitted to collaborate on homework assignments, *however* each student must write their solution on their own and in their own words. Identical, or highly similar solutions, will not be tolerated.

- Midterm Exams: (200 points) Two in-class midterm exams are tentatively scheduled for:
 - Wednesday, October 10th, from 11:00am 11:50am, in Chavez 104,
 - Monday, November 19th, from 11:00am 11:50am, in Chavez 104.

Each exam will be worth 100 points.

- Final Exam: (200 points) The final exam has been scheduled by the University for:
 - Wednesday, December 12th from 10:30am 12:30pm in Chavez 104.

The room for the final exam will be announced by your instructor, and will be posted on the course website. Additional information and a study guide can be found on the course website. The University's Exam regulations will be strictly followed.

- **515A Requirement**: (100 points) Those students taking 515A are required to choose a topic from the book, together with the instructor, not covered in class and present an oral summary to the instructor at the end of the semester. The topic should be chosen no later than October 30th and a total of up to 100 points will be assigned.
- Final Letter Grades: Your final course grade will be determined by a percentage of the 500, for 415A, or 600, for 515A, total possible points in the course. The point cutoffs for grades will be no higher than those set forth in the following table:

Grade	Percentage	Points (415A)	Points (515A)
A	80 - 100%	400 - 500	480 - 600
В	70 - 80%	350 - 399	420 - 479
С	60 - 70%	300 - 349	360 - 419
D	50 - 60%	250 - 299	300 - 359
Е	0 - 50%	0 - 249	0 - 299

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 Centre (520-621-3268) to establish reasonable accommodations. For additional information on the Disability Resource Centre 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.

Students Withdrawing from the Course: Must be made in accordance with the University's withdrawal policy. You may drop the class without a W through September 4th using UAccess. The class will appear on your UAccess record, but will not appear on your transcript. If you withdraw from the class between September 5th and October 29th you will receive a grade of W. The University allows withdrawals after October 29th through November 17th, but only with the Dean's approval. Late withdrawals are dealt with on a case by case basis, and requests for late withdrawal with a W without a valid reason may or may not be honored.

Incompletes: Must be made in accordance with University policies, which are available here. The grade of I will be awarded if **all** of the following conditions are met:

- 1. the student has completed all but a small portion of the required work,
- 2. the student has scored at least 50% on the work completed,
- 3. the student has a valid reason for not completing the course on time,
- 4. the student agrees to make up the material in a short period of time,

5. the student asks for the incomplete before grades are due, 48 hours after the final exam.

Computing Resources: Information about using computers on campus, setting up a UA email account, and computer support can be found here. A list and map of open access computing facilities on campus can be found here.

University Policies:

- The UA Threatening Behaviour by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself.
- 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.
- The University is committed to creating and maintaining an environment free of discrimination; see the UA Nondiscrimination and Anti-harassment Policy for more details.

Note: 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.