

## **SYLLABUS Spring 2024**

The University of Iowa

The College of Liberal Arts and Sciences

**Department of Mathematics**

**Title of Course: MATH:3720:0AAA Introduction to Abstract Algebra**

**Time/Days/Location: 1:30P - 2:20PM MWF 218 [MLH](#)**

**Course ICON site:** To access the course site, log into [Iowa Courses Online \(ICON\)](#)  
<https://icon.uiowa.edu/index.shtml> using your Hawk ID and password.

**Course Home:** The College of Liberal Arts and Sciences (CLAS) is the home of this course, and CLAS governs the add and drop deadlines, the “second-grade only” option (SGO), academic misconduct policies, and other undergraduate policies and procedures. Other UI colleges may have different policies.

**Instructor: Isabel Darcy**

Office location and office hours: **M 2:30 – 3:20pm, WF 11:45pm – 12:15pm in 25J MLH, And 6:00pm-6:35pm Tuesdays/Thursday on zoom.**

Join URL: <https://uiowa.zoom.us/j/92642528819?pwd=SXMzbXdZcm9xNFBvNHB6Vkp1dWhVQT09>

**And by appointment.**

Phone and E-mail: **335-0770, [isabel-darcy@uiowa.edu](mailto:isabel-darcy@uiowa.edu)**

### **Assistant Contact Information**

Name: **Margarita Bustos Gonzalez**

Office location: 1F MLH

Office hours: TBA

Email: [margarita-bustosgonzalez@uiowa.edu](mailto:margarita-bustosgonzalez@uiowa.edu)

**DEO Contact Information: Ryan Kinser, 14 MLH, [ryan-kinser@uiowa.edu](mailto:ryan-kinser@uiowa.edu)**

**Prerequisites:** (MATH:1560 or MATH:1860) and (MATH:2700)

### **Description of Course**

MATH:3720 provides students with an introduction to Abstract Algebra. The topics of the course include groups, the relationship between groups, symmetries and group actions.

### **Learning Objectives**

We will develop knowledge of proofs and logic. Applications of prime factorization and discrete logarithm will have application to cryptographic algorithms such as RSA and Diffie-Hellman.

### **Textbook/Materials**

Our main textbook will be Hill and Theron “Elementary Abstract Algebra: Examples and Applications” see <https://open.umn.edu/opentextbooks/textbooks/850>

### Course Grades

Final course grades will be assessed based on your performance in the following activities:

- 25% Midterm 1
- 25% Midterm 2
- 25% Final exam (Cumulative)
- 25% Homework and Quizzes

### **Grade cuts and Grade Distribution:**

90% <= A- < 92% <= A
80% <= B- < 82% <= B < 88% <= B+ < 90%
70% <= C- < 72% <= C < 78% <= C+ < 80%
60% <= D- < 62% <= D < 68% <= D+ < 70%
F < 60%

Improvement may be taken into consideration.

The grade of A+ will be considered for truly exceptional performance.

If you are interested in an HONORS version of this course, please let me know.

***Calculators and other electronic devices are not allowed during the exams.***

### Date and Time of the Final Exam

The [final examination date and time](#) will be announced by the Registrar generally by the fifth week of classes and it will be announced on the course ICON site once it is known. **Do not plan your end of the semester travel plans until the final exam schedule is made public. It is your responsibility to know the date, time, and place of the final exam.** According to Registrar's final exam policy, students **have a maximum of two weeks after the announced final exam schedule** to request a change if an exam conflict exists or if a student has more than two exams in one day (see the [policy](#) here).

**Calendar of Course Assignments and Exams (exam 1 and 2 dates will be chosen via student input by Jan 22):**

- Jan 16: First day of class (discussion section)
- Feb 21 or 28: Exam 1
- March 10 - 17: Spring Break
- April 3 or 17: Exam 2
- May 3: Last day of class
- May 6 - 10: Final exam week

**HW will normally be due weekly. Quizzes will be sporadic. Final exam will be comprehensive.**

to Get Help (in addition to office hours):

- **Math Tutorial Lab:** <https://math.uiowa.edu/math-tutorial-lab>
- Tutor Iowa: <https://tutor.uiowa.edu/>
- Math Platoon (for military-connected students): <https://math.uiowa.edu/diversity-and-outreach/math-platoon>
- Other tutoring resources: <https://math.uiowa.edu/math-tutorial-lab/other-tutoring-resources>

**Course Policies:**

### **ATTENDANCE AND CLASSROOM EXPECTATIONS**

**Students are expected to attend every class. Absences may affect your grade.**

All students are expected to attend class and to contribute to its learning environment in part by complying with University policies and directives regarding appropriate classroom behavior or other matters.

### **Academic Honesty and Misconduct**

All students in CLAS courses are expected to abide by the [CLAS Code of Academic Honesty](#).

Undergraduate academic misconduct must be reported by instructors to CLAS according to [these procedures](#). Graduate academic misconduct must be reported to the Graduate College according to Section F of the [Graduate College Manual](#).

### **Rules on Student Collaboration:**

In this class, students are encouraged to talk with others about homework. However, do not share your written work with others or ask others to see their completed assignments since both are considered academic misconduct. In other words, you can discuss a problem with other students, but you write your solution alone. If you worked/discussed a problem with others, you must state their names on your homework before the beginning of that problem, even if you wrote the solution yourself. HWs showing duplication will be considered as the result of academic dishonesty. If you need help, please stop by during my office hours. Students are responsible for understanding this policy; if you have questions, ask for clarification.

### **Student Complaints**

Students with a complaint about a grade or a related matter should first discuss the situation with the instructor and/or the course supervisor (if applicable), and finally with the Director or Chair of the school, department, or program offering the course.

Undergraduate students should contact [CLAS Undergraduate Programs](#) for support when the matter is not resolved at the previous level. Graduate students should contact the CLAS [Associate Dean for Graduate Education and Outreach and Engagement](#) when additional support is needed.

**Drop Deadline for this Course**

You may drop an individual course before the deadline; after this deadline you will need collegiate approval. You can look up the [drop deadline for this course](#) here. When you drop a course, a “W” will appear on your transcript. The mark of “W” is a neutral mark that does not affect your GPA. Directions for adding or dropping a course and other registration changes can be found on the [Registrar’s website](#). Undergraduate students can find policies on dropping and withdrawing [here](#). Graduate students should adhere to the [academic deadlines](#) and policies set by the Graduate College.

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**College of Liberal Arts and Sciences (CLAS) Course Policies****[Attendance and Absences](#)**

*University regulations require that students be allowed to make up examinations which have been missed due to illness or other unavoidable circumstances. Students with mandatory religious obligations or UI authorized activities must discuss their absences with me as soon as possible. Religious obligations must be communicated within the first three weeks of classes.*

**[Exam Policies](#)****Communication: UI Email**

Students are responsible for all official correspondences sent to their UI email address (uiowa.edu) and must use this address for any communication with instructors or staff in the UI community.

**University Policies**

**[Accommodations for Students with Disabilities](#)**

**[Basic Needs and Support for Students](#)**

**[Classroom Expectations](#)**

**[Exam Make-up Owing to Absence](#)**

**[Free Speech and Expression](#)**

**[Mental Health](#)**

**[Military Service Obligations](#)**

**[Non-discrimination](#)**

**[Religious Holy Days](#)**

**[Sexual Harassment/Misconduct and Supportive Measures](#)**

**[Sharing of Class Recordings](#)**