

# MATH 130

## Contemporary Mathematics

### Syllabus

### Spring, 2023

<b>Instructor:</b>	Dr. Colin Starr	<b>Office Hours:</b>	M 1-3; W 11:30-12:30 and 1:30-2:30(Z)
<b>Office:</b>	Collins 308		TΘ 9-10(Z); T 2-3(Z); Θ 1:30-2:30(Z);
<b>Office Phone:</b>	(503) 370-6419		F 11:30-12:30
<b>Home Phone:</b>	(503) 585-4088	Others by appointment	
<b>e-mail:</b>	cstarr@willamette.edu	<b>My URL:</b>	<a href="http://www.willamette.edu/~cstarr">http://www.willamette.edu/~cstarr</a>

A "(Z)" indicates office hours held on Zoom.

**Required Text:** *Mathematics for the Liberal Arts*, by Lumen Learning and David Lippman.

**Goals:** This course is an exploration of mathematical thinking and problem solving. The specific topics will depend on our collective interests, but the overarching theme is mathematical reasoning. At the end of the course, students will have (1) improved mathematical reasoning skills, (2) greater confidence in their mathematical reasoning abilities, and (3) a greater understanding of the breadth of problems amenable to mathematical reasoning.

This is not a primarily lecture-based class, although there will be some. You should be prepared to be challenged by non-trivial, non-formulaic problems that will require creativity and perseverance to solve.

**Assessment:** Your grade will be computed as follows:

<b>Playsheets:</b>	400 points
<b>Mathematical Thinking Journal:</b>	150 points
<b>Mini Essays:</b>	250 points
<b>Final Project:</b>	200 points

**Playsheets** are collaborative with one to three of your classmates. We will use these to explore new content; they also serve as homework. They are generally made up of just a few problems, but they may require some ingenuity. There is a hazard in group projects that the bulk of the work falls on only part of the team. You are all accountable to each other to perform a fair share of the work. Note that **every** group member should work on every problem – do not delegate particular problems to individuals. You may, however, assign write-ups of different problems to different individuals. If someone is not keeping up their end, it is important to let me know. While attendance is not its own requirement, your playsheet scores may suffer if you miss a lot of class (and leave your groupmates to carry the load!).

**Mathematical Thinking Journal:** Keep a journal in a Google doc. You should make at least three entries per week. The entries can be about any mathematical thinking you have done during that week. They only need to be a few sentences each, and each should be dated. Examples: you could write about how you approached a playsheet problem, how mathematical problem solving arose in another class or in your kitchen, something you heard on the radio – anything! The only constraint is that it should be mathematical in nature and have something to do with solving problems. I have shared a possible template with you, but you are welcome to be creative. I will check the journal weekly during the semester; a “week” will run from Monday through Sunday, so each week’s entries are due by **Sunday night**. The semester is 15 weeks, so each week is worth 10 points. For the first week, setting up the document and sharing it with me counts as your first entry. Also, I understand that sometimes things slip by. You may make up missed entries for the week prior (but no further back). Just make a note that the entry is a make-up entry so I credit you properly.

**Mini Essays:** We will have five readings over the course of the semester. These mini-essays are response papers to those readings. They should be around one or two pages (unless you find you have more to say!). The essays are due one week after the reading is assigned. They will be graded for mechanics as well as content, so be sure to proofread and use appropriate grammar, spelling, and punctuation.

**Final Project:** We will encounter several mathematical subdisciplines during the semester. Be alert for one you would like to pursue further. For the last two weeks of the semester, we will be working on group projects that take a deeper look at some mathematical topic. I will have a selection of project topics for you based on what we do in class, or you can choose your own (subject to my approval!). This will culminate in a presentation during our final exam time.

**Grading:** Grades must fall into the categories below to earn the corresponding letter grade.

Letter Grade	A	A <sup>-</sup>	B <sup>+</sup>	B	B <sup>-</sup>	C <sup>+</sup>	C	C <sup>-</sup>	D <sup>+</sup>	D	F
Minimum Percentage	92	89.5	87.5	82	79.5	77.5	72	69.5	67.5	59.5	
Minimum Points	920	895	875	820	795	775	720	695	675	595	

The final presentations will be on Friday, May 12 from 8 to 11 AM.

**Please note:** Written responses to all questions must be in complete sentences. I expect correct usage of grammar, spelling, and punctuation at all times; your grade will reflect this! I also expect your work to be neatly written.

If you have special needs (e.g., for a documented disability), it is your responsibility to approach me at least a day in advance of the need for accommodation. To receive accommodation, you must be registered with Disability Services; this office is located in Bishop Health Center in Baxter Hall. (Phone: (503) 370-6471.)

Cheating and plagiarism absolutely will not be tolerated. The minimum penalty for cheating or plagiarism is a 0 on the assignment and a formal notification to the dean. I encourage you to work together, but you must indicate that you have done so and cite your sources.

My door is usually open. The office hours above are the times I will definitely be in my office (or nearby), but you are welcome to come by at other times as well. Make sure you come see me whenever you have a question.

## General Policies

### Academic Integrity

Students of Willamette University are members of a community that values excellence and integrity in every aspect of life. As such, we expect all community members to live up to the highest standards of personal, ethical, and moral conduct. Students are expected not to engage in any type of academic or intellectually dishonest practice and encouraged to display honesty, trust, fairness, respect, and responsibility in all they do. Plagiarism and cheating are especially offensive to the integrity of courses in which they occur and against the College community as a whole. These acts involve intellectual dishonesty, deception, and fraud, which inhibit the honest exchange of ideas. Plagiarism and cheating may be grounds for failure in the course and/or dismissal from the College. <http://willamette.edu/cla/catalog/policies/plagiarism-cheating.php>

### Commitment to Positive Sexual Ethics

Willamette is a community committed to fostering safe, productive learning environments, and we value ethical sexual behaviors and standards. Title IX and our school policy prohibit discrimination on the basis of sex, which regards sexual misconduct — including discrimination, harassment, domestic and dating violence, sexual assault, and stalking. We understand that sexual violence can undermine students' academic success, and we encourage affected students to talk to someone about their experiences and get the support they need. Please be aware that as a mandatory reporter I am required to report any instances you disclose to Willamette's Title IX Coordinator. If you would rather share information with a confidential employee who does not have this responsibility, please contact our confidential advocate at [confidential-advocate@willamette.edu](mailto:confidential-advocate@willamette.edu). Confidential support also can be found with SARAs and at the GRAC (503-851-4245); and at WUTalk - a 24-hour telephone crisis counseling support line (503-375-5353). If you are in immediate danger, please call campus safety at 503-370-6911.

### DACA/Undocumented Student Advocate

Willamette is committed to supporting our DACA/Undocumented students in a variety of ways. This year, Olivia Muñoz is the contact person for all DACA/undocumented students can provide those students with a number of external and internal resources that are available. Her contact information is [email:omunoz@willamette.edu](mailto:omunoz@willamette.edu), Office: 3rd Floor UC, Phone: 503-370-6447.

### Diversity and Disability Statement

Willamette University values diversity and inclusion; we are committed to a climate of mutual respect and full participation. My goal is to create a learning environment that is usable, equitable, inclusive and welcoming. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or accurate assessment or achievement, please notify me as soon as possible. Students with disabilities are also encouraged to contact the Accessible Education Services office in Smullin 155 at 503-370-6737 or [Accessible-info@willamette.edu](mailto:Accessible-info@willamette.edu) to discuss a range of options to removing barriers in the course, including accommodations.

### Religious Practice

Willamette University recognizes the value of religious practice and strives to accommodate students' commitment to their religious traditions whenever possible. Please let me know within the first two weeks of the semester if a conflict between holy days or other religious practice and full participation in the course is anticipated. I will do my best to work with you to determine a reasonable accommodation.

### **SOAR Center Offerings: Food, Clothing, and School Materials**

The Students Organizing for Access to Resources (SOAR) Center strives to create equitable access to food, professional clothing, commencement regalia, and scholarly resources for WU and Willamette Academy students. The SOAR Center is located on the Putnam University Center's third floor (in the former Women's Resource Center and across from the Harrison Conference Room). The space houses the Bearcat Pantry, Clothing Share, and First-Generation Book Drive and is maintained by committed students and staff and faculty advisers.

### **Trans-Inclusive Classroom Space**

I will gladly honor your request to address you by your affirmed name and gender pronouns. Please advise me of this at any point in the semester so that I may make appropriate changes to my records. If I accidentally use an incorrect gender pronoun when addressing you, please feel free to let me know, in whatever manner makes you comfortable, what pronouns you use so that I can make every effort to correct that error.

### **Land Acknowledgement**

We are gathered on the land of the Kalapuya, who today are represented by the Confederated Tribes of the Grand Ronde and the Confederated Tribes of the Siletz Indians, whose relationship with this land continues to this day. We offer gratitude for the land itself, for those who have stewarded it for generations, and for the opportunity to study, learn, work, and be in community on this land. We acknowledge that our University's history, like many others, is fundamentally tied to the first colonial developments in the Willamette Valley. Finally, we respectfully acknowledge and honor past, present, and future Indigenous students of Willamette.

### **LinkedIn Learning**

Willamette University tracks all log-in information for LinkedIn Learning. This information will be kept in-house and will be used for the purposes of developing LinkedIn Learning on campus. Faculty may keep track of your log-in for the purposes of evaluating your progress for class. Faculty using LinkedIn Learning in for class assignments will not share your log-in information with others as it is protected under FERPA.

### **Time Commitment**

Willamette's Credit Hour Policy holds that for every hour of class time there is an expectation of 2-3 hours' work outside of class. Thus, for this class you should anticipate spending 6-9 hours outside of class engaged in course-related activities. Examples include reading course materials, preparing for discussion, and preparing and writing papers and exams.

### **Intellectual Property and Privacy**

Class materials and discussions including recorded lectures are for the sole purpose of educating the students enrolled in the course. The release of such information (including but not limited to directly sharing, screen capturing, or recording content) is strictly prohibited, unless the instructor states otherwise. Doing so without the permission of the instructor will be considered an Honor Code violation and may also be a violation of other state and federal laws, such as the Copyright Act.