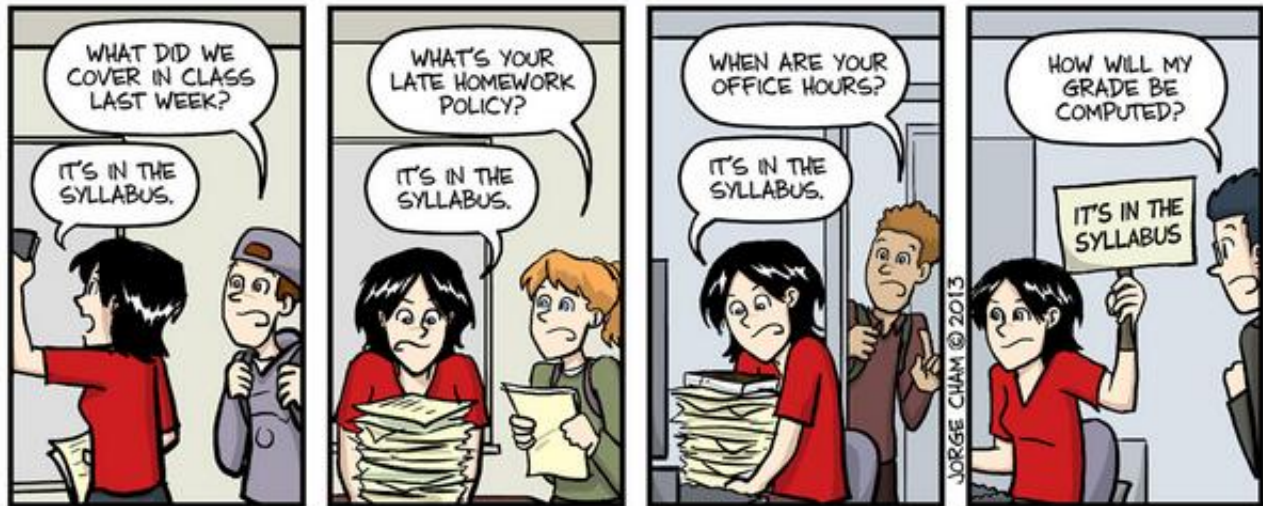


Course Syllabus
Mathematics 4400, Section 01, Summer 2020
Introduction to Number Theory



IT'S IN THE SYLLABUS

This message brought to you by every instructor that ever lived.

WWW.PHDCOMICS.COM

Instructor: Allechar Serrano López
Preferred pronouns: she/her/hers
Preferred name: Allechar
Office: JWB 328
E-mail: serrano@math.utah.edu

Class Hours: MWF, 12:30PM–1:30PM, Zoom

Office Hours: I will be available during the following times:

- MWF 12:00PM–12:30PM (30 minutes before class)
- MWF 1:30PM–2:00PM (30 minutes after class)
- Monday 4:30PM–5:30PM
- Wednesday 4:00PM–5:00PM

Text and Online Material: Provided by instructor. Only in this rare occasion, I will discourage you from consulting the literature to solve the exercises. It is important that you develop the concepts and proofs on your own. Before consulting any book or the internet, you should ask your classmates or your instructor.

Prerequisites: C or better in Math 2270 or Math 2250.

Course description: An overview of algebraic number theory, covering factorization and primes, modular arithmetic, quadratic residues, continued fractions, quadratic forms, and diophantine equations.

Our Class Culture: We will model our class based on the axioms proposed by Federico Ardila:

Axiom 1 Mathematical talent is distributed equally among different groups, irrespective of geographic, demographic, and economic boundaries.

Axiom 2 Everyone can have joyful, meaningful, and empowering mathematical experiences.

Axiom 3 Mathematics is a powerful, malleable tool that can be shaped and used differently by various communities to serve their needs.

Axiom 4 Every student deserves to be treated with dignity and respect.

Grading Policy: The grades will be calculated as follows:

Weekly Packet	35%
MWF Material	15%
Writing Assignments	20%
Projects	25%
NT Bio	5%
NT Topic	20%
Midterm Exams	40%
First Midterm	20%
Second Midterm	20%

Grades (Evaluation and criteria): Final letter grades will be determined by overall percentage as follows:

A	93% – 100%	B	83% – 86%	C	73% – 76%	D	63% – 66%
A-	90% – 92%	B-	80% – 82%	C-	70% – 72%	D-	60% – 62%
B+	87% – 89%	C+	77% – 79%	D+	67% – 69%	E	0% – 59%

Approach: This course will be a synchronous online course, which means that we will meet during the scheduled time (MWF 12:30PM–1:30PM). Class will start with an agenda of what we will cover during that class. You might be asked to do a small reading or watch a video before class. I will avoid lecturing as much as possible, the course will be based on problem solving. In class, we will be working on exercises to develop understanding of concepts and results.

Class Meetings: Students are expected to attend and actively participate in class. I am expected to make class worth attending.

Participation in class involves:

- being present in class (virtually and mentally),
- coming to class prepared and on time,
- asking questions when appropriate,
- making positive contributions to class discussion by volunteering and when called upon, and
- working effectively and respectfully with other students.

If your participation or non-participation causes problems for other students, I will invite you to visit office hours to discuss the issue.

ADA Statement: The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability and Access, 162 Olpin Union Building, 581-5020 (V/TDD). CDA will work with you and the instructor to make arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to the Center for Disability and Access.

Safety Statement: The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu.

Student Responsibilities: All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. You have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, collusion, fraud, theft, etc. Students should read the Code carefully and know you are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee. <http://regulations.utah.edu/academics/6-400.php>

Addressing Sexual Misconduct: Title IX makes it clear that violence and harassment based on sex and gender (which Includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veterans status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS). Wellness Statement: Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness at <https://wellness.utah.edu/> or 801-581-7776.

Dean of Students Office: The Dean of Students Office is dedicated to being a resource for students through support, advocacy, involvement, and accountability. It serves as a support for students facing challenges to their success as students, and assist with the interpretation of university policy and regulations. Please consider reaching out to the Office of the Dean of Students for any questions, issues and concerns. <https://deanofstudents.utah.edu/> or 801-581-7066

Student Names and Personal Pronouns: Class rosters are provided to the instructor with the students legal name as well as Preferred first name (if previously entered by you in the Student Profile section of your CIS account). While CIS refers to this as merely a preference, I will honor you by referring to you with the name and pronoun that feels best for you in class, on papers, exams, group projects, etc. Please advise me of any name or pronoun changes (and update CIS) so I can help create a learning environment in which you, yourname, and your pronoun will be respected. If you need assistance getting your preferred name on your U-ID card, please visit the LGBT Resource Center Room 409 in the Olpin Union Building, or email bpeacock@sa.utah.edu to schedule a time to drop by. The LGBT Resource Center hours are M-F 8am-5pm, and 8am-6pm on Tuesdays.

Cheating: If you cheat on any homework or exam, I will give you a grade of zero for that work. Depending on the severity of the cheating, I may decide to fail you from the class. In all cases, I will report the incident to the Dean of Students, and to the International Students Office in the case of an international student.

Webpage: All information concerning this class will be posted on the Canvas webpage of the class. Any important information will be given in class and on the Canvas webpage. **You are responsible for checking the webpage on a regular basis** (you can have the communication from Canvas forwarded to your email address).

Disclaimer: If I do any modification to this syllabus, I will let you know in class and update the webpage.