### SYLLABUS – MATH 5320, SECTION #1

#### INTRODUCTION TO MODERN ALGEBRA II

**Description:** This is a course on rings, fields and modules. We in particular aim to study modules over PIDs and Euclidean domains and also Galois theory.

• Time: Monday, Wednesday, Friday 12:55 PM – 1:45 PM.

Location: AEB 306.
Instructor: Karl Schwede
Contact information:

- email: schwede@math.utah.edu

- office: JWB 315

- website: http://www.math.utah.edu/~schwede/math5320 (or see Canvas).

• Office hours: TBD

• **Textbook:** Algebra, 2nd edition by Michael Artin.

**Grade:** Your grade will be determined by the following formula.

15% In-class group worksheets (once every 1-2 weeks) and occasional individual homework.

20% Quizzes will once every 1 or 2 weeks. Your lowest quiz score will be dropped.

15% Midterm #1. Tentatively Monday, February 10th.

20% Midterm #2. Tentatively Friday, March 14th.

30% Final. Scheduled as per University guidelines.

In terms of letter grade assignments, here is the minimum scale (the final scale may be more generous than what is written here).

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93+ will be an A, 83-87 will be a B, 73-77 will be a C, 63-67 will be a D, 90-93 will be an A-, 80-83 will be a B-, 70-73 will be a C-, 60-63 will be a D-, 87-90 will be a B+, 77-80 will be a C+, 67-70 will be a D+, 0-60 will be an E.
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If your homework/worksheet will be late (or if you will miss an exam or quiz), for instance because you are sick, you must contact the instructor *prior* to missing the assignment in order to receive credit. There will be no negative impact on the grade for late homework where an arrangement was agreed to prior to the due-date. More than two requests per student for making up late assignments might not be granted, such decisions will be made on a case-by-case basis (this is separate from ADA accommodations). If there is an emergency that makes it difficult or impossible to contact me before the assignment is due, that will also be handled case-by-case.

• We will use gradescope to both turn in and grade homework, worksheets etc., as well as return quizzes and exams.

Students are allowed, and even encouraged to work together when solving homework problems (although each student is responsible for their own write-up, unless it is specifically a group assignment). Do not use artificial intelligence tools to solve homework problems without authorization.

**Prerequisites:** They officially are "C" or better in Math 5310.

**Academic Integrity:** All University of Utah policies regarding ethics and honorable behavior apply to this course. See point 4 on the next page.

#### Official matters

University Policies

1. The Americans with Disabilities Act (ADA). The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities.

All written information in this course can be made available in an alternative format with prior notification to the Center for Disability & Access (CDA). CDA will work with you and the instructor to make arrangements for accommodations. Prior notice is appreciated. To read the full accommodations policy for the University of Utah, please see Section Q of the Instruction & Evaluation regulations.

In compliance with ADA requirements, some students may need to record course content. Any recordings of course content are for personal use only, should not be shared, and should never be made publicly available. In addition, recordings must be destroyed at the conclusion of the course.

If you will need accommodations in this class, or for more information about what support they provide, contact:

Center for Disability & Access

801-581-5020 disability.utah.edu 65 Student Services Building 201 S 1460 E Salt Lake City, UT 84112

2. Safety at the U. The University of Utah values the safety of all campus community members. You will receive important emergency alerts and safety messages regarding campus safety via text message. For more safety information and to view available training resources, including helpful videos, visit safeu.utah.edu.

To report suspicious activity or to request a courtesy escort, contact:

Campus Police & Department of Public Safety 801-585-COPS (801-585-2677) dps.utah.edu 1735 E. S. Campus Dr. Salt Lake City, UT 84112

**3.** 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, veteran's status, or genetic information.

If you or someone you know has been harassed or assaulted, you are encouraged to report it to university officials:

Title IX Coordinator & Office of Equal Opportunity and Affirmative Action 801-581-8365 oeo.utah.edu 135 Park Building 201 Presidents' Cir. Salt Lake City, UT 84112

Office of the Dean of Students 801-581-7066 deanofstudents.utah.edu

270 Union Building

200 S. Central Campus Dr. Salt Lake City, UT 84112

To file a police report, contact:

## Campus Police & Department of Public Safety

801-585-COPS (801-585-2677)

dps.utah.edu

1735 E. S. Campus Dr.

Salt Lake City, UT 84112

If you do not feel comfortable reporting to authorities, the U's Victim-Survivor Advocates provide free, confidential, and trauma-informed support services to students, faculty, and staff who have experienced interpersonal violence.

To privately explore options and resources available to you with an advocate, contact:

# Center for Campus Wellness

801-581-7776 wellness.utah.edu 350 Student Services Building 201 S. 1460 E. Salt Lake City, UT 84112

4. Academic Misconduct Statement. It is expected that students comply with University of Utah policies regarding academic honesty, including but not limited to refraining from cheating, plagiarizing, misrepresenting one's work, and/or inappropriately collaborating. This includes the use of generative artificial intelligence (AI) tools without citation, documentation, or authorization. Students are expected to adhere to the prescribed professional and ethical standards of the profession/discipline for which they are preparing. Any student who engages in academic dishonesty or who violates the professional and ethical standards for their profession/discipline may be subject to academic sanctions as per the University of Utah's Student Code: Policy 6-410: Student Academic Performance, Academic Conduct, and Professional and Ethical Conduct.

Plagiarism and cheating are serious offenses and may be punished by failure on an individual assignment, and/or failure in the course. Academic misconduct, according to the University of Utah Student Code:

"...Includes, but is not limited to, cheating, misrepresenting one's work, inappropriately collaborating, plagiarism, and fabrication or falsification of information...It also includes facilitating academic misconduct by intentionally helping or attempting to help another to commit an act of academic misconduct."

For details on plagiarism and other important course conduct issues, see the U's Code of Student Rights and Responsibilities.

5. Drop/Withdrawal Policies. Students may drop a course within the first two weeks of a given semester without any penalties. Students may officially withdraw (W) from a class or all classes after the drop deadline through the midpoint of a course. A "W" grade is recorded on the transcript and appropriate tuition/fees are assessed. The grade "W" is not used in calculating the student's GPA. For deadlines to withdraw from full-term, first, and second session classes, see the U's Academic Calendar.

Other important information

- (a) Student Code: http://regulations.utah.edu/academics/6-400.php
- (b) Accommodation Policy (see Section Q): http://regulations.utah.edu/academics/6-100.php
- 7. Supports for Students. Your success at the University of Utah is important to all of us here! If you feel like you need extra support in academics, overcoming personal difficulties, or finding

community, the U is here for you. Please refer to the Student Support Services page for the U for updated information.

8. Basic Needs Student Support Statement. Success at The University of Utah includes learning about and using available resources. The Basic Needs Collective (BNC) is a coordinated resource referral hub. They educate about and connect students to campus and community resources to help them meet their basic needs. As a central location for resource referrals related to food, housing, health insurance, managing finances, legal services, mental health, etc., any student experiencing difficulty with basic needs is encouraged to contact them. Drop into their office located in the Union basement or schedule with them online for an in-person or virtual visit through their webpage: https://basicneeds.utah.edu/.