

MAS 5311 – Fall 2015 Algebra I

Instructor: Dr. Dmytro Savchuk

Office: CMC 310 Office Hours: TR 1:00am – 2:00pm or by appointment

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Course Meeting Times: TR 11:00am – 12:15am, CMC 118

Course Webpage: http://savchuk.myweb.usf.edu/teaching/2015C_MAS5311_AlgebraI/

Prerequisite(s): MAS 3105 (Linear Algebra) and MAS 4301 (Elementary Abstract Algebra). The students should know the basic logic rules and common techniques of proofs (mathematical induction, proof by contradiction, use of "without loss of generality", etc.). The students are assumed to know Zorn's lemma.

Course Objectives: To learn the fundamentals of groups, rings and modules.

Text: Algebra, by T. Hungerford, Springer

Course Plan: The course will mainly cover the following sections of Hungerford's book:

Chapter 1: Sections 1-7, 9 Chapter 2: Sections 1, 2, 4-8Chapter 3: Sections 1-6Chapter 4: Sections 1-3, 6

Homework: Most homework problems are from Hungerford's book. You are encouraged to do as many exercises as possible. A few selected problems will be collected for grading. These problems and their due dates will be announced in class and on the web. Please no late homework. Homework assignments will be posted at:

http://savchuk.myweb.usf.edu/teaching/2015C_MAS5311_AlgebraI/homeworks.html

Exams: There will be 2 tests and the final cumulative exam. The dates for the exams are:

Exam 1: October 1 (Thursday, close-book/notebook, in class)

Exam 2: October 21 (open-book, take home, handed out 11/05, due 11/12)

Final Exam: December 11 (open-book, take home, handed out 12/01, due 12/9)

Makeup Exams: *Makeup exams will be given at the discretion of the instructor.* Thorough documentation of the student's reason for missing an exam must be provided before a makeup will be considered.

Grading: Homework 25%; Midterm Exams 20% each, Final (cumulative) 35%

Contingency Course Plan: In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include but are not limited to: Blackboard, Elluminate, Skype, and email messaging and/or alternate scheduling. It is the responsibility of the student to monitor the main USF website, emails and MoBull messages for important information about the closure. For information about the continuation of instruction, students are directed to their individual blackboard course sites.

Retaining Records: You should keep all of your returned homework and exams until you receive your final grade. You will need these to demonstrate that a grade was incorrectly recorded, should that happen.

Miscellaneous Policies:

- *Please* do not hold conversations, either with your classmates or your cell phone, during the lecture sessions. (Turn your cell phone off and keep it out of sight at all times.)
- Cheating will **not** be tolerated. Please refer to the Undergraduate Catalog for clarification of the university policy on Academic Dishonesty.
- Students who must miss a class period due to a major religious observance must notify the instructor of this absence, in writing, by the end of the second week of classes.
- Any student with a disability is encouraged to meet privately with the instructor during
 the first week of classes to discuss accommodations. The student must bring a current
 Memorandum of Accommodations from the Office of Student Disability Services
 (SVC 1133). This is a prerequisite for receiving accommodations. Exam
 accommodations through SDS usually require two weeks advance notice.
 Note: If you need extra time on exams, you *must* make arrangements to take your
 exams with the SDS office. You *cannot* receive extra time if you choose to take your
 exams with the course instructor.
- You are encouraged to take notes during lectures, but your notes are not to be sold.
- All unauthorized recordings of class are prohibited. Recordings that accommodate individual student needs must be approved in advance and may be used for personal use during this semester *only*; redistribution is prohibited.
- S-U Policy: Students who want to take this course for a grade of S-U must sign the S-U contract no later than the end of the third week of classes. There will be **no** exceptions.
- A grade of "I" indicates incomplete work and will only be considered when most of the coursework has already been completed with a passing grade (C or better).