

MAT312-AMS351

Applied Algebra
Summer Session I, 2002

Instructor: Eduardo González.

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Office Hours: Mondays 12:30pm to 2:30pm in the MLC.

Meeting: Monday, Wednesday, Thursday 9:30-12:05.

Textbook: J.F.Humphreys and M. Y. Prest. *Numbers, Groups and Codes*.
Cambridge University Press.

Course web page: <http://www.math.sunysb.edu/~eduardo/mat312/>

Course Description: This class will be an introductory approach to algebraic structures and applications. We will study some of the algebraic properties of the integers. We will study congruences and using some of its techniques, we will examine the RSA public-key code. We will review the theory of sets, functions and relations, and complete a brief introduction to Group theory. Finally, if time permits, we will study error correcting codes.

Homeworks: Homework is of extreme importance for any mathematics class. There will be problems assigned from the textbook at the end of each class. You should try to solve them by yourself. We can briefly discuss these problems at the beginning of the next class. The (graded) homework set will consist of problems *not* necessarily from the textbook. These problems usually will be handed out on Thursday lecture and should be handed in the following week. There will be a copy of the homework available at the course home page (in PDF and PS formats). LATE HOMEWORKS WILL NOT BE ACCEPTED.

Quizzes: There will be three 30-minute quizzes. Check the schedule on the next page. THERE WILL NOT BE MAKE-UPS FOR QUIZZES. Depending on the class familiarity with programming languages, there will be a computer project that could count as part of the final grade.

Exams: Because the summer session is short, there will be no midterm examinations. You should treat the quizzes as midterms. The *final* exam will be on the last day of class.

Grades: The final grade will be determined according to the following policy: 50% final exam and 50% class work (homeworks, quizzes, etc.). The lowest homework grade and the lowest quiz grade will *not* be counted toward the average.

Note: If you have a physical, psychological, medical or learning disability that may affect your ability to carry out assigned course work, I urge you to contact the staff in the Disabled Student Services Office (DSS), Room 133 Humanities, 632-6748/TDD. DSS will review your concerns and determine, with you, what accommodations are necessary and appropriate. All information and documentation of disability is confidential.

TENTATIVE SCHEDULE

	Day	Sections
	W 05/29	3.1, 2.1
	T 05/30	2.1, 2.2
	M 06/03	2.2, 2.3
	W 06/05	2.3 Quiz #1
	T 06/06	1.1
	M 06/10	1.2, 1.3
	W 06/12	1.3, 1.4
	T 06/13	1.4, 1.5
	M 06/17	1.5, 1.6
	W 06/19	4.1 Quiz #2
	T 06/20	4.2, 4.3
	M 06/24	4.3
	W 06/26	5.1
	T 06/27	5.2 Quiz #3
	M 07/01	5.3
	W 07/03	5.4
	T 07/04	Review
	M 07/08	Final Exam