Course Syllabus Math 677.01

Graduate Abstract Algebra

3 Credits

Fall 2007

Location: Room 201 Lee Drain Building

Time and Days: Monday, Wednesday, Friday 9:00 a.m. – 9:50 a.m.

Professor: Dr. Rebecca Garcia Office: 435 Lee Drain Building

Telephone: (936) 294 – 3520 **e-mail:** rgarcia@shsu.edu

Office hours: Friday, 10:00 a.m. - 2:00 p.m.,

other times available by appointment.

Course Description: Algebraic structure is emphasized in this course, which includes a study of groups, rings, fields, and their applications in coding theory and cryptography.

Prerequisite: Math 477, Math 568, or by professor's consent.

Required Materials: We will be using the following text:

D. Dummit and R. Foote Abstract Algebra, 3^{rd} Edition, Wiley, 2003.

It is the responsibility of the student to obtain all course materials at the beginning of the semester.

Course Objectives: Students completing this course should have mastery of the following major concepts. Other techniques and ideas will also be covered.

Chapters	Topic
1, 2, 3, and 4	Group Theory
7, 8, and 9	Ring Theory
10, 11, and 12	Module Theory
13 and 14	Field Theory

Attendance Policy: Regular and punctual attendance for this course is mandatory and will be recorded throughout the semester. The student is responsible for obtaining any assignments or notices given during the date of their absence. For all documented and university-approved absences (e.g. hospitalization, court appearances, university athletic conferences, etc...) students must immediately contact and inform the instructor of the situation and present proper documentation before re-entering the classroom.

Assignments: Homework will be assigned regularly. Students are expected to complete the assignment by the due date assigned. Students are expected and encouraged to work cooperatively on these assignments. However, those working together must give credit to their collaborators by appending their names at the top left corner of the first page of the written solutions. The homework will be collected on the due date at the beginning of class. If a university-approved absence is expected on this date, the student must hand in the homework prior to leaving. If an unexpected absence occurs on this date, the student must see the professor before class.

Exams: There will be one (1) in-class midterm exam and the final exam. The final exam is cumulative and will be given on Wednesday, December 12 from 8:00 a.m. to 10:00 a.m. The midterm exam is tentatively scheduled for Wednesday, October 10. For any university-approved or documented absence, the student must contact the professor before the day of the exam to make arrangements for examinations. Otherwise, no make-up exams will be administered.

Grading:

Homework	60%
Midterm Exam	20%
Final Exam	20%

The following is the distribution for each letter grade.

90%	\leq	Α	\leq	100%
80%	\leq	В	<	90%
70%	\leq	С	<	80%
60%	<u> </u>	D	<	70%
		F	<	60%

Academic Honesty: All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student

found guilty of dishonesty in any phase of academic work will be subject to disciplinary action at the discretion of the instructor. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

Students with Disabilities: It is the policy of Sam Houston State University that no otherwise qualified disabled individual shall, solely by reason of his/her handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic or Student Life program or activity. Disabled students may request assistance with academically related problems stemming from individual disabilities by contacting the Director of the Counseling Center in the Lee Drain Annex or by calling (936) 294-1720. Please bring all the necessary paperwork to the instructor before the end of the first week of classes in order to proceed with the requested accommodations. All disclosures of disabilities will be kept strictly confidential. NOTE: no accommodation can be made until the student registers with the Counseling Center.

Classroom Rules of Conduct: Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Cellular telephones and pagers must be turned off before class begins. Students are prohibited from eating in class, using tobacco products, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy.

Visitors in the Classroom: All visitors must not present a disruption to the class by their attendance. It is at the professor's discretion whether or not any visitor will be allowed to remain in the classroom.

Observation of Holy Days: Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after

the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). This request must be made in the first fifteen days of the semester or the first seven days of a summer session in which the absence(s) will occur. The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed.

Additional Information: All information on this syllabus is subject to change. Any changes will be announced in class.