PRACTICAL INFORMATION

Class time:	MWF 2:00–2:50 pm
Class room:	MATH 016
Instructor:	Lars Winther Christensen
Office:	MATH 251
Office hours:	T 3–4 pm, W 1–2 pm F, 3–4 pm, or by appointment
E-mail:	`lars.w.christensen@ttu.edu`
Course homepage:	`www.math.ttu.edu/~lchriste/teaching.html`

COURSE DESCRIPTION

This course is intended to be *the* introduction to abstract mathematics, with proofs. It is also a Communication Literacy course.

Required text: *Algebra. Pure & Applied* by Papantonopoulou; Pearson (2002).

Prerequisites: Math 2360 and Math 3310.

Expected learning outcomes: Students learn how to think and reason abstractly in the context of algebraic structures and learn how to write correct and clear mathematical arguments in this context. Concepts to be mastered by the students include but are not limited to the following:

- Groups and group homomorphisms.
- Group actions.
- Rings and ring homomorphisms.
- Polynomial rings.

LEARNING ASSESSMENT

Graded assessment is done through homework, quizzes, and exams. Other assessment techniques will also be used; these include direct questioning, problems to be solved in class, and discussions during office hours. Additionally, problems will be assigned for student self-assessment. The homework problems will focus on the concepts listed above. They will be constructed such that they facilitate the students' development of skills in reasoning about algebraic objects and communicating their thoughts. Exam problems will be constructed such as to test if the students have acquired the expected command of the concepts and developed the expected skills in abstract algebra.

COURSE ORGANIZATION

Of the 43 class periods, 39 will be spent on lectures and in-class activities, including quizzes, and 4 on exams and feedback. The plan is to cover sections 1.1–1.4 (7 class periods), 2.1–2.5 (8 c.p.), 3.1–3.4 (6 c.p.), 4.1–4.3 (4 c.p.), 6.1–6.3 (5 c.p.), 7.1–7.3 (5 c.p.), and 8.1–8.3 (4 c.p.). Reading assignments are posted on the course homepage, which is updated after every class.

Exams: In-class exams take place on Wednesday 26 February and Friday 17 April. The final exam is on Tuesday 12 May, 4:30–7:00 pm.

Other important dates:

Martin Luther King Jr. Day	20 January
Last day to drop a course without penalty	31 January
Spring Break	14–22 March
No classes	13 April
Last day to drop a course	22 April
Last day to withdraw	22 April

ASSIGNMENTS, GRADES, AND GRADING

Two in-class exams and three quizzes are given during the semester. Regular homework will be assigned 12 times during the semester and is due on Fridays. Students are encouraged to work together on the homework problems. Results and grades are posted at www.blackboard.ttu.edu.

Grading: On exams and homework, partial credit for correct steps will be awarded even if the final answer is wrong. Full credit will be given only if the final answer and all intermediate steps are correct. A correct final answer does not *per se* guarantee any credit.

Deadlines and make ups: Homework is not accepted after the deadline. Make-up exams are only given if the original exam was missed for a valid, university approved, reason.

Final grade: Homework (10 assignments), quizzes (3), and exams (3) are counted towards the final grade with weights as follows: Homework 30% (3% ea.), quizzes 15% (5% ea.), in-class exams 30% (15% ea.), and final exam 25%.

GENERAL POLICIES

Academic integrity: It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and high standard of integrity. The attempt of students to present as their own any work not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offenders liable to serious consequences, possibly suspension. "Scholastic dishonesty" includes, but it not limited to, cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student or the attempt to commit such an act. See www.depts.ttu.edu/opmanual/OP34.12.pdf.

Students with disabilities: Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Student Disability Services (SDS) during the instructor's office hours. Please note: instructors are not allowed to provide classroom accommodations to a student until appropriate verification from SDS has been provided. For additional information, please contact SDS in West Hall or call 806-742-2405. Please see more on-line at www.depts.ttu.edu/opmanual/OP34.22.pdf

Religious holy days: Students are allowed to take time to travel and observe a religious holy day as detailed in www.depts.ttu.edu/opmanual/OP34.19.pdf. Note that prior notice must be given to the instructor in writing.