Math 301 **Introduction to Abstract Algebra** **Spring 2004**

Time:	MWF 10–11
Classroom:	Carver 008
Instructor:	Dr. Alexander Burstein
Office:	Carver 456
Office Hours:	MWF 11–12 (subject to change), or by appointment, or by email. I usually check my email several times a day, so you can usually expect an answer fairly soon, sometimes even if it's late night or weekend.
Email:	`burstein@math.iastate.edu`
WWW:	`http://www.math.iastate.edu/burstein/2004/math301f/math301.html` or go to my homepage at `http://www.math.iastate.edu/burstein/`, then click on "Teaching", then in "Fall 2004", click on "Math 301".
Phone:	(29)4-7294
Textbook:	*Contemporary Abstract Algebra*, 5th edition, by Joseph A.Gallian

Grading

- Homework – 30%
- Lab Performance and Participation – 10%
- Two Midterm Exams – 15% each
- Final Exam – 30%

Midterm **exams** will be announced at least 1-2 weeks in advance. All exams will be cumulative, but with emphasis on new material. I expect the first midterm to be sometime in late September or early October, and the second midterm to be in early to mid November. All exams will be take-home.

The **homework** is the heart of this course. Every other week I will hand out an assignment due 2 weeks from that date – solutions being presented when it is due. The homework will usually consist of two parts: easier A-problems, designed to test your understanding of the material being covered; and harder B-problems, designed to test your talent, your stamina, your courage, your fortitude. Occasionally, a homework will contain extra credit C-problems for the bravest. Even a good student should understand that some portion of each B- and C-problem may not seem doable in the time you have; however, you should still try to do the whole homework. This is the common lot of creative and original work in all areas – we always attempt things that are too hard for us. I understand this and allowance will be made at grading time. Throw yourselves at these problems; surprise yourselves at how much you can accomplish.

The classes when assignments are due will be "the Lab," where you will present your homework solutions to me and the rest of the class. During the Lab, mostly B- and C-problems will be presented.

I ask that you work together in small **groups** of your own choosing to solve these problems. There are two reasons:

1. The problems may be too hard or too many to do alone. You must learn to cooperate – not compete – with one another. A piece of an idea may germinate in one head, the rest of the solution in another – this is normal, it is the way the world works.

2. It is essential to develop critical faculties and to be able to explain things to each other – *clearly*. It is all too easy to think you have settled something only to find you have been deluding yourself. Here is where you can help one another to think more clearly.

If you work in a group (as I strongly urge), please hand in but *one* paper for the entire group. Everyone in the group will receive the same grade for that assignment. That brings us to the two fundamental rules which experience shows govern groups:

1. The best size for a group is four or five.

2. You are in the "correct" group if you are neither always giving nor always taking. Change groups if you are in the wrong one. Remember: *Give-and-take is what you want.*

One more remark on HW: You will not be able to do the problems if you begin on them 24 or 48 hours before they are due. You will need the entire two weeks to think about them. (Yes, I really mean it!) Within a day of receiving them, absorb them and let them cook in your head for the entire two weeks. NO LATE HOMEWORK CAN BE ACCEPTED.

Please address any special needs or special accommodations with me at the beginning of the semester or as soon as you become aware of your needs. Those seeking accommodations based on disabilities should obtain a Student Academic Accommodation Request (SAAR) form from the Disability Resources (DR) office (515-294-6624). DR is located on the main floor of the Student Services Building, Room 1076.