

**MAT 300 — MATHEMATICAL STRUCTURES — FALL 2005**

**Line No.:** 36386  
**Time:** TuTh 10:40-11:55 PM  
**Room:** AG-181  
**Instructor:** Jack Spielberg  
**Office:** PSA-747  
**Phone:** 965-3286 (Math Department: 965-3951)  
**Office Hours:** MW 2:00 - 3:30, and by appointment  
**e-mail:** jack.spielberg@asu.edu  
**webpage:** <http://math.asu.edu/~jss>  
**Text:** *Proofs and Fundamentals*, Ethan D. Bloch, Birkhäuser

**Note:** The information in this syllabus may be modified during the semester at the instructor's discretion. Changes will be announced in class.

**Points:** Final (cumulative): 30%  
2 midterms @ 15: 30%  
Homework: 20%  
Quizzes: 20%

**Dates:** Drop/Add Ends: August 26 (in person — 28 phone/web)  
Labor Day: September 5 (Monday)  
Unrestricted Withdrawal Deadline: September 17 (in person — 19 phone/web)  
Midterm 1 (ch. 1 - 2): September 22 (Thursday)  
Restricted Course Withdrawal Deadline: October 28 (in person — 30 phone/web)  
Midterm 2 (ch. 3 - 4): November 10 (Thursday)  
Veteran's Day: November 11 (Friday)  
Thanksgiving Break: November 24 - 25 (Thursday-Friday)  
Final Exam: December 9 (Friday), 10:00 am - 11:50 am

Homework will be collected on Tuesdays. Write neatly and legibly, print your name, STAPLE the pages together BEFORE class. Assignments will **\*\*NOT\*\*** be announced in class, but will be posted on my webpage. You must check there regularly for updates. A short quiz will be given each week. The quizzes will be based on the homework that is not handed in.

Late homework will not be accepted, and missed quizzes cannot be made up. However, I will drop the lowest two homeworks and the lowest two quizzes at the end of the semester. I recommend that you reserve these opportunities for emergencies or university-sanctioned absences. A missed midterm exam can be made up only in the case of a documentable emergency, or because of a conflict with a university-sanctioned activity. In the latter case you must notify me well in advance, and provide me with a copy of your travel schedule and the name and phone number of the appropriate university sponsor. The Mathematics Department has an extremely strict policy regarding missed final exams. You may view this policy through a link on my webpage.

During class I welcome questions at any time. (The only exceptions are questions about the grading of your own homework/quiz/exam. Please bring these questions to me before or after class, or during office hours.) Please feel free to come by my office at any time, either for a quick question or a longer discussion. If it is not a designated office hour, and I am too busy, we can set up another time. If you want to come by when it is not a designated office hour, you may call to see if I am in. You may also send me questions by e-mail.

**(OVER)**

## HOMEWORK

Assignment	Read	Due	Section	Hand in	Do, but don't hand in
1	1.2-3	8/30	1.2	11(1), 12(1), 13(3)	11(4), 12(2), 13(5)
			1.3	2(4), 3, 6(ii), 7(xii, xv)	2(7), 6(xii), 7(vi, xiii, xiv)
2	1.4-5	9/6	1.4	2(4)	
			1.5	5(2, 4), 6(3, 7)	5(3), 6(4, 5, 9)
				A.	B.

A. All people with red hair are nice.

B. Some people with red hair are nice.

In problems 5 and 6 in section 1.5, and problems A and B, follow these directions instead of those given in the text:

- (i) Rewrite the statement using symbols and quantifiers (you will have to define letters for the relevant pieces of the statements.)
- (ii) Negate the result of part (i) and simplify it.
- (iii) Write an English sentence expressing the result of part (ii). Do not write the word “not” applied to any of the objects being quantified.