

1. Structure of the Class Hour

- (a) There are two days on the syllabus for every section of the book. The first day for each section will consist of a lecture. On the second day we will work through some of the harder concepts and homework problems.
- (b) You will be expected to read the material in each section outside of class. Lectures will not cover all of the material in the textbook, and will be more of an overview of the section being covered. Effectively reading, understanding, and learning from the textbook may be the most challenging part of this course for you if you have not taken a class like this before.
- (c) On “problem” days you may be asked to go to the board to present solutions, or to be the leader in solving a problem. Sometimes I will be the one at the board, taking suggestions as to how to proceed from the class. One major goal of problem days is to get *you* to talk through the material, so you are going to be put on the spot a lot!
- (d) Your participation in problem days will be a part of your grade for the course.

2. Collection of Assignments

- (a) Homework is listed on the syllabus according to the day it is assigned. Every assignment is due at the *beginning* of the class period following the one in which it is listed.
- (b) Each day we will roll of a six-sided die, which will determine whether or not assignments are to be collected, as follows:
 - 1 No collection
 - 2 No collection
 - 3 No collection
 - 4 Homework collected
 - 5 “Proof of the Day” collected
 - 6 Either HW or POD is collected, determined by a class vote
- (c) I will not accept late assignments. If you are going to miss class, give your assignments to a classmate to hand in for you. If you have an unexpected problem please contact me as soon as possible.

3. Homework

- (a) Problems for each section are split into two parts. For Section n there will be HW $n.A$ (mostly easier, calculational problems) and HW $n.B$ (mostly harder or theoretical problems).
- (b) HW $n.A$ is assigned the day we have the lecture on Section n and due at the *beginning* of the subsequent problems day. You are expected to read the entire section and do this first block of easier problems *before* the problems day for that section. Since you may have to hand in this assignment at the start of the problems day, you may want to make notes to yourself about any problems from HW $n.A$ that you would like to address during the problems day.
- (c) HW $n.B$ will be the major focus of the problems day for Section n . It is very important that you do as much of HW $n.B$ *before* the problems day, even though these problems will not be due until the subsequent class period. Remember that you may be asked to go to the board to present solutions or try to solve a problem. If you do not have a significant head start on HW $n.B$ before problems day, you may have trouble following what we do on problems day, and you may have trouble completing HW $n.B$ before the next class period.
- (d) I expect your homework assignments to be neat and organized. A significant part of mathematics is expressing yourself clearly. Each homework problem should stand on its own; that is, the problem should be summarized or stated before the solution is presented. The solution should be neat, clear, logical, and easy to follow. Try to imagine that you are writing an example or solution that will be published in a textbook, or that a classmate will be reading your solution and trying to understand the logic of your arguments.

- (e) You may work with whoever you want, however you want, to complete the homework assignments, as long as your work is your own and you are following the JMU honor code. In fact, I encourage you to work together as much as possible, and to talk about mathematics as much as possible. However, if you receive any help on a problem you should clearly indicate this on your work (including help from another student, ideas brought up during problem days, help from me, or help from a tutor or friend). For example, you might write “This method of proof suggested by Stuart” or “You helped me with this problem in your office hours.”
- (f) Homeworks should be clearly labeled with your name, the date, and either “HW $n.A$ ” or “HW $n.B$,” as appropriate. (Of course, fill in the “ n ” with the appropriate section number.)
- (g) Each collected homework assignment will be worth 10 points. Your score will be based on completeness and on your answers to selected problems.

4. Proof of the Day

- (a) Proofs and proof-writing are a major focus of this course. Writing proofs clearly and succinctly is a skill and an art, and one goal of this course is for you to learn how to write proofs. To this end I have chosen one proof for each day of class that you will work on with special attention.
- (b) There will be two “Proof of the Day” (POD) assignments for each section of the book. Usually POD $n.A$ will ask you to write up a proof from the reading in your own words, while POD $n.B$ will be a proof from the exercises.
- (c) Unlike homework assignments, you are expected to work on the POD primarily on your own. You may discuss the POD with anyone you like, as long as no written material is used. (No writing on the board, no looking at another person’s work, etc.) The point is for you to express the proof clearly and succinctly on your own.
- (d) Some POD’s ask you to write up your own proofs for theorems that are proved in the textbook. For these assignments, you may not simply copy down the proof in the book. (I’m not stupid, I can tell if you copied it out of the book!) The point is for you to organize the material in your own way, with your own words, and to fill in the details that are invariably left out of many proofs in the textbook.
- (e) Since the major focus of the POD is to help you learn to write good proofs, the major part of your grade for any POD will be based on how well your proof is written. You may have to revise your proof a number of times before it is suitable for handing in.
- (f) Please do not write proofs in “paragraph format” (as they often appear in the book). Such proofs are very difficult to read. Try to organize your proofs in a more readable format, maybe with more linebreaks, a more list-like format, or with reasons/justifications provided at the end of each line. Find your own style of proof-writing. Don’t forget to clearly state the problem before providing the solution.
- (g) Each “Proof of the Day” should be clearly labeled with your name, the date, and either “POD $n.A$ ” or “POD $n.B$,” as appropriate. (Of course, fill in the “ n ” with the appropriate section number.)
- (h) Each collected “Proof of the Day” assignment will be worth 10 points. Your score will in large part be determined by the quality of your proof-writing.