Suggestions for taking a mathematics exam

by Dr. Andrew Nestler

Before the exam:

Accept the fact that, even though your instructors may indicate what the exam will be like, they may change their minds, and you have no control over the format, length or difficulty of the exam. Remember that the exam is your opportunity to demonstrate what you know and what you can do. Study so that by the time you take the exam, you have little or no questions or misunderstandings regarding the material, and are confident in your knowledge and ability.

Instead of staying up very late or even all night before the exam, get plenty of sleep and wake up early on the day of the exam.

Arrive at the classroom early, allowing yourself time to relax and focus.

During the exam:

If you realize that you tend to make common errors, such as forgetting to write “+c” at the end of an indefinite integral problem, or temporarily forgetting memorized formulas, begin the exam by writing “+c” or definitions or formulas or other visual clues at the top or on the back of one of the pages.

Read through the exam quickly to get an overview of the problems. Start with the problems that you find the easiest. Pace yourself, moving through the exam to allow extra time for more difficult problems, and also time to go through your exam to check your work.

Read instructions carefully. In particular, do not do more work than you are asked to do.

Do not omit a problem. Write down a relevant definition or statement of a theorem. This may earn you partial credit, and may give you ideas about how to solve a problem. Try to write true statements, and refrain from writing false statements.

Remember that each problem on the exam is designed to test a course objective or your ability to make a connection between several topics. Think about what you were studying prior to the exam and determine what topics are being tested on each problem.

Do not erase anything; rather, neatly cross out any unused work – this way the instructor may salvage some of your work for partial credit.

Check your work using an alternate method of solution if possible. Do not leave the exam early unless you are really sure that you have done all you can do.

After the exam:

Immediately after receiving your graded exam, inspect it carefully. Attempt to solve again each problem that you did not solve correctly. Analyze your errors and determine whether they were small/silly errors (e.g. making arithmetic errors, memorizing a formula incorrectly) or more fundamental conceptual errors (e.g. not really understanding the concept(s) being tested). Discuss your exam in private with your instructor, and modify your study habits accordingly.