

HOW TO (MAXIMIZE THE LIKELIHOOD THAT YOU WILL) DO WELL IN YOUR ECONOMICS CLASS

*Marc F. Bellemare**

Introduction

“I have studied a lot for this test, but I didn’t do well. That’s so unfair. How can I do better next time?”

This is a question I have heard often since I began teaching. Because I used to teach the core undergraduate microeconomics course in a public policy school, where not all students like economics, it is a question I probably hear more often than my colleagues who have always taught in an economics department.

So instead of giving the same advice over and over again to different students, I thought I should write down my thoughts about how one can maximize the chances one will do well in one’s economics class.

Beyond the obvious, my credentials for doing so are as follows. I started college wanting to major in philosophy. After a few semesters of (i) wondering what I would do with my life with a philosophy degree and (ii) feeling frustrated by what I felt was somewhat arbitrary grading, I switched my focus to economics, where I didn’t do very well in microeconomics and math for economists until I figured out a good method of preparing for tests. But that wasn’t until I started my Masters in Economics. Hopefully, this document will help some of you get there earlier than I did.

Method

The most important piece of advice I was ever given about how to study for an economics test was: “Quit reading the book and start solving problems.”

This seemingly simple statement says it all: beyond a few definitions and formulas that you will need to remember, economics is not about rote learning, it is about technique. This means that in most core courses (e.g., micro, macro, or econometrics), you should only use your textbook when there is something you do not understand or for which you need a refresher.

Now, I am not saying that you should not read the textbook. If you read it ahead of lecture, reading the textbook will allow you to get a lot more out of lecture (and although I started every semester telling myself I’d do the readings ahead of time, I never kept that resolution more than a few weeks). If you read it after class, it will allow you to make sure you understood things correctly in lecture or to properly understand the things you did not understand in lecture.

On a related note, it is perfectly okay not to be able to follow what your instructor says in lecture from start to finish. It’s not supposed to be that easy. If it were, it would either not be taught at the college level, or you should switch to a higher-level class. It has often been the case throughout my career as a student (i.e.,

* Assistant Professor, Department of Applied Economics, University of Minnesota, 1994 Buford Avenue, St. Paul, MN, 55108, mbellema@umn.edu.

spanning B.Sc., M.Sc., and Ph.D. degrees) that I would eventually just stop following what an instructor would say. In that case, I would just switch to pure note-taking mode during lecture, making sure to figure stuff out on my own once I got home. This is where the textbook really comes in handy.

So what is the right way of preparing for an economics exam?

How to Work on Problem Sets

1. As soon as a problem set is assigned, read the questions. On a piece of paper (I'm old-fashioned, I know), try to note down, for each question, what you think the answer is, or how you would go about solving this given problem. Do this without the help of your textbook: the idea is to get you to think on your feet about economics problems (since that's essentially what an exam is designed to do) as well as to set your brain to work on these problems while you do something else. I have no scientific information to back this claim, but my experience is that there is a whole lot of "thinking" about specific problems that occurs while you do something else.¹

2. Once you decide to start working on the problem set seriously, review your lecture notes or the slides. If there is anything you don't understand from lecture, read the relevant textbook chapter.

3. Attempt to solve the problems. Don't spend more than five minutes on a problem if you really have no idea how to go about solving it – it will simply discourage you, and that will put you on a path towards self-defeat. Make a note of what concepts and techniques the problems you can't solve involve. Identifying your weaknesses, and identifying them early, is key.

4. Once you have solved everything you could solve, go over the problems you set aside for later. You will notice, however, that some of them may have become feasible. For those that have not, read the relevant textbook chapter.

5. Attempt to solve the difficult problems again. If you still cannot solve them, talk to the teaching assistant or your instructor during office their hours. I find that it's best to talk about these problems since it is difficult to solve economics problems via email.

How to Prep for an Econ Exam

1. Once again, attempt the practice problems "cold." That is, do not look at your lecture notes, and do not look at the textbook. Presumably, you are getting better at this after working on your problem sets, so there will be fewer problems which you simply have no idea how to solve. This is good news, but there will still be problems that you cannot solve. Again, make a note of what concepts and techniques the problems you can't solve involve, and move on.

2. Once you have solved everything you could solve, go over those problems you set aside for later. If you still cannot solve them, read the relevant parts of your lecture notes and the relevant textbook chapters.

3. If you still do not understand how to solve these difficult problems, talk to the teaching assistant or your instructor during their office hours.

¹ Also see <http://orgtheory.wordpress.com/2008/05/03/subconscious-problem-solving/>.

4. After a few days, try all the problems again. Make sure to spend more time on your identified weaknesses than on the things you do well. Once again, make a note of your weaknesses.
5. Repeat steps 2 to 4 over and over until you have effectively eliminated all your weaknesses.
6. Learn whatever has to be learned by heart for the exam: definitions, formulas, theorems, etc.
7. Make sure you have a full night of sleep before taking your exam. This is more about the fact that your brain needs a full night of restful sleep to process, order, and structure complex information than it is about being well rested.

You'll notice that the process just described takes a few days. The corollary to that is this: Don't wait until the night before to study for an economics exam. Just like you can't show up for an expect to complete a half-marathon if you have never run in your life, you can't show up for an expect to do well on an economics exam if you have never done the practice problems.

Conclusion and an Analogy

As you can see, except for step 6 above, there is little to no actual "studying" involved. This is why it is often so difficult for students in other disciplines to do well in their economics courses: They think they can just cram for their econ exams.

A while ago, I had a student in my office tell me that she was really good at taking tests in her history classes, but that it was different in my class. The reason for this is that preparing for an economics exam has a lot more to do with preparing for a mathematics exam than it has to do with anything else.

In fact, my own experience is that preparing for an economics exam has more to do with preparing for a musical performance than with preparing for an exam in the humanities. You cannot expect to play a piece of music perfectly the first time you sight-read your way through it. Rather, you will have to do a number of very rough sight-readings of it before you can identify weaknesses in your playing. When you have identified those weaknesses, you will isolate those measures that are the most difficult and work on them until you can play them seamlessly at the right tempo. Once that's done, you will play the whole piece so as to make sure you can integrate those difficult measures into the easier material to make the whole piece of music flow evenly.