

Tips for Succeeding in ECON 302

1. **Attend class in person whenever possible** (and watch lecture videos if you miss class). Lectures are essential because:

- **Outside material (e.g. textbooks, YouTube videos) is NOT a good substitute for attending class.** While consulting external sources can help in addition to attending class, these sources may not focus on the same things as the instructor, who makes your exams. Moreover, non-textbook outside sources often fail to discuss the links between different topics and sometimes seek to provide only a superficial knowledge of the material by showing you how to answer certain questions without emphasizing why these methods work and/or produce complete answers. In ECON 302, **understanding “why” in addition to “how” is important for success.**

For more about **textbooks**, see the FAQ on Canvas.

- **Doing problem sets is an important complement to attending class, but, again, NOT a good substitute.** Problem sets focus on questions where *practice* is most needed – especially quantitative exercises. Some important aspects of the course may not appear on problem sets (for example, you are seldom asked to copy definitions or repeat explanations given in class) but do show up regularly on exams. Also, relating to the previous point, problem sets give you practice for how to answer certain questions, but they are useful for understanding why the methods work **ONLY IF** you learn the theory, which is taught during class, before doing those questions.

Moreover, attending lecture **in person** helps because:

- **Attending class forces you to keep up with course material.** If you skip class thinking that you’ll just watch videos later, you may fall far behind and may never get around to watching those videos. By the end of the Spring 2022 semester, only about 20% of students were attending class and about 30-40% of students were watching lecture videos. This means that nearly half of the class completely skipped lectures, which predictably led to extremely poor results. This is why I am grading attendance in 2022-23 and may continue to do so thereafter, as needed.
 - Obviously, if anything is unclear, **you can immediately ask questions in class.**
 - Most people focus better while attending a lecture live than remotely.
2. **Understand that “learning things by heart” isn’t the point of ECON 302 – and embrace this fact!**

The objective in this course is for you to understand certain ideas well enough that you can use them to analyze **NEW** situations, both familiar and unfamiliar. For this reason, while some exam questions will match questions from lectures, problem sets or past exams, many (regular questions that are simple applications or ask for explanations, as well as challenge questions) will be different. Problem sets aim to help you absorb the material, NOT to give you things to learn by heart. Memorization and shortcuts will not get you very far in this course: to do well, you must understand the concepts.

Why is this something to embrace? You are much more likely to remember things that you understood than things that you just memorized. (Example: if you learned the definition of derivative as a limit in Calculus I by heart without understanding it, you've probably forgotten it. But if you understood the idea behind the formula, you're much more likely to remember it.) So if you do well in ECON 302, chances are that you will get more out of this course than a class based on rote learning where you do equally well.

Now, this doesn't mean that you don't have to learn anything by heart – there are several definitions that you just need to memorize, just like you had to memorize some formulas in high school math before being able to use them to solve problems.

3. **Attempt problem sets and past exams seriously BEFORE consulting solutions.**

Given that you have access to past exam solutions, it may be tempting to read them as soon as you don't immediately know how to answer a question. (The same goes for problem sets if you somehow get the solutions before they're posted, although as explained on the syllabus, this can be counterproductive.) Don't do this! The whole point of problem sets and past exams is to get you to **THINK ACTIVELY**. If you read the solutions to anything you can't figure out in just a few minutes, you are cutting short the thinking process and becoming a passive learner. This usually leads to worse understanding of the material and therefore worse performance in the class.

4. **CAREFULLY study the solutions to problem sets and past exams.**

Do not make the mistake of just comparing your final answers to the solutions' final answers and figuring out how to get the latter if they differ. Remember that **you should know not only how to do the problems, but also why the solution is constructed in a certain way**, so that you know what to do when¹, can explain the reasoning and can build a new solution when facing a different problem. Pay special attention to the **explanations** given in the solutions even if your final answer is correct: on exams, you are often asked to explain why the reasoning behind the way in which you solve a problem.

Here are a few things to reflect on as you go through problem sets and past exams:

- What is the point of the question? (For example, what course concept(s) does it relate to? If there are any "twists," what do they illustrate?)
- What is the economic intuition behind the math?
- (In some cases) Why do other ways of doing the problem work or not work?

5. **Do NOT rush through past exams in an attempt to do them all.**

I have posted all my past ECON 302 exams on Canvas (except for Fall 2020 remote exams, which had a very different format). Since I have taught this course many times, there is a huge amount of practice available, and if you follow the two previous tips, you probably won't have time to do it all. **I would suggest prioritizing exams from recent semesters, which have regular/basic and challenge questions broken out.** Try to mimic exam conditions while doing past exams. Also make sure to read the information and brief tips in the "Practice Exams" section on the course website.

¹ If you blindly learn solution methods without thinking about what you're doing, you could do silly things on exams, such as solving a Stackelberg model as if it were a Cournot model (this happened a lot in 2011-2012), find the Nash equilibrium when you're asked for Pareto efficient outcomes (final from Fall 2012) or to analyze dominated strategies (final from Spring 2022).

6. **Keep the big picture in mind: avoid mixing up concepts and know their significance.** As you study for exams (especially the final exam), make sure you get the relationship between the many ideas covered in this course: you should be able to “see the forest for the trees.” For example, how do the purposes of “Nash equilibrium” and “Pareto efficiency” differ? What is the relationship between “incomplete information,” “asymmetric information,” “hidden characteristic” and “adverse selection”? It’s a good sign if you can recall the structure of the course outline without having memorized it.

Some Useful Reminders

- Economics is the most quantitative social science, and microeconomic theory is among the most math-intensive areas in economics. If you have problems with math, and especially if you struggled in ECON 103, 201, MATH 157 or ECON 233, which this course builds on, be prepared to do some review and work extra hard in ECON 302. You can also try to work with someone that is good at math on problem sets, but don’t free-ride off their work: **think about how you would tackle the problems before meeting with your study group.** That said, this is not a math course, and the actual mathematical techniques used are not advanced. The main challenge is problem-solving.
- At SFU, there are two semesters of required intermediate microeconomics, while many universities have only one. We do not cover twice as much material, but some topics (“+” on the outline) are covered in greater depth, at an advanced undergraduate level. As a result, you will be learning some concepts that may not be covered in standard intermediate textbooks. **Consider reading and thinking through the lecture slides before class. Make sure your own notes fill the gaps from the lecture slides.**
- The problem sets may be time-consuming. Remember that this is a 4-unit course, and you should be spending 4.5 to 8.5 hours per week outside of class. This is an average that includes some weeks with no problem sets (when you’ll be below 4.5), but also some weeks with exams (when you may be well above 8.5).

Additional Tips from Former Students

Three students that took ECON 302 both in Fall 2011 and in Spring 2012 improved from a D to a B. I was the instructor both times and asked one of them which things were done differently. The reply mentioned the following elements:

- “I stopped trying to cram everything in just 2 days and tried to get at least 4 days to study before the quiz, midterm, and final.”
- “Before the exams, I would first study the lecture slides and make my own notes from it.”
- “I stopped trying to memorize the questions (which works in some other classes) and tried to understand the basic concepts, and how and why they were done the way they were through the problem sets.”

The student found the last point especially important because it means that when facing exam questions that differ from problem set questions, partial credit can be obtained even when one does not know how to fully solve the problem.

The student then summarized, **“It’s really just changing my habit from trying to memorize the solutions to trying [...] to understand the concepts.”**

Another student that also improved from a D to a B said, **“I thought understanding the concepts is much more important than memorizing the answers.** Visiting TAs regularly also helped me significantly.”