

This review sheet is intended to cover everything that could be on the exam; however, it is possible that I will have accidentally left something off. You are still responsible for everything in the chapters covered except anything that I explicitly say you are not responsible for.

Therefore, if I left something off of this sheet, it can still be on the exam. There will be no multiple-choice questions. Most of the questions will be like the ones in the homework assignments, and possibly a few definition questions, but I am more likely to ask questions that make you use the definitions rather than recite them. I will probably ask one of the questions from the book at the end of the chapters.

The review session will be at a time to be determined in class, probably Wednesday 2/9.

Chapter 1: What are economics, macroeconomics, microeconomics, and wants? Know the difference between positive and normative statements. What is meant by **incentives**, **models**, **theories**, and *ceteris paribus*? What is important about them? From the appendix, know how to **plot a straight line**, **calculate the slope** of any line including curves, and know what we mean by **direct** and **inverse relationships**.

Chapter 2: What are scarcity, land, labor, physical capital, human capital, entrepreneurship, goods, and services? **“Opportunity costs” is the first of the great ideas in this course that helps this course qualify for fulfilling the Contemporary Society and Institutions requirement for graduation from Bethany College. Therefore, it is one of the most important parts of this course.** What are **opportunity costs**? How do we see them? Note that opportunity costs are what you would have done with the time and resources. What is the PPC (or as I prefer to call it, the **PPF**)? Why does it take its shape? How does it show the opportunity costs? Where do we see **efficiency**, **inefficiency**, and **unattainable** sections of the graph? What moves it? What explains the law of increasing relative costs? How does the trade off between current consumption and capital goods affect future output? What are **absolute advantage** and **comparative advantage**? What is the **law of comparative advantage**?

Chapter 3: **“Supply and demand analysis” is the second of the great ideas in this course that help this course qualify for fulfilling the Contemporary Society and Institutions requirement for graduation. Therefore, it is one of the most important parts of this course.** What determines demand? What is the **“law of demand”**? What do **“demand schedule”** (a.k.a. table) and **“demand curve”** represent? What moves the demand curve and what causes movements along the curve? Ignore inferior goods. Answer the **above questions for supply**. **Note that one of the two most common errors students make on questions is to get confused between movements along a curve and movements of a curve. Price changes cause movements along the curve.** Since the list of things that move supply and the list of things that move demand are almost mutually exclusive (excluding expected future prices), you should almost never move both curves. Move one and move along the other one. One note, the costs of production include the opportunity costs of producing another good. We called this the price of a substitute in production. For example, if the price of another good that they could produce goes up, then the cost of resources used to produce both go up and that reduces supply of the good you are analyzing. This is one way that the costs of inputs can go up. Also, a change in the selling price of a complement in production will encourage or discourage production of the good, thus will move supply. A complement in production is something that you produce with it. **The other error common to students in this course, is to move the supply curve the wrong way.**

Note that because the graph has the dependent variable on the horizontal axis, it moves right and left. Know what equilibrium is and how it is achieved. What are **shortages** and **surpluses**?

Chapter 4: What is a **price system**? Ignore voluntary exchange, transaction costs, and terms of exchange. Like most things we skip in these early chapters, they are important for microeconomics but not for macroeconomics. Be able to show movements of supply and demand on the same diagram. If you do not draw both supply and demand, then I will take off points. Also, label all axes and lines. How do we **ration goods**? What are other methods of rationing? What are the economic effects of **price ceilings, price floors, taxes, and quotas**? Be able to show them on the supply and demand graph. Use the graphs to explain the problems they cause, how those problems are solved without government action, and what the government can do to relieve those problems.

Chapter 5: What are **negative externalities** and **positive externalities**? How are they seen on the graph? What is the best way to offset them? Show that on the supply and demand diagram. Know the economic reasons for **providing a legal system, promoting competition, providing public goods, and income redistribution**. Know what **government sponsored** and **government deterred goods** are. What is the difference between **voting** and **spending**?

Non-graded Homework Assignment #3A to be reviewed with Assignment #3.

1) (30 points) Rare earth metals are important for batteries and computers. However, mining of them causes environmental problems. Illustrate the S/D diagram for rare earth elements taking into consideration the environmental problems. Explain why the diagram looks as drawn. If the government wanted to reduce this problem, what do economists say is the best way to do that? Illustrate that on the graph. Explain why the diagram changed as drawn and how that reduces the problem. <https://phys.org/news/2021-08-rare-earth-elements-western.html> (Of interest, although I am not asking about it, there is also a positive externality issue too. The batteries help increase the availability of electric vehicles which reduce climate change.)

2) (15 points) The book says that “income redistribution” is a non-economic reason for government. I argue that it is also an economic reason for government, provided it is not done too much. From an economic point of view, why do we need some income redistribution? Explain your logic.

3) (15 points) A lot of textbooks incorrectly state that police services is a public good. Give the economists’ definition of a public good and prove that they are not a public good.

4) (20 points) Suppose that a project costs \$4000. If completed, it would allow the firm to sell 1 item to each of 250 people at a profit of \$20 per item. There is a negative externality which affects 200 people at a cost of \$6 per person. Should this project be done? Would the market provide it? Would the government provide it? Show all work for each calculation and briefly explain what you did.

5) (20 points) Suppose that a project costs \$3000. If completed, it would allow the firm to sell 1 item to each of 300 people at a profit of \$9 per item. There is a positive externality which affects 200 people at a benefit of \$2 per person. Should this project be done? Would the market provide it? Would the government provide it? Show all work for each calculation and briefly explain what you did.