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 Thursday 9/11.

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

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.

Most of 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.

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

- 1) (30 points) Draw the supply and demand for water. The article below talks about how the water companies in the UK are creating negative externalities. Use the graph to prove the optimal amount of water is not being used. Explain how the graph shows that. What do economists say the government should do to correct that problem? Illustrate that on the graph and show how it corrects the problem. <a href="https://www.envirotech-online.com/news/water-wastewater/9/international-environmental-technology/river-pollution-and-externalities/59847">https://www.envirotech-online.com/news/water-wastewater/9/international-environmental-technology/river-pollution-and-externalities/59847</a>
  There is another interesting article about polarization in our country and externalities, which I found interesting. <a href="https://www.ictworks.org/tax-negative-externalities-of-digital-platforms/">https://www.ictworks.org/tax-negative-externalities-of-digital-platforms/</a>
- 2) (25 points) Draw the supply and demand for vests. Illustrate the effects of a price floor. Explain why the diagram changed as drawn. What is the problem created? If the government does nothing about that problem, how will the market solve the problem? Show that on the graph and explain how you found it.
- 3) (15 points) The webpage linked below has two problems with it. Fire and police are not public goods. Why is this page wrong? Explain your logic. <a href="https://www.economicshelp.org/blog/137/markets/paying-for-police-and-fire-services/">https://www.economicshelp.org/blog/137/markets/paying-for-police-and-fire-services/</a>
- 4) (30 points) Draw the supply and demand for a good which creates a positive externality. Use the diagram to prove that the market won't produce optimally. How do economists say to solve this problem? Illustrate that on the graph. Explain why the curve(s) moved as drawn and how it gets us to the optimal point.

There is a great article on the opportunity costs of college: <a href="https://www.startribune.com/making-sense-of-opportunity-cost/600283400">https://www.startribune.com/making-sense-of-opportunity-cost/600283400</a>