

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 missing class on 1/30 will be made up by not going over Exam #1 in class. Instead you will get an answer key. The review session will be at a time TBD in class, probably Thursday 2/7.

Chapter 1: What do economists mean when they use the terms **scarcity**, **resource**, and **capital**? What is the most common method of **rationing** in the USA? Know what the following terms mean. We will go into more detail in later chapters: **opportunity cost**, **utility**, **incentives**, **marginal**, and **secondary effects**. Understand why more **information** helps us to make better choices but is costly, the value of a good or service is **subjective**, and why the **test of a theory** is its ability to predict. Understand the differences between **normative** and **positive statements**. Know how *ceteris paribus* is an important assumption. Be able to find the **slope** and **intercepts** of a straight line. Also be able to find the slope of a curve at a point. That is done by finding the slope of the tangent line.

Chapter 2: **Opportunity costs** are one of the most important topics of the course. (Of interest the footnote on the bottom of Page 20 would have helped with your answer to Question #1 on Homework #2.) Know how **trade creates value**, **transaction costs are a barrier to trade**, and **middlemen reduce costs**. Why are **property rights** so important especially for incentives? Know why the **PPC a.k.a. PPF** takes its shape. Know what moves it. Note that it shows what can be produced. We do not know if we are on the curve or not. We also cannot tell where on the curve we want to be because there is no indication of tastes or demand. So, when moving it, talk about the "maximum amount we can produce" not what is produced nor what is demanded. Know how to find the opportunity costs of the two goods on it. The absolute value of the slope is the opportunity costs of the good on the X-axis. If you want the opportunity costs of the good on the Y-axis, you must take the reciprocal of the absolute value of the slope. How does the PPF show **gains from specialization**? What is **comparative advantage**? Be able to prove the **Law of Comparative Advantage** and understand why it makes sense. The proof comes from the relationship of the two opportunity costs as seen on the PPF.

Chapter 3: Understand why **demand curves** slope down. They are the **income effect** (*can't afford to buy as much*) and the **substitution effect** (*substitute a cheaper product*). Know the difference between a change in **demand** and a change in **quantity demanded**. The former moves the curve while the latter is a movement along the curve caused by a change in the price. Understand what **consumer surplus** means and how to find it on the graph. Know how to find the **elasticity of demand** which is more properly called the **own-price elasticity of demand**. All elasticities are $\% \Delta Q / \% \Delta \text{something}$. For this one, the something is price. If you use the **point formula** for the elasticity, the $\% \Delta Q$ is $(\text{New } Q - \text{Old } Q) / \text{Old } Q$. The **arc formula** divides by the average of (New Q and Old Q). Know how to determine if the demand curve is **inelastic**, **elastic**, or **unitary elastic** and what that means. Those are $|E| < 1$, $|E| > 1$, and $|E| = 1$ respectively.

The first one means small change in Q (steep demand) and the second means large change in Q (flat demand). However every point on a straight line has a different elasticity, so you cannot look just at the slope. Understand why necessities tend to be inelastic, items with lots of substitutes tend to be elastic, items you spend a large percentage of your budget on tend to be elastic, and why time makes all elasticities more elastic. Know how the following changes affect the demand curve: income, tastes, number of consumers, price of a **substitute**, price of a **complement**, expected future prices. Remember, you need to explain your logic especially for substitutes and complements. Peanut butter and jelly being a classic example. Understand why **supply curves** slope up. Know the difference between a **change in supply** and a **change in the quantity supplied**. How do we see **producer surplus** and what does that mean? Understand how the **elasticity of supply** is calculated and what it means. It is basically the same as elasticity of demand except that it is always positive. Know how the following cause the supply curve to move: **marginal cost, technology, government actions** (we will discuss this more in later chapters), **number of producers, expected future price, price of substitutes in production, and price of complements in production.** Note that if you say “substitute” or “complement” without “in production” then it means in consumption. If you have no idea how two products are related, it is probably substitute in production or complement in production because you understand demand, but not supply. There are almost no complements in production, so it is probably a substitute in production. Substitutes in production are a type of opportunity cost. Remember, an increase in supply moves the curve down/right because the quantity is increasing. Always check to see if your graph agrees with your intuition. If not, the graph is most likely wrong. Unless expected future price is changing DO NOT MOVE BOTH SUPPLY AND DEMAND. Understand why the market is efficient, i.e., why **MB=MC** is the best place and why supply/demand gets you there. Note that the **invisible hand** causes supply to equal demand when we have **price rationing**. This is because prices going up give incentives to produce more and buy less and prices going down do the opposite.

Even though we will have covered part of Chapter 4, and the original syllabus says some of it is on the exam, it will not be on the exam because the cancelled class means we would not have covered enough to test you on.

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

- 1) (20 points) Draw the supply and demand for corn in the grocery store. Illustrate the effects of an increased use of ethanol (which comes from corn). Explain why the curve(s) moved as drawn. What happens to the price of corn in the store and the quantity sold?
- 2) (25 points) Draw the supply and demand for a good. Use it to prove the market is efficient. And prove that $MB=MC$ is the optimal point.
- 3) (20 points) Draw the supply and demand for doors. Illustrate the effects of a predicted increase in the price of doors next month. Explain why the curve(s) moved. What happens to the number of doors sold and the price charged?
- 4) (20 points) What is wrong with the following argument? “When the price of wood goes up, firms charge more for wooden furniture. This causes a decrease in demand, which is seen as a downward movement of the demand curve.”
- 5) (15 points) What happens to the elasticities of demand and supply over time? Explain your logic.