Teaching Plan

Title	Adverse selection and market failure
Instructional Objectives	➢ To illustrate how information asymmetries can lead to adverse selection
Keywords and Concepts Illustrated	➢ Asymmetric information ➢ Adverse selection ➢ Moral hazard ➢ Market failure
Needed Time	➢ One lesson, 40 minutes in total

Sessions	Details	Time Spent
Activity/ Announcement	1. T: Do you have any experience of being cheated when you buy something? After buying the product, you realize that the quality of the product is not as good as salesperson said. 2. T: Now, we try to form a second-hand market for cars. Let see what happens in the market and if there is any cheating. You class will be divided into two sides. Students in one side are used-car owners and those in the other side are car buyers (dealers). 3. T: Here are the instructions for used-car owners and car buyers (dealers). (Teacher divides the class into two sides. Distribute Appendix 1 to used-car sellers and Appendix 2 to used-car buyers. After that, post both enlarged appendices on board. It is because buyers and sellers should know the instructions of the other side as well. Explain instructions.) 4. Distribute a small blank paper to car sellers to write down their selling prices. Besides, teacher should give used-car sellers a draw to decide what type of car they have, whether a good car or a lemon. Half of the cars are good and half of them are lemons (Please refer to Appendix 3). 5. T: I give you two minutes to think about your buying or selling price. Each seller should write down your selling price on a small paper I gave to you. 6. (After two minutes) T: Now you have five minutes to trade. Sellers can reveal your prices to buyers by putting up your price. Buyers can approach sellers and decide whose car you want to buy. It is ok if you buy more than one car or you don't buy any.	10 mins 10 mins

	7. (After five minutes) T: Now, buyers can see what type of car you have bought by looking at the small piece of paper you got from the seller you approached. Both sellers and buyers can calculate how much profit or loss you have made. 8. Discussion: 8.1. Who have successfully sold your cars? (Ask them to raise up their hands. Then choose some of them to answer the following questions.) Is your car a lemon or a good one? How did you set your price? Did you tend to give wrong information to buyers? 8.2. Who could not sell your cars? (Ask them to raise up their hands. Then choose some of them to answer the following question). Can you explain why you couldn't sell your car? 8.3. How many buyers bought their cars? (Ask them to raise up their hands. Then choose some of them to answer the following questions.) Did you make a profit or a loss from this transaction? How did you make your decision when you were in the used-car market? 8.4. How many buyers could not buy their cars? (Ask them to raise up their hands. Then choose some of them to answer the following questions.) Why couldn't you buy a car? (Teacher can introduce asymmetric information and its consequences, such as adverse selection, moral hazard and market failure. Try to use this experiment to explain the meaning of these terms.) 8.5. How can we solve the problem of asymmetric information in real world?	20 mins
Tools	➢ Prepare enough Appendix 1 and 2 to students and enlarge both Appendices to post on board. ➢ Print out enough Appendix 3 for used-car sellers to draw their car condition. ➢ Prepare some small blank papers for car sellers to write down their prices.	
Definitions	➢ Asymmetric information – occurs when traders on one side	

	of the market know things that traders on the other side of the market do not. (Bergstrom and Miller, 2000) ➢ Adverse selection – is a condition which occurs in a market when buyer or sellers would, on average, be better off trading with someone selected at random from the population than with those who volunteer to trade. (Bergstrom and Miller, 2000) ➢ Moral hazard – is a condition which occurs when the actions taken by your trading partners are less favorable for you than the actions of the average member of the population. (Bergstrom and Miller, 2000) ➢ Market failure – is a condition which occurs when market cannot achieve an efficient allocation of resources. (Parkin, 1996)	
References	➢ Source of the experiment: ➢ Yandell, Dirk, 1999, Experiment #9, *Using Economic Experiments in the Classroom*, Upper Saddle River, New Jersey: Prentice Hall. ➢ Definition of key words: ➢ Bergstrom, Theodore C., Miller, John H., 2000. *Experiments with Economic Principles: Microeconomics*. The McGraw-Hill Companies, Inc. ➢ Parkin, M., 1996. *Economics 3rd rd.* USA: Addison-Wesley Publishing Company, Inc.	

Appendices **Materials for Teacher**

Appendix 1 Instructions for used-car owners
Appendix 2 Instructions for used-car buyers/dealers
Appendix 3 Car’s Condition