

## Fall 2008 LDC Exam Results --Microeconomics

This brief report describes how well fall 2008 BUS 302L students performed on their *first* take of the microeconomics exam. These results offer some insight into which of the top ten concepts junior-level business students find most difficult.

Roughly 955 students enrolled in BUS 302L during the fall 2008 semester. Table 1 contains the top ten concepts for microeconomics. Table 2 provides a breakdown of the LDC exam by topic number and level of question difficulty.

Table 1. Top Ten Concepts in Microeconomics

Topic Number	Microeconomic Concept
1	Explain the concept of opportunity cost & explain why accounting profits and economic profits are not the same.
2	Explain the principle of comparative advantage and how it leads to specialization and gains from trade.
3	Understand how various factors shift supply or demand and understand the consequences for equilibrium price and quantity.
4	Show how prices affect the allocation of resources and coordinate a decentralized market economy.
5	Discuss factors that determine demand and supply elasticity. Explain how demand and supply elasticity affect tax policy and the consequences of business decisions.
6	Be able to explain and calculate average and marginal cost to make production decisions.
7	Contrast market outcomes under monopoly and competition.
8	Apply principles of consumer/producer surplus to explain efficient level of production and sales in a market.
9	Explain externalities and public goods and how they affect efficiency of market outcomes.
10	Explain why exchange rates indicate the price of international currencies and how exchange rates are determined by supply and demand for currencies in international markets.

The third and fourth columns in Table 2 indicate the number of student responses and the percentage of responses that were correct. For example, row one shows that students answered 818 questions on topic 1 with a level one difficulty *and* that 63.9 percent of those answers were correct.

Table 2. LDC Microeconomics Results by Topic and Question Difficulty

Topic Number	Question Difficulty	Number of Student Responses	Correct Answers (percent)
1	1	818	63.9
1	2	856	52.3
1	3	93	45.7
2	1	831	66.0
2	2	843	57.8
2	3	74	45.6
3	1	443	56.4
3	2	394	48.1
3	3	94	58.3
4	1	883	59.1
4	2	791	60.2
4	3	79	43.8
5	1	847	48.7
5	2	827	32.2
5	3	81	50.3
6	1	859	63.0
6	2	815	62.5
6	3	104	40.8
7	1	400	54.8
7	2	437	35.4
7	3	82	38.6
8	1	422	47.7
8	2	415	39.2
8	3	85	40.8
9	1	431	60.2
9	2	406	34.1
9	3	70	40.9
10	1	467	50.4
10	2	370	33.6
10	3	75	34.5

The level of question difficulty is determined by the economics faculty who developed the exam questions. As expected, Table 2 shows a lower percentage of correct responses for the more difficult questions (with some exceptions in topics 3, 5, 7, and 9).

Overall student performance is fairly modest on the microeconomics exam. For example, the percentage of correct answers by topic range from a high of 66.0 (62.5) percent to a low of 47.7 (32.2) percent on the questions with level one (two) difficulty.

When controlling for question difficulty, student performance is consistently highest on topics 2 and 6. Students appear to have the greatest difficulty on topics 5, 7, 8, and 10. This finding is easier to see when ignoring question difficulty and displaying LDC exam results by topic only in Table 3.

Table 3 indicates that roughly 61 percent of the questions covering topics 2 and 6 were correctly answered. By contrast, less than 45 percent of the questions covering topics 5, 7, 8, and 10 were correctly answered.

Table 3. LDC Microeconomics Results by Topic Only

Topic Number	Number of Student Responses	Correct Answers (percent)
1	1,767	57.3
2	1,748	61.2
3	931	53.1
4	1,753	58.9
5	1,755	41.0
6	1,778	61.5
7	919	44.1
8	922	43.3
9	907	47.0
10	912	42.3

A p chart was used to investigate whether the percentage of correct answers differs significantly among the topics. The results are shown on the following page in Figure 1. The p chart reveals that 53 percent of all questions on the microeconomics exam are answered correctly. However, topics 1, 2, 4, and 6 are significantly above this overall percentage, while topics 5, 7, 8, 9, and 10 are significantly below it. Topic 3 (barely) varies from the overall percentage so the difference is not statistically significant.

If the LDC exam questions are a fair indicator of student knowledge, then lower-division microeconomics instructors may need to devote more time to topics 5, 7, 8, 9, and 10.

Figure 1. P Chart of the Percentage of Correct Answers by Topic

