

**Student Learning Outcomes Committee**  
Department/Program Assessment Results Report

Department/Program: BSBA (Finance)

Degree: Finance

Date Submitted 03/25/10

The purpose of this report is to communicate the assessment activities that have taken place during the 2009 calendar year and convey how the results are being used to improve student learning at the program level. The report should be kept as succinct as is possible, while answering the following questions clearly and conscientiously:

**I. Working from your assessment report of last year, please discuss some changes made or strategies implemented in response to last year's results.**

The department did not consider adding additional courses; it will examine the current year's findings to decide if additional courses in various "sub-areas" of Finance are needed to be brought into the assessment cycle.

**II. Drawing upon the goals and objectives contained in the department/program student learning assessment plan, what was the focus of the department's student learning assessment for the past academic year?**

**This year's assessment focused on the following GOALS and associated Student Learning Outcomes:**

**A. Goal 2: Value firms and projects**

SLOs:

1. Determine discount/hurdle rates
2. Evaluate investments in working capital and long-term assets
3. Apply valuation techniques, both DCF (discounted cash flow) and non-DCF
4. Apply the contingent claims approach to valuation

**Goal 3: Determine a firm's financing needs**

SLOs:

1. Create and analyze pro-forma statements
2. Determine composition of short and long term funds
3. Identify and evaluate financing choices

- B. The committee has completed an entire assessment cycle. All the GOALs of the BSBA-Finance program have been assessed. Appendix 1 shows the next cycle of assessments scheduled to start in 2010.

### III. What information was collected, how much, and by whom?

**The key assessment vehicles for the student learning outcomes listed under item II are results (from exams and case assignments) obtained in two courses: Finance 325 (SLO 2.1 – 2.4) and Finance 423 (SLO 3.1 – 3.3).**

#### **GOAL 2**

Goal 2 and associated SLOs were assessed from midterm and final exam questions in Finance 325 during Fall 2009.

Learning Outcome and associated questions (The questions appear in Appendix 2)

1. Determine discount/hurdle rates. Question: 11
2. Evaluate investments in working capital and long-term assets. Questions: 2, 4
3. Apply valuation techniques, both DCF and non-DCF. Questions: 1, 4, 7
4. Apply the contingent claims approach to valuation. Questions: 9, 10

#### **Scoring Results (Average for Question(s) Related to Each SLO)**

Learning Outcome, Average of Results

1. Determine discount/hurdle rates. 81%
2. Evaluate investments in working capital and long-term assets. 82%
3. Apply valuation techniques, both DCF and non-DCF. 82%
4. Apply the contingent claims approach to valuation. 72%

*The Finance Department has set the benchmark for an acceptable score at a minimum of 70% of total points.*

The average scores for these questions on the Finance 325 Fall 2009 Midterm and Final Exams were as follows.

- Q. 1: 7.1/8 points; 89%; **Benchmark 6/8 points; 91% meet or exceed**  
Q. 2: 6.7/8 points; 84%; **Benchmark 6/8 points; 81% meet or exceed**  
Q. 4: 6.4/8 points; 79%; **Benchmark 6/8 points; 68% meet or exceed**  
Q. 7: 6.2/8 points; 78%; **Benchmark 6/8 points; 64% meet or exceed**  
Q. 9: 6.3/8 points; 78%; **Benchmark 6/8 points; 72% meet or exceed**  
Q. 10: 5.2/8 points; 66%; **Benchmark 6/8 points; 55% meet or exceed**  
Q. 11: 4.8/6 points; 81%; **Benchmark 4/6 points; 69% meet or exceed**

The student performance on all three questions meet the Acceptable Score and provides evidence that Goal 2 and associated Learning Outcomes are being adequately achieved. However, the results of Questions 10 & 11 suggest that students need some more preparation in the area of option pricing and the APT (Arbitrage Pricing Theory) model.

### **GOAL 3**

Goal 3 and associated SLOs were assessed from case analyses, midterm and final exam questions in Finance 423 during Spring 2009.

Students had to do a total of 12 cases in Fin 423. In each and every case, students had to project and analyze pro forma statements which were in turn used to determine funding needs, to evaluate the firm's performance, value a project, calculate the cost of capital of funding sources, calculate free cash flows, value a company, etc. (SLO 3.1) The average score on these cases was over 80%.

This score is above the acceptable score of 70% and provides evidence that learning outcome one is being adequately achieved.

Learning outcomes 2 and 3 were assessed by an exam - A mini case that dealt with a president having to decide on how to finance a major investment: Debt vs. Equity. Students had to answer the questions below:

#### **Mini Case**

..... The president of the firm argues that the project should be delayed for three reasons.

- a) It is too expensive for the firm to issue new debt.
- b) Financing the project with new equity will reduce earnings per share because the market value of equity is less than book value.
- c) Equity markets are currently depressed. If the firm waits until the market index improves, the market value of equity will exceed the book value and equity financing will no longer reduce earnings per share.

Critique the president's logic.

The student performance on all three questions averaged 73%. This score is above the Acceptable Score of 70% and provides evidence that learning outcomes 2 and 3 meet the Acceptable Score of 70% and indicates that the learning are being adequately achieved. These results provide evidence that Goal 3 and associated Learning Outcomes are being adequately achieved.

#### **IV. What conclusions were drawn on the basis of the information collected?**

Fin. 325:

The student performance on all three questions meet the Acceptable Score and provides evidence that Goal 2 and associated Learning Outcomes are being adequately achieved.

Fin. 423:

The student performance on all three questions averaged 73%. This score is above the Acceptable Score of 70% and provides evidence that learning outcomes 2 and 3 are being adequately achieved. These results provide evidence that Goal 3 and associated Learning Outcomes are being adequately achieved.

**V. How will the information be used to inform decision-making, planning, and improvement?**

This section should describe the strategies that will be implemented for program improvement as a result of the conclusions drawn from the assessment activities. The program change may pertain to curricular revision, faculty development, student services, resource management, and/or any other activity that connects to student success.

**Report completed by: Nikhil Varaiya**

**Date: 03/25/2010**

**APPENDIX 1**

**BS – FINANCE MAJOR**

<b>GOALS AND STUDENT LEARNING OUTCOMES</b>	<b>Assessment: Calendar Year</b>	<b>Courses and Assessment Methods</b>
<b>Goal 1: Assess a firm's financial condition.</b>		
Learning Outcomes: 1. Create and interpret financial statements 2. Create and interpret cash flow statements	2010	FIN 423 Cases and/or FIN 325 Exams
<b>Goal 2: Value firms and projects</b>		
Learning Outcomes: 1. Determine discount/hurdle rates 2. Evaluate investments in working capital and long-term assets 3. Apply valuation techniques, both DCF (discounted cash flow) and non-DCF 4. Apply the contingent claims approach to valuation	2009	FIN 325 Exams
<b>Goal 3: Determine a firm's financing needs</b>		
Learning Outcomes: 1. Create and analyze pro-forma statements 2. Determine composition of short and long term funds 3. Identify and evaluate financing choices	2009	FIN 423 Cases
<b>Goal 4: Evaluate securities and manage portfolios</b>		
Learning Outcomes: 1. Apply models for Pricing stocks, bonds, and derivative instruments 2. Construct optimal portfolios 3. Design hedging strategies to Manage market risks	2010	FIN 421 (SLOs 1, 2) FIN 427 (SLO 3)
<b>GOAL 5: Evaluate the economic, legal, regulatory, and industry environment, domestic and international, in which firms operate</b>		
Learning Outcomes: 1. Perform Competitive and Comparative Analyses of industries 2. Describe Global capital markets	2011	FIN 421 Exams (SLO 1) FIN 329 Exams (SLO 2)

**APPENDIX 2**  
**GOAL #2 ASSESSMENT QUESTIONS**

**Questions:**

1. Company XYZ paid its annual dividend yesterday. The dividend was \$5.00. The dividend will grow, for the next two years, at a rate of 5%. After that, it will grow at a rate of 3% forever. The discount rate on XYZ stock is 10%. Use the models we discussed in class to estimate the value of XYZ stock.

Price of XYZ stock = \_\_\_\_\_

2. Two mutually exclusive machines perform the same function and have the following PV of costs and project lives.

<u>Machine</u>	<u>PV of Cost</u>	<u>Life</u>
machine A	\$ 8,000	9 years
machine B	\$ 4,000	4 years

If the cost of capital is 16%, which machine would you recommend purchasing? Why?

Answer: \_\_\_\_\_

4. Suppose that a new air conditioning system for the EBA building will cost \$2.5M to install and \$50,000 per year to operate (assume the operating costs occur at the end of each year of operation). However, the vendor of this system will pay the first two years of operating costs. The system should last 25 years in total and have a salvage value of \$350,000. The real cost of capital is 4% (all of the costs quoted here are on a real basis), and the college pays no taxes.

What is the equivalent annual cost?

Answer: \_\_\_\_\_

7. A small business is receiving a five-year \$400,000 loan at a subsidized rate of 2% per year. The firm will pay a 2% annual interest payment each year and the principal at the end of five years. If market interest rate on similar loans is 6% per year, what is the NPV of the loan? (Ignore taxes.)

NPV of loan = \$ \_\_\_\_\_

9. The stock price of Heavy Metal (HM) changes only once per month: either it goes up by 5% or if falls by 2%. Its price now is \$100. The interest rate is 2.00% per month. What is the value of a one-month call option with EX= \$95?

Value of one-month call option = \$ \_\_\_\_\_

10. The common stock of Triangular File Company is selling at \$90. A 26-week put option written on Triangular File's stock is selling for \$7. The put's exercise price is \$80. The risk-free interest rate is 10% per year. What should a 26-week call with an exercise price of \$80 sell for?

Value of 26-week call option = \$ \_\_\_\_\_

11. Consider the following simplified APT model:

<u>Factor</u>	<u>Expected Risk Premium</u>
Market	6.4%
Interest Rate	-0.6%
Yield Spread	5.1%

Suppose we have factor risk exposures for the following 3 firms:

<u>Stock</u>	<u>Market</u>	<u>Interest Rate</u>	<u>Yield Spread</u>
Alpha Bits	1.0	-2.2	-0.2
Beta Lot	1.2	0.0	0.3
Gamma Bears	0.3	0.5	1.0

Calculate the expected return on Gamma Bears. Assume the risk-free rate of return is 3%.

Answer as a percentage with two decimals, as in 1.23%.

Answer: \_\_\_\_\_