MSFA AY 2016-2017 Assessment

Phase 1: Assessment Plan

Learning Outcome assessed:

1-3 Analytical Tools
Accounting Describe and interpret financial accounting concepts and measurements to (i) use financial statements and footnotes to analyze an investment valuation; ii) analyze a company’s liquidity, profitability, financial stability, solvency, and asset utilization; and iii) analyze the effects of alternative accounting methods and assumptions on firm valuation.

Assessment Method:
Midterm Exam

Targeted performance, based on rubrics:
80% of students will score 22/30 (75%) on exam.

Evaluation Process:
Exam question with open-ended question.

Rubric:
Test key

Course where learning outcome was assessed:
67 students assessed.
MSFA 714-40, Corporate Finance

Evaluator(s):
Torben Voetmann
**Phase 2: Results Assessment and Planned Action**

**Results:**

The scores for problem 4 were as follows:

<table>
<thead>
<tr>
<th>27-30 (90%)</th>
<th>23-26 (77% or &gt;)</th>
<th>&lt;23 (&lt;77%)</th>
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<tr>
<td>39</td>
<td>19</td>
<td>6</td>
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87% of 67 students achieved a “satisfactory level” on test.

**Suggested Action:**

The instructor was very successful in helping students attain the targeted percentage in what is a fairly complex open-ended question. Instructor will continue to focus on developing student skills in the valuation area using applied word problems as a way to develop student skills with the underlying mathematical concepts.

**Phase 3: Closing the Loop**

We note that this question requires students to use the concept of present value in a fairly sophisticated context. The improvement in proficiency percentage relative to LOS 1-1 tested earlier (the midterm) in this class shows that the course is working well. We will continue to monitor this in course development each year to ensure it continues.
Problem 4 (30 Points)
Today is 1/1/2016, and SmartPhone Corporation (SPC) has developed the lightest smart phone in the world. In the year ending 12/31/2015, SPC spent $20 million on a test marketing campaign, believing it is going to be a huge hit. SPC must now decide whether or not to go ahead with production of the phone.

The machinery to produce the phones costs $100 million and can be installed immediately. It is depreciated for tax purposes by the straight-line method over 6 years. SPC estimates annual production and sales will be 1 million units. The phone will be produced for 4 years, at which time a new technology will have made the phone obsolete. The machinery can be sold at the end of 4 years for $45 million. SPC owns the production building, which was constructed 1 year ago at a cost of $12 million. It is also being depreciated over 6 years by the straight-line method. Another company has offered to rent the building indefinitely for $1 million per year. Their lease would start today (1/1/2016), with payments occurring on the first day of every year.

Production and marketing costs are $45 per unit. The smart phones will be sold for $90 each. Unless otherwise stated, cash flows occur at year-end. SPC is a profitable company paying tax at a 34% rate. Assume the company’s relevant discount rate is 12%.

a) Calculate the NPV of this project? Should SPC undertake this project?