

# MGEM AY 2015-2016 Assessment

## Phase 1: Assessment Plan

Learning Outcome assessed:

### MGEM Learning Outcome 05: Identify and Analyze Financial Information

Identify and analyze financial information to make effective managerial

Assessment Method:

Individual Final Exams

Targeted performance, based on rubrics:

80% Exceeds Expectations

Evaluation Process:

Students were tested with individual final exams containing both quantitative and qualitative questions. 2 open questions were assigned to test each four parts of the assessment rubric.

Rubric:

1. Students will be able to calculate EBITDA used in companies valuations decisions	Students will be able to correctly calculate EBITDA used in firms' valuation	Students will be able to apply the correct formula to calculate EBITDA with minor computational mistakes	Students are unable to use the correct formula to calculate EBITDA, or use the formula with major computational mistakes
2. Students will be familiar with cash management techniques	Students can correctly use accounting data to evaluate firms' cash management	Minor error(s) in evaluate firms' cash management	Major error(s) in evaluate firms' cash management
3. Ability to distinguish between pre- and post-money firms' valuation	Students can calculate pre- and post-money firms' valuation	Minor mistake(s) in calculating pre- and post-money firms' valuation	Major mistake(s) in calculating pre- and post-money firms' valuation
4. Calculate and use multiples used in firms' valuation	Students can correctly calculate and use multiples used in firms' valuation	Minor mistake(s) in calculating multiples used in firms' valuation	Major mistake(s) in calculating multiples used in firms' valuation

**Course where learning outcome was assessed:**

MGEM 5112 - Venture Capital, Corporate Entrepreneurship, and Micro Financing

**Evaluator(s):**

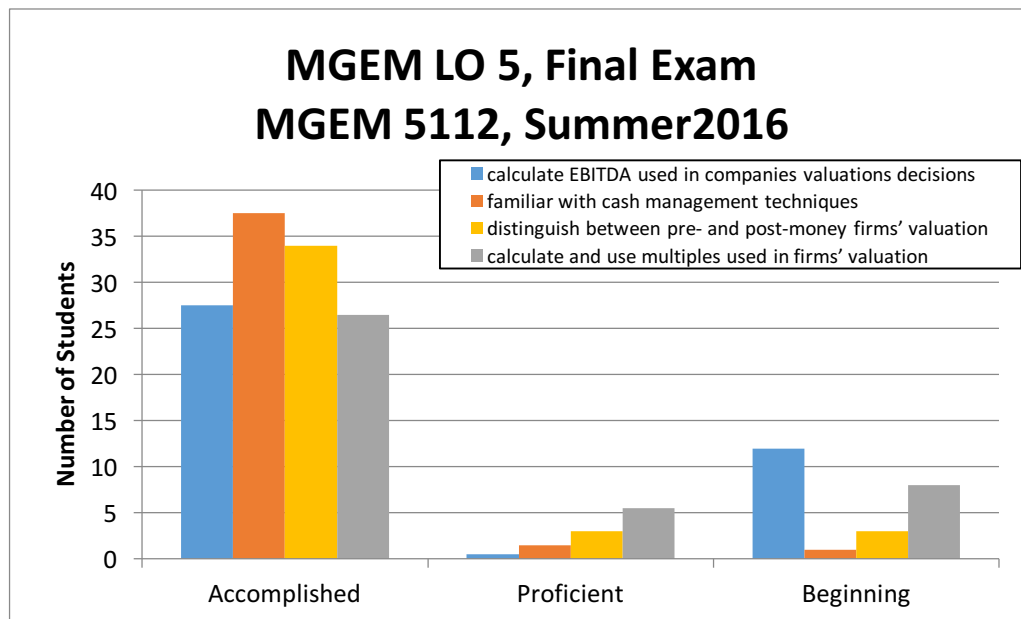
Yuri Fedyk and Gleb Nikitenko

**Phase 2: Results Assessment and Planned Action**

**Results:**

	Accomplished	Proficient	Beginning	% Students at Exemplary or Accomplished Level
Categories:	3	2	1	
1. Students will be able to calculate EBITDA used in companies valuations decisions	28	1	12	70%
2. Students will be familiar with cash management techniques	38	2	1	98%
3. Ability to distinguish between pre- and post-money firms' valuation	34	3	3	93%
4. Calculate and use multiples used in firms' valuation	27	6	8	80%

Cumulative average: 2.23



**Suggested Action:**

Students have demonstrated a rather high level of performance in their familiarity with the valuation concepts on the descriptive level (qualitative aspects), their ability to calculate EBITDA and multiples for valuation purposes (quantitative aspects) was significantly lower –20-30% of the students scoring below the threshold proficiency levels. The results indicated uneven level of preparation and weaker background in the finance material that may partially stem from the gaps in the MGEM Finance curriculum in addition to the undergraduate educational demographics of the cohort.

Finance faculty at IQS (Sylvia Bou) and USF (Yuri Fedyk) have both indicated the need to strengthen the financial/ accounting foundational knowledge of MGEM students, and especially those with no business educational background. As a result of the assessments conducted by IQS and further supplemented by USF, IQS faculty have introduced an introductory finance/ accounting course to be taken prior to the Common Ground in Corporate Valuation course (scheduled for the Fall II semester). The non-credit course has been scheduled to take place for all MGEM students starting Fall 2016 with an option to test out for those who have had the necessary business/ finance training and experience.

***Phase 3: Closing the Loop***

In the year that the assessment is made, this is good place to describe how the suggested actions might be evaluated in a future assessment cycle. When that cycle is complete, the results can be added to this document to finalize the report.

**Questions used in Assessment:**

Rubrics 1: Students will be able to calculate EBITDA used in companies valuations decisions

1. Calculate EBITDA given a company has net income of \$5,300,000; COGS of \$3,900,000; administrative expenses of \$400,000; depreciation & amortization total of \$600,000; interest expense \$500,000; income tax expense \$300,000.
  
2. Company Homwell & Co. manufactures widgets. Total sales are \$560,000. The cost of manufacturing the widgets for the company is \$320,000. Operating expenses are as follows: wages \$10,000; rent \$5,000; sales expenses 4,000; depreciation \$6,000 and amortization 7,000. Accounts payable are \$20,000; accounts receivable are \$50,000. Find EBITDA.

Rubrics 2: Students will be familiar with cash management techniques

3. A company's sales are \$1,000,000; COGS are \$800,000 and accounts payable are \$50,000. Calculate accounts payable average daily costs and number of days it takes to pay.
  
4. A company has inventory days of 65, days payable of 26 and days receivable of 78. Calculate its cash gap.

Rubrics 3: Ability to distinguish between pre- and post-money firms' valuation

5. Company A provides a \$10 million investment to a company with post-money valuation of \$60 million. This implies that Company A has a pre-money valuation of \_\_\_\_\_ and investor's share in the company is \_\_\_\_\_.
  
6. A seed investor adds \$15mm into an existing pool of \$60mm. What is this seed investor's % share of the post-money in the pool? What is the post money company value after that seed investment? Investor B then adds a \$20mm investment, using post-money of the previous seed round as pre-money value of the second round. What is investor B's % share of the total post-money pool?

Rubrics 4: Calculate and use multiples used in firms' valuation

7. Company A has EBITDA of \$500,000 and Sales of \$1,500,000; Company B has EBITDA of \$700,000 and Sales of \$3,000,000. Both are industrials companies with average EV/EBITDA multiples of 7x and EV/Sales multiples of 2x. Calculate the enterprise values of Company A and

Company B first using EV/EBITDA valuation multiples and next using EV/Sales valuation multiples.

8. For which company stages EV/sales is more appropriate than EV/EBIDTA valuation method? Why?