

### **DEPARTMENT OF BUSINESS**

# ASSURANCE OF LEARNING REPORT UNDERGRADUATE ACCOUNTING, BUSINESS, AND MIS MAJORS

2013-14

#### 1. Introduction

This document describes the results of the assurance of learning exercises conducted by the Department of Business during the 2013-14 academic year. The complete assessment plans used by the Department of Business are described in three documents: Assessment Plan for the Undergraduate Business Program, MIS Major Assessment Plan, and Assessment Plan for the MBA Program. Each plan identifies program level learning goals (PLLGs) that are periodically assessed. These plans also specify rubrics for the assessment, processes for performing the assessment, processes for taking action on the assessment results, and processes for updating the assessment procedures. The latest assessment plans, were discussed and approved through a series of department and advisory board meetings in the spring 2006. The assessment plans and the data generated are periodically reviewed for quality improvement.

Students in Accounting, Business and MIS major were assessed in 2013-14. These students take a common body of pre-business and business foundation courses. The PLLG results do not distinguish between the three groups. MIS students are also subject to an MIS assessment plan. The results of this assessment are presented in a separate document. Accounting students will be subject to a plan beginning in 2014-2015.

The following summarizes the PLLGs in the Business assessment plan. The starred PLLGs were evaluated during 2013-2014.

**PLLG1:** Students can recognize the ethical implications in a business situation and choose and defend an appropriate resolution.

\*PLLG2: The students can write effectively about a business problem or issue.

**PLLG3**: The students can make an effective oral presentation on a business problem or issue.

**PLLG4:** Each student is knowledgeable in project management principles and is able to apply these principles to a practical situation.

**PLLG5:** Students will be able to articulate important diversity issues – including, but not limited to, race, ethnicity, culture, gender, age, socio-economic status and political/religious/sexual orientation – in business management.

\*PLLG6: Students will be able to effectively use computer technology to support a business decision.

In addition to the normal course embedded assessment that are conducted each year, the ETS proficiency profile was administered in 2013-2014.

The rest of this document is organized per PLLG. The rubrics, the results, and the action items are included. The results of the ETS proficiency profile are included at the end of the document.

<u>PLLG2.</u> The students can write effectively about a business problem or issue.

Course in which this learning goal is assessed: MGT 349: Organizational Behavior

<u>Course Embedded Activity for Assessment:</u> Each student in MGT 349 is required to submit a written paper in which they analyze a management problem or issue.

### Particular Assignment

Activity for Assessment: Each student is required to submit a 2-3 page typed paper in which they analyze various personallity characteristics based on a number of assements they are to complete. This is part of the course homework.

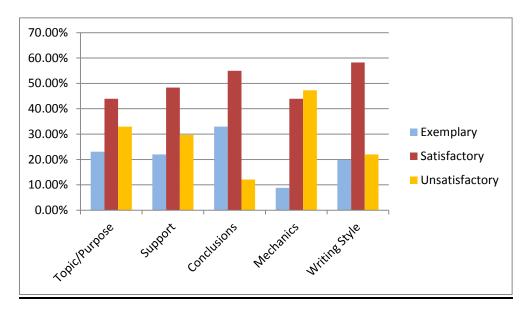
### Assessment Rubric:

	Exemplary	Satisfactory	Unsatisfactory
Topic/Purpose	Topic/purpose is clearly	Topic/purpose is	Topic/purpose is not
	identified & selection of	clearly identified	clearly identified in
	topics shows insight &	in the document.	the document.
	creativity		
Support	Include examples &	Includes examples	Does not include
	verifiable sources beyond	& verifiable	examples or sources
	assignment minimum	sources as per	adequate for
		assignment	understanding
		minimum	
Conclusions	Develops and explains	The conclusions	The conclusions are
	conclusions that are	are supported by	not adequately
	supported by the evidence.	the evidence but	explained and
	The conclusions	are primarily	supported by the
	demonstrate creative	based on one or	evidence.
	insight and are based on a	two sources.	
	thoughtful and critical		
	analysis of the evidence.		
Mechanics	No errors in grammar or	No major errors in	Multiple (five or
	spelling.	grammar, spelling,	more) minor errors
		paragraph	OR one or more
	Paragraphs are well	structure, or paper	major errors (such as
	organized (topic sentence	organization AND	incomplete
	and support)	fewer than five	sentences)
		minor errors (such	
	Paper is well organized	as there for their)	
Writing Style	Writing style is appropriate	Writing style is	Writing style is not
	for paper topic and	appropriate for	appropriate for the
	enhances the desire to read	paper topic	paper topic.
	the paper.		

#### **Assessment Results**

### Business Students (from MGT 349)

	Exemplary	Satisfactory	Unsatisfactory	Total
	21	40	30	91
Topic/Purpose	23%	44%	33%	
	20	44	27	91
Support	22%	48%	30%	
	30	50	11	91
Conclusions	33%	55%	12%	
	8	40	43	91
Mechanics	9%	44%	47%	
	18	53	20	91
Writing Style	20%	58%	22%	



#### Discussion:

- Overall unsatisfactory scores were most often received due to an incomplete paper. The rubric on mechanics presented the most problems.
- Most students met the requirements of the assignment
- Evaluator most often looks for content and understanding compared to mechanics and style
- The PLLG takes too much time to complete. Suggests that we evaluate a subset of students in the future
- Foreign, non-native English speaking students, have difficulty. Question is should they be treated differently
- Suggests we reevaluate the mechanics rubric. Students write very informally
- Students tend to think that they do not learn to write in the Business writing class
- Suggests that we embed writing into more of our classes

- Perhaps create our own business writing/presentation class
- Have members of advisory board assess the writing

<u>PLLG6.</u> Students will be able to effectively use computer technology to support a business decision.

<u>Course in which this learning goal is assessed:</u> QM 310: Business Statistics II. This year, we analyzed results in QM 210 and MIS 320.

<u>Course Embedded Activity for Assessment:</u> Students in QM 310 will develop a spreadsheet solution to a business decision problem based on statistical analysis. Note: This year we changed the method compared to previous years and analyzed historical data. Please see the data and analysis following the rubric.

### Assessment Rubric:

	Exemplary	Satisfactory	Unsatisfactory
Identify the Math	The student has	The student	The student has the
Technique or	identified the correct	identified the	wrong
Formula	mathematical	correct	mathematical
	model/formula for the	mathematical	model.
	decision making	model/formula.	
	situation and provided		
	an adequate		
	explanation.		
Formulate the	The student has	The student has	The student
model for a	developed the math	made no mistakes	incorrectly
specific situation	model given the data	or one minor	formulated the
	and constraints	mistake in the	method for the
	related to the business	application of the	decision problem or
	decision problem. In	correct method	has made major
	addition, the student	given the	mistake in the
	was able to explain	constraints for the	formulation.
	the model.	decision problem.	
Solution and	The student has	The student has	The student has the
analysis	correctly solved the	the right solution,	wrong solution, or
	problem and has	or there is at most	has more than one
	added a verbal	one minor error.	error in the
	explanation of the		solution.
	solution.		

### **Description and Results**

We assessed the business program's learning goal 6. This learning goal was assessed in two curses: QM 210 (Learning Goal: "Students will be able to effectively use statistical methods to solve business problems and make decisions.") and MIS 320 (Learning Goal: "Students will be able to effectively use computer technology to support a business decision."). A combination of exam questions and assignments were used to assess student performance. While a majority of the students for both courses are in the exemplary/satisfactory category for each rubric dimension, a number of students continue to be in the unsatisfactory category. Several steps will be undertaken to reduce the unsatisfactory rates in future, including providing additional materials and support via D2L and hiring qualified tutors. Between the two very different courses --- MIS 320 and QM 210 --- problem analysis/solving and business decisions are common rubric dimensions on which student performance was measured. It is interesting that students performed similarly along these dimensions regardless of the course with the exception of one data point (QM 210 Spring 2012 for Business Decisions). For the dimension of preparing business presentations, the unsatisfactory rates are low. An interesting aspect of this study is that it includes data from face-to-face and online sections for MIS 320. The unsatisfactory rates for the online sections are 4 to 7 percentage points higher. In future, we need to collect additional data regarding student learning for online and face-to-face sections to draw more meaningful conclusions.

For QM 210, a rubric was developed to assess student performance in QM in three categories — Apply correct statistical procedure, solve the problem correctly and make appropriate statistical and practical decision. Students were given a few problems in a closed books exam (formula and calculator allowed). Their performance is recorded as Exemplary, Satisfactory or Unsatisfactory. In MIS 320, students were given an assignment with business data. They needed to analyze the data, make business decisions and make a presentation discussing their analysis. Two instructors in the department collaborated to assess this learning goal in different courses.

<u>PLLG6a:</u> Students will be able to effectively use statistical methods to solve business problems and make decisions.

Course in which this learning goal is assessed: QM 210: Business Statistics I

<u>Course Embedded Activity for Assessment:</u> Following rubric assesses student performance in QM in three categories—Apply correct statistical procedure, solve the problem correctly and make appropriate statistical and practical decision. Students were given a few problems in a closed books exam (formula and calculator allowed). Their performance is recorded as Exemplary, Satisfactory or Unsatisfactory based on the number of problems solved correctly (see the rubric below).

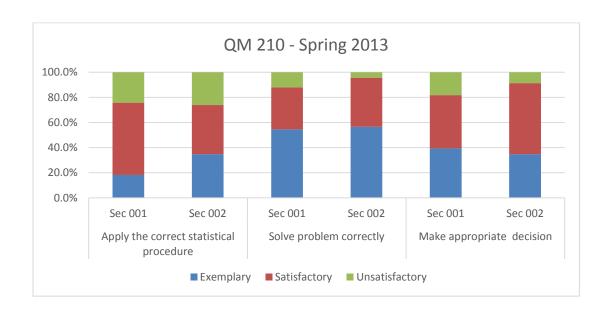
	Exemplary	Satisfactory	Unsatisfactory
Apply the	Student applies the	Student applies the	Student applies the
Correct	correct statistical	correct statistical	correct statistical

Statistical	procedure for ALL 4	procedure for 2 or 3	procedure for 0 or 1
Procedure	problems	out of 4 problems	out of 4 problems
Solve	Student solves ALL	Student solves 2	Student solves 0 or 1
problem	3 statistical	statistical problems	statistical problems
correctly	problems correctly	correctly out of 3	correctly out of 3
		problems	problems
Make	Student makes	Student makes	Student makes correct
appropriate	correct decisions for	correct decisions for	decisions for 0 or 1
decision	ALL 3 statistical	2 statistical problems	statistical problems
	problems	out of 3 problems	out of 3 problems

### Results from QM 210 for PLLG6a:

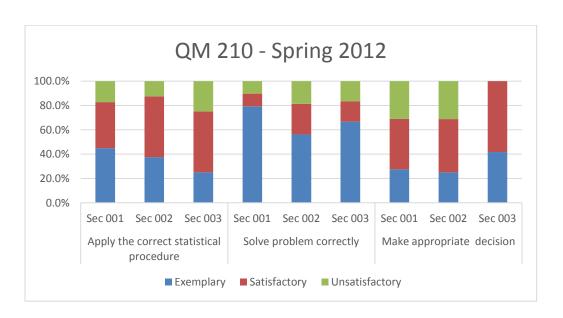
Spring 2013

		Exemplary	Satisfactory	Unsatisfactory
		LACITIPIATY	Jatisfactory	Offsatisfactory
	Sec			
Apply the correct	001	18.2%	57.6%	24.2%
statistical procedure	Sec			
	002	34.8%	39.1%	26.1%
	Sec			
Solve problem	001	54.5%	33.3%	12.1%
correctly	Sec			
	002	56.5%	39.1%	4.3%
	Sec			
Make appropriate	001	39.4%	42.4%	18.2%
decision	Sec			
	002	34.8%	56.5%	8.7%



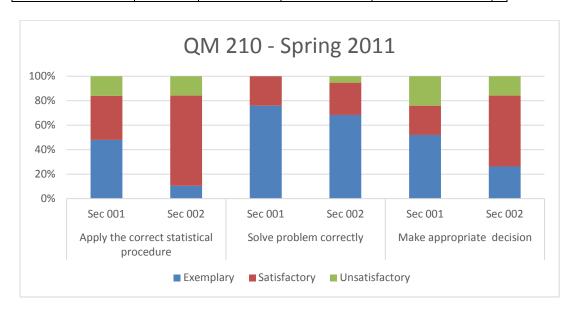
Spring 2012

		Exemplary	Satisfactory	Unsatisfactory
Apply the				
correct				
statistical	Sec			
procedure	001	44.8%	37.9%	17.2%
	Sec			
	002	37.5%	50.0%	12.5%
	Sec			
	003	25.0%	50.0%	25.0%
Solve problem	Sec			
correctly	001	79.3%	10.3%	10.3%
	Sec			
	002	56.3%	25.0%	18.8%
	Sec			
	003	66.7%	16.7%	16.7%
Make				
appropriate	Sec			
decision	001	27.6%	41.4%	31.0%
	Sec			
	002	25.0%	43.8%	31.3%
	Sec			
	003	41.7%	58.3%	0.0%



Spring 2011

		Exemplary	Satisfactory	Unsatisfactory
Apply the				
correct				
statistical	Sec			
procedure	001	48.0%	36.0%	16.0%
	Sec			
	002	10.5%	73.7%	15.8%
Solve problem	Sec			
correctly	001	76.0%	24.0%	0.0%
	Sec			
	002	68.4%	26.3%	5.3%
Make				
appropriate	Sec			
decision	001	52.0%	24.0%	24.0%
	Sec			
	002	26.3%	57.9%	15.8%



<u>**PLLG6b.**</u> Students will be able to effectively use computer technology to support a business decision.

<u>Course in which this learning goal is assessed:</u> MIS 320: Management Information Systems

<u>Course Embedded Activity for Assessment:</u> Students in MIS 320 are presented with business data. They will analyze the data, develop a spreadsheet solution to the business

problem and arrive at decisions. They will also prepare a business presentation in support of the decisions.

### Assessment Rubric:

	Exemplary	Satisfactory	Unsatisfactory
Analysis of the problem	Student analyzes the business the data with an accuracy above 90% range.	Student analyzes the business the data, but the accuracy of analysis is in the 75% to 90% range.	Student analyzes the business the data, but the analysis is incomplete or is only 75% (or less) accurate.
Using analysis to arrive at business decisions	Student correctly arrives at Business decisions in more than 90% of the assigned problems.	Student correctly arrives at 51% to 90% of the Business decisions.	At most 50% of the business decisions that student arrives at are correct.
Business Presentation	The student prepares a professional presentation; uses additional spreadsheet features such as Table and Chart commands to explain the recommendations with graphs and/or tables.	Student prepares a professional presentation; however, student does not explain the recommendations with graphs and/or tables.	Student does not prepare a professional presentation using PPT/Excel summarizing the analysis and decisions; or, student's presentation is significantly lacking in terms of analysis and decisions.

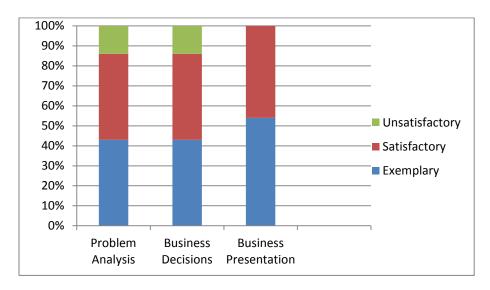
### Results from MIS 320 for PLLG6b:

## MIS 320 Spring 2013

### Face-to-face section

Dimension	Exemplary	Satisfactory	Unsatisfactory	Total
Dualilana Analysia	16	16	5	37
Problem Analysis	43%	43%	14%	100%

Business Decisions	16	16	5	37
	43%	43%	14%	100%
Business	20	17	0	37
Presentation	54%	46%	0%	100%

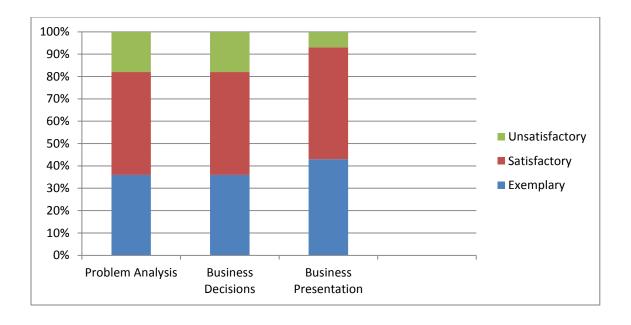


MIS 320 Fall 2013

<u>Online</u> Section

(Excluding no submissions)

Dimension	Exemplary	Satisfactory	Unsatisfactory	Total
Problem Analysis	10	13	5	28
	36%	46%	18%	100%
Business Decisions	10	13	5	28
	36%	46%	18%	100%
Business	12	14	2	28
Presentation	43%	50%	7%	100%



#### MIS 320 Observations:

- (1) Unsatisfactory rates range from 14% to 18% for Problem Analysis and Business Decision dimensions
- (2) Unsatisfactory rates are lower for the Business presentation dimension
- (3) Unsatisfactory rates are higher by 4 to 7 percentage points for the online section compared to face-to-face section
- (4) Provide more online resources for students on how to analyze business data in future semesters
- (5) Gather more data in future semesters

### QM 210 Observations:

- (1) Students need to solve more problems to reduce unsatisfactory rates. Some incentives are provided to students for solving practice problems. We need to study further whether those in the "Unsatisfactory" category are utilizing this incentive. (Spring 2015)
- (2) Students ask for more tutoring help the best students that were recommended by the instructor did not want to work as tutors because the pay was low. Try to get better tutors for this course (Spring 2015).
- (3) Add content (video recorded or audio recordings with narration) on how to solve the problems and post it to D2L. More resources such as graduate assistants and instructional designers are needed to complete this task. (Tentative upon resource availability)
- (4) Use publisher's websites (textbook companion sites) for additional problem solving for students that need extra help. (Spring 2015)

(5) Students should be encouraged to meet with the instructor after every exam if they are in the "Unsatisfactory" category. (Spring 2015)

### Other Proposals

- (1) The learning as it is currently written "Students will be able to effectively use computer technology to support a business decision" does not accurately capture students' abilities conduct statistical analysis. Consider changing this learning goal into two goals as follows:
- <u>PLLG6a</u> Students will be able to effectively use computer technology to support a business decision.
- <u>PLLG6 b</u> Students will be able to effectively use statistical methods to solve business problems and make decisions.
- (2) To reduce unsatisfactory rates in statistics courses, consider hiring quality tutors and increasing the number of tutoring hours for courses such as QM 210.
- (3) For both QM 210 and MIS 320, add more content to help students solve statistical and business problems.

#### ETS Proficiency Profile Senior Results and Profile: Business Majors 2013-14 Administration Prepared by OIE, 11/10/2014 **ETS Proficiency Profile Results National Comparison** Business Dept (N=82) All Seniors (N=301) (N=93,135) Mean SD Mean SD Mean SD Component 446.41 446.01 19.09 447.80 20.20 Total 18.65 Critical Thinking 110.68 5.75 111.29 5.93 112.80 6.50 Reading 117.62 6.96 118.23 7.02 119.00 6.80 Writing 114.24 4.93 114.59 5.17 114.90 4.90 Math 116.23 5.58 114 54 5.93 114.20 6.30 Humanities 114.50 6.27 114.64 6.43 115.70 6.60 Social Sciences 112.92 114.40 6.30 112.35 6.36 6.43 **Natural Sciences** 114.38 5.68 115.26 5.57 116.10 5.80 Classification Level N Pct Number Pct N Pct Proficiency Proficient 56 68.3% 204 67.8% 71.0% Classifications - Reading Marginal 12.2% 51 16.9% 17.0% 10 Level 1 Not proficient 16 19.5% 46 15.3% 13.0% 106 35.2% 42.0% Proficiency 23 28.0% Proficient Classifications - Reading Marginal 29.3% 70 23.3% 20.0% 41.5% Level 2 Not proficient 35 42.7% 125 38.0% Proficiency 2 2.4% 9 3.0% 8.0% Proficient Classifications - Critical Marginal 12 14.6% 47 15.6% 21.0% Thinking Level 3 Not proficient 68 82.9% 245 81.4% 71.0% Proficiency Proficient 52 63.4% 196 65.1% 67.0% Classifications - Writing Marginal 23 28.0% 77 25.6% 24.0% Level 1 Not proficient 7 8.5% 28 9.3% 9.0% 18.3% 19.9% 23.0% Proficiency Proficient 15 60 Classifications - Writing Marginal 30 36.6% 118 39.2% 37.0% 45.1% 40.9% 40.0% Level 2 Not proficient 37 123 8.5% Proficiency Proficient 7 34 11.3% 10.0% 18 22.0% 65 28.0% Classifications - Writing Marginal 21.6% 69.5% 62.0% Level 3 Not proficient 57 202 67.1% Proficiency Proficient 62 75.6% 187 62.1% 60.0% 21.9% 23.0% Classifications -Marginal 11 13.4% 66 Mathematics Level 1 Not proficient 9 11.0% 48 15.9% 17.0% Proficiency Proficient 39 47.6% 108 35.9% 34.0% Classifications -Marginal 22 26.8% 75 24.9% 26.0% Mathematics Level 2 41.0% Not proficient 21 25.6% 118 39.2% Proficiency Proficient 7 8.5% 24 8.0% 10.0% 25 30.5% 20.9% 19.0% Classifications -Marginal 63

50

61.0%

214

71.1%

72.0%

Mathematics Level 3

Not proficient

		Busine	ss Dept	All Seniors		National	Comparison	
Variables		Mean			Mean SD		Mean SD	
Spring 2014 Cum GPA		3.16		3.12	0.53	1		
, J								
		N	Pct	N	Pct	N	Pct	
Credit Load	Full-Time	70	85.37%	251	83.40%	1	90.00%	
	Half-Time	11	13.41%		14.00%	1	10.00%	
	Less than Half	1		6	2.00%	1		
	No units	0	0.00%	2	0.70%			
GPA Range (Self-	0.00 - 2.49	4	4.88%	30	10.00%		6.00%	
reported)	2.50 - 2.99	22	26.83%	81	26.90%		22.00%	
	3.00 - 3.49	37	45.12%	110	36.50%		37.00%	
	3.50 - 4.00	18	21.95%	78	25.90%		35.00%	
	Missing	1	1.22%	2	0.70%			
Major**	Accounting	9	10.98%					
	Business Management	65	79.27%					
	Management Information Systems	12	14.63%					
Entering Academic Pro	ofile							
			Business Dept		All Seniors		National Comparison	
Variables		Mean	SD	Mean	SD	Mean	SD	
ACT Comp		20.65	3.48	21.26	3.79			
ACT English		20.26	4.73	20.79	4.91			
ACT Math		21.20	3.79	20.61	4.10			
ACT Reading		20.33	4.77	21.34	4.86	§		
High School Class Rank Pct.		68.75	18.38	65.28	23.12			
		N	Pct	N	Pct	N	Pct	
Math Placement	ACSK A010	1	1.22%	18	6.00%			
	ACSK A015	18	21.95%	68	22.60%			
					22.000/			
	MATH 102/111	25	30.49%	99	32.90%			
	MATH 102/111 MATH 112/113/114	25 20		99 67	22.30%	!		
	·		24.39%	67				
	MATH 112/113/114	20	24.39% 12.20%	67	22.30%			
English Placement	MATH 112/113/114 MATH 221	20 10	24.39% 12.20% 9.76%	67 30	22.30% 10.00%			
English Placement	MATH 112/113/114 MATH 221 Missing	20 10 8	24.39% 12.20% 9.76%	67 30 19	22.30% 10.00% 6.30%			
English Placement	MATH 112/113/114  MATH 221  Missing  ACSK A090	20 10 8 16	24.39% 12.20% 9.76% 19.51%	67 30 19 52	22.30% 10.00% 6.30% 17.30%			
English Placement	MATH 112/113/114  MATH 221  Missing  ACSK A090  ENGL 100	20 10 8 16 19	24.39% 12.20% 9.76% 19.51% 23.17%	67 30 19 52 79	22.30% 10.00% 6.30% 17.30% 26.20%			
English Placement	MATH 112/113/114  MATH 221  Missing  ACSK A090  ENGL 100  ENGL 101	20 10 8 16 19	24.39% 12.20% 9.76% 19.51% 23.17% 17.07%	67 30 19 52 79 48	22.30% 10.00% 6.30% 17.30% 26.20% 15.90%			
	MATH 112/113/114 MATH 221 Missing ACSK A090 ENGL 100 ENGL 101 English Exempt	20 10 8 16 19 14 28	24.39% 12.20% 9.76% 19.51% 23.17% 17.07% 34.15% 6.10%	67 30 19 52 79 48 111	22.30% 10.00% 6.30% 17.30% 26.20% 15.90% 36.90%			
	MATH 112/113/114 MATH 221 Missing ACSK A090 ENGL 100 ENGL 101 English Exempt Missing	20 10 8 16 19 14 28	24.39% 12.20% 9.76% 19.51% 23.17% 17.07% 34.15% 6.10% 15.85%	67 30 19 52 79 48 111 11	22.30% 10.00% 6.30% 17.30% 26.20% 15.90% 36.90% 3.70%			
English Placement  Reading Placement	MATH 112/113/114 MATH 221 Missing ACSK A090 ENGL 100 ENGL 101 English Exempt Missing ACSK A083	20 10 8 16 19 14 28 5	24.39% 12.20% 9.76% 19.51% 23.17% 17.07% 34.15% 6.10%	67 30 19 52 79 48 111 11	22.30% 10.00% 6.30% 17.30% 26.20% 15.90% 36.90% 3.70% 13.60%			

Variables		Busine	Business Dept		eniors	National Comparison	
		Mean	SD	Mean	SD	Mean	SD
Age		25.90	7.14	25.39	5.883	27.35*	:
		N	Pct	N	Pct	N	Pct
Age 25+	No	58	70.73%	192	63.8		
	Yes	24	29.27%	109	36.2		
Commuter Status Fall	Lives on Campus	4	4.88%	21	7.00%		
2010	Commutes to Campus	78	95.12%	280	93.00%		
First Generation Status	Not First Generation	27	32.93%	103	34.20%		
	First Generation	45	54.88%	159	52.80%		
	Status Unknown	10	12.20%	39	13.00%		
Race/Ethnicity	African American	3	3.66%	20	6.60%		15.00%
	Hispanic/Latino	12	14.63%	35	11.60%		6.00%
	American Indian/Alaskan Native	0	0.00%	1	30.00%		1.00%
	Southeast Asian	1	1.22%	4	1.30%		
	Hawaiian/Pacific Islander	0	0.00%	0	0.00%		
	Other Asian	3	3.66%	7	2.30%		4.00%
	White	59	71.95%	226	75.10%		70.00%
	Unknown	0	0.00%	0	0.00%		5.00%
	International	3	3.66%	4	1.30%		
	Two or More Races/Ethnicities	1	1.22%	4	1.30%		
Original Entrance	New Freshmen	44	53.66%	161	53.50%		57.00%
	New Transfer	38	46.34%	140	46.50%		43.00%
Pell Eligible	No	55	67.07%	158	52.50%		
· ·	Yes	27	32.93%	143	47.50%		
Gender	Male	47	57.32%	147	48.80%		41.00%
	Female	35	42.68%	154	51.20%		59.00%
Best Language	Better in English	67	81.71%	252	83.70%		88.00%
	Better in another language	7	8.54%	30	5.30%		8.00%
	Equally well in English and another language	6	7.32%	16	10.00%		4.00%
	Missing	2	2.44%	3	1.00%		
Hours Working for Pay	0 hours	6	7.32%	44	14.70%		21.00%
	1 - 15 hours	6	7.32%	49	16.30%		29.00%
	16 - 30 hours	30	36.59%	113	37.70%		28.00%
	more than 30 hours	39	47.56%	94	31.20%		22.00%
	Missing	1	1.22%	1	0.30%		
*National comparison mean	ns estimated from frequency distributions						

The above results are consistent with the 2011 results. Math scores are above the university and national average. Writing illustrate some need for improvement especially in the 2 and 3 Levels of complexity. Critical Thinking is below the university and national averages. Lower levels of proficiency in critical thinking may explain student difficulties with quantitative analysis and some of the historical poor performance in ethical reasoning.

Action: Introduce more critical thinking exercises throughout classes. Economics and Quantitative Methods instructors have stated that they will look to add relevant critical thinking problems into their classes.