# School of Business - Assurance of Learning - Goal 2

**Integration of Knowledge across Business Disciplines:** Students will demonstrate understanding of key concepts and theories in various functional areas of business.

A. Data collection and Analysis: Begins 2011 - 2012

#### **B.** Measurement Locations & Instruments

- 1. UNIV1000 SoBus Knowledge Exam (SoBusKE) Complete
- 2. MKTG3230 Partial (content based) SoBusKE
- 3. BUAD2120 Partial (content based) SoBusKE
- 4. FIN2150 Partial (content based) SoBusKE
- 5. MGT4300 SoBus Knowledge Exam (SoBusKE) Complete

A copy of the SoBus Knowledge Exam will be provided upon request.

## C. Results/Summary Data

Fall 2009 - Spring 2014											
Business Areas	**ETS Mean Scores	Fa 09	Sp 10	***ETS Mean Score as of Sept. 2010	Fa 10	Fa 11 (piloted SoBus Knowledge Exam)	Sp 12	Fa 12	Sp 13	Fa 13	Sp 14
Accounting	49.8	50	48	43.8	43	44.6	57	<b>55</b>	<b>53</b>	52	52
Economics	47.4	44	43	44.2	39	42.1	48	<mark>54</mark>	<mark>47</mark>	47	44
Management	54.7	47	49	57	54	65.4	55	<u>57</u>	<mark>53</mark>	51	59
Quantitative Analysis	46.2	43	40	40.5	37	OM: 64.3 ST: 43.7	OM: 69 ST: 53	OM: 72 ST: 50	OM: 66 ST: 52	OM: 65 ST: 50	OM:6 1 ST: 51
Finance	54.9	52	51	42.6	40	41.4	55	<mark>55</mark>	<mark>51</mark>	54	52
Marketing	52	52	47	55	47	58.3	62	<mark>62</mark>	<mark>62</mark>	62	54
Legal Environment & Social Environment	46.1	44	42	55.5	54	55.1	50	54	48	49	52
Information Systems	58	58	54	48.4	45	81.9	74	<mark>77</mark>	<mark>69</mark>	65	69
International Issues	54	51	50	52.8	49				<mark>44</mark>	38	37
Ethics									<mark>62</mark>	59	53
Bolded (red) scores a	re at or ab	ove ET	S means	s scores							

<sup>\*\*</sup> Assessment Indicators for this test cannot be compared to testing years prior to 2006 due to changes in the Business test.

When compared with the fall 2010 ETS mean scores, in the Spring Semester of 2014, senior business students performed at or above the overall average score (i.e., mean percent correct answers) in four of the nine functional areas of business—accounting, management, finance, and information systems. In the remaining five areas in which the School did not meet its objective, the results were still encouraging. The Quantitative Analysis area of the ETS Exam was divided into operations management and statistics in the SoBus Knowledge Exam so comparison of those scores is not possible.

Analysis of the SoBus Knowledge Exam when compared to the fall 2010 ETS mean scores shows that student performance in accounting, finance, and information systems has been at or above the expected objective every semester for the past two years. Student performance in the marketing and economics met the objective every semester except for spring 2014.

## **Intermediate Measures/Summary Data**

#### BUAD2200 - Partial SoBUSKE

	Number of Students	Number with score higher than ETS 2010 QA (40.5)	Percent Scores >= 40.5
Fall	•		
2012	32	26	86%

## MKTG3230 – Partial SoBUSKE

	Number of Students	Number with score higher than ETS 2010 MKTG (55)	Percent Scores >= 55
Fall			
2013	49	35	71%

FIN2150 - Partial SoBUSKE

	Number of Students	Number with score higher than ETS 2010 FIN (42.6)	Percent Scores >= 42.6
Spr14	12	7	58%

Intermediate measures of the SoBUSKE show that students are receiving and retaining the information during the semester it is imparted. Comparison measures with the complete SoBUSKE for each partial content area will be compiled in a two year rotation.

### D. Actions/Curriculum and Instruction Changes

Results of the SoBus Knowledge Exam and discipline scores are shared with each faculty. This data is also posted to the SoBus Drive (Zdrive). Faculty are encouraged to review the results of the exam within their discipline to identify those content areas and specific questions where students performed below expectations. Following review of the collected data, faculty fortify their curriculum to address these issues and concerns. Faculty will construct a course of action to address the weaknesses. For example, specific questions in which students performed poorly may be embedded in the course. Additional review time in the poorly performing topic areas may also be employed. Additional instructional changes will also be considered at that time.

As part of the Continuous Improvement process, in the fall 2014 semester the SoBus Knowledge Exam PRE-TEST was introduced and administered to students in the MGT 4300 Capstone class. Each of the nine core disciplines (Accounting, Economics, Management, Quantitative Analysis, Finance, Marketing, Legal & Social Environment, Information Systems, International Issues was represented on the exam. A tenth core discipline, Ethics, was included in the SoBus Knowledge Exam in the spring 2013 semester. To increase the student knowledge of key concepts and theories in the various functional areas of business, students researched identified core areas and created class presentations on these materials in an effort to increase their knowledge base. The SoBus Knowledge Exam POST-TEST was administered following this exercise and at the conclusion of the fall 2014 semester.

## Preliminary Pre-Post Test Results/Summary Data

Benchmark: Average score should be equal or higher than the ETS score.

Discipline	ETS Mean Percent Correct (Sept 2010)	Fall 2014 PRE TEST	MGT4300	Fall 2014 POST TEST
Accounting	43.8	40	Discover Research Peer Reporting Process Continuous Improvement	67
Economics	44.2	43		65
Management	57	56		78
Quantitative (STATS & OPMGT)	40.5	51/55		65/80
Finance	42.6	48		82
Marketing	55	58		84
Legal	55.5	48	Action	70
nformation Systems	48.4	67		76
International Business	52.8	36		75
Ethics	NA	63		80

Bolded (green) scores are at or above ETS means scores

Notes: Mean test scores indicate mean percent correct

When compared with the fall 2010 mean ETS scores, in the Fall Semester of 2014, senior business students performed at or above the overall average score (i.e., mean percent correct answers) in five of the nine functional areas of business—quantitative, finance, marketing, information systems and ethics. In the remaining four areas, economics, management, legal and international business, the School did not meet its objective. Following the conclusion of Continuous Improvement Action: Discover-Research-Peer Reporting Learning Process, the post-test SoBus Knowledge Exam was administered.

Analysis of the post-test SoBus Knowledge Exam when compared to the fall 2010 ETS mean scores shows that student performance was equal to or higher than the ETS score across **ALL** disciplines: economics, management, quantitative, finance, marketing, legal, information systems, international business and ethics.

When examining the preliminary pre-test class point scores, it was determined that the average score was 51.05%, ranging from 28.85% to 73.82%. When examining the post-test class point scores, it was determined that the average score was 75.83%, ranging from 52% to 97%.

When comparing pre-test and post-test class point scores there was a significant positive difference in scores. There was an average increase in class point scores of 23.57% These results would indicate the pilot classroom learning experience engaging students in the Discovery-Research-Peer Reporting Process (a Continuous Improvement Action) across the school of business disciplines was successful. The preliminary findings of this pilot Continuous Improvement Action indicate that students performed at a higher level on the exam following the implementation of the pilot learning process.

Based on the results of this initial Continuous Improvement Action, graduating seniors significantly improved SoBus Knowledge Exam scores in the core disciplines. The Continuous Improvement Action and preliminary findings Report will be addressed by the faculty during the Spring 2015 Faculty Meeting. At that time, the faculty will review the Pre-Post Test Preliminary Findings Report. Additional review of the outcomes and proposed next steps will be discussed in order to determine the best course of action.

To allow for further comparison of the SoBus Knowledge Exam and the ETS in the spring 2015 semester, seniors will be given the ETS exam and the SoBus Knowledge Exam. Low scores in the different areas will be brought to the attention of the faculty.

To allow for comparison measures between the intermediate measure and the final measure, the faculty is adding one intermediate measure for each content area. The Accounting area will measure the ACT content as a middle measure in the ACCT2010 class in the Spring 2015 semester.

### **E.** Background about the Process:

To fully address the objective of Goal 2, the faculty decided it was necessary that students successfully complete all preparatory classes to obtain an understanding of key concepts and theories in the primary functional areas of business. Subsequently the Educational Testing Service (ETS) Major Field Test in Business was used to assess the knowledge of business students in nine functional areas of business. The School has been participating in the ETS program since 1992.

The ETS exam is given as a regular part of MGT 4300 (Management Policy), which is the capstone course in the business curriculum, and taken in the senior year (earned 90 credit hours) of the student's program. The stated metric of the college is that students should be able to perform at or above the overall average

score (i.e., mean percent correct answers) of schools participating in the ETS program in each of the nine functional areas of business.

Prior to the fall 2009 AACSBI visit, faculty discussions regarding the results of the ETS tests gave rise to some concerns. First, faculty members believe that the standardized ETS exam does not adequately reflect the business knowledge that NSU wants its students to possess. For example, as an educational institution in Louisiana, students are expected to possess a comprehensive knowledge of not only the national legal system but also the legal system of Louisiana, which is based on the Napoleonic Code rather than common law. The ETS exam is based more on the general legal system of the 49 other states, and does not cover the basic legal concepts of the Napoleonic Code. Second, a mean score reflecting the percentage of correct responses in a particular functional area provides the faculty with little information concerning specific strengths and weaknesses of student performance, and offers no suggestion as to how to improve the educational program, i.e. the ETS score feedback is far too broad to allow sufficient analysis. Third, faculty in general have had limited access to the ETS test itself such that a reasonable analysis could occur. As faculty members have reviewed course syllabi to keep their courses updated, they have paid particular attention to developing measurable objectives for all business courses and particularly each core business course. These objectives have been used as the basis for improving the pedagogy for teaching these courses. Most faculty members believe that students are achieving the learning objectives set out in the nine core business disciplines. The ETS exam, however, tests students over business knowledge objectives developed by panels of national faculty members rather than the business knowledge objectives developed by the School of Business faculty. In short, faculty are not sure what these national business knowledge objectives are in very specific terms. Additionally, the ETS exam provides only general information to faculty members concerning the achievements of students. For example, although students have consistently met NSU's objective in accounting, the accounting faculty still do not know if students graduating from NSU have a comprehension of the basic concepts of liquidity and leverage. Thus, there is no way to know which specific areas need additional depth of instruction.

As a result of this analysis and in the interest of continuous improvement, faculty have developed a SoBus Knowledge Exam to provide feedback as to Assurance of Learning for graduating business students over the key concepts and theories in the nine core business disciplines of accounting, economics, management, quantitative analysis, finance, marketing, legal environment, information systems, and international issues.

Professors were asked to submit pertinent questions related to their areas. These questions were used to develop the SoBus Knowledge Exam. It was piloted in fall 2011. Faculty analyzed and made revisions to the SoBus Knowledge Exam. In spring 2012, it contained 142 questions plus a written, technology assessment part. In fall of 2012, it was analyzed and determined that questions addressing ethics and international business should be added. Therefore, in the spring of 2013, the new SoBus Knowledge exam had 162 questions plus a written, technology assessment part. A detailed annual report showing specific strengths and weaknesses of graduating business students in each of the nine core areas will be provided to the faculty. Thus, each year, faculty members can adjust their teaching to remedy specific problems discovered through analysis of the SoBus Knowledge Exam and accomplish continuous improvement. To all for external comparison with similar schools, the ETS Field Exam will be administered every four years beginning in spring 2015.

#### F. Future Action Items

Due to changes in the curriculum, starting with the Fall 2016, CIS will not complete the MGT4300 capstone class. Instead, they will complete a CIS capstone class that will measure this goal with a case study.

# Appendix

 $SoBus\ Knowledge\ Exam\ -\ \underline{https://www.surveymonkey.com/r/N8DNVXT}$