## Institutional Effectiveness Report Academic Year 2010-2011 School of Business Including Computer Science

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## Mission and Goals

#### Vision

The School of Business at Francis Marion University strives to provide the highest quality baccalaureate and master's degree business programs offered at a small comprehensive university in the southeastern United States.

#### Mission

The School of Business at Francis Marion University strives to provide learning opportunities for students from a range of backgrounds and transform them into globally competitive business men and women.

We teach students to think logically, communicate effectively, develop an understanding and appreciation of the global business environment, and follow high ethical standards. Our students develop conceptual and analytical skills needed to be successful leaders in both private and public institutions. Our business curriculum is strengthened by a strong liberal arts focus within the broader university.

Accredited at both the graduate and undergraduate levels, the School of Business at Francis Marion University has a mission of teaching, research, and service. Nearly our entire faculty holds a doctorate in the area they teach. Our small classroom environment promotes interaction among students and faculty. Our internship program and placement efforts actively assist students in finding meaningful jobs. Our faculty conducts research and service activities that enhance the region's economic and industrial development. Most of our undergraduate students major in accounting, business economics, finance, general business, management, management information systems, or marketing, to achieve a Bachelor of Business Administration degree. Other School of Business students major in economics and achieve a Bachelor of Arts or Bachelor of Science degree. Our graduate students work to achieve a Master of Business Administration degree. Through the Center for Entrepreneurship, the School works with area for-profit and not-for-profit firms and integrates those experiences into our business classes. The School of Business seeks students locally and globally of all ages and ethnic backgrounds and serves them in a friendly, considerate manner.

#### Assessment Activities

During 2010-2011, the School of Business continued to refine and improve its assessment process. That process contains the following: The 2004 establishment of learning goals and measurable outcomes, measurement of those outcomes (2005-2011), results and identification of issues of concern (2005-2011), and actions both implemented and proposed to address those concerns (implemented 2005-2011 and proposed 2011-2016).

#### **Learning Goals:**

(*Knowledge*) Students will know the core concepts within each business discipline: accounting, business economics, finance, management, management information systems, and marketing. (*Analytical*) Our students will have conceptual and analytical skills to analyze and solve managerial problems.

(*Communication*) Our students will be able to effectively communicate orally and in writing. (*Creativity*) Our students will utilize creativity in solving of managerial problems.

*(Ethics)* Our students will have an understanding of ethical perspectives and be guided by high ethical standards.

(*Global*) Our students will have an understanding and appreciation of the global business environment.

#### **Measurement:**

The measurement process contains direct and indirect measures including rubrics, Supervisor's Evaluation of Student Interns, Student Self Internship Evaluation and the Major Field Exams from the Educational Testing Service Exams (ETS).

The ETS Major Field Exams have been given since before 2004 for undergraduate business programs and since 2005 for the graduate (MBA) program to assess curriculum changes. In addition, the School of Business Exit Survey was expanded in spring 2007 to include demographic analyses, job placement, and to improve assessment of class requirements on student's understanding and abilities; that survey has been withdrawn for this year, in order to study its content in relation to our current environment. Rubrics assessing individual learning goals were developed in 2005-2006 and are currently being used. Surveys of Interns and their Supervisors were introduced in 2008 and provide additional qualitative information for assessment.

#### **Measurement of Outcomes:**

# Student Knowledge, Skills, Attitudes, and Opinions for 2005, 2006, 2007, 2008, 2009, and 2010 for the School of Business and Computer Science

In the 2007-2008 year significant changes were made in the Management and MIS curriculums. In the 2008-2009 year additional changes were implemented in the Accounting, Finance, and Management curriculums based on assessment activities, feedback from graduates, the business community and trends within the disciplines. In 2010, the criteria for admission to the School were modified, and the required course in business statistics was updated and changed to a 300 level course. In addition, recommendations for change to the Finance curriculum were

introduced. Future assessment efforts will be used to evaluate the effectiveness of these changes and suggest areas for continued improvement.

### **Results of Comparative Data:**

usiness Undergraduate Results based on the 2006-2010 ETS Major Field Exams.										
	2006	2006	2007*	2007*	2008*	2008*	2009*	2009*	2010*	2010
	<u>FMU</u>	<u>National</u>	<u>FMU</u>	<u>National</u>	<u>FMU</u>	<u>National</u>	<u>FMU</u>	National	<u>FMU</u>	National
Accounting	45.1	44.4	45.0	50.3	45.0	49.8	50.0	49.8	48.0	45.1
Economics	40.2	42.7	43.5	47.6	42.5	47.4	47.5	47.8	45.0	45.6
Management	59.1	57.1	51.5	55.2	44.5	54.7	48.5	54.5	47.0	58.4
Quantitative Business Analysis	57.5	56.4	47.0	46.5	42.5	46.2	45.0	46.1	41.0	41.3
Finance	37.3	36.1	43.5	55.6	46.0	54.9	53.0	55.0	50.0	43.9
Marketing	48.5	46.8	50.5	52.6	47.5	52.0	50.0	51.9	50.0	56.3
Legal and Social Environment	51.0	49.8	43.5	46.1	35.5	46.1	44.0	45.9	39.5	57.1
International Issues	46.9	44.4	45.5	54.3	44.0	54.0	48.5	57.7	55.0	49.6
Information Systems	n/a	n/a	57.5	58.5	55.5	58.0	58.5	54.1	48.0	54.0

\*The ETS undergraduate major field exam in business underwent a major revision in the fall of 2006. This resulted in significant differences for both the national and FMU senior averages on the major field test.

Results on the 2006 - 2010 ETS Major Field Exam for MBA students\*.

	2006	2006	2007	2007	2008	2008	2009	2009	2010	2010
	FMU	National								
Marketing	62	55.7	61	55.9	66	55.6	63	55.4	62	58.5
Management	65	57.2	60	57.5	71	57.1	65	56.7	65	59.7
Finance	56	45	51	45.2	55	44.9	48	44.8	47	43.8
Managerial Accounting	61	50.7	61	51.0	65	50.7	57	50.5	52	49.4
Strategic Integration	61	52.3	59	52.7	63	52.2	57	52.0	56	52.6

\*The MBA Major Field Exam is administered in the Fall only.

• In fall 2005, FMU administered the MBA Major Field Exam for the first time. For the

sixth year, FMU students performed better than the national average in all five categories tested. We find that especially impressive for two reasons: 1) it is our sense the other schools using the test are of a higher national profile and 2) they have somewhat more rigorous admissions criteria than do we (e.g., a 400 minimum GMAT versus 540 at Clemson).

• Rubrics were developed and administered to a sampling of students in 2005-2006 to assess learning goals. In 2006-2007, the individual rubrics were revised and the sample expanded. The rubrics continue to be refined and they promise to provide an additional valuable assessment tool. The 2007-2008 and 2008-2009 rubrics were evaluated by faculty last summer and the results provided to faculty at the first fall school of business faculty meeting. Issues of concern from combined assessment efforts are contained below:

Primary Issues Identified during 2005-2011 with a Review of Actions Taken During 2005-2011 for the School of Business and Computer Science

Summary of Assessment Results, Recommendations, Actions Implemented 2005 – 2011							
Issues of Concern	Actions Taken (2005-2011)						
Below Average Performance on Embedded Questions & ETS scores are slightly below the national average (Analytical & Knowledge)	<ul> <li>Analytical <ul> <li>Three new and replacement faculty hired in Production and Operations Management in 2006, 2007, 2008 to teach core Business Statistics (Bus 205) and upper division quantitative courses. Increased rigor of Bus 205.</li> <li>Replaced Management Science and Operations Management (Mgt 308) in the Core Business Curriculum with revised and updated Production and Operations Management (Mgt 355). Revised MGT 355 first taught fall 2008. Elimination of Mgt 308 from curriculum.</li> <li>A change to statistics as the Mathematics prerequisite for the School, and modification and upgrading of the business statistics course (now Bus 305).</li> <li>Dr. David provided a Certified Strategic Planner certificate to any student during the fall 2008 semester that completed his strategic management class with an A.</li> </ul> Knowledge <ul> <li>Additional/replacement Faculty hired in Marketing, Finance and Accounting for fall 2010.</li> <li>Used Quality Enhancement Plan (QEP) money to promote plant tours.</li> <li>Internships offered in all business areas, with a special course in Accounting.</li> <li>Delta Sigma Pi, and SAM (Society for the Advancement of</li> </ul></li></ul>						

Students have Adequate Command of Oral Presentation Skills. Students Meet	<ul> <li>Management) are now active. SAM groups competed and placed in 2008, 2009, 2010 National Case Competitions</li> <li>Revised the Management Information curriculum to include Management Science (Mgt 373), Supply Chain Management (Mgt 467) and Business Decisions Support Systems (MIS 378)</li> <li>Increased flexibility and updated Management curriculum as stated above.</li> <li>Oral Communication <ul> <li>Faculty discussions for how to increase opportunities for students to focus on presentation and conversational skills.</li> <li>Podcasts of Bus 458 sections began Fall 2007; subsequent</li> </ul> </li> </ul>
Expectations on	analysis led to its discontinuance.
Written	Written Communication
Communication, but Few Exceed Expectations. (Communication)	• Faculty discussions have centered on the process for including written assignments. A review of syllabi of core courses indicates that most courses now require written assignments.
Trend analysis indicates our students were below the national average on global issues. (Global)	<ul> <li>The School of Business continues to lead the University in number of students studying abroad and number of exchange students studying in a University program</li> <li>Encourage students to take International Economics, Management and/or Marketing rather than a combined course so that specific majors will receive adequate coverage.</li> <li>Hired Entrepreneurship/International Marketing professor for fall 2010.</li> <li>Greater effort to incorporate international issues in a broad array of courses throughout the curriculum.</li> <li>The result of these efforts contributed to a change in student scores to some above the national norm.</li> </ul>
Prior semesters indicate a satisfactory percent of our students meet expectations for ethical issues, but less than 30% exceed expectations. (Ethics)	<ul> <li>Continue to encourage faculty to provide more learning opportunities to model ethical decision making.</li> <li>Specifically, the Bus 150, Acct 202 and Mkt 331 would be excellent environments for enhancing our ethical learning opportunities.</li> <li>The Assurance of Learning Committee has begun efforts seeking to address this deficiency.</li> </ul>
Creativity Scores are Average (Creativity)	<ul> <li>Dr. Aniello presented a brief workshop on teaching creativity to Faculty during spring 2008 faculty meeting.</li> <li>During spring 2009, MIS 327 (a core course) incorporated specific assignment requiring creativity and conceptual skills.</li> </ul>
The length of MBA program, including the minimum 18 hours of prerequisites, is a	<ul> <li>Reduced the number of Pre-MBA courses from 18 hours to 6 and incorporating the material into existing core courses. Change approved by Graduate Council, monitored effectiveness of the curriculum change.</li> </ul>

competitive concern.	• In addition, recommendations have been developed and are now under consideration for program promotion through advertisements via print and online media, which have not been in place heretofore.
Move Computer Science department to the College of Liberal Arts as an independent Department Maintain PhD faculty	<ul> <li>Fall 2007, CS faculty and the School of Business Faculty voted for Computer Science to become an independent department in the College of Liberal Arts starting in fall 2008. Both votes were unanimous. Due to budget restraints, both the hiring of a Chair and the move were delayed.</li> <li>In 2008-2009 the Computer Science made two critical hires,</li> </ul>
teaching Computer Science courses at greater than 25%	<ul> <li>Ken Araujo and Hrishikesh Goradia, both PhDs in Computer Science. The hires in CS are the only PhDs in the Computer Science department and will teach more than 25% of the upper division computer science curriculum for the 2008-2009 year.</li> <li>A department chair, also expected to hold the PhD in CS was expected to be hired for 2009-2010, however the current budgetary environment has continued to put hiring a chair on hold.</li> </ul>
Provide students with more experience in problem solving	<ul> <li>In 2007-2008 CS students participated in two Extreme Programming Competitions. In 2008-2009 CS students participated in two additional Extreme Programming Competitions and an additional CS conference.</li> <li>Offered CS internship to increase student's preparation for the marketplace.</li> <li>In 2010-2011, an experiment was introduced with mega sections for CS 105, resulting in an increase in student hours produced.</li> </ul>
CS computer networking lab	<ul> <li>Plan developed by CS faculty including cost and space requirements proposed to the Provost in 2008. Plan on hold pending space, revisit in coming year.</li> </ul>

The School of Business Assurance of Learning Program continues to evolve. It is noted that the AACSB reaccreditation team reviewed our AOL efforts and had no criticisms, while anecdotal evidence suggests other schools found this area a source of concern with their AACSB review team. In 2009-2010, the AOL Committee was restructured, with the objective of using these efforts to drive future strategy.

Results of the School of Business Assessment Instrument and feedback from internship supervisors and rubrics continue to provide valued input as we seek to further revise and improve our curriculum. Based on our assessment efforts, the five areas below remain issues of concern. The table below summarizes those issues, outlines recommendations for actions derived from the Assurance of Learning Committee's 2009 and 2010 Reports to the Dean and matches strategic action items to our 2009-2014 Strategic Plan.

2010-2011 School of Business and Computer Science Institutional Effectiveness Report

The Strategic Plan for the School of Business incorporates many of the findings from our Assessment Program of our BBA, our largest program. As summarized below, the introduction of Florence Young Professionals Mentors for our students, greater strategic use of the University's Quality Enhancement Plan to introduce more non-traditional and experiential learning and continued program review and revision are major efforts already incorporated into our Strategic Plan for 2009-2014.

Primary Issues Identified During 2005-2011 with a Review of Actions Considered for 2011-2015 for the School of Business and Computer Science

	Issues and Actions for 2010-2015 Cycle
Issues of Concern	Strategic Actions Under Consideration
Below Average Performance on Embedded Questions & ETS scores are slightly below the national average (Analytical- Knowledge)	<ul> <li>Analytical.</li> <li>Encourage faculty to continue integrating experiential learning into the classroom and applying for Quality Enhancement Program grants.</li> <li>Expand internship opportunities so that all qualified seniors can enroll in Bus 475.</li> <li>Provide a mentor from the Florence business community to every qualified junior and senior through the Young Professionals-FMU organization.</li> <li>Increase non-traditional learning opportunities via plant visits and speakers.</li> <li>Knowledge</li> <li>Continue to focus on student's quantitative skills and introduce ethics issues as possible.</li> <li>Review other POM/IT programs in the region, survey regional businesses and suggest possible curriculum revisions to the Curriculum Committee.</li> <li>Advise students to make greater use of Entrepreneurship offerings for General Business Major electives</li> <li>Coordinate one study abroad International Marketing, Management or Economics Summer 2011.</li> </ul>
Students have Adequate Command of Oral Presentation Skills. Students Meet Expectations on Written Communication, but Few Exceed Expectations. (Communication)	<ul> <li>Oral</li> <li>Provide a series of workshops concerning the best teaching methods for achieving our learning outcomes with special focus upon ethics, creativity and communication.</li> <li>Support the marketing faculty in developing a workshop concerning PowerPoint development and oral presentation skills. The students enrolled in Mkt 331 would be required to attend the workshop. The oral communication rubric would be provided to the students.</li> <li>Encourage faculty to continue integrating experiential learning into the classroom and applying for QEP grants.</li> </ul>

	<ul> <li>Continue discussion with Mass Communication concerning additional speech courses for business students.</li> <li>Written         <ul> <li>Provide a series of workshops concerning the best teaching methods for achieving our learning outcomes with special focus on ethics, creativity and communication.</li> <li>Encourage faculty to provide feedback of written learning opportunities to students with focus upon depth, clarity and organization.</li> <li>Follow up on the assessment activities undertaken by the Eng 305 faculty.</li> </ul> </li> </ul>
Prior semesters indicate a satisfactory percent of our students meet expectations for ethical issues, but less than 30% exceed expectations. (Ethics)	<ul> <li>Provide a series of workshops concerning the best teaching methods for achieving our learning outcomes with special focus upon ethics, creativity and communication.</li> <li>Encourage faculty to continue integrating experiential learning into the classroom and applying for QEP grants.</li> </ul>
Trend analysis for the last 5 years indicates our students had been below the national average on global issues, until this year. (Global)	<ul> <li>Add one study abroad business course every summer for academic credit.</li> <li>Increase students from international exchange universities studying business and economics at FMU.</li> <li>Encourage faculty to have executives with international experience interact with students</li> <li>Continue support for faculty to advise students to take the international courses in management, marketing or economics as an elective business course.</li> <li>Encourage faculty to emphasize international perspectives in courses, as relevant to the context.</li> </ul>
Creativity Scores are Average ( <b>Creativity</b> )	<ul> <li>Provide a series of workshops concerning the best teaching methods for achieving our learning outcomes with special focus upon ethics, creativity and communication.</li> <li>Encourage faculty to continue integrating experiential learning into the classroom and applying for QEP grants.</li> </ul>
The length of MBA program, including the minimum 18 hours of prerequisites, is a competitive concern.	• Implement change in number of Pre-MBA courses from 18 hours to 6 and incorporating the material into existing core courses beginning summer 2010.

Low level of promotion and advertising of the MBA program a competitive concern.	<ul> <li>Our MBA program continues to produce a high quality product, though few in the region know about the program. Support the proposal now submitted to university leadership, and if approved, implement it promptly.</li> <li>Additionally, study the possibility of online education with the potential for portions of a course, or an entire course to be taught online, which issue is in response to competitive concerns.</li> </ul>
Move Computer Science department to the College of Liberal Arts and create independent Department	<ul> <li>Request approval to hire a Department Chair when funds become available.</li> <li>Submit a recommendation for the department to seek Computer Science accreditation.</li> </ul>
Maintain PhD faculty teaching Computer Science courses at greater than 25%	<ul> <li>Maintain the current level of PhDs in CS.</li> <li>When funds become available, hire a department chair, also expected to hold the PhD in CS.</li> </ul>
Provide students with more experience in problem solving	• In 2007-2008 CS students participated in two Extreme Programming Competitions. In 2008-2009 CS students participated in two additional Extreme Programming Competitions and an additional CS conference. Continue this important aspect of the program.
CS computer networking lab	• Plan developed by CS faculty including cost and space requirements proposed to the Provost in 2008. Plan on hold pending space, revisit in coming year. Continue to seek out space on campus for the CS program.

Addendum:	Supporting Tables for Number of Students, Credit Hours and Graduates
Table A1. Nu	umber of students in School of Business Disciplines 2006-2011.

Students Majoring in School of Business Disciplines							
Major	2006	2007	2008	2009	2010	2011	
Accounting	117	137	144	138	127	132	
Business Economics	15	9	11	19	20	17	
Computer Science	79	70	62	63	65	56	
Economics	21	12	8	11	22	25	
Finance	47	57	56	72	70	67	
General Business	245	254	210	180	174	144	
Management	101	96	100	127	114	118	

Management Inf. Sys.	69	47	49	45	42	42
Marketing	106	108	102	86	74	72
Total Undergraduate	800	790	742	741	708	673
MBA	38	34	37	31	35	38

Table A2. Credit hours taught by School of Business Faculty Fall & Spring 2005–2011.

	Credit Hours by Discipline								
Di	iscipline								
С	omputer Science	05-06	06-07	07-08	08-09	09-10	10-11		
	Lower Undergraduate	2,409	2,316	2,232	2,679	1,732	2,490*		
	Upper Undergraduate	528	345	321	216	483	219		
	Total Undergraduate	2,937	2,661	2,553	2,895	2,215	2,709		
	Total		2,661	2,553	2,895	2,215	2,709		
Bı	usiness and Management		1	[	[	[			
	Lower Undergraduate	3,156	3,208	3,960	4,104	3,684	4,953		
	Upper Undergraduate	6,054	5,559	5,511	6,528	6,275	6,033		
	Total Undergraduate	9,210	8,767	9,471	10,632	8,959	10,986		
	Graduate	549	525	522	660	453	462		
	Total	9,759	9,292	9,993	11,292	11,627	11,448		

\*For 2010-2011, "Lower undergraduate" within "Business and Management" includes Economics.

Table A3. Number of graduates by major – Fall 2005 – Spring 2011.

Number of Graduates by Major								
Major	05-06	06-07	07-08	08-09	09-10	10-11		
Undergraduate:								
Accounting	16	15	17	20	18	24		
Computer Science	13	12	4	11	5	5		
Economics (BA, BS & BBA)	10	10	8	3	6	8		
Finance	12	14	14	25	17	24		
General Business Administration	25	25	18	26	22	15		

# 2010-2011 School of Business and Computer Science Institutional Effectiveness Report

Management	36	31	23	30	41	39
Management Information Systems	11	10	13	10	3	9
Marketing	30	36	31	29	28	18
Total Undergraduate	153	153	128	154	140	142
0	155	155	140	10.	110	
Graduate:	155	155	120	101	110	
0	133	133	120	19	11	14