



Florida Atlantic University
2013-14 Academic Program Review
Self-Study Report Information Technology and Operations Management

Program:	Management Information Systems (MIS) – undergraduate BBA Master of Science in Information Technology Management (MSITM) – graduate
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Instructions: Please respond to each of the following items, providing interpretations, self-assessment and reflection where appropriate.

A. Mission and Purpose of the Program (*School or College*)

- ☐ In the context of the BOG and FAU mission and Strategic Plans.
Links: [FAU Strategic Plan](#), [BoG Strategic Plan](#)

The mission of the Department of Information Technology and Operations Management is to develop competence in information systems, operations management (including quality management), and related decision sciences disciplines for traditional and non-traditional students across the College of Business; to produce skilled individuals proficient in information technology who are able to contribute effectively to their organizations and communities in an ever-evolving technological environment; to engage in an active partnership with the business community; and to continually innovate and increase the quality of its educational and research activities in a manner that increases education effectiveness and global reach.

The Vision of ITOM: In an environment that integrates information technology and operations management the ITOM department balances world renown research with excellence in teaching to create successful students. Both the department and its students are in alignment with community we serve thus having a positive impact on the outside community (all communities) while maintaining a friendly collegial atmosphere which generates trust among ourselves. We use technology effectively, distance and locally providing multiple venues for the learning experience. Ethics and integrity are at our core, especially in our openness (acceptance each others' views) and balance. We embrace change management and seek to improve our enrollment.

The Degree Programs offered by the ITOM department are summarized in the following chart:

Major Name	CIP Code	Degree
Bus Adm: Mgtm Info Systems	52.1201	Bachelors
Management Information Systems	52.1201	Bachelors
Information Technology and management	52.1201	Masters
Management Information Systems	52.1201	Doctorate

B. Date and description of last external (i.e. accreditation) review, if applicable, and last review of this program

☐ **Findings:** In the ITOM department, the three year trend in faculty dedicated to instruction shows a decline in the person years and FTEs carried by tenured and tenure-earning faculty and an increase carried by instructors and visiting faculty. The difference in the 2005-2006 data compared to the two previous years is especially noticeable. The changes are due to an increase in research productivity by a number of tenured and tenure-earning faculty and the availability of a federal earmark to conduct research in information security. Both of these factors affected a reduction in teaching assignments for these faculty in 2005-2006. Another finding was decrease of enrollment of MIS majors. While the number of sections offered by the ITOM department remained fairly constant and increased last year, the number of sections in the College grew at a higher rate.

An important trend found in the previous review cycle was that faculty are publishing in better journals in the field. We do not believe that an increase in the number of publications from one year to the next is necessarily a positive indicator of research productivity. And while there are a minority of faculty in the ITOM Department who publish in moderately acceptable journals, a greater number are publishing in significantly better journals

☐ **Major changes made since last review**

We have extensive changes on both faculty composition and program delivery since the last review. To summarize:

1. The graduate program MSITM was created
2. Curriculum overhaul of the undergraduate program, namely:
 - a. Creation of Business Analytics and Information Security tracks, minors, and certificates
 - b. Relaxing the curriculum in terms of prerequisites and giving more choices and paths to students
 - c. Introducing Social networks and Social Media courses
 - d. Creating new minors and certificates, some of them offered jointly with other COB departments, such as Healthcare Information Systems, Digital Marketing, Operations Management
3. Faculty composition changes. We have two senior faculty leaving at Professor rank, 1 tenure track faculty hire, several instructors left and one deceased. One senior faculty member at Professor rank and former Department Chair became College Associate Dean

C. Instruction: The self-study should address all aspects of programmatic quality associated with instruction. Special attention should be paid to curriculum, degree programs, and teaching quality. Student issues such as advising, retention, honors programming, occupational outcomes and placement in graduate schools should be addressed.

Departmental Dashboard Indicators

☐ **Establishment of goals for student learning** (Refer to the program's latest plan in the FAU). Clear Learning goals have been established for the program as a whole and for every single course taught at ITOM. These goals are now part of the respective course syllabus. The goals were established in 2011 and constantly reviewed and adjusted per the assessment results.

☐ **Assessment Database, and for baccalaureate programs, attach a copy of ALC/ SLO)**

Assessment of how well students are achieving expected learning outcomes (Refer to the program's latest report in the FAU Assessment Database). Assessment of how well students are achieving expected learning outcomes (Refer to the program's latest report in the FAU Assessment Database)

☐ **Description of how results of assessments are used for continuous program improvement.** The results from the assessment are discussed in two levels: 1) At course coordination meetings that are regularly conducted for multiple section courses, and 2) At department meetings in which each course coordinator gives a report to the whole faculty. As a result of the discussion or the results of the assessment, points for improvement are identified such as specific topic or specific deliverable (Memo, paper, oral presentation). Upon which methods of improvement are identified. This may include textbook change; topic elimination or enhancement depending on how it serves the purpose of the overall program or if it is duplicated and offered in another course; new methodology such as class discussion, team project, computer technology, new quizzes or similar.

Baccalaureate Programs:

ITOM offers one major in the College of Business, namely Management Information Systems (MIS). MIS develops specialized proficiencies in management information technology and leads to the B.B.A. or B.S. degree. It focuses on the concepts and tools necessary for analyzing, designing, planning and developing resources.

☐ **Review of lower level prerequisite courses** to ensure that the program is in compliance with State-approved prerequisites As part of the College of Business (COB), ITOM students must first complete the COB "pre-professional business courses" and maintain a 2.50 grade point average (on a 4.0 scale) for admissions. The pre-professional business courses include:

Accounting I (Financial Accounting)	ACG 2021
Accounting II (Managerial Accounting)	ACG2071
Macroeconomics	ECO 2013
Microeconomics	ECO 2023
Methods of Calculus	MAC 2233
Introductory Statistics	STA 2023
Information Systems Fundamentals	ISM 2000

☐ **For limited access programs**, review of whether such status is still warranted. The program is not limited access.

□ **Admissions criteria.** Florida Atlantic University (FAU) is one of 13 state universities within the state university system of Florida (SUS). The middle 50% of freshmen who were admitted to the fall, 2013 freshmen entering class were reported as:

High School GPA (out of 4.0): 3.38-3.98

ACT Composite Score: 22-26

SAT Total Score: 1520-1740

In addition to the 2.50 cumulative GPA overall, students must receive a grade of “C” or higher on all of these pre-professional business courses.

□ **Enrollment information (headcount and SCH production)**

Enrollment: Headcount - ITOM

Major	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Bus Adm: Mgtm Info Systems	3	1		3	5	4
Management Information Systems	248	211	217	208	182	208
Total	251	212	217	211	187	212

2012-2013 finally saw a reversal of the negative trend of decreasing enrollment numbers that has plagued MIS majors nationwide since 2004-2005. We believe that the substantial increase of 13.4% in enrollments is due to 1) national trends of increased interest in IT and STEM disciplines, and 2) Massive department efforts in curriculum overhaul, industry outreach, and recruiting and advising efforts

As the IT job sector, Information Security and Business Analytics continue to look very promising, we are optimistic that the MIS major will continue to grow. Lower than what the job market needs, enrollments in MIS and IT degrees in general is a nationwide trend and phenomenon, has now persisted for about 5-6 years, and is due to two major factors: 1) post dot.com bust in the early 2000s, and 2) still lingering perception in the general public that IT jobs are outsourced and there are no job opportunities. This perception is contradictory to the job market trends and we expect within a couple of years the public opinion to catch up with the job market demand. In general, MIS undergraduate major enrollments constitute between 4 and 5% of the Business Schools enrolments nationwide. An upward trend is clearly visible and will most likely continue as the national priority of STEM disciplines redirects the future graduates to technology-focused education.

Student Credit Hour / FTE Productivity Reports - ITOM

	State Fundable SCH						Annualized State Fundable FTE					
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Lower Div	2,658	2,658	3,003	3,081	3,438	3,924	2,658	66.4	75.1	77.0	85.9	98.1
Upper Div	13,822	13,822	13,857	13,839	14,121	14,070	13,822	345.6	346.4	346.0	353.0	351.7
Grad I	1,554	1,554	2,058	2,275	2,046	2,203	1,554	48.6	64.3	71.1	63.9	68.8

Grad II	74	74	6	39	27	42	74	2.3	0.2	1.2	0.8	1.3
Total	18,108	18,108	18,924	19,234	19,632	20,239	18,108	462.9	486.0	495.3	503.8	520.0

Student Credit Hour/FTE Productivity Reports, College of Business, by Department (ITOM highlighted):

Course Level	Department	State Fundable SCH					Annualized State Fundable FTE				
		2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Lower Div	Accounting	5,484	5,889	6,603	6,759	7,599	137.1	147.2	165.1	169.0	190.0
	Economics	6,951	7,587	7,473	7,290	8,574	173.8	189.7	186.8	182.2	214.3
	Finance	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
	Info Tech & Op Manage	2,658	3,003	3,081	3,438	3,924	66.4	75.1	77.0	85.9	98.1
	Management Programs	1,395	1,710	1,401	1,353	1,299	34.9	42.7	35.0	33.8	32.5
	Marketing	0	0	0	0	0	0.0	0.0	0.0	0.0	0.0
	College Total	16,938	18,189	18,558	18,840	21,396	423.4	454.7	463.9	471.0	534.9
Upper Div	Accounting	11,528	17,441	21,240	22,273	21,403	288.2	436.0	531.0	556.8	535.1
	Economics	7,891	9,809	10,713	10,206	10,984	197.3	245.2	267.8	255.2	274.6
	Finance	12,002	13,104	11,057	10,762	10,811	300.1	327.6	276.4	269.1	270.3
	Info Tech & Op Manage	13,822	13,857	13,839	14,121	14,070	345.6	346.4	346.0	353.0	351.7
	Management Programs	17,772	23,423	23,650	24,174	27,240	444.3	585.6	591.3	604.3	681.0
	Marketing	13,196	12,442	13,023	13,361	13,180	329.9	311.0	325.6	334.0	329.5
	College Total	89,645	90,076	93,522	94,897	97,688	2,241.1	2,251.9	2,338.1	2,372.4	2,442.2
Grad I	Accounting	4,154	5,661	5,233	5,141	4,560	129.8	176.9	163.5	160.7	142.5
	Economics	508	732	891	1,094	969	15.9	22.9	27.8	34.2	30.3
	Finance	1,443	1,347	1,617	1,314	1,311	45.1	42.1	50.5	41.1	41.0
	Info Tech & Op Manage	1,554	2,058	2,275	2,046	2,203	48.6	64.3	71.1	63.9	68.8
	Management Programs	4,470	6,000	6,348	6,177	6,035	139.7	187.5	198.4	193.0	188.6
	Marketing	1,318	1,360	1,332	1,323	1,257	41.2	42.5	41.6	41.3	39.3
	College Total	14,320	17,158	17,696	17,095	16,335	447.5	536.2	553.0	534.2	510.5
Total	Accounting	21,280	29,121	33,216	34,332	33,801	558.7	764.2	864.0	891.4	875.0
	Economics	15,407	18,224	19,161	18,671	20,614	388.7	460.8	485.1	474.1	521.9
	Finance	13,607	14,646	12,832	12,209	12,304	350.2	375.8	331.9	314.3	316.9
	Info Tech & Op Manage	18,108	18,924	19,234	19,632	20,239	462.9	486.0	495.3	503.8	520.0

Course Level	Department	State Fundable SCH					Annualized State Fundable FTE				
		2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
	Management Programs	23,767	31,262	31,572	31,950	34,891	622.9	819.9	830.1	838.9	912.0
	Marketing	14,681	13,941	14,509	14,778	14,499	376.3	357.9	372.0	378.3	370.7
	College Total	121,613	126,118	130,524	131,572	136,348	3,134.3	3,264.5	3,378.4	3,400.8	3,516.6

ITOM generates the highest number of FTE in the College for majors outside the department but within the College. That is, ITOM provides the majority of the instruction of core business courses required for all business majors. ITOM produces 14.8% of the College's total Annualized State-Fundable FTEs. It is the third largest Graduate FTE producer in the College, third largest Lower and Upper Division FTE producer, and along with Economics, third largest total FTE producer for the College.

There is a steady FTE increase from year to year majorly due to the enrollment increase in the College as a whole. The majority of teaching productivity within the Department is generated by courses required for each business major. While the Department generated a total of 53.7 FTEs based on courses for the MIS majors, it generated 400.5 FTEs based on courses required of all business majors, the highest number of FTEs generated in this category.

Instruction Effectiveness. Per the ITOM SPOT results, the average rating of quality of instruction as measured by item #20 has stayed flat at 2.1 across the years and is higher than the College average. In terms of item #21, ITOM quality of teaching is generally higher than the College average. One must keep in mind that: 1) ITOM trains business students in Information technology – a STEM discipline which is generally considered a harder discipline by COB students, and 2) There are a number of additional factors (grades, size of class, expectations of grade, type of course, time of class, etc.) that affect the quality of teaching and are not accounted for in this data.

□ Average class size and faculty/student ratio

Data was collected in the following manner: The data was filtered to give a more accurate and representative description of what programs are really experiencing in terms of “Class Size” and “Student-to-Faculty Ratio.”

	Undergrad	Undergrad	Graduate	Graduate		
					UG Faculty Student Ratio	GR Faculty Student Ratio
Summary	Mean Class Size	Median Class Size	Mean Class Size	Median Class Size		
2009-10	38.4	35.5	22.4	24.0		22.4
2010-11	41.0	36.0	22.7	22.0		21.9
2011-12	40.7	36.0	18.6	18.0		14.6
2012-13	37.4	30.5	20.6	20.0		17.2

All ISM Courses and ISM3011, MAN 3506, QMB 3600

	Undergrad	Undergrad	
			UG Faculty Student Ratio
Summary	Mean Class	Median Class Size	
2009-10	26.2	28.0	15.7
2010-11	27.8	30.0	14.9
2011-12	22.9	22.5	15.8
2012-13	20.9	20.5	12.0

All ISM Courses (Excluded: ISM3011, MAN 3506, QMB 3600)

Class Size

Undergraduate and Graduate courses were evaluated separately.

Courses not included in the analysis: all of the seven Pre-business courses (all are 2000-level) as well as GEB 2011 were not reviewed. Other courses not included are Dissertation courses (7978-7980), DIS courses, Internships, lab sections, and small cross-reference courses sections.

Mean and Median Class Size and Student-to-Faculty Ratios were determined after segmenting the course data in to three groups:

- 1) all courses in the Department (separated as Undergraduate and Graduate)
- 2) all non-business core courses in the Department (only applies to Undergraduate)
- 3) only business core classes in the Department (only applies to Undergraduate)

Student-to-Faculty Ratio

Student: Faculty ratio is derived from a formula created by the Common Data Set Initiative that is used by US News and World Report for reporting purposes. Also, the Integrated Postsecondary Education Data System (IPEDS), the primary source for data on colleges, universities, technical, and vocational postsecondary institutions in the United States uses the same formula.

IPEDS formula:

$$\text{Student-to-Faculty Ratio} = [S_F + S_P/3] / [F_{FI} + (F_{FN} + F_{PI})/3]$$

S_F = the number of full-time enrolled students,

S_P = the number of part-time enrolled students,

F_{FI} = the number of full-time instructional faculty,

F_{FN} = the number of full-time non-instructional faculty who teach part-time, and

F_{PI} = the number of part-time instructional faculty

****** Since the College of Business does not classify students as Full-time or Part-time, the College of Business will determine Student FTE as follows: the number of student credit hours divided by a constant number (ie. 12 credits for Undergraduate courses and 9 credits for Graduate courses).

FAU formula for UG Student-to-Faculty Ratio = [total student credit hours/12] / [$F_{FI} + (F_{FN} + F_{PI})/3$]

FAU formula for GR Student-to-Faculty Ratio = [total student credit hours/9] / [$F_{FI} + (F_{FN} + F_{PI})/3$]

Lastly, it should be mentioned that Student-to-Faculty Ratios have been calculated based on a count of students from Fall and Spring of the academic year. It appears most university reports are based on one semester which results in a lower Student-to-Faculty Ratio.

□Curriculum, including duration of program and comparison to peer programs, as identified by the unit (including aspirational peers and SUS)

The MIS major was known to be one of the tightest, most inflexible and difficult majors. It had one of the largest set of mandatory courses, most of them technically intensive and the MIS majors had very little freedom to choose according to their interests and career goals. As such the enrollments were most humble. Although it has been a national trend for several years, after consulting with faculty, attending national MIS program development workshops on how to improve the program and enrollments, we proceeded with one of the most intensive program creation and major overhaul. New, creative curriculum has been designed that gives opportunities to more students to major in MIS. Relaxing the restrictions and the prerequisite chain of our curriculum allowed our students to diversify their education across two tracks, one more technical and the other, more information and knowledge management oriented. Below is the description of the MIS major:

Management Information Systems Major Requirements

In addition to the foundation and core courses required, all Management Information Systems majors must complete the courses that follow one of the two paths for a total of 18 credits. A grade of "C" or better is required in all major courses. Two paths are available for the MIS Major, Information Technology and Information and Knowledge Management.

Information Technology Path*. This is the classical MIS path that provides core technical skills needed to manage and design Information Technology in organizations. Students acquire the Basic Four technical skills: application development and programming languages, databases, data communications, and system analysis.

Information Technology Path*

Introduction to Computer Systems and Software Development	ISM 3230	3
Database Management Systems**	ISM 4212	3
Business Data Communications***	ISM 4220	3
Advanced Systems Analysis and Design	ISM 4133	3

Choose two of the following courses:

Special Topics	ISM 4930	3
Social Media and Web Technologies	ISM 4054	3
Project Management	MAN 4583	3
Information Technology and Operations Management Internship	ISM 4940	3
Introduction to Business Intelligence**	ISM 3116	3
Data Mining and Data Warehousing**	ISM 4117	3
Advanced Business Intelligence**	ISM 4403	3
Information System Security***	ISM 4320	3
Information Security Management***	ISM 4323	3

Computer Forensics***	ISM 4324	3
Mobile Apps for Business	ISM 4053	3
Social Media and Web Analytics	ISM 4420	3

**Students who take the Information Technology Path may choose to, but are not required to, concentrate in one of two areas: Business Analytics and Information Security. If a student chooses a concentration, it is recommended that all four courses be taken in that concentration.*

***These courses constitute the Business Analytics Concentration*

****These courses constitute the Information Security Concentration*

Information and Knowledge Management Path*. This path provides students with general, broad knowledge in information and knowledge management in organizations, digital products and service development, social media analysis as well as project management. Graduates will have the skills to analyze and lead technology-enabled products and services and consult organizations on digital products and services.

Information and Knowledge Management Path*

Advanced Systems Analysis and Design	ISM 4133	3
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Choose five of the following courses:

Special Topics	ISM 4930	3
Social Media and Web Technologies	ISM 4054	3
Project Management	MAN 4583	3
Information Technology and Operations Management Internship	ISM 4940	3
Database Management Systems**	ISM 4212	3
Introduction to Business Intelligence**	ISM 3116	3
Data Mining and Data Warehousing**	ISM 4117	3
Advanced Business Intelligence**	ISM 4403	3
Information Security Management	ISM 4323	3
Global Supply Chain Management	MAN 4597	3
Social, Legal and Ethical Issues of Digital Data	ISM 4041	3
Mobile Apps for Business	ISM 4053	3
Social Media Innovation	ISM 3007	3
Healthcare Information Systems	ISM 4381	3
Social Media and Web Analytics	ISM 4420	3

**Students who take the Information and Knowledge Management Path may choose to, but are not required to, concentrate in Business Analytics. If a student chooses this concentration, it is recommended that all four courses be taken in this concentration.*

***These courses constitute the Business Analytics Concentration*

Minors at ITOM. Currently we have 6 minors and four certificate programs. Minors are aimed at degree seeking students while certificate programs are aimed at non-degree seeking students and professionals. The following are under this category: MIS Minor, Business Analytics Minor and Certificate, Information Security Minor and Certificate, Operations Management Minor, Healthcare Information Systems Minor and Certificate, and Digital Marketing Minor and Certificate. In response to industry demands and the need to modernize our curriculum, I initiated and coordinated the creation of three minors, the last two being offered jointly with the Department of Management Programs and the Department of Marketing, respectively. All minors are generating strong student interest and class enrollments.

□ **Description of internships, practicum, study abroad, field experiences**

Corporate Projects in classroom. ISM 4133, Advanced Systems Analysis and Design, is a Quality Enhancement Instruction course which is research-oriented in collaboration with industries. Students work in teams of 2-3 on a real company project development in strong collaboration with the industry partners. By the end of the course they complete the project.

Internships. As part of the curriculum overhaul, to encourage career development and real world experience for its majors, ITOM created 2 Internship for credit courses: ISM 4940 for undergraduate students and ISM 6942 for graduate students. In collaboration with the local business community, especially the ITOM Advisory Board, ITOM placed 31 students during the past five semesters, which constitutes developing opportunities for more than 10% of the MIS majors. Several students were hired permanently following their internships. We identified five primary local organizations that hire our students on a regular basis. Going forward, our goal is to streamline the process to place students. As part of this process, we plan to work with students to help them create better resumes and improve their interviewing skills.

Research-Enriched Courses. We have project and research intensive MIS courses that incorporate a class project employing a method, technology or data from the real world to solve real industry problems. Students

work in teams and present their project in class and in front of an industry representative.

- ISM 4117 Data Mining and Data Warehousing. A term research project of students involves researching a new Data Mining technology, method, or tool, not described in the textbook, class labs, or lectures; present it to the class, and analyze a data set with that new technology.
- ISM 4324 Computer Forensics. A term research project that involves researching a new Network Forensics technology, method, or tool, not described in textbook, class labs, or lectures; present it to the class, and showcase a forensics discovery with that new technology.
- ISM 4053 - Mobile Apps for Business. ITOM, in collaboration with Management Programs, Engineering and Graphic Design has students work in teams to research and develop new Android apps that have commercial application.
- DIS – Direct Independent Study. A professor works individually with a student or two on a specific topic relevant to current research stream in the area of the student's study

□ **Pedagogy/Pedagogical innovations (for example, eLearning, simulations, student-centered approaches, and so on).** The main purpose of constantly creating new and improve existing pedagogical approaches is to challenge the students to think analytically and critically, since the ability to think and process information is a vital skill for business and MIS majors. The major pedagogical approaches used by our faculty include:

Critical thinking and experiential learning as the key approach in business education. It focuses on student engagement, and is more broadly defined as an approach in which students actively engage in the learning process. Many classes include individual or group student projects aiming to solve a real business problem with real data from a real company. To implement this student-centered learning pedagogy, ITOM faculty employ many pedagogical and technology-based innovations such as

- (1) **Simulation-based learning** in the graduate operations, supply chain management, and project management courses using leading-edge web-based simulations from Harvard Business School

- (2) **Case studies and Case analyses.** Graduate classes typically have one Harvard case study each week, along with a semester-long term paper involving an analysis of a specific company's processes, or a multi-week simulation managing the supply chain for a company, with a report analyzing the decisions the group made each round. Company tours and guest speakers are incorporated in the curriculum as well to see the course material applied to a real business. For example, each team in a class designs a production or information process with the aim of being the most profitable for company, and then they must analyze how they could it. Each activity is followed by a written analysis to help students better understand the learning goals of the activity as well as better understand the course material as it applies to business.
- (3) **Individual or Group project.** In many classes all graduate course students are required to do **individual company-based projects** driven by the current challenges they face at work. For example, an OM graduate class worked to help the Human Powered Submarine Club of FAU to better organize themselves as they prepared for the national championship in the human powered submarine competition. Projects typically include consulting projects with local firms, business case requirement, business plan requirement, and so on. Many of these successfully enter and are showcased at the Business Plan Competition, a main entrepreneur initiative at the College of Business. Undergraduate students are also involved in real world group projects. Practical hands on projects are utilized to ensure that students are not only learning the fundamentals of the course material but they are also able to utilize the principles learnt in a real world problem. For example, in the Social Media and Web Technologies course (ISM 4054), individual students perform an in depth analysis of two existing websites and offer suggestions for improvement. They also work in groups to plan and create or re-design a website for an organization or a company. Similarly, ISM 4133 is a project-based class in which students in teams analyze and create or improve an Information Systems in a real world company (See also Research-enriched courses under Internships).
- (4) **New software tools and mobile/social technologies** into the curriculum. For example, Evernote (social app) is used for undergraduate projects in an experiential product and service design project. Other integrated information technologies include Web 2.0 tools (wiki, blogs, Facebook, etc.), web-based activities, online assessment and collaboration, synchronization of virtual and on-campus course, student website creation, etc. Such instructional innovations are recognized via presentation at a premier academic conference, obtaining the **Quality Matters** certification, and publication in a top teaching-research journal, *Journal of Information Systems Education*.
- (5) Adopting **Academic Service-Learning (ASL)** by incorporating community work into the undergraduate curriculum, giving students real-world learning experiences that enhancing their academic learning while providing a tangible benefit for the local non-profit organizations such as the CROS Ministries Delray Beach Community Food Pantry
- (6) Adaptation of the **Universal Teaching Method of Jacotot, Rancière and Biesta**. The goal of this methods is to provide a space for deliberative democracy and collaborative self-learning, to create a space in which students can do research (FAU's QEP initiative) and to minimize stultifying explanation by the instructor. Students are asked to rewrite the class text in class discussions (F2F format) and in group wikis (F2F and online formats). The rewritten text is the basis for some of the exams. F2F sections are required to produce a creative video (in groups) related to course topics. Assessment is based upon twelve individual wiki assignments, twelve MC quizzes and two essay/MC exams, and a group project (F2F only). Students are allowed to take on an optional explanatory basis if they choose - explanatory videos are available on the course Blackboard site.

E-Learning.

- (1) **Lecture Capture Video Streaming (LCVS) format.** This is a cutting edge technological course delivery in which lectures are transmitted live and recorded. Students choose to watch synchronously or at a later time. Due to the large number of students in a lecture capture section, teaching assistants provide access to face-to-face and e-tutoring sessions as well as test reviews. The students are provided with an abundance of creative materials to master the lessons: challenging problem sets, worksheets, voice-over PowerPoint, notes, tutorials, online graded assignments and regular quizzes. The inclusion of demonstrations of current topical issues in the news, such as quantitative analytics pertaining to elections and quantitative tools available on popular websites enhances the students' understanding of the business relevance of the course. Providing adequate ancillary materials supports the increased demand for assistance required to pass the course and to accommodate the different learning styles of the students pursuing their quantitative confidence and expertise
- (2) **Online course delivery.** All of the ITOM faculty received extensive E-Learning training from the Provost's office E-Learning program to build and deliver effective, innovative, challenging course material and stimulate student learning through variety of methods appropriate for the online delivery. Use of Discussion board, individual or group projects, video materials, wikis and blogs, and many others innovative methods are incorporated in the online course delivery.

□ **Scope of institutional contributions**, such as to the Intellectual Foundations Program, cross-listed courses, "service courses", inter-professional education efforts, certificate programs

ITOM contributes to the Intellectual Foundations Program through teaching ISM 2000 – Management Information Systems for Freshmen. In addition, it provides service core courses to the College of Business Graduate and Undergraduate programs, such as ISM 3011, QMB 3600, MAN 3506, ISM 6026, MAN 6501, MAN 6525, MAN 6596, QMB 6603, QMB 7565.

We have several interdisciplinary programs:

1. Our graduate MSITM program is offered jointly with the College of Engineering, Department of Computer Science and Computer Engineering
2. We have two joint minors and certificate programs: Minor in Healthcare Information Systems, offered jointly with Management programs; and Minor in Digital marketing, offered jointly with Department of Marketing

□ **Student profile, including student diversity and demographics, scholarly activity, number of students receiving scholarships and assistantships, and recruitment strategies**

Age Distribution of MIS majors, 2012-2013, past years have similar patterns

Age	19	20	21	22	23	24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	Total
Bus Adm: Mgtm Info Systems				1	1	1			1					4
Management Information Systems	1	18	16	21	17	20	56	25	18	5	5	3	3	208
Total	1	18	16	22	19	21	64	29	21	9	5	5	3	233

Gender distribution of MIS majors, 2012-2013, past years have similar patterns

	Female	Male	
Bus Adm: Mgtm Info Systems	1	3	4
Management Information Systems	52	156	208
Total	59	174	233

Ethnicity distribution of MIS majors, 2012-2013, past years have similar patterns

	Asian	Black or African American	Hispanic or Latino	Two or more races	Nonresident alien	White	Race and ethnicity unknown	
Bus Adm: Mgtm Info Systems			2			2		4
Management Information Systems	11	45	56	4	5	86	1	208
Total	13	47	61	5	8	98	1	233

One of the great advantages and points of pride of our program is that it is age and ethnicity diverse program providing many opportunities to younger and older students, and those with diverse ethnical and national background. However, as in every technical and STEM discipline, we are experiencing shortage of female students interested to major in MIS. While this is a national trend, through vigorous recruitment effort, in class education at the core ISM 2000 and ISM 3011, we are trying to provoke enthusiasm and interest as much as possible (see **Student Recruitment** in the following sections).

Scholarships. ITOM currently does not have Scholarship Fund and availability of scholarships is centralized and announced through the College of Business (COB). These are now posted on the college web site at: http://business.fau.edu/undergraduate/current-students/scholarships/index.aspx#.Ukd7kPPD_Sc

The scholarship opportunities are few and there is much to be desired on that front. ITOM has tried to engage the ITOM Advisory Board to solicit and generate some scholarships but the results so far are not encouraging.

□ **Advising procedures.** During their freshman year and their first 50 credit hours, students generally receive advising by the university-wide University Advising Office. To facilitate their work during this period, the ITOM Chair twice a year visits both the Admissions and Advising Offices to raise their awareness of our major and direct the interested students to contact the Chair for further information. This helps freshmen and sophomore students understand that before they can declare a major in the COB, they will be categorized as “pre-business” and only after taking the COB core courses, will be able to declare a major. Once students reach the 50-60-credit-hour-mark, they get their advising from the College of Business Undergraduate Advising Office. It handles advising all COB undergraduate majors. (we also have COB graduate advising office). The advisors in the COB are professional and strive to learn about each major in the college so they can give effective advice.

ITOM has built a framework to regularly communicate with the COB Advisors’ team to inform them about the program changes, to clarify some elements of our complex program that includes tracks and

paths and give more information about the minors as well. The Chair attends Advising meetings every semester to answer questions and give clarifications and recommendations for improvement in advising MIS students. In addition, the Chair hosts a Holiday Lunch during the month of December whose purpose is in relaxed atmosphere to enhance the awareness of the importance of their job and to express appreciation of their work. The event is used to further clarify the program.

ITOM has also appointed a COB Advisors' liaison, a faculty member who has intimate knowledge about our program and regularly visits the Advisors' office, takes their questions and difficulties and conveys them to the ITOM Chair.

Finally, the ITOM Chair does one-on-one advising for anything related to MIS – careers, specific course questions, internships, paths and opportunities, etc.

New Mentorship Program for Management Information Systems (MIS) Students: ITOM launched an innovative mentorship program for the MIS majors while strengthening relationships between academia and industry in the information technology sector. ITOM Advisory Board members, executives from prominent firms in South Florida, have been selected to serve as mentors for this program. Teams of three undergraduate students will have exclusive access to a designated board member and forge a close mentorship relationship with that member. Each semester, board members and their respective teams will conduct meetings in an informal setting such as online chat, coffee shop, or at the executive's workplace. Board members will provide guidance and informational interviews with the students, answer questions on how to best develop their careers and present themselves, and help develop their resumes and skills. With exclusive access to company executives, students will gain the opportunity to learn about the local industry, what type of jobs and skills are most sought after, what type of work MIS professionals typically perform in a company, and how they can build successful portfolios.

☐ **Licensure rates (if applicable).** N/A

☐ **Placement rates/employment profile**

ITOM and COB do not have their own measurements of placement rates and average beginning salary. Historically, MIS Bachelor graduates have among the highest salaries among Business majors, and in an environment of high industry demand for IT talent, have high placement rates. The table below is the Florida Education and Training Placement Information Program (FETPIP), <http://www.fldoe.org/fetpip/> data (currently available for 2010-2011) that serves to determine the number and percentage of employed graduates from FAU. Below are given all types of IT disciplines (including College of Engineering and Information Sciences) for FAU. The MIS major, administered by ITOM is highlighted. FETPIP has been used by the Florida Legislature to distribute Performance-based funds to universities. Although FETPIP data has limitations, it provides a uniform method of measurement for all universities.

FAU Placement rates for IT majors

Program Title	CIP Code	Degree Level	Employed Percent	Full Qtr Employment Percent Employed	Full Quarter Average Earnings

Information Systems Technology	151202	Bachelor	60%	100%	\$**, ***
Computer & Information Science	110101	Bachelor	61%	89%	\$11,826
Computer Engineering	140901	Bachelor	58%	86%	\$**, ***
MGMT. Info. Systems/Busi Data Proc.	521201	Bachelor	65%	85%	\$11,632

As seen from the above table, FAU MIS majors have the highest percentage of full time employment among all IT majors.

☐ Retention rates and Graduation rates

The following table represents the retention and graduation rates data

All Transfers from Florida Public CC (with AA degree or without AA degree)

ITOM	Number in Class	Number who Graduate			Retention Number			Number who Persist			Number who Graduate in 10 years					Retention Number in 10 years					Number who Persist for 10 years									
		≤ 3 yrs	≤ 4 yrs	≤ 5 yrs	≤ 3 yrs	≤ 4 yrs	≤ 5 yrs	≤ 3 yrs	≤ 4 yrs	≤ 5 yrs	≤ 6 yrs	≤ 7 yrs	≤ 8 yrs	≤ 9 yrs	≤ 10 yrs	≤ 6 yrs	≤ 7 yrs	≤ 8 yrs	≤ 9 yrs	≤ 10 yrs	≤ 6 yrs	≤ 7 yrs	≤ 8 yrs	≤ 9 yrs	≤ 10 yrs	≤ 6 yrs	≤ 7 yrs	≤ 8 yrs	≤ 9 yrs	≤ 10 yrs
2002	103	40	51	60	37	22	13	77	73	73	62	64	65	65	66	7	4	1	2	0	69	68	66	67	66					
2003	88	40	43	49	26	17	9	66	60	58	52	52	52	52		4	2	1	2		56	54	53	54						
2004	75	34	44	46	23	8	2	57	52	48	46	46	46			3	4	3			49	50	49							
2005	53	18	31	31	21	9	7	39	40	38	34	35				3	2				37	37								
2006	39	11	19	19	21	8	9	32	27	28	22					7					29									
2007	27	11	16	17	9	5	1	20	21	18																				
2008	22	10	12		7	4		17	16																					
2009	19	8			9			17																						
ITOM	Number in Class	Percent who Graduate			Retention Percentage			Percent who Persist			Percent who Graduate in 10 years					Percent Retention for 10 years					Percent who Persist for 10 years									
		≤ 3 yrs	≤ 4 yrs	≤ 5 yrs	≤ 3 yrs	≤ 4 yrs	≤ 5 yrs	≤ 3 yrs	≤ 4 yrs	≤ 5 yrs	≤ 6 yrs	≤ 7 yrs	≤ 8 yrs	≤ 9 yrs	≤ 10 yrs	≤ 6 yrs	≤ 7 yrs	≤ 8 yrs	≤ 9 yrs	≤ 10 yrs	≤ 6 yrs	≤ 7 yrs	≤ 8 yrs	≤ 9 yrs	≤ 10 yrs	≤ 6 yrs	≤ 7 yrs	≤ 8 yrs	≤ 9 yrs	≤ 10 yrs
2002	103	39%	50%	58%	36%	21%	13%	75%	71%	71%	60%	62%	63%	63%	64%	7%	4%	1%	2%	0%	67%	66%	64%	65%	64%					
2003	88	45%	49%	56%	30%	19%	10%	75%	68%	66%	59%	59%	59%	59%		5%	2%	1%	2%		64%	61%	60%	61%						
2004	75	45%	59%	61%	31%	11%	3%	76%	69%	64%	61%	61%	61%			4%	5%	4%			65%	67%	65%							
2005	53	34%	58%	58%	40%	17%	13%	74%	75%	72%	64%	66%				6%	4%				70%	70%								
2006	39	28%	49%	49%	54%	21%	23%	82%	69%	72%	56%					18%					74%									
2007	27	41%	59%	63%	33%	19%	4%	74%	78%	67%																				
2008	22	45%	55%		32%	18%		77%	73%																					
2009	19	42%			47%			89%																						

Retention shows how many students re-enrolled the following year

Graduation + Retention = Persistence

Analysis of historical data:

- 1) The yearly range of transfer students who declared ITOM when entering FAU from 2002-2006 and graduated within three years or less was 28-45% with an overall average of 40%.
- 2) Approximately 49-59% of transfer students who declared ITOM when entering FAU graduated in 4 years or less with an average of 53%.
- 3) Approximately 49-63% of transfer students who declared ITOM when entering FAU graduated in 5 years or less with an average of 58%.
- 4) Looking beyond 5 years, (ie. 6-10 years after matriculating at FAU) the data indicates that graduation rates for transfer students who declared ITOM when entering FAU between 2002 and 2006 levels off around year 7 with an average of 62%.
- 5) The data suggest that an additional 6% of undergraduate students will graduate within years 6-10 of starting the program.

In sum, approximately 38% of transfer students who declared ITOM when entering FAU from 2002-2006 did not earn a degree from FAU within 6-10 years.

Approximately 11% of students were still working to complete the degree program after five years and 2% after eight years.

Trends:

The Graduation and Persistence rates for the ITOM program between 2002 and 2007 have stayed in a tight range not fluctuating more than 10% during that time period. However, the most recent reading in 2009 indicates that Persistence Rate for students who started within three years is at 89% which is 7% higher than any other reading in the eight years that 3-year Persistence Rates were available.

Define population:

The IEA numbers for ITOM caused limitations in analysis as only Transfer students (with AA and without AA) could effectively be tracked by IEA (Institutional Effectiveness and Analysis).

Unfortunately, the College of Business' process of declaring a major does not correlate with metrics designed by IEA for reporting and assessment purposes. Specifically, IEA numbers are lacking because it cannot track FTIC (First Time in College) students in the College of Business. The reason is that in 2007 the FAU College of Business created a requirement that stated all students can only declare a Business major after earning 60 credits. Another limitation is that the IEA system only tracks new students declaring a major. Therefore, IEA could not track College of Business students who initially started at FAU as freshman and declared a major two years later after earning 60 credits.

How formulas were calculated and interpreted:

The ITOM department conducted student performance analysis by focusing on Graduation Rates, Retention Rates and Persistence Rates. Graduation Rate is the percentage measurement of students who graduated from an initial group of students in a given year. ($\text{Graduation Rate} = \frac{\text{total graduated}}{\text{initial start group}}$). Retention Rate is the percentage measurement showing how many students re-enrolled the following year. ($\text{Retention Rate} = \frac{\text{total enrolled}}{\text{initial start group}}$).

Persistence Rate is the percentage measurement for the number of students who have graduated or are still enrolled. ($\text{Persistence Rate} = \frac{\text{total graduated} + \text{total enrolled}}{\text{initial start group}}$). All rates were tracked for 10 years to give a more encompassing view of student performance. Persistence Rate was brought in to focus rather than Retention rate because once students start to graduate, the retention rate starts to decline.

The following are some strategic initiatives aimed at increasing student success and retention and graduation rates

- Launch a Mentor program with the ITOM Advisory Board that will help students understand the job market environment, their job responsibilities as IT workers, and build competitive skills to best present themselves in the market. Each advisory board member will mentor a team of 3 students.
- Establish a comprehensive data gathering initiative of the main reasons MIS students do not graduate on time or leave. This includes developing surveys, and interviewing individually students.
- Develop and launch an accelerated/combined degree graduate program to enable undergraduate students to continue their graduate studies in our MSITM program.

□ **Student recruitment.** ITOM's Management Information Systems (MIS) is a STEM Discipline, <http://iea.fau.edu/inst/inventory712.pdf>. Below are the efforts ITOM undertook to recruit more students to the MIS discipline.

Efforts to recruit high school students into ITOM

- **Engage Local Industry.** ITOM has a very active Advisory Board whose members are local industry leaders in Information Technology (IT). Several of them, among which Steve Bordelon, Director, Information Systems Services, Palm Beach County Government; John Bruno, Chief Information Officer Broward County Enterprise Technology Services; Mike Wolfson, Senior Account Manager at C3 Cloud, have taken proactive initiatives to leverage their connections with local high schools and talk to and mentor high school students toward MIS degree at ITOM, FAU
- **Direct Efforts to High Schools.** The ITOM Chair has built contacts with neighboring schools through top Educational Official in Palm Beach and Broward counties, Jody Gleason, Executive Director of the Education Commission of Palm Beach County and Doris Bodnar, Chair, Broward County NAF Academies Advisory Board, Chair, South Florida NAF Tri-County Advisory Board, and NAF Advisory Board Leadership Council (ABLC). Through them, the Chair gave several talks to the National Academy of Learning students interested in IT. Intense efforts are made to connect to High School's Guidance Counselors to present the ITOM programs to them.
- **Efforts through Workforce Alliance.** The ITOM Chair is a member of the Palm Beach Workforce Alliance's IWDI (Infotech Workforce Development Initiative) whose goal is to establish common talent/skill development and recruitment goals and strategies for training in IT-related disciplines. The Committee developed in Spring a Talent pipeline with IT programs offered in IT in Palm Beach County. This document is disseminated directly to Guidance Counselors.
- **Dual Enrollment.** ITOM is exploring the options and the necessary paths toward approval of offering dual enrollment classes to high schools, similar to the College of Engineering's offerings.

Internal advising to start or stick with MIS as a STEM degree area

- **Invited Speakers.** Each class taught by ITOM once a semester has an invited speaker who is an industry leader to talk about IT and its importance in organizations and job opportunities.

- **ITOM Advisory Board.** Each member of the AB is an individual mentor of a group of 3-4 MIS students and guides them through their course choices, resume building, presenting themselves, and choosing a career focus. This is accomplished through Skype sessions, coffee chats and other formats best fit to students.
- **Company Tours for MIS students.** Advisory Board members organize company tours for students. Some recent very successful tour were at Citrix for the students in the Data Communications class, organized by Paul Martine, CIO of Citrix, as well as with the MIS Student Association members, again at Citrix and at NCCI.
- **Working with LLC communities.** ITOM gives 3-4 lectures per semester to Freshmen LLC communities about the benefits of an IT degree
- **Reach to Freshmen and undecided pre-business majors.** Recently explored channels to reach to freshmen through FreshWeek and similar events where the ITOM can present the MIS program. Also, we plan in the Fall semester to have a pizza event for the pre-business majors to present to the MIS degree
- **COB Advisors.** ITOM is closely working with COB advisors and educating them about the degree specifics. We appointed ITOM liaison who works directly with advisors and answers their questions. The ITOM Chair conducts at least 2 meetings each semester with all advisors to inform them of the curriculum specifics and answer their questions about the program
- **Orientation session for the newly declared MIS majors.** ITOM Chair gives orientation session to the newly declared MIS majors
- **Internships and Job Opportunities Promotion.** Each semester the ITOM Chair uses a survey to build a mailing list of MIS students who are interested in Internships and Job Opportunities. Advisory Board members commit to opening Internship opportunities for ITOM students. All job opportunities that reach ITOM reach the students by direct emailing to them
- **Alumni reach-out.** ITOM created a Linked-in ITOM Alumni group. Alumni will be featured on our web site and will be invited to the classrooms to connect to students and help.

Graduate Programs:

In 2009 the Masters program MSITM (**Master of Science in Information Technology Management**) was created and launched. It is offered jointly with the College of Engineering. The Master of Science with Major in Information Technology and Management (MSITM) is jointly offered by the Department of Computer & Electrical Engineering and Computer Science (CEECS) in the College of Engineering and Computer Science and the Department of Information Technology and Operations Management (ITOM) in the College of Business. Designed for highly motivated individuals with computing and/or managerial backgrounds, the program aims to prepare students for a management career in the area of information technology in organizations. To allow for maximum flexibility in career aspirations, students can select from two options: Advanced Information Technology, emphasizing the technical aspect of organizational IT systems; and Information Technology Management, focusing on the management issues of IT in organizations.

In Fall 2013 we launched the **Accelerated Combined 5 year BBA-MSITM**. The Accelerated (B.B.A. or B.S.) to M.S. prepares highly motivated students for careers as professional information technologists through an integrated, five-year, 150-credit program that leads to the joint award of a B.B.A. or B.S. with

Major in Management Information Systems and a Master of Science with Major in Information Technology and Management. The program begins in the senior year and is based on the Boca Raton campus. Students complete a rigorous curriculum, take their Information Technology classes together as a cohort group and participate in professional development activities. Students apply for the program in the spring semester of their junior year and must complete 150 credits in specified courses, satisfy all University and College major degree requirements for each academic program, maintain a cumulative and major GPA of at least 3.0 and satisfy all other requirements of the accelerated program. Students are awarded each degree separately upon completion of the individual degree requirements.

In the event that a student enrolled in the Combined degree program is unable to complete the M.S. program credits, the student will be awarded the B.B.A. or B.S. degree upon completion of the undergraduate requirements.

☐ **For limited access programs, review of whether such status is still warranted.** The programs are not limited access.

☐ **Admissions criteria.** To be admitted to the MSITM program applicants must have:

1. An undergraduate degree in Computer Science, Information Engineering Technology or an IT-related field of study. Applicants with another undergraduate degree and documented work experience of two or more years in an IT function will be evaluated as well;
2. An undergraduate GPA of 3.0 or higher;
3. Scores of at least 145 (verbal), 150 (quantitative) and 4 (analytical writing) on the Graduate Record Examination (GRE) or a GMAT score of 500 or higher;
4. A satisfactory score on the Test of English as a Foreign Language (TOEFL) or the International Language Testing System (IELTS) for international students; TOEFL score of 600 /IBT = 100
5. Met other requirements of the FAU Graduate College.
6. One to two page statement of candidate's objectives

Admissions criteria for the Accelerated Dual BBA-MIS degree program:

Students apply to the program in the spring semester of their junior year, during which they should complete the prerequisite courses below. To be considered, students must have a cumulative undergraduate GPA of at least 3.0 and an Information Technology GPA of at least 3.0. Students must also complete an on-site essay and interview with a member of the Information Technology and Operations Management Accelerated Undergraduate/Graduate Programs Committee.

Prerequisites for Admission to Combined Program (Junior Year)		
Management Information Systems (fall)*	ISM 3011	3
Introduction to Computer Systems and Software Development (fall)	ISM 3230	3
Business Data Communications (fall)	ISM 4220	3
Advanced Systems Analysis and Design (spring)	ISM 4133	3
Database Management Systems (spring)	ISM 4212	3

* All College of Business undergraduate students, except Accounting majors, must take this course.

In addition, ISM 6405 (Advanced Business Analytics) is required during undergraduate studies and is used to fulfill the required B.B.A. or B.S. 120 degree credits. In the event that a student is unable to complete the 30 M.S. program credits, excluding ISM 6405, during the following four semesters after receiving the B.B.A. or B.S. degree, the student will be dismissed from the program.

Students who successfully complete the first year of the accelerated program are admitted to graduate school in the fall of the second year. The financial aid status of the student changes to graduate at this time. Students who have not maintained the requirements are not automatically admitted to graduate school. These students may apply to graduate school by taking the GMAT and going through the traditional graduate school admission process. In the event that a student completes the undergraduate degree requirements but is unable to complete the graduate degree requirements, the student, upon receiving permission from the College of Business, will be awarded only the undergraduate degree.

□ **Enrollment information (headcount and SCH production)**

Enrollment/headcount data

	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Info Tech and Management	-	-	6	17	25	23

Student Credit Hour / FTE Productivity Reports - ITOM

	State Fundable SCH						Annualized State Fundable FTE					
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Grad I	1,554	1,554	2,058	2,275	2,046	2,203	1,554	48.6	64.3	71.1	63.9	68.8
Grad II	74	74	6	39	27	42	74	2.3	0.2	1.2	0.8	1.3

Student Credit Hour/FTE Productivity Reports, College of Business, by Department (ITOM highlighted):

Course Level	Department	State Fundable SCH					Annualized State Fundable FTE				
		2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
Grad I	Accounting	4,154	5,661	5,233	5,141	4,560	129.8	176.9	163.5	160.7	142.5
	Economics	508	732	891	1,094	969	15.9	22.9	27.8	34.2	30.3
	Finance	1,443	1,347	1,617	1,314	1,311	45.1	42.1	50.5	41.1	41.0
	Info Tech & Op Manage	1,554	2,058	2,275	2,046	2,203	48.6	64.3	71.1	63.9	68.8
	Management Programs	4,470	6,000	6,348	6,177	6,035	139.7	187.5	198.4	193.0	188.6
	Marketing	1,318	1,360	1,332	1,323	1,257	41.2	42.5	41.6	41.3	39.3

Course Level	Department	State Fundable SCH					Annualized State Fundable FTE				
		2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013
	College Total	14,320	17,158	17,696	17,095	16,335	447.5	536.2	553.0	534.2	510.5

ITOM provides the majority of the instruction of core business courses required for all business majors. ITOM produces 13.5% of the College's total Graduate I Annualized State-Fundable FTEs. It is the third largest Graduate I FTE producer in the College.

The MSITM program is still new, created only in 2009 and has a good potential for growth. In Fall 2013 we launched the Accelerated Combined 5 year BBA-MSITM program. Currently more than 20 MIS students are interested in applying which has the potential of increasing the enrollment in the MSITM program 100%.

□ **Average class size and faculty/student ratio.** Average class size for the MSITM classes ranges from 10 to 35 students maximum. Thus, faculty to student ratios are excellent.

□ **Curriculum, including duration of program and comparison to peer programs, as identified by the unit (including aspirational peers and SUS)**

Students are required to complete 33 graduate level credits, or 11 three-credit courses, with a 3.0 GPA or better to graduate. Students in Advanced Information Technology will be awarded the degree by the College of Engineering and Computer Science, while those in Information Technology Management will have their degrees awarded by the College of Business.

Information Technology Management

Students are required to take the following eight courses offered by the College of Business:

Management of Information Systems and Technology	ISM 6026
Information Technology Project and Change Management	ISM 6316
Information Technology Investment Planning and Evaluation or Advanced Business Analytics	ISM 6319 or ISM 6405
Information Security Management	ISM 6328
Enterprise Information Technology Service Management	ISM 6368
Electronic Commerce and Internet Business Applications	ISM 6508
Information Technology Sourcing Management	ISM 6509
Graduate Business Communication Applications	GEB 6215

In addition, students need to take three electives from the following courses offered by the College of Engineering and Computer Science:

Data Mining and Machine Learning	CAP 6673
Software Maintenance and Evolution	CEN 6076
Software Testing	CEN 6076
Computer Data Security	CIS 6370
Computer Network Programming	CNT 5715
Mobile Computing	CNT 6517
Object-Oriented Software Design	COP 5339
Component Programming with .NET	COP 5595
Theory and Implementation of Database Systems	COP 6731
Topics in Computer Science	COT 5930
Wireless Networks	EEL 6591

The following undergraduate classes are core MIS classes that may be deficient in the graduate student's academic record or professional experience: ISM 3230, ISM 4212, ISM 4220, and ISM 4133. In general, if there is no extensive industrial experience or academic degree related to MIS or IT, MSITM Graduate Foundation Classes need to be taken. These Foundation courses do not earn a credit and serve to compensate for the undergraduate curriculum deficiency that may be present. As far as which course exactly can be waived is based on individual assessment of the student during a short interview with the ITOM Graduate Program Director. The Foundation Graduate Courses are:

- ISM 6225, Business Data Communications (undergraduate equivalent ISM 4220 or similar);
 - ISM 6140, Information technology Fundamentals (undergraduate equivalent ISM 3230 or similar);
 - ISM 6217, Database Management Systems (undergraduate equivalent ISM 4212 or similar); and
 - ISM 6123, Advanced System Analysis and Design (undergraduate equivalent ISM 4133 or similar);
- during the first or second semester in the program.

□ **Description of internships, practicum, study abroad, field experiences.** As part of the curriculum overhaul, to encourage career development and real world experience for its graduate students, ITOM created Internship for credit course ISM 6942 for graduate students. In collaboration with the local business community, especially the ITOM Advisory Board, ITOM placed more than 5 graduate students during the past five semesters, which constitutes developing opportunities. Several students were hired permanently following their internships. We identified five primary local organizations that hire our students on a regular basis. Going forward, our goal is to streamline the process to place students. As part of this process, we plan to work with students to help them create better resumes and improve their interviewing skills.

□ **Pedagogy/Pedagogical innovations (for example, eLearning, simulations, student-centered approaches, and so on)** This section is identical to the section under the Undergraduate/Baccalaureate

Programs.

☐ **Scope of institutional contributions, such as cross-listed courses, "service courses", inter-professional education efforts, certificate programs.** ITOM provides service core courses to the College of Business Graduate MBA and Ph.D. programs, such as ISM 6026, MAN 6501, MAN 6525, MAN 6596, QMB 6603, QMB 7565.

Our graduate MSITM program is offered jointly with the College of Engineering, Department of Computer Science and Computer Engineering

☐ **Student profile, including student diversity and demographics, scholarly activity, number of students receiving scholarships and assistantships, and recruitment strategies**

Age Distribution of MSITM students

Age	19	20	21	22	23	24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	Total
Info Tech and Management					1		8	4	2	4		2		21

Gender distribution of MSITM students:

	Female	Male	
Info Tech and Management	6	15	21

Ethnicity distribution of MSITM students, 2012-2013, past years have similar patterns

	Asian	Black or African American	Hispanic or Latino	Two or more races	Nonresident alien	White	Race and ethnicity unknown	
Info Tech and Management	2	2	3	1	3	10		21

One of the great advantages and points of pride of our program is that it is age and ethnicity diverse program providing many opportunities to younger and older students, and those with diverse ethnical and national background. However, as in every technical and STEM discipline, we are experiencing shortage of female students interested to major in MIS. While this is a national trend, through vigorous recruitment effort, in class education at the core ISM 2000 and ISM 3011, we are trying to provoke enthusiasm and interest as much as possible (see **Student Recruitment** in the Baccalaureate section).

Scholarships. Our graduate students are offered Teaching Assistantships. They teach or tutor for undergraduate MIS courses up to 20 hours per week. If they are enrolled full time and are also full time TAs, they receive maximum tuition waiver as determined by the FAU Graduate College.

☐ **Advising procedures.** ITOM has built a framework to regularly communicate with the COB Graduate Advisors' team and share the advising responsibilities and Study Plan building for the graduate students. We have had a dedicated Graduate Program Director whose responsibilities included advising, recruitment and mentoring graduate students. The Chair attends Advising meetings every semester to answer questions and give clarifications and recommendations for improvement in advising MIS

students. In addition, the Chair hosts a Holiday Lunch during the month of December whose purpose is in relaxed atmosphere to enhance the awareness of the importance of their job and to express appreciation of their work. The event is used to further clarify the program.

Finally, the ITOM Chair does one-on-one advising for anything related to MSITM – careers, specific course questions, internships, paths and opportunities, etc.

☐ **Licensure rates (if applicable).** N/A

☐ **Placement rates/employment profile.** Because the program is new, there are no adequate placement rates measurement.

☐ **Retention rates.** Because the program is very new, no adequate retention rates can be given

☐ **Graduation rates.** The following is the number Degrees awarded since the start of the program:

2009-2010 – 1

2010-2011 – 0

2011-2012 – 7

2012-2013 – 3

The program is too new to extract any meaningful information based on the above numbers.

☐ **Student recruitment**

ITOM's MSITM is a STEM Discipline, <http://iea.fau.edu/inst/inventory712.pdf> . Below are the efforts ITOM undertook to recruit more students to the MSITM program.

Efforts to recruit MSITM students into ITOM. Above all, we have developed a very information rich web site for both undergraduate and graduate programs. The Chair is committed to meet one and one any potential candidate who has questions or wants to learn more about the program.

- **Engage Local Industry.** ITOM has a very active Advisory Board whose members are local industry leaders in Information Technology (IT). Several of them, among which Steve Bordelon, Director, Information Systems Services, **Palm Beach County Government**; John Bruno, Chief Information Officer Broward County Enterprise Technology Services have taken proactive initiatives to leverage their connections with local high schools and talk to and mentor high school students toward MIS degree at ITOM, FAU
- **Open House and Information Sessions.** Chair gives every semester Open House for potential candidates
- **Alumni reach-out.** ITOM created a Linked-in ITOM Alumni group. Alumni will be featured on our web site and will be invited to the classrooms to connect to students and help. Connection with Alumni and understanding their nature of work will help promote our MSITM program.
- **Efforts through Workforce Alliance.** The ITOM Chair is a member of the Palm Beach Workforce Alliance' s IWDI (Infotech Workforce Development Initiative) whose goal is to establish common talent/skill development and recruitment goals and strategies for training in IT-related disciplines.

Internal advising to promote the Dual degree program to current MIS students

- **Invited Speakers.** Each class taught by ITOM once a semester has an invited speaker who is an industry leader to talk about IT and its importance in organizations and job opportunities.

- **ITOM Advisory Board.** Each member of the AB is an individual mentor of a group of 3-4 MIS students and guides them through their course choices, resume building, presenting themselves, and choosing a career focus. This is accomplished through Skype sessions, coffee chats and other formats best fit to students.
- **Company Tours for MIS students.** Advisory Board members organize company tours for students. Some recent very successful tour were at Citrix for the students in the Data Communications class, organized by Paul Martine, CIO of Citrix, as well as with the MIS Student Association members, again at Citrix and at NCCI.
- **Open House and Information Sessions.** Chair gives every semester Open House for potential candidates

Faculty *Include all School or College faculty*

□ **Administrative structure.** ITOM has a Chair who is a tenured faculty member and the only 12 month appointment. From 2011-2013 ITOM has appointed a Graduate Program Director to support the growth, advising, and recruitment of our graduate programs. As of Fall 2013 these responsibilities have been assumed by the Chair in light of more faculty resources dedicated to research and scholarly activities. ITOM has several active committees, among which Strategic Planning, Personnel, Curriculum, Marketing, and some ad-hoc committees. Full time instructors and tenured faculty are members of these committees.

□ **Profile, including diversity, rank, academic specialties, and mix between full- and part-time faculty and how this meets or does not meet department needs**

Name	Rank	Ph.D.	Gender	Ethnicity	Degree	Academic Specialty
Sunil Babbar	Full	Y	M	Asian	Kent State University	OM
Mehran Basiratmand	Adjunct	Y	M	Asian	Florida Atlantic University	MIS
Dennis Battistella	Adjunct	N	M	Caucasian	New York Institute of Technology	OM
Ravi Behara	Associate	Y	M	Asian	Manchester University	OM
Susan Carter	Instructor	N	F	Caucasian	Florida Atlantic University	MIS
Robert Cervený	Full	Y	M	Caucasian	University of Texas	MIS
Pauline Chin	Instructor	Y	F	African American	University of Florida	MIS
James Cooley	Adjunct	N	M	Caucasian	Florida Institute of Technology	MIS
Caryn Conley	Assistant	Y	F	Caucasian	New York University	MIS
Tamara Dinev	Full	Y	F	Caucasian	Florida Atlantic University	MIS
Karen Dye	Instructor	Y	F	Caucasian	University of Pennsylvania	OM
Lawrence Feidelman	Adjunct	N	M	Caucasian	University of Pennsylvania	MIS
Stuart Galup	Associate	Y	M	Hispanic	Nova Southeastern University	MIS
Jahyun Goo	Associate	Y	M	Asian	SUNY, Buffalo	MIS
Jim Han	Full	Y	M	Asian	PennState University	OM
Paul Hart	Full	Y	M	Caucasian	Uni. of Southern California	MIS
Derrick Huang	Associate	Y	M	Asian	Harvard University	MIS
Mehdi Kaighobadi	Associate	Y	M	Asian	Georgia State University	OM

Mary Schindlbeck	Instructor	Y	F	Caucasian	Florida Atlantic University	MIS
Jay Subrahmanian	Adjunct	N	M	Asian	Case Western Reserve Uni.	OM
Graeme Warren	Instructor	Y	M	Caucasian	Purdue University	OM

The current faculty mix, along with the anticipated changes, does not meet the department needs. We are in process of hiring a tenure track faculty effective Fall 2014.

☐ **Faculty teaching load and methods of calculation**

Contractual teaching loads are 4 courses for each of the Fall and Spring semester. Active research and publications in at least peer reviewed journals gives one or more course releases, depending on the quality of the publication outlet. The following framework serves as a guideline for the faculty of ITOM;

Framework of Evaluation of Research component of the Annual Evaluation

Research Productivity is always assessed in 3 year window

Competent Evaluation	Maintain your AQ, including by publishing in non-ranked journals (per the current AQ). Higher Teaching load
Highly Competent Evaluation	Publish in the ITOM Target Journal list; OR in premier High Impact Journals OR in C or B journal(s) documented ranked and recognized in the field by the peers (such as ABS ranking, rankings in MIS/OM publications) and aspirant institutions (journal lists). OR earn Research grant Standard 3-2 Teaching load (with adequate service load) Travel support
Excellent Evaluation	Publish in 2 or more B+ journals OR one B+ journal and Research grant OR one premier journal from the ITOM Target Journal list, including Harvard Business Review and Sloan Management Review OR Substantial Research grant (\$100,000 or more) Standard 3-2 Teaching load (with adequate service load) Travel support

High Service load can lead to another course release as well.

☐ **Summary of faculty scholarship and research productivity, including grants and publications**

Since 2008 ITOM faculty published in 13 premier MIS and Organizational Science journals, in 10 A- to B journal range in MIS and OM, and 24 other peer reviewed MIS and OM journals. ITOM faculty is a co-PIS of a joint grants with College of Engineering in the range of 100,000-200,000\$.

High rankings and recognition. FAU College of Business is ranked overall 34th (adjusted count, and 53d, normal count) in terms of publications published in the top 8 IS Journals 2006-2011, neighboring top and research-Intensive Schools such as Carnegie Mellon University, Michigan State University, University of Florida, and Boston University. As a direct result of ITOM faculty publications, FAU is ranked 28th in the highly prestigious University of Texas at Dallas (UTD) Top 100 North American

Rankings of Business Schools Based on Research Contribution 2006-2011 based on the number of publications in Management Information Systems Quarterly (MISQ) and Information Systems Research (ISR). MISQ and ISR are included in the 24 top business journals used by UTD to produce the rankings. They also are the only MIS journals included in the top Financial Times' Business journal list.

□ **Strategic planning for hires.** We are in the process of planning more strategic hires. This Fall we started with recruitment for one MIS faculty position at the Assistant/Associate level has been approved. The recruitment process is underway in the current 2013-2014 academic year. The intent is to select a faculty member with additional academic background in analytics to support the planned development by the department in this area.

Further planning includes tenure track hires in the area of supply chain management and business analytics/healthcare analytics. The goal is to align faculty resources with College/University research goals and the department's growth plans.

□ **Abbreviated vita for each full-time faculty member** See Appendix 2

D. Departments/Schools should address their efforts at collaborating with internal and external partners to promote both volume and quality of faculty and student research, scholarship, creative achievements, and other forms of inquiry. They should report on interdisciplinary efforts and those initiatives that promote economic development or community engagement in the region.

□ **Review of Part II of the Departmental Dashboard Indicators for school or college faculty.** The ITOM Department devoted 1.9 Faculty Person-Years and 2.6 FTE to research activity in 2011-2012, up from the previous year's indicators (1.7/2.2 for Person-Years and FTEs respectively).

In 2011-2012 the Department generated 1.1 peer-reviewed articles and 0.6 conference papers per faculty. This is down from the previous year (1.4/1.1 in 2009-2010 for peer-reviewed articles/conference papers respectively).

The Department's research productivity is consistent with the previous years but relatively lower compared to other units in the College.

□ **Interdisciplinary efforts and community engagement efforts.**

Cyber Security Center. ITOM actively participated in the initiative of creation of University-wide umbrella center of Information Security, and ITOM is one of the key founding members. We proceeded with acquiring teaching and research certification with NSA which will largely enhance the visibility of the center and its contribution to the University Research and teaching goals.

Center for Business Analytics. ITOM recently proposed to create an interdisciplinary Florida Atlantic University research center, Center for Business Analytics, housed at the College of Business and aiming to position FAU at the knowledge frontier of Business Analytics. The center will engage faculty, students, and organizations to conduct ground-breaking research on Big Data that will help solve current and emerging business and societal problems. The center will use statistical techniques, data mining, link analysis, machine learning, econometrics, optimization, and experimental methodologies in order to

extract actionable insights from Big Data. Of particular interest to the center are meaningful industry partnerships that will help our mission through knowledge and data sharing.

We have faculty actively involved in collaborative research on healthcare information systems with College of Engineering and Health Informatics with the Health Administration program.

□ **Establishment of goals for research.** The ITOM Mission statement reflects our research goals: to continually innovate and increase the quality of its educational and research activities in a manner that increases education effectiveness and global reach. Per the Vision statement, ITOM department balances world renown research with excellence in teaching to create successful students.

ITOM goals are aligned with the COB goals for scholarship: Our pursuit of Scholarship is fundamental to the creation of an intellectually relevant climate at the College of Business. It is based on a foundation of intellectual honesty and belief in lifelong learning. The research questions we address are relevant to the business community, both locally and globally, while being academically rigorous. Our scholarship is the cornerstone of our excellence in teaching and service to our community.

It is the goal of ITOM to produce highest quality of publications in peer reviewed journals recognized at the aspirant schools; to encourage interdisciplinary collaboration and expanding the research horizons; to foster a climate conducive to seek research funding through collaborative efforts across departments and colleges.

□ **Assessment of how well goals are being met**

As noted above, ITOM faculty published in highest quality journals during 2008-2013 and was accordingly recognized in Nationwide research rankings for MIS publications.

However, in recent years, the Department has lost a number of faculty some of whom were highly research productive. There are also caveats that must be noted in assessing the research productivity for any given year. (1) There are swings in research productivity over short periods of time. (2) The metrics do not account for quality of peer-reviewed articles or conference presentations. (3) If faculty collaborate with colleagues in their department, then the department productivity is higher, whereas if faculty collaborate with colleagues in other universities instead the department is indirectly penalized.

E. Service/Community Engagement for Department/School

□ **Discussion of community engagement including public service, special projects, service learning, and other services to the community.** The ITOM Department Annualized FTEs per Instructional Person-Year were better than the College numbers and well above the University numbers for 2011-2012. The Department offers a number of required courses for the business major.

□ **Review of Part III of the Departmental Dashboard Indicators for Department/School**

	Information Technology & Operations Management				
	2008-2009	2009-2010	2010-2011	2011-2012	% Change
1. Faculty memberships on department, college or university committees	57	45	56	56	-2%
2. Faculty memberships on community or professional committees	16	13	16	15	-6%
3. Faculty serving as editors or referees for professional publications	53	45	44	10	-81%

	Information Technology & Operations Management				
	2008-2009	2009-2010	2010-2011	2011-2012	% Change
1. Faculty memberships on department/college/university committee/fac. member	4.8	4.1	5.6	5.6	17%
2. Faculty memberships on community or professional committees/fac. member	1.3	1.2	1.6	1.5	15%
3. Faculty serving as editors or referees for professional publications/fac. member	4.4	4.1	4.4	1	-77%

The ITOM Department memberships on FAU committees per faculty member stayed flat at 5.6 in 2011-2012. In addition there were 1.5 memberships on community or professional committees and 1 editorship or referee roles for professional publications per faculty member. The large discrepancy between the numbers for editors and referees as reported in 2011-2012 and the ones in previous years is due to added clarification to the Dash Board web site that Chairs need to report number of *faculty* and not number of *journals*.

□ **Establishment of goals for service.** It is the department goal to service the institution, profession, students, and community. We strive to have each full time faculty member involved in at least one of the following service activities:

- Involvement in faculty support, department, college, and university committees
- Conducting professional service such as peer reviewing of journal and conference papers, participating in conference organization committees, National/International accreditation committees, professional organizations and others.
- Engagement in community based service such as reaching out and working with companies, memberships in advisory board committees, working and reaching out to guest speakers

- Working with student groups such as MISA and professional mentoring of students

□ **Assessment of how well goals are being met.** The service productivity has been very strong relative to other departments in the College. We offer extensive membership to committees and university governance. We have dedicated faculty that serve the community through Board memberships and City governance committees, in National university accreditation bodies and curriculum standardization bodies. We have faculty members serving as Associate editors in premier and top journals, with awards for Best Reviewer of the Year. Faculty serve at the Academy of Management Leadership and Organization Committees. Faculty have put immense effort into creating and mentoring the MIS students association in 2011. Currently MISA is thriving, energized and helps promoting the MIS major. Faculty participate in Faculty Learning workshops such as Teaching with Technology, E-Learning, etc.

While the department service goals are generally being met, there are two main areas where there are gaps that could be improved. The department pursues a dual mission of teaching large number of service courses and newly developed majors/concentrations, while also requiring a strong research output for tenured/track faculty without graduate support and a PhD program. In addition, service loads have also been very high in recent years given the general challenges in enrollment in the MIS major. As a result, faculty has been stretched to the limit. This in turn limits the extent to which service goals can be met for further developed.

As the department has tenured/track, instructor and adjunct faculty, college bylaws limit the types of committee assignments to different faculty under existing rules. More effective utilization of all faculty and their skills should be pursued, for a more inclusive and equitable distribution of committee service work and responsibilities.

F. Other Program Goals for School or College

□ **Describe and assess how well goals are being met.** A main goal is to keep the department's program curriculum current and relevant. The department has actively pursued its program development. It reached to the industries and communities of interest to make sure that their needs for talent development are met. A new graduate program, MS in IT Management, has been successfully launched. In addition an accelerated BBA-MSITM program has also been developed and approved. Further, new MIS minors in emerging areas have been developed. These include the Healthcare IT and Digital Marketing minors. In addition, the department has developed and successfully launched a minor in Operations Management.

The other main goal of the department was to launch outreach efforts. The department has reconstituted the Advisory Board that now meets regularly and gives the department a much needed perspective from current and potential employers of our students. In addition, the department is also affiliated with the South Florida Procurement Professionals executive group, who bring their operational expertise to the department's Operations management program. The department has also successfully launched the MISA to bring together MIS students and faculty. Student outreach has also been pursued through open houses, meeting advisors, and informal promotion of the program in our classes.

G. Strengths and opportunities that support achievement of program goals for School of Public Administration

☐List and describe. There is an increased demand in the IT and Supply Chain areas (a recent Business Week issue's main report (Supply Chain Management: The Next Big Thing?, September 2011) was on the demand of Supply Chain management). This opportunity plays directly to our strengths. We are addressing this through our current and proposed graduate and undergraduate programs as well as through additional faculty hires. For example, in addition to creating undergraduate and graduate programs in OM and SCM, introduce OM and SCM courses or program themes in the MSITM graduate program.

The growing demand in analytics can be leveraged as the common platform around which the IT and Operations Management elements of the department can integrate more effectively.

There is an opportunity to improve the department's professional reputation as achieved by other College of Business programs such as Accounting, Sports Management, Healthcare Management, and Hospitality Management.

H. Weaknesses and threats that impede program progress for School or College

☐List and describe

- Aspirations of a “world-class research” are not consistent with the reality of resource allocation. A significant weakness is the lack of resources that are often available to top research schools (TAs, research assistants, Ph.D. students, research funds for research related expenses). This also includes heavier teaching loads and less time for research activity. There is a misalignment of research expectations and teaching loads.
- There is existing disconnect between the skills and preparedness of the incoming students and the demands of our high quality programs. For instance, the Business Analytics is highly quantitative but many of our students lack these skills coming into our programs. So while the opportunity for developing analytics programs exists, so is the real threat of not having sufficient number of qualified students to sustain the program.
- Lack of strong cohesive student body to inspire collaboration and interaction among students. Reason: large body of commuting/working students.
- Growing competition to our programs coming from the State Colleges and the increasing presence of other online programs across the country, state and local area.
- Motivating faculty is a challenge in an environment where they are stretched thin, with limited salary increases and research funding, while retention efforts have not been evident in recent years to stop high quality faculty from leaving.
- There are impediments for instructors and adjuncts to participate in research and service activities.

I. Resource analysis for School or College

☐Sufficiency of resources to meet program goals

The department provides a significant number of service courses to the College. In addition, it also has an undergraduate MIS program, a graduate MSITM program, contributes to the MBA core, the MBA

concentration in Operations Management, and a variety of new and existing minors in MIS and Operations Management.

Additional junior and senior faculty resources who have strong interest in publishing in premier and highest quality journals are needed to enhance the research productivity of the department and support the goal of high research expectations. The increased high quality research productivity will give opportunity to revive the PhD program as adequate to a research granting institution.

Resources are limited on handling unexpected challenges. For example, the decreased MIS major enrollment after 2005 led to significant additional service efforts by the faculty to energize and promote our programs

These increased faculty loads across all three dimensions of teaching, research and service has adversely affected all tenured/track and full-time instructor faculty. Initial efforts at remediation has begun by the current search for a new faculty member in the current 2013-2014 academic year.

J. Future Direction for School or College

□ **Anticipated changes.** The main change we anticipate is the changes in the University Administration. Currently we have an Interim President and Interim Provost who are working on revisiting the Strategic Plan of the Academic Affairs. The College has a new Dean who will set the strategy and the priorities for the coming 5-7 years. Thus, we expect to also align our department strategy with these changes. Currently, in alignment with the ITOM Strategic plan, we anticipate and prepare for growth of our minor and major programs as well as creations of new majors. The following initiatives represent the main set of tasks the department wants to see being involved in.

- INITIATIVE 1: Explore the development of a Business Analytics PhD program with appropriate faculty resource support.
- INITIATIVE 2: Investigate options to grow the existing programs such as: 1) Pursue CAE/IAE, 2) Grow ITOM Minors, 3) Grow MBA OM concentration, 4) Strengthen the Business Analytics program.
- INITIATIVE 3: Explore the development of new programs such as: 1) Graduate Supply Chain, 2) UG Major in OM, Integrated IT/OM programs that will make business analytics a nexus.
- INITIATIVE 4: Explore Redesigning the role and contribution of Instructors and Adjunct Faculty to enable their participation in research and committee service
- INITIATIVE 5: Explore opportunities for increasing research time and support for all full time faculty.
- INITIATIVE 6: Explore collaborative teaching. For example, a full time faculty to give a lecture in another ITOM class
- INITIATIVE 7: Explore the development of an OM student group.

□ **3 to 5 broad questions for the review team to answer with respect to a unit's current state and aspirations**

1. In order to be a research focused department, how should ITOM support its research faculty, what are appropriate teaching loads as compared with aspirational schools, and should ITOM restart the PhD program?
2. What is your assessment of the ITOM faculty structure (tenured/track vs instructors vs adjunct) and how would you suggest the department integrate all faculty to achieve its aspirations?
3. Should ITOM develop graduate and undergraduate programs in Operations/Supply Chain Management and Business Analytics, instead of spreading its resources thin on a variety of minors?
4. What is your assessment of the content of ITOM courses, especially as they relate to integrating academic and real world knowledge and experiences, and being attractive to potential employers?
5. In what areas do you think we need to increase our engagement with students and businesses?

K. If available, student feedback regarding programs.

Currently, we do not have an official student feedback about the program, although we constantly listen to students and implement their suggestions

Notes:

Appendix 1. Assessment Database Report

Top of Form

[FAU Assessment Reporting Database](#)

My Reporting Units | Account | View Other Units | Logout

tdinev - Plan Reporter

Return to Reporting Unit Management Page

Assessment Plan

Florida Atlantic University
Super-Division: **Academic Unit**
College/Division: **Business**
Department: **Info Tech & Op Manage**
Program: **BBA and BS Management Information Systems**
Plan Type: **Learning Outcomes Plan**
Period: **2011-2012**
Plan Status: **Report approved (complete)**
Current Plan Status Set On: **2/3/2013 2:47:51 PM**
Current Time/Date: **10/31/2013 4:35:19 PM**

Plan developed by:
Pauline Chin

Current contact person(s) for plan:

J. Dennis Coates	Paul Hart	Som Bhattacharya
Quinq Hu	Geoffrey Johnson	Pauline Chin
Derrick Huang	Mary Margaret Davis	Karen Dye
Marc Rhorer	Tamara Dinev	

This plan currently has 10 outcomes.

All steps in the plan have been completed.

Move to: **Outcome 1 Outcome 2 Outcome 3 Outcome 4 Outcome 5 Outcome 6 Outcome 7 Outcome 8 Outcome 9 Outcome 10**

Assessment Plan/Report Feedback

Outcome: 1

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Description & Methodology

Outcome Description

Students will acquire common concepts, knowledge and skills needed to function in an entry-level management position.

Academic Learning Compact (ALC) Categories related to this outcome:

Content Knowledge

Declarative Knowledge

FAU Strategic Plan related goals & objectives:

Goal 1(all objectives): Providing Increased Access to Higher Education

Goal 1, Objective 1: Assure student achievement in baccalaureate degree programs by developing and implementing Academic Learning Compacts

Implementing Strategy

During this plan year, a core of faculty in each of the assessment courses (MAN 4720 and MAN 3025) worked with their respective Assessment Coordinators to insure that core learning outcomes were focal points across all sections of the course. They also reviewed Spring 2010 data outcomes to determine if they suggest course revisions are appropriate. A common textbook and a single assignment for critical thinking skills and written

communication were adopted along with a written handbook on assessment for MAN 4720 which was developed to assist faculty with their respective in-class assessments and to bring continuity to the assessment process.

Assessment Method

MAN 4720 courses incorporate a group project in which teams of students apply the material learned in the course in analyzing either a case or a firm or industry. This project has become the basis for assessing analytic skills. Assessment will be on a group basis, utilizing a rubric developed by the faculty committee. A common rubric was selected, however, faculty were allowed to choose a rubric of their own if they so preferred.

A departmental committee had selected a single textbook which was used in all sections of MAN 3025. A total of 6 sections of MAN 3025 were offered, across four campuses. This represents an increase in participation over the 2008-9 report of last year. While the numbers are increasing, apparently some faculty did not feel responsibility to comply with the assessment requirement. Some of this may have been due to the economic downturn, the University's letting go of some tenured faculty, the manner in which the UFF (faculty union) and issues surrounding faculty raises were handled. There are still some faculty who vehemently state that this requirement is an infringement on their freedom in the classroom. No online or teleconferenced sections of the course were included in the assessment due to the unique nature of their instruction and testing.

This year, students in MAN 3025 were assessed on all of the seven core content areas (organizational culture and change, managing structure and design, human resource management, managing employee diversity, motivation, leadership, and managing teams) using a pool of standardized questions selected from a test bank with already proven reliability and validity. Standard descriptive statistics from item analyses were applied to ascertain inter-rater reliability. Correlations and regression analysis were utilized.

During Spring of 2010, students in MAN 4720 were assessed on five content areas identified by faculty as encompassing core class concepts. Testing occurred across all sections of the course and all courses were taught by full-time faculty. During Fall 2009, a faculty coordinator provided guidelines and a rubric for faculty to utilize so that there would be consistency in the assessments and equivalency across sections for inter-rater reliability.

Criterion for success

Development of specific learning outcomes for each of the covered courses, MAN 4720 and MAN 3025.

MAN 3025. 70% of the students taking the exams and completing the course will score a passing grade (70% or better) on the embedded questions.

MAN 4720. 85% of the students participating in the course requirements and completing the course will score a passing grade (70% or better) on the critical thinking and oral presentation assessments.

Comments about plan made by reviewers:

Results

Data Summary

There were 84% of MAN 3025 students who scored above 70% of the content related materials covering topics of: organizational culture, structure, human resources, diversity, motivation, leadership, and teams.

Of students in sections of MAN 4720, 78% met or exceeded expectations on evaluation of critical thinking in targeted assignments. Of the 78%, 50% exceeded expectations, whereas the remaining 28% met expectations in the application of critical thinking skills. The passing grade calculation will be reported at a later date, but preliminary indication is that the number is slightly greater than the 85% target.

Program Improvement

The following recommendations are being considered for program improvement (MAN 3025)

- Create a pool of questions covering all Fundamental Concept Areas. All seven of the FCAs were assessed this year. A full item pool still needs to be developed so that questions may be rotated from year to year to avoid bias from questions that have found their way into student hands.
- Set standards for when testing of knowledge from Fundamental Concept Areas should occur. Testing may be either during a required final exam or during intra-semester exams. Currently both formats are being utilized.
- Set exam length requirements. A minimum requirement would avoid the Fundamental Concept Area being a primary source of questions, e.g. exams with fewer than 20 questions. This is primarily because it is impossible for instructors not to teach to the questions, which they have in advance. An alternative is to provide instructors with an outline of what they must teach to in each Fundamental Concept Area. This would help instructors avoid teaching to the questions and instead teach to the desired curriculum. Questions could then be developed according to the outlines provided.

- Parse exam score data for performance on multiple-choice questions. This year exam scores were not parsed, increasing noise in the data.
 - Subtract scores on Fundamental Concept Area questions from exam scores.
- Multicollinearity is a threat to results due to the fact that the same questions being used to predict exam scores are included in the exams themselves. Removing the points related to the Fundamental Concept Areas would negate this issue. Specifically, the instructors could be required to provide an exam score with and without the FCA questions.
- Expand the scope of the FCAs to include essay and short-answer questions. Expanding to other question types could help to reduce the effects of teaching to the questions.

Supporting Documents

COBassessment Committee Docket-F2011.pdf

Comments about results made by reviewer:

Outcome: 2

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Description & Methodology

Outcome Description

Students will acquire common written and oral communication skills needed to function within an entry-level management position in a firm functioning in the field of international business and trade.

Academic Learning Compact (ALC) Categories related to this outcome:

Communication

Written Communication

Oral Communication

FAU Strategic Plan related goals & objectives:

Goal 1(all objectives): Providing Increased Access to Higher Education

Goal 1, Objective 1: Assure student achievement in baccalaureate degree programs by developing and implementing Academic Learning Compacts

Implementing Strategy

College faculty have worked with the English Department to include at least one substantial written and oral assignment to be evaluated for grammatical, mechanical, and formal correctness in a business and professional setting clearly indicating the difference between business and academic writing. In ENC 3213, required of all Management students, this communication assignment is the basis for assessing communication and analytic skills.

Working with the College of Business, the ENC 3213 coordinators have developed 2 assignments to assess development of a written argument and the oral presentation of the material.

Assessment Method

In ENC 3213, COB faculty have worked with the English Dept. to include a substantial written and oral assignment to be evaluated for grammatical, mechanical, and formal correctness in a business/professional setting clearly indicating difference between business and academic writing. The business communications assignment is required, and all BBA students taking the course are required to complete it.

The written and oral communication skills are evaluated utilizing the Communication Rubric.

Samples of these assignments (at least 20% of enrollment) will be evaluated by independent, trained evaluators to assess these skill sets.

Criterion for success

ENC 3213. 70% of the students writing the business communications assignment and completing the course will score at least a “meets expectations” (out of a 3 category rubric: needs improvement, meets expectations, or exceeds expectations) on the assignment.

ENC 3213. 70% of the students will score at least a “meets expectations” (out of a 3 category rubric: needs improvement, meets expectations, or exceeds expectations) on the business writing position paper assignment.

ENC 3213. 70% of the students will score at least a “meets expectations” (out of a 3 category rubric: needs improvement, meets expectations, or exceeds expectations) on the individualized presentation.

Comments about plan made by reviewers:

Results

Data Summary

We have written communication assessment data from the Writing Across the Curriculum program assessment, which measures student outcomes in ENC 3213 (Writing for Managers) in communication.

The writing samples of ENC 3213 were compared relative to other writing-across-the-curriculum (WAC) courses. Overall the scores from ENC 3213 were lower than expected, being statistically tied with ENC 1101 results (27.76 for ENC 1101 and 27.38 for ENC 3213). The high range was a Nursing WAC course at 37.2. Though the course measurements of student learning were not exactly in alignment with prior methods, from these results we can tell that significant improvement is needed in delivery of writing skills to business students. The COB will undertake this when we take over the course delivery in 2013.

Program Improvement

As the ENC 3213 course is phased out and being replaced by GEB 3213 (Communicating Business information) and administered by the COB, we have several detailed assessment mechanisms we plan to build into the new program. We especially will build in an additional measurement of oral communication, which is currently not a priority for the English course that is required.

Supporting Documents

Comments about results made by reviewer:

Outcome: 3

(ID: 20014 Last saved: 11/16/2012 4:32:19 PM)

Description & Methodology

Outcome Description

MAR3023 Students will demonstrate Declarative Knowledge of marketing research, target marketing and elements of the marketing mix.

Academic Learning Compact (ALC) Categories related to this outcome:

Content Knowledge

Declarative Knowledge

FAU Strategic Plan related goals & objectives:

[Goal 1\(all objectives\)](#): Providing Increased Access to Higher Education

[Goal 1, Objective 1](#): Assure student achievement in baccalaureate degree programs by developing and implementing Academic Learning Compacts

Implementing Strategy

MAR3023:

Assessment questions were devised by the faculty to measure the students' ability to understand the definition and use of marketing research, target marketing and the marketing mix.

Assessment Method

MAR3023:

A multiple choice exam which included 9 questions about marketing research, 5 questions about target marketing and 12 questions about the elements of the marketing mix was administered during the Fall 2010 semester across two campuses, distance learning, and day/evening time periods. The exam constituted 10% of each student's final grade. The students were given an outline of key concepts to be covered on the exam.

Criterion for success

MAR3023:

- A. The overall average will be 73% or higher.
- B. The correlation between performance on the assessment exam and final course grade will be .7 or higher.
- C. The average for the Marketing Research ALC will be 73% or higher
- D. The average for the Target Marketing ALC will be 73% or higher
- E. The average for the 4P ALC will be 73% or higher

Comments about plan made by reviewers:

Results

Data Summary

? The correlation between students' performance on the Assessment questions and their final course grades varied from .4 to .8, with an average correlation of almost .7 (see attached Exhibit A). The average correlation result is higher than the correlation achieved in 2010, which was .5.

? By campus correlation results (see Exhibit B) showed an increase from 2010 to 2011, with the Boca campus increasing from .4 to .8. The Davie campus also showed an increase as well with the average correlation moving from .5 to .6. The correlation for the new Lecture Capture format had a low correlation of .4. Since the grading components were different than the other classes, it is likely this is the reason for the low correlation.

? The correlations for time of day were higher for the day sessions, with a .8 average and lower for the night, with a .7 average.

? Average percent correct for each of the Learning Outcomes was calculated (see exhibit C). Averages were 78% for the 4P's, 67% for STP, and 77% for Global Diversity. The most significant change was the decline in the average correct for STP, since it moved from 76% correct in 2010 to 67% in 2011. This knowledge area appears to vary from year to year, since in 2009 the percent correct was also lower.

? The average percent correct for each campus varied from 63% to 86% with the Boca campus having lowest averages across all learning outcomes. The new Lecture Capture format had the highest percent correct in all categories except in STP.

? The average percent correct by time slot varied from 62% at night for STP to 86% for the 4P's using the new Lecture Capture format.

Program Improvement

Based on these conclusions, the following recommendations and improvements will be implemented in the next MAR3023 Assessment Project cycle:

? We will be using a common textbook across all sections in the Fall of 2012.

? The questions will come from the test bank of the book chosen and be tied to AACSB learning outcomes by choosing those questions tagged as AACSB questions.

? The concepts surrounding STP will be emphasized in order to improve knowledge in this area.

? The Lecture Capture format will continue to be supported since it shows promise in terms of concept learning.

Supporting Documents

Comments about results made by reviewer:

Outcome: 4

(ID: 20015 Last saved: 11/16/2012 4:32:40 PM)

Description & Methodology

Outcome Description

Students will demonstrate knowledge of basic financial concepts, including cash flows, cost of capital, and valuation. Specifically, the learning outcomes that accompany this objective are the following:

Interpret and apply financial ratio and common size analyses to financial statements and other financial disclosures to evaluate the financial health and performance of a company.

Facilitate financial decision-making by applying financial math and valuation principles to

value securities, capital projects, and other assets.

Assess the risk associated with a financial or capital asset and identify, identify the relevant risk, and estimate the cost of capital for financial decision-making purposes.

Apply the net present value and internal rate of return techniques to make project selection decisions in a capital budgeting context, and perform sensitivity analysis in capital project decision-making.

The learning outcomes for all finance courses are provide on the Department of Finance web site and at http://www.fau.edu/~ppeter/finance_department/Learning_outcomes.pdf

Academic Learning Compact (ALC) Categories related to this outcome:

Content Knowledge

Declarative Knowledge

Procedural Knowledge (Research skills)

ProceduralKnowledge (Technical Skills)

Critical Thinking

Analytical Skills

Practical Skills

FAU Strategic Plan related goals & objectives:

Goal 1(all objectives): Providing Increased Access to Higher Education

Goal 1, Objective 1: Assure student achievement in baccalaureate degree programs by developing and implementing Academic Learning Compacts

Implementing Strategy

Test all students enrolled in the Principles of Financial Mangement (FIN3403) course once each semester on the Principles of Financial Management Body of Knowledge using an assessment device applied across all sections of the course. The Principles of Financial

Management Body of Knowledge is based on the Principles of Financial Management Learning Outcomes.

The Principles of Financial Management Body of Knowledge is available at the Department of Finance web site and at http://www.fau.edu/~ppeter/finance_department/Body_of_knowledge.pdf

The Assessment Strategy is provided through the Department of Finance web site and at http://www.fau.edu/finance_department/Assessment_strategy.pdf

Assessment Method

Development of assessment

The finance department develops the assessment of the Principles of Financial Management Body of Knowledge that all FIN3403 will take each semester. The assessment is coordinated by the FIN3403 Coordinator, but all instructors of the course participate by contributing questions, reviewing questions, and updating questions. Other faculty members in the department are encouraged to participate in these tasks as well.

Delivery of the assessment

The assessment is developed on a Blackboard® site that will be populated with students in all FIN3403 sections for the current semester. The site will be renewed each semester and the participants will be only those currently enrolled during the particular semester. The assessment will be made available to the students during the last two weeks of the regular semester and students may take the assessment at any time within those two weeks.

Testing security

Each student's assessment will be slightly different from another's because the questions are drawn from a pool of questions. However, the draw of questions is from specific pools of questions such that each exam is comprehensive with respect to the FIN3403 Body of Knowledge.

Criterion for success

Review of assessment results for continual improvement

Each instructor is invited to review the results of the students taking their course. However, the primary purpose of the assessment is to provide information that will be productive for continual improvement of the course in general. To this end, the results of the assessment

will be reported to the entire Finance faculty, with breakdowns provided in terms of demonstrated learning on the elements of the Body of Knowledge. The assessment is not intended as a device to evaluate instructors and no results will be compiled or distributed identified by instructor.

This information will then be used by the FIN3403 Coordinator, in conjunction with the entire Finance faculty, to address whether the students are mastering the Principles of Financial Management Body of Knowledge and what course of action must be taken, if any, to help students master this body of knowledge.

Comments about plan made by reviewers:

Results

Data Summary

As of the reporting time, the Finance department had not completed filing of their Financial Management course data. It will be added later.

Program Improvement

Supporting Documents

Comments about results made by reviewer:

Outcome: 5

(ID: 19639 Last saved: 11/16/2012 4:33:26 PM)

Description & Methodology

Outcome Description

Students completing QMB3600, a business core course, will demonstrate proficiency in the use of quantitative methods and decision making tools and techniques for business applications. Students will demonstrate content knowledge and critical thinking skills using probabilistic and deterministic business models in administrative and operational problem

solving and decision-making.

Academic Learning Compact (ALC) Categories related to this outcome:

Content Knowledge

Declarative Knowledge

Procedural Knowledge (Technical Skills)

Critical Thinking

Analytical Skills

FAU Strategic Plan related goals & objectives:

Goal 1(all objectives): Providing Increased Access to Higher Education

Goal 1, Objective 1: Assure student achievement in baccalaureate degree programs by developing and implementing Academic Learning Compacts

Goal 1, Objective 3: Promote the academic success and improve the retention rate of first-time-in-college (FTIC) students

Goal 1, Objective 10: Award graduate and undergraduate degrees in targeted and non-targeted areas consistent with Board of Trustees-approved Board of Governors Accountability Targets

Implementing Strategy

A common cumulative 40 multiple choice question final exam will be administered during the Fall and Spring semesters to all sections of QMB3600. The final exam is administered to all QMB students on the same evening and the Scantrons will be graded at the testing center. Reports will be evaluated for supplementary statistical information regarding each question and the overall scores of the students.

Assessment Method

Data from the final exam will be analyzed to assess student performance in probabilistic and deterministic models. The data will be used to determine the reliability of the exam thereby

providing an important benchmark for future modifications in our final exam. The data should provide a clearer understanding of the content knowledge strengths and weaknesses of our students which can be used to improve student learning outcomes.

Criterion for success

The final exam accounts for 30% of the students' grade. The percent of correct responses in each topic area should be 70%. The percentage of students to be rated competent, a grade of C or higher in the course, should be at least 75%.

Comments about plan made by reviewers:

Results

Data Summary

Fall 2011: During the fall term 456 students received their lecture face-to-face in ten different sections, 52 students were in a distance learning section and the remaining 55 were registered in a lecture capture video stream section. All 563 students took their final exam online. The assessment scores correlate .78 with an overall course grade of a C. The average final exam score was 69.50 and the average score for the set of 16 questions was 71.85.

Seventy percent of the students passed the course with a grade of C or better. Accuracy rates of 65% and 88% were achieved for probability concepts and distributions respectively, 78% for decision theory, 80% regarding forecasting and regression and 59% for the topic of linear programming. With regard to last fall's scores, improvement in scores was seen in the topics of probability distribution, decision theory and forecasting. There was only a slight variation in scores for the topics of probability concepts and linear programming.

In analyzing the exam question data lack of common math vocabulary and prerequisite algebra and statistic skills continues to be observed. Questions that require multiple steps or critical thinking skills such as probability concepts continue to challenge the students. This is the seventh semester of Supplemental Instruction (SI) being available to the students. As in the past SI increases the knowledge level for the students who attend; however, attendance is weak except for review sessions before exams. During this semester the students in the Lecture Capture (LC) section, in which lecture can be reviewed, performed only slightly better than the distance learning and face-to-face sections.

Spring 2012: During the spring term 293 students received their lecture face-to-face in nine different sections, 24 students were in a distance learning section and the remaining 200 were registered in a lecture capture video stream section. Of the 516 students, 420 students took their final exam online and 96 students took a paper-based exam in a proctored classroom. Each group had the same 16 questions representing the topics aligned with the

course objectives. The assessment scores correlate .77 with an overall course grade of a C+. The average final exam score was 68.30 with a standard deviation of 15.8 and the average score for the set of 16 questions was 72.63. Seventy-seven percent of the students passed the course with a grade of C or better; a ten percent improvement over last semester and the highest pass rate of the last five years. Accuracy rates of 72% and 88% were achieved for probability concepts and distributions respectively, 79% for decision theory, 79% regarding forecasting and regression and 58% for the topic of linear programming. With regard to last spring's scores, improvement in scores was seen in the topics of probability distribution and decision theory. There was only a slight variation in scores for the remaining topics. The most interesting area of improvement over last semester was a 7% increase in probability concepts especially the problem that requires the most critical thinking improved by 12%. The LC section achieved about 5% higher scores on the 16 assessed questions; however, the overall exam grade did not differ. The final exam grades between those taken online and those taken in class with a paper based exam were very similar.

Program Improvement

QMB course program improvement efforts during the following terms will include new text book selection, order of topics taught will be adjusted, online tutorials will be available and while the weight for the final exam will remain at 30% the grading policy for other exams and activities will be adjusted.

Supporting Documents

Comments about results made by reviewer:

Outcome: 6

(ID: 19642 Last saved: 11/14/2012 6:49:50 PM)

Description & Methodology

Outcome Description

Effective communication skills will be demonstrated in three categories:

1. Writing a comprehensive systems analysis and design project documentation package for a proposed computer application. The documentation package is expected to address a "real world" computer-based system -- one which might realistically be developed and implemented. Students will work, in teams of 4 or 5, to develop the documentation package.

Documentation packages are expected to exhibit clear and concise knowledge of the system problem and the proposed solution.

2. In-class oral presentations, by each project member, as well as a presentation on a current IT topic. These oral presentations should be well organized and exhibit all the attributes of a good presentation, which include clarity, creativity and the ability to generate a high level of interest from the intended audience.

3. External survey of the organization within which the student conducted the project. The organization liaison who worked with the student team would be the person designated to complete the survey. This survey consists of 21 questions divided into three categories:

Questions 2 – 10 focus on company plans to implement the project, or any portion of the project, submitted by the students.

Questions 11-15 focuses on the quality and usefulness of the project to the organization.

Questions 16-21 focuses on the quality and usefulness of the documentation.

Academic Learning Compact (ALC) Categories related to this outcome:

Communication

Written Communication

Oral Communication

FAU Strategic Plan related goals & objectives:

Goal 1, Objective 1: Assure student achievement in baccalaureate degree programs by developing and implementing Academic Learning Compacts

Goal 1, Objective 3: Promote the academic success and improve the retention rate of first-time-in-college (FTIC) students

Goal 1, Objective 10: Award graduate and undergraduate degrees in targeted and non-targeted areas consistent with Board of Trustees-approved Board of Governors Accountability Targets

Implementing Strategy

Projects from each section of ISM 4133 will be evaluated for the fall and spring semesters.

Assessment Method

Project documentation and oral presentations will be assessed on the basis of a rubric developed and utilized across all sections of the course and which will be shared with the students. The rubric will be used to assess student performance in the three categories outlined above.

SUPERIOR**Written Communication**

The document identifies and clearly and fully defines the problem that the system is being designed to solve.

The content presented is relevant to the business problem reviewed and demonstrates in-depth analytical procedures to solve the problem.

The language of the documentation is concise and easy to read.

There is clarity and coherent organization of the project documentation.

The document reflects superior command of grammar and diction.

Oral Communication

Comments demonstrate insights and knowledge about the contents of the project documentation package.

Clarity -- The presenter effectively communicates the organizations' problem(s), the solution(s), and the methodologies used to obtain the solution(s).

Creativity - The presenter uses innovative presentation methods by the presenter.

Overall Project – Project generates substantial interest from other members of the class.

COMPETENT**Written Communication**

The document adequately identifies and defines the problem that the system is being designed to solve.

The content is relevant to the business problem reviewed and demonstrates adequate analytical procedures to solve the problem.

The language of the documentation is concise and easy to read.

The document reflects adequate organization of the material and adequate command of grammar and diction.

Oral Communication

Comments demonstrate adequate insights and knowledge about the contents of the project documentation package.

Clarity- Presenter adequately communicates the organizations' problem(s), the solution(s), and the methodologies used to obtain the solution(s)

Creativity – The presenter adequately utilizes innovative presentation methods.

Overall Project – Project generates adequate interest from the other members of the class.

INCOMPETENT

Written Communication

Fails to adequately define the problem that the system is being designed to solve.

The content presented is irrelevant to the business problem reviewed and demonstrates inadequate analytical procedures to solve the problem.

The language of the documentation is confusing and difficult to understand.

Material presented is disorganized.

Documentation contains grammatical and typographical errors.

Oral Communication

Comments demonstrate that the presenter has little or no insight and knowledge about the contents of the project documentation package.

Clarity- Presenter inadequately communicates the organizations' problem(s), the solution(s), and the methodologies used to obtain the solution(s).

Creativity – The presenter utilizes no innovative presentation methods.

Overall Project – Project fails to generate any interest from the other members of the class.

Criterion for success

This project documentation and oral presentations account for 50% of the students' grade.

The percentage of students to be rated at least competent(C) should be 90%. The percentage of students to be rated superior (A) should be 20%. Approximately 75% of the projects completed by students in the Advanced Systems Analysis and Design course will receive the highest possible evaluation from respondents of the organization.

Comments about plan made by reviewers:

Results

Data Summary

External surveys were conducted among representatives of companies collaborating with

Management Information System majors on projects required for successful completion of ISM 4133 (Advanced Systems Analysis and Design). The surveys provided external validation of the work done by the students. The survey was extremely useful for measuring effective oral and written communication skills.

Students in ISM 4133 work in teams of 3, 4 or 5 individuals. Each team develops an extensive document (~100 pages in length) containing the technical description for a software project intended to be built in the real world context of the collaborating company. The document is evidence of written communication and knowledge of Management Information System concepts. Students are also required to provide an oral presentation of their project. Representatives from the collaborating companies receive a copy of the written documentation as well as an oral presentation of the project by the student teams. Company survey feedback is based on the documentation and presentation.

The survey data for the period were obtained from 11 companies representing 11 projects. Using a 5 point scale (1= strongly agree to 5 = strongly disagree), the means of the respondents for the items pertaining to the quality of communication included the following. The mean for whether the documentation was easy to read was 1.36 and 1.45 for whether the required information could be easily found – the reader did not have to refer to many different places in the documentation to find the required information. When asked whether the documentation used words that had a different meaning for the user, the mean was 2.91 as most disagreed. Similarly, when asked whether there were missing or underdeveloped elements, the mean was 3.64 as again most disagreed. On the overall question of whether the documentation was useful, the mean was 1.18.

Overall, the survey results were mostly consistent with those from the previous year; a majority of the projects reflected a level of communication competence between the “superior” to “competent” categories.

Program Improvement

In an on-going effort to improve the Advanced Systems Analysis and Design course, any comments and suggestions made in the survey reports by the company representatives as it relates specifically to the documentation of the project and the oral project presentations will be examined and evaluated and where applicable will be implemented for the coming period. This will help to identify any areas in which the students may have had difficulties in communication and will serve to improve this component. Evaluation of analytic rubrics in each area will also be done for potential future implementation.

Supporting Documents

Comments about results made by reviewer:

Outcome: 7

(ID: 19641 Last saved: 11/14/2012 6:50:48 PM)

Description & Methodology

Outcome Description

Project documentation for ISM 4133 should demonstrate in-depth content knowledge of the principles, methodologies and practices of the Systems Analysis and Design field. The documentation should stand-alone (i.e., it should assume that the reader has no knowledge of either the organization or the application). The documentation should also demonstrate technical skills representing the practical application of systems analysis and design principals in the identification and analysis of system problems and proposed system solutions.

Academic Learning Compact (ALC) Categories related to this outcome:

Content Knowledge

Procedural Knowledge (Technical Skills)

FAU Strategic Plan related goals & objectives:

Goal 1, Objective 1: Assure student achievement in baccalaureate degree programs by developing and implementing Academic Learning Compacts

Goal 1, Objective 3: Promote the academic success and improve the retention rate of first-time-in-college (FTIC) students

Goal 1, Objective 10: Award graduate and undergraduate degrees in targeted and non-targeted areas consistent with Board of Trustees-approved Board of Governors Accountability Targets

Implementing Strategy

Projects from each section of ISM 4133 will be evaluated for the fall and spring semesters.

Assessment Method

Project documentation and oral presentations will be assessed on the basis of a rubric developed and utilized across all sections of the course and which will be shared with the students. The rubric will be used to assess student performance in the three categories outlined above. (See Assessment method for Outcome 1 for the scoring of the rubric.)

Criterion for success

This project documentation and oral presentations account for 50% of the students' grade. The percentage of students to be rated at least competent (C) should be 90%. The percentage of students to be rated superior (A) should be 20%. Approximately 75% of the projects completed by students in the Advanced Systems Analysis and Design course will receive the highest possible evaluation from respondents of the organization.

Comments about plan made by reviewers:

Results

Data Summary

Survey data were obtained from 11 companies representing 11 projects. Using a 5 point scale (1= strongly agree to 5 = strongly disagree), the means of the respondents for the items pertaining to content knowledge included the following. The mean for whether the project objectives were clearly stated was 1.27 and 1.91 for whether the analysis and design specifications were sufficient. On the overall question of the quality of the project, the mean was 1.55.

Overall, the data collected from the survey respondents indicated that a majority of the projects reflected a level of content knowledge competence between the "superior" to "competent" categories.

Program Improvement

In an on-going effort to improve the Advanced Systems Analysis and Design course, any comments and suggestions made in the survey reports by the company representatives related specifically to improvement of the analysis and design specifications and the overall

quality of the project will be examined and evaluated and where applicable will be implemented for the coming period. This will help to identify any areas in which the students had difficulties with analytical thinking and will provide a means for improvement in the coming period.

Supporting Documents

Comments about results made by reviewer:

Outcome: 8

(ID: 19637 Last saved: 11/14/2012 6:51:44 PM)

Description & Methodology

Outcome Description

Students will have the opportunity to examine and analyze “real world” problems within an organization. Students will then utilize the content knowledge obtained within the course to demonstrate analytical thinking in the practical application of the tools and processes used by systems developers to analyze, design, manage and construct information systems for the proposed solution.

Academic Learning Compact (ALC) Categories related to this outcome:

Critical Thinking

Practical Skills

FAU Strategic Plan related goals & objectives:

[Goal 1, Objective 1](#): Assure student achievement in baccalaureate degree programs by developing and implementing Academic Learning Compacts

[Goal 1, Objective 3](#): Promote the academic success and improve the retention rate of first-time-in-college (FTIC) students

[Goal 1, Objective 10](#): Award graduate and undergraduate degrees in targeted and non-targeted areas consistent with Board of Trustees-approved Board of Governors

Accountability Targets

Implementing Strategy

Projects from each section of ISM 4133 will be evaluated for the fall and spring semesters.

Assessment Method

Project documentation and oral presentations for the Systems Analysis and Design course will be assessed based on a rubric developed and utilized across all sections of the course and which will be shared with the students. The rubric will be used to assess students' performance in the three categories outlined above. (See Assessment method for Outcome 1 for the scoring of the rubric.)

Criterion for success

The project documentation and oral presentations account for 50% of the students' grade. The percentage of students to be rated at least competent (C) should be 90%. The percentage of students to be rated superior (A) should be 20%. Approximately 75% of the projects completed by students in the Advanced Systems Analysis and Design course will receive the highest possible evaluation from respondents of the organization.

Comments about plan made by reviewers:

Results

Data Summary

Survey data were obtained from 11 companies representing 11 projects. Using a 5 point scale (1= strongly agree to 5 = strongly disagree), the means of the respondents for the items pertaining to an examination of real world problems included the following. The mean for whether an incentive for implementing the project was that the project had a "champion" within the company was 2.0 and 1.91 for whether there were monetary or other incentives to solve the problem that the project targeted. When asked whether the benefit of implementing the project were worthwhile, the mean was 1.45. And when asked whether there would be continuing contact with team members about the project, the mean was 1.36.

Overall, the data collected from the survey respondents were very similar to the results of the previous year and indicated that a majority of the projects reflected a level of competence in

addressing a real world problem between the “superior” to “competent” categories.

Program Improvement

In an on-going effort to improve the Advanced Systems Analysis and Design course, an analysis will be made of the incentives/motivations to move forward with the project within the organizations. This will serve to improve the approach with regards to the focus of the projects and the design of the project requirements for the coming period.

Supporting Documents

Comments about results made by reviewer:

Outcome: 9

(ID: 19640 Last saved: 11/15/2012 4:02:20 PM)

Description & Methodology

Outcome Description

Content Knowledge (Declarative). Students will reinforce learning of business intelligence concepts such as use data analysis techniques to make better business decisions, data preparation and simple tools for solving data mining problems. They will be introduced to advanced data mining concepts such as Data warehouses, Neural Networks and linear regression, cluster and affinity analysis, market basket analysis and decision trees, web mining, text mining, and ethical aspects of data mining.

Content Knowledge (Research). Students will reinforce their skills to research, gather, and analyze large sets of data to gain useful business understanding, to research and implement appropriate data storage technology, and research and implement appropriate data analysis technique.

Content Knowledge (Technical). Students will demonstrate proficiency in use of a typical data mining application, recode, format, and partition data for analysis, and use various data mining tools to analyze a large data set

Academic Learning Compact (ALC) Categories related to this outcome:

Content Knowledge

Declarative Knowledge

Procedural Knowledge (Research skills)

Procedural Knowledge (Technical Skills)

Critical Thinking

Analytical Skills

FAU Strategic Plan related goals & objectives:

Goal 1(all objectives): Providing Increased Access to Higher Education

Goal 1, Objective 1: Assure student achievement in baccalaureate degree programs by developing and implementing Academic Learning Compacts

Goal 1, Objective 3: Promote the academic success and improve the retention rate of first-time-in-college (FTIC) students

Goal 1, Objective 10: Award graduate and undergraduate degrees in targeted and non-targeted areas consistent with Board of Trustees-approved Board of Governors Accountability Targets

Implementing Strategy

The declarative and content knowledge will be assessed through final exam in ISM 4117, Data Mining and Data Warehousing, that will contain specific questions that measure the above learning outcomes. The final exam questions' answers from ISM 4117 will be evaluated for the fall and spring semesters.

Additionally, the students' last memo - a deliverable of their regular assignment will be evaluated for content and technical knowledge and analytical skills.

Assessment Method

The Declarative Knowledge and two types of Procedural Knowledge will be assessed based on the final exam questions and the last memo that is a deliverable from assignment. The metrics for each type of knowledge were developed by the professors assigned to teach the course. The metrics instrument incorporates a three level ranking framework (i.e., superior,

competent, low competency) for assessing student performance. The instrument employs a cumulative scheme for determining the performance ranking. The metrics instrument will be distributed and explained to the students at the beginning of the term so that they will understand how their performance will be assessed and hopefully be motivated to achieve a rating that reflects their highest potential.

The assignment memos the students submit will serve to assess the students' analytical skills.

Criterion for success

The percentage of students who will be rated at least competent will be 90% and 40% of the students will be rated superior.

Comments about plan made by reviewers:

Results

Data Summary

The final exam for ISM4117 consists of 32 multiple choice questions and represents 25% of the student's overall grade. A representative sample of both declarative and technical skill questions which cover key topics aligned with the learning objectives of the course were evaluated for this assessment.

Additionally, the last memo created by the students in the course was used to assess procedural knowledge. The current rubric as declared in the syllabus is as follows:

Memorandum concisely summarizes the results of a data mining technique and is created to be presented to an executive for decision making. The memorandum should contain the following five sections:

- 1) Business Problem Identification – describe what problem you are trying to solve, what is the outcome variable; what are the input variables (factors); what data are you using; what pre-processing of the data did you perform?
- 2) Problem Estimation – describe the results of the analysis you used for this problem. Discuss accuracy, confidence, and interestingness rates as appropriate for the data mining technique you are using
- 3) Technique effectiveness – evaluates and compares the technique's effectiveness to the other techniques used in class for that specific problem solution. Is it appropriate for this problem? Is it better than the others? Which one is best so far?
- 4) Identify actionable information – extract the “so what?” story from applying the technique and the results. Remember, no actionable information is also a result.
- 5) Recommendation – write down a recommendation for decision making, including whether

to employ this technique in the future.

Three levels of ranking were assigned to each memo for the business problem identification and technique effectiveness sections. Seven-five percent of the business identification sections were ranked superior and twenty-five percent were ranked competent. As for the technique effectiveness section, fifty-eight percent were ranked superior and forty-two percent were ranked competent. There were no memos that had sections ranked as not competent. Memos represent 25% of the course grade.

With regard to the final exam questions; 80% of the declarative knowledge questions were answered correctly and 58% of the technical questions were answered correctly.

Program Improvement

In an effort to improve the Data mining course venues for program improvement during the following terms include new text book selection, order of topics taught will be adjusted, new data sets have been selected to better fit the learning goals and development of a detailed rubric for the final project to improve the focus of the teams' efforts.

Supporting Documents

Comments about results made by reviewer:

Outcome: 10

(ID: 19638 Last saved: 11/16/2012 4:35:49 PM)

Description & Methodology

Outcome Description

Outcome Description

Content Knowledge (Declarative). Students will learn management aspects of information security. Students will be introduced to security planning techniques, contingency planning, developing a security policies and programs, using security management models, risk assessment and risk management, legal and ethical aspects of security management as well as integration of information security into business practice.

Content Knowledge (Research). Students will reinforce their skills to research, gather, and analyze information systems to determine component vulnerability, security exposure, criticality and human and machine protection.

Content Knowledge (Technical). Students will demonstrate proficiency in use of a security modeling, risk assessment analytics, and determining risk control techniques.

Critical Thinking (Apply/Analyze/Evaluate). Students will demonstrate proficiency in security management by analyzing a company's security protection, policies for each component of the information system and evaluating how well they have protection their information system assets.

Academic Learning Compact (ALC) Categories related to this outcome:

Content Knowledge

Declarative Knowledge

Procedural Knowledge (Research skills)

Procedural Knowledge (Technical Skills)

Critical Thinking

Analytical Skills

FAU Strategic Plan related goals & objectives:

Goal 1, Objective 1: Assure student achievement in baccalaureate degree programs by developing and implementing Academic Learning Compacts

Goal 1, Objective 3: Promote the academic success and improve the retention rate of first-time-in-college (FTIC) students

Goal 1, Objective 10: Award graduate and undergraduate degrees in targeted and non-targeted areas consistent with Board of Trustees-approved Board of Governors Accountability Targets

Implementing Strategy

The declarative and content knowledge will be assessed through final exam in ISM 4323, Information Security Management that will contain specific questions that measure the above learning outcomes. The final exam questions' answers from ISM 4323 will be evaluated for the fall and spring semesters and adjustments will be made to better measure outcome and student understanding of analytical and practical concepts presented.

Additionally, the students' project will be evaluated for content and technical knowledge and analytical skills. These projects require outside research, sound writing abilities and effective oral communication

Assessment Method

The Declarative Knowledge and two types of Procedural Knowledge will be assessed based on the final exam questions and the student's projects. The metrics for each type of knowledge were developed by the professors assigned to teach the course. The metrics instrument incorporates a three level ranking framework (i.e., superior, competent, low competency) for assessing student performance. The instrument employs a cumulative scheme for determining the performance ranking. The metrics instrument will be distributed and explained to the students at the beginning of the term so that they will understand how their performance will be assessed and hopefully be motivated to achieve a rating that reflects their highest potential.

The assignment memos the students submit will serve to assess the students' analytical skills as well as practical knowledge.

The assignment memos the students submit will serve to assess the students' analytical skills.

Criterion for success

The percentage of students who will be rated at least competent will be 90% and 40% of the students will be rated superior.

Comments about plan made by reviewers:

Results

Data Summary

As of press time, this dataset was not compiled. The additional, ample assessment data from the other areas of competency will give us significant items to work on for improvement as work for program development and improvement.

Program Improvement

Supporting Documents

Comments about results made by reviewer:

APPENDIX 2. Faculty Abbreviated CV, in alphabetical order by last name

SUNIL BABBAR

ITOM Department, College of Business, Florida Atlantic University
(E-Mail: Babbar@fau.edu; Phone: 561-297-3179)

EDUCATION

December, 1988	Ph.D.	Kent State University (Major: Operations Management)
August, 1983	M.B.A.	Kent State University
July, 1979	M.A.	Economics, Meerut University, Meerut, India
July, 1977	B.A.	Economics, Meerut University, Meerut, India

RECENT ACADEMIC APPOINTMENTS

August 2011	Professor, Department of Information Technology & Operations Management, Florida Atlantic University, Boca Raton, Florida.
- present	
August 2001	Associate Professor, Department of Information Technology & Operations Management, Florida Atlantic University, Boca Raton, Florida.
- July 2011	
August, 1998	Assistant Professor, Department of Information Technology & Operations Management, Florida Atlantic University, Boca Raton, Florida.
- July 2001	
August, 1997	Visiting Assistant Professor, Department of Management, University of Missouri-Columbia, Columbia, Missouri.
- June 1998	

PUBLICATIONS IN REFEREED JOURNALS

- I have published some 30 articles in refereed journals including some 13 in premier journals. I am lead author on 20 of these including sole author on eight. My research has been cited as “suggested reading”; received recognition for its important public-policy-related implications from the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO); and received a *Citation of Excellence* from ANBAR.
- I also have some 25 refereed publications in the proceedings of conferences.

Some Recent Publications in Referred Journals:

- Babbar, S., Koufteros, X. and Jayaram, J., “Expanding the Quality Paradigm for Contemporary Realignment: An Ethics Perspective”, *International Journal of Services and Operations Management*, Vol. 12, No. 3, 2012, pp. 309-331.
- Babbar, S., “Teaching Ethics for Quality as an Innovation in a Core Operations Management Course”, *Decision Sciences Journal of Innovative Education*, Vol. 8, No. 2, 2010, pp. 361-366. **(The paper is cited in the leading OM textbook by Krajewski et. al. and its content forms much of the section on “Ethics and Quality” of this textbook.)**
- Koufteros, X., Babbar, S. and Kaighobadi M., “A Paradigm for Examining Second-Order Factor Models Employing Structural Equation Modeling”, *International Journal of Production Economics*, Vol. 120, No. 2, 2009, pp. 633-652.
- Babbar, S. and Koufteros, X., “The Human Element in Airline Service Quality: Contact Personnel and the Customer”, *International Journal of Operations & Production Management*, Vol. 28, No. 9, 2008, pp. 804-830. [Published as the **lead article**.]
- Babbar, S., Addae, H., Gosen, J. and Prasad, S., “Organizational Factors Affecting Supply Chains in Developing Countries”, *International Journal of Commerce and Management*, Vol. 18, No. 3, 2008, pp. 234-251. [This paper received the **Highly Commendable Paper Award** at the 2009 Literati Networks Awards for Excellence.]

RESEARCH-RELATED AWARDS AND RECOGNITIONS

- **Best Reviewer Award (2011)** – of the *Decision Sciences Journal of Innovative Education*.
- **Best Reviewer Award (2010)** – of the *Decision Sciences Journal of Innovative Education*.

- **Member of the Editorial Boards** of the *Decision Sciences Journal of Innovative Education*, *International Journal of Services and Operations Management*, and the *International Journal of Integrated Supply Management*.
- **Recipient of the \$10,000 Top-Tier 2010 Summer Research Grant** of the College of Business.
- **Highly Commended Paper Award of the 2009 Literati Network Awards for Excellence** – for “Organizational Factors Affecting Supply Chains in Developing Countries”, (with Addae, H., Gosen, J. and Prasad, S.), published in the *International Journal of Commerce and Management*, Vol. 18, No. 3, 2008, pp. 234-251.
- **Researcher of the Year Award - 2004** Associate Professor Level award of the College of Business at Florida Atlantic University.
- **Recognized at FAU’s Honors Convocation – 2004** as one of only two “Finalists” for the university-level award for creative scholarship at the Associate Professor level.
- **Citations of my Publications as Leading Contributions in International Operations Management Research (2003)** - My research publications in the area of international operations management are specifically identified and discussed in an article by David G. Hollingworth in a widely-circulated publication *Decision Line* as seminal work that lays a foundation and helps shape the international operations research agenda for the field of OM.
- **Researcher of the Year Award - 2000** Assistant Professor Level award of the College of Business at Florida Atlantic University.
- **Recognition for its important public-policy-related implications from the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO)** - for “The Overtime Rebellion: Symptom of a Bigger Problem?”, (with Aspelin, D. J.), **published in the premier journal** *Academy of Management Executive*, Vol. 12, No. 1, 1998, pp. 68-76.
- **ANBAR Citation of Excellence** – for “International Purchasing, Inventory Management and Logistics Research: An Assessment and Agenda”, **published as the lead article in the number 2 ranked OM journal on quality and relevance**, *International Journal of Operations & Production Management*, (with Prasad, S.), Vol. 18, No. 1, 1998, pp. 6-36. This article was also reprinted in the *International Journal of Physical Distribution & Logistics Management*.
- **Listed as “Suggested Reading”** - My article “Competitive Intelligence for International Business”, (with Rai, A.), published in *Long Range Planning*, Vol. 26, No. 3, 1993, pp. 103-113, is identified and included (on p. 146) as a suggested reading on strategies for achieving global competitive superiority in the textbook *International Dimensions of Management*, 4th Edition, South-Western College Publishing, Cincinnati, OH. This article is also heavily quoted and cited (on pages 501, 505, 507, 511, 519-521) in the textbook *International Management: A Cultural Approach* by Carl Rodrigues and published by the West Publishing Company, St. Paul, MN.

SOME TEACHING-RELATED AWARDS & RECOGNITIONS RECEIVED AT FAU

- 2012 Recipient of FAU’s *Excellence and Innovation in Undergraduate Teaching Award* at the University level.
- 2007 Recipient of the *Stewart Distinguished Professorship Award* of the College of Business.
- 2006 Selected as a *Finalist for the Stewart Distinguished Professorship Award* (one of only four faculty members selected as finalists and awarded a certificate of recognition).
- 2006 Nominated (unsolicited) by FAU students for the University’s *Distinguished Teacher Award*.
- 2005 Selected as a *Finalist for the Stewart Distinguished Professorship Award* (one of only four faculty members selected as finalists and awarded a certificate of recognition).
- 2004 Recognized in *Who’s Who Among America’s Teachers* upon nomination (unsolicited) by Deans List/outstanding students at FAU.
- 2003 Nominated (unsolicited) by FAU students for the University’s *Distinguished Teacher Award*.
- 2001 Recipient of the FAU *Teaching Incentive Program (TIP) Award* for excellence in teaching.
- 2001 Recipient of the *Excellence and Innovation in Undergraduate Teaching Award* of the College of Business.

RAVI S. BEHARA

Associate Professor, IT & OM Department,
College of Business, Florida Atlantic University, Boca Raton, FL 33431
561.297.2778 rbehara@fau.edu

Qualifications

- Ph.D.** Service Operations Management/Computer Simulation, Manchester Metropolitan University, (Council for National Academic Awards: CNAAB), United Kingdom, Aug 1989.
- B.Eng.** Electrical Engineering, Indian Institute of Science, Bangalore, India, Aug 1981.
- B.Sc.** Physics, Chemistry, and Mathematics, Bangalore University, Bangalore, India, April 1978.

Current Position

- Associate Professor, Department of IT & Operations Management (ITOM), Florida Atlantic University, Boca Raton, FL

Current Research Portfolio

- Healthcare Operations: Predictive Analytics, Quality, Information Systems, Service Networks
- Service Operations: Service Metrics, Knowledge-Intensive Service Operations

Research Awards

- 2012 College of Business Researcher of the Year
- Multiple Emerald Management Review (formerly Anbar) awards including Top 50 Management Article for 2002 and Citation of Excellence for originality, research implications and practical implications.

Major Research Grants Received

- 2012-2014: Co-PI in the 200K cost-share two-year NSF/IUCRC Design of Medical Information Systems project starting from 10/1/2012; IUCRC is the Industry/University Cooperative Research Center at FAU that conducts research projects funded by NSF and matched by Industry.

Current Teaching Portfolio

- Graduate (MBA & MS in IT): Operations Management, Project Management, IT Project and Change Management
- Undergraduate (BBA): Operations Management in LCVS, Project Management

Teaching Awards

- 2012 FAU Distinguished Teacher of the Year Finalist, 2012-2013 Master Teacher for the College of Business, 2010 Stewart Distinguished Professor Award for Undergraduate Teaching at FAU College of Business, 2009 Decision Science Institute Instructional Innovation Award (National runner-up), Awarded the 2002-03 and 2008-09 Florida Atlantic University Award for Excellence in Undergraduate Teaching.

Selected Refereed Publications

- Behara, R.S. and Fabio Potenti (2013), Improving Patient Satisfaction: A Service Management Approach, in Service Management in Health and Wellness Services, Jay Kandampully (Ed.), Kendall Hunt Publishing Company, USA.
- Behara, R.S., C.D. Huang, and J. Goo (2013), The Emerging Healthcare Service Platform, in Service Management in Health and Wellness Services, Jay Kandampully (Ed.), Kendall Hunt Publishing Company, USA.
- Huang, C.D. and R.S. Behara (2013), Economics of Information Security Investment in the Case of Concurrent Heterogeneous Attacks with Budget Constraints, International Journal of Production Economics, 141 (1), 255-268.
- Behara, R.S. and M.M. Davis (2010), Active Learning Projects in Service Operations Management, INFORMS Transactions on Education, 11 (1), 20-28.
- Prier, E., C.P. McCue and R.S. Behara (2010), “The Value of Certification in Public Procurement: The Birth of a Profession?” Journal of Public Procurement 10 (4): 512-540.
- Behara, R.S., C.D. Huang, and Q. Hu (2010), A System Dynamics Model of Information Security Investments, Journal of Information Systems Security, 6 (2), 30-46.
- Huang, C.D., Q. Hu, and R.S. Behara (2008), An Economic Analysis of the Optimal Information Security Investment in the Case of a Risk-Averse Firm, International Journal of Production Economics, 114 (2), 793-804.
- Behara, R.S. and S. Bhattacharya (2008), DNA of a Successful BPO, Journal of Service Science, 1 (1), 111-118.
- C.D. Huang, R.S. Behara, and Q. Hu (2008), Securing the Information Supply Chain: Managing Risk Propagation in Extended Enterprise Networks, IEEE IT Professional, July/August, 14-19.
- Behara, R.S., T. Thatchenkery and C. Kenney (2008), Empathic Knowledge Management: Reverse Simulation Experiments in a Learning Laboratory, International Journal of Information Technology and Management, 7 (3), 283 - 314.
- C.D. Huang and R.S. Behara (2007), Outcome-Driven Experiential Learning with Web 2.0, Journal of Information Systems Education, 18 (3), 329-336.
- Behara, R.S. and S. Bhattacharya (2007), Process-Centric Risk Management Framework for Information Security, in H. Chen, T.S. Raghu, R. Ramesh, A. Vinze, and D. Zeng, eds., Handbooks in Information Systems Vol. 2: National Security, Elsevier: Amsterdam, The Netherlands, 349-365.
- C.D. Huang, R.S. Behara, and Q. Hu (2007), Economics of Information Security Investment, in H. Chen, T.S. Raghu, R. Ramesh, A. Vinze, and D. Zeng, eds., Handbooks in Information Systems Vol. 2: National Security, Elsevier: Amsterdam, The Netherlands, 53-69.
- Behara, R.S., Robert L Wears, Shawna J Perry et al (2005), A Conceptual Framework for Studying the Safety of Handovers, Advances in Patient Safety: From Research to Implementation, AHRQ-DoD Publication No. 05-0021-2, 2, 309-321, USA.

Service

- Serve on University, College and Department Committees
- Liaison with South FL Procurement Professionals (Indirect Procurement Executives)
- Outreach to companies/organizations and active job placement of graduate and undergraduate students

SUSAN L. CARTER
Information Technology & Operations Management
College of Business, Florida Atlantic University
Boca Raton, FL 33431
561-297-3925

EDUCATION

Ph.D. student

1996-2004 Florida Atlantic University, Boca Raton, FL
Employee Grant-In-Aid Leave for 1996 - 1997 year
Co-authored teaching case
Bethesda Healthcare System: Physician Information System
Presented at the International Conference on Information Systems (ICIS)
Published in ICIS Conference Proceedings
Member of Business Studies Doctoral Consortium
President - Upsilon Pi Epsilon 1996-1997

Master of Business Administration

1994 Florida Atlantic University, Boca Raton, FL
Received MBA Communications certification
Inducted into Phi Kappa Phi and Beta Gamma Sigma honor societies
Prepared major research papers on Business Ethics &
Economics, Electronic mail & privacy, and centralization/decentralization of IS

Master of Applied Science, Computer Systems Option

1985 Florida Atlantic University, Boca Raton, FL
Programmed in Pascal, FORTRAN, C, COBOL.
Knowledge of INGRES, SQL, and PROLOG
Created a gateway which permits terminals local to the
UNIX system to communicate with the university public data network
Completed an independent study concerning the use of
Stand-alone and relational query systems
Prepared major research papers on software protection
and on concurrency control in distributed database management systems

Bachelor of Science in Accounting

1972 Florida Atlantic University, Boca Raton, FL

Additional Professional and Technical Coursework

2012 E-Learning Designer/Facilitator Certification Course
2011 Faculty Learning Community – Assessment Technologies & Strategies
2010-2012 Course Technology National Conference for Information Technology Educators
2009- 2012 FAU Teaching with Technology Workshops
2010 Faculty Enhancement Workshop – Critical Thinking – Strategies you can use

Pre-2008

Internal Auditors Conference on Advanced Technology
Train the Trainer
Seminar on teaching undergraduate MIS

WORK EXPERIENCE

Senior Instructor Florida Atlantic University, Boca Raton, FL
August 2013 –

Instructor Florida Atlantic University, Boca Raton, FL

January 1987 – August 2013

Recipient of Employee Grant-In-Aid Leave for 1996 - 1997 year

Developed and taught classes in Files & Database Management,

Computer Systems Concepts (using C), Programming Concepts,

Oracle, IBM PC Assembler, End User Computing,

Foundations of Computer Science, Standard Microcomputer Software,

Elements of Data Processing, and Management Information Systems.

Software includes: Windows 95, Windows NT, DOS, Unix,

C, Pascal, BASIC, IBM PC Assembler, WordPerfect,

WordStar, Word, Lotus 1-2-3, Quattro, Excel, SQL,

Oracle, dBase III+, Paradox, Access, HTML, Powerpoint, Harvard Graphics.

Inducted into Upsilon Pi Epsilon, computing sciences honor society

Web Page Developer

1996-2000 Florida Atlantic University

Open University and Continuing Education

Upsilon Pi Epsilon

UNIX Lab Director

Florida Atlantic University, Boca Raton, FL August 1989 - August 1990

Responsible for maintenance of UNIX AT&T 3B2 Lab

Consultant

Continuing Education, Florida Atlantic University, Boca Raton, FL

January 1989 - July 1989

Developed and taught Introduction to DOS course

UNIX System Administrator

Florida Atlantic University, Boca Raton, FL January 1987 - August 1987

Acted as System Administrator for three AT&T 3B2 UNIX systems

Software Instructor

Harris Corporation, Ft. Lauderdale, FL August 1985 - January 1987

Taught introduction to UNIX and VOS, word processing and VOS system level courses to both customers and internal employees, maintained the previous courses,

and beta-tested a new release of WordMARC Composer

Programmer

CES, Inc., Boca Raton, FL

January 1984 - September 1984

Designed and implemented maintenance and retrieval functions for a database information system operating under UNIX and VOS

Graduate Assistant

Florida Atlantic University, Boca Raton, FL

January 1984 - December 1984

Taught, graded exams, and proctored tests

Adjunct Instructor

Palm Beach Junior College, Boca Raton, FL 1984

Accountant I, II, III

State of Florida, Tallahassee, FL

July 1972 - December 1974

Prepared financial statements and administered the fiscal aspects of federal programs

Abbreviated Curriculum Vitae

Robert Paul Cervený

Department of Information Technology and Operations Management

EDUCATION

Ph.D., 1976	University of Texas at Austin Graduate School of Business
MBA, 1971	Southern Methodist University
BS, 1964	Southern Methodist University

EMPLOYMENT RECORD -- University

1993 - present	Professor of Decision and Information Sciences, College of Business, Florida Atlantic University, Boca Raton, Florida.
1980 - 1993	Associate Professor of Management Science and Systems, School of Management, State University of New York at Buffalo, Buffalo, New York.
1979 - 1980	Visiting Associate Professor of Information Systems and Quantitative Sciences, College of Business Administration, Texas Tech University, Lubbock, Texas
1974 - 1979	Assistant Professor of Management Systems, School of Management, State University of New York at Buffalo, Buffalo, New York.
6/73 - 12/73	Instructor, School of Business, St. Edward's University, Austin, Texas.
1971 - 1974	Teaching Assistant, Department of General Business College of Business, University of Texas at Austin, Austin, Texas.

ADMINISTRATION

Chair, Decision and Information Systems Department, (August, 1993 – July, 1999)
College of Business, Florida Atlantic University.

Executive Director, Stuart James Research Center (SJRC), (1995 – 1998) College of Business, Florida Atlantic University.

Chair, Honorary Doctoral Committee, Florida Atlantic University (1997 – 2001)

Chair, College of Business Strategic Planning Committee (1994 - 2001)

Acting Associate Dean for Academic Affairs, (1991 – 1993)

Chair and Founding Fellow, Institute for Computing and Computer Applications,

Session Director, SUNY Buffalo China MBA program (July - August, 1985, September - November, 1990).

Associate Dean for Academic Affairs, (1981 - 1984)

Director (Management) - The Center for Industrial Effectiveness, (TCIE), (1987-1991).

PUBLICATIONS

9 books, monographs and pieces in books:

28 refereed articles:

26 refereed proceedings:

OTHER ACADEMIC ACTIVITY

24 Ph.D. dissertation committees, chaired 8

28 grants and awards valued at over \$550,000 total

Recent Courses Taught (2008 to date)

ISM 2000 Information Systems Fundamentals

ISM 3011 Management Information Systems

ISM 4403 Advanced Business Intelligence

ISM 6405 Advanced Business Analytics

QMB 3600 Quantitative Methods

Recent Committees (2008 to date)

Department representative to the College Promotion and Tenure Committee

University Faculty Senate (2008 – 9)

ITOM rep to the College of Business Market Equity Committee

Member of the Ad Hoc ITOM personnel review committee

Department co-coordinatorvQMB 3600 (2008 – 10)

Chair of the departmental strategic planning committee (2008 – 2012)

Florida Atlantic University
3200 College Ave., LA 454
Davie, FL 33314

Email: pchin@fau.edu
Phone: (954) 236-1355

EDUCATION

Ph.D. Business Administration
(Specializing in Information Technology)
University of Florida
Gainesville, Florida

August 1997 - August, 2001

M.Ed. Educational Technology
Florida Atlantic University
Boca Raton, Florida

January 2007 – December 2010

M.S. Business Administration
(Specializing in Management Information Systems)
Pennsylvania State University
State College, Pennsylvania

August 1989 - December, 1990

B.Sc. Management Studies
University of the West Indies
Mona, Jamaica

September 1982 - August, 1985

EMPLOYMENT

Instructor/Assistant Professor
Curriculum Development, Instructional Design,
Course Delivery
Florida Atlantic University, Boca Raton, Florida

August, 2001 – Present

Teaching Assistant and Ph.D. Candidate
University of Florida
Gainesville, Florida

August, 1997 - August, 2001

Distance Education Rep. /Deputy Dean - Distance Education
University of the West Indies
Mona, Jamaica

August, 1994 – July, 1997

ACADEMIC PUBLICATIONS

REFERRED JOURNAL ARTICLES/BOOK CHAPTER

Chin, P., Brown, G., and Hu, Q. "The Impact of Mergers and Acquisitions on IT Governance Structures: A Case Study," *Journal of Global Information Management*, (12: 4), 2004, pp. 50-74.

Chin, P. "The Evolution of IT Governance Structures in Dynamic Environments," in *Advanced Topics in Global Information Management Vol. 5*, pp.149-177, M. Gordon Hunter and Felix B. Tan eds. (Idea Group Publishing, 2006).

REFERRED CONFERENCE PROCEEDINGS

Chin, P. The Strategic Role of Information Technology Executives in Developing Countries, *Proceedings of the 13th International Conference of the International Association for Management of Technology* – Washington, D.C., April 3-7, 2004.

Chin, P. An Examination of Factors that affect the Management of Technology in Organizations, *Proceedings of the Tenth Americas Conference on Information Systems*, New York, New York, August 2004.

Chin, P.; Cooke, D. Satisfaction and Coordination in Virtual Communities, *Proceedings of the Tenth Americas Conference on Information Systems*, New York, New York, August 2004.

ACADEMIC SERVICES

UNIVERSITY AND PROFESSIONAL SERVICES

1. Department SACS/ AACSB Accreditation Committee, 2003-Present.
2. Curriculum Developer - Advanced Systems Analysis and Design, 2002 - Present.
3. Faculty Advisor – Student Club Professional Business Leaders of America, 2009-2011.
4. Member International Society for Technology in Education, 2009.
5. College of Business Faculty Development Committee, 2003-2004.
6. Member of International Association for the Management of Technology (IAMOT), 2004-2005.
7. Member of Americas Conference on Information Systems (AMCIS), 2000-2001, 2004-2005.

AWARDS RECEIVED

1. Department Merit (monetary) Award for teaching, 2005-2006, 2009-2010.
 2. USAID Scholarship, Pennsylvania State University, State College, Pennsylvania, August, 1989-December 1990.
-

CARYN A. CONLEY

Education	<p>New York University, Stern School of Business <i>Doctorate of Philosophy, Department of IOMS, May 2008</i> <i>M. Phil, Department of IOMS, Fall 2004</i></p> <p>The University of Texas at Austin, McCombs School of Business <i>Bachelor of Business Administration, May 1999</i> <i>Majors: Business Honors Program, Management Information Systems</i></p>
Experience	<p>Assistant Professor, ITOM, Florida Atlantic University, 2008-present Consultant, PricewaterhouseCoopers, 1999-2002</p>
Interests	<p>Research Open Source Software development, Distributed work, Information architecture and organization, Crowdsourcing, Social networks, Work group structure</p>
Publications	<p>Journal Articles</p> <ul style="list-style-type: none">• Conley, C. A., and Tosti-Kharas, J. (forthcoming). Crowdsourcing Content Analysis for Managerial Research, <i>Management Decision</i>.• Conley, C. A. (2009). Work design for volunteers: The case of Open Source Software development. In the <i>Best Paper Proceedings, Academy of Management Annual Meeting</i>.• Koehler, J. J., and Conley, C. A. (2003). The 'hot hand' myth in professional basketball, <i>Journal of Sport and Exercise Psychology</i>, 25, 253-259. <p>Book Chapters</p> <ul style="list-style-type: none">• Conley, C. A. (2013). Network organisations through communication technology. In Wolfgang Donsbach (Ed.), <i>The International Encyclopedia of Communication, 5th Edition</i>. London: Blackwell Publishing.• Sproull, L., Conley, C. A., and Moon, J. (2013). Prosocial behavior on the net. In Yair Amichai-Hamburger (Ed.), <i>The Social Net: The Social Psychology of the Internet, 2nd Edition</i>, Oxford: Oxford University Press.• Sproull, L., and Conley, C. A. (2008). Network organisations through communication technology. In Wolfgang Donsbach (Ed.), <i>The International Encyclopedia of Communication</i>. London: Blackwell Publishing.• Sproull, L., Conley, C. A., and Moon, J. (2005). Prosocial behavior on the net. In Yair Amichai-Hamburger (Ed.), <i>The Social Net: The Social Psychology of the Internet</i>, 139-161. Oxford: Oxford University Press. <p>Conference Papers/Presentations</p> <ul style="list-style-type: none">• Conley, C.A., Tosti-Kharas, J. (2010). Crowdsourcing content analysis for behavioral research: Insights from Mechanical Turk. Presented at the Academy of Management Annual Meeting, Montreal, CA, August 2010.• Conley, C.A. (2009). Work design for volunteers: The case of Open Source Software development. Presented at the Academy of Management Annual Meeting, Chicago, IL, August 2009.• Conley, C. A., and Sproull, L. (2009). Easier said than done: An empirical investigation of software design and quality in Open Source Software development. In the <i>Proceedings of the 42nd Annual Hawai'i International Conference on System Sciences (HICSS)</i>.• Conley, C. A. (2007). Impact of product architecture on product development and project effectiveness in the online collective production of information goods. Presented at the Academy of Management conference, Philadelphia, PA, August 2007.

CARYN A. CONLEY

- Conley, C. A., and Sproull, L. (2006). Project structure and participation in the online collective production of information goods. Presented at the Building sustainable online communities: Insights from social science and organization theories Symposium at the Academy of Management conference, Atlanta, GA, August 2006.
- Conley, C. A. (2006). The role of project administrators in open source software development projects. Presented at the Academy of Management Open Source Software: Research Development Workshop at the Academy of Management conference, Atlanta, GA, August 2006.
- Conley, C. A., and Shapira, Z. (2004). Perception of price movement and prediction of future stock prices: An experimental analysis. Presented at the Society for Judgment and Decision Making conference, Minneapolis, MN, November 2004.

Invited Presentations

- Work design for volunteers: The case of Open Source Software development. Florida Atlantic University, College of Business, ITOM Seminar, Spring 2009
- Work design for volunteers: The case of Open Source Software development. NOVA Southeastern University, Graduate School of Computer and Information Sciences, Working Paper Series, Spring 2010

Teaching

Florida Atlantic University

Assistant Professor

- ISM 3011 Management Information Systems
- ISM 3230 Introduction to Computer Systems and Software Development
- ISM 4054 Social Media and Web Technologies
- ISM 6148 Information Technology Fundamentals

New York University

Instructor

- C20.0001 Computer-Based Systems for Management Support - Spring 2005
(Enrollment: 28. Student rating: 6.4 on 7pt scale)

Honors/Awards

Participant in the 2007 ICIS Doctoral Consortium, Montreal, Canada
Joseph H. Taggart Fellowship, 2006-2007
New York University Doctoral Fellowship, 2002 to 2006
Participant in the 2006 Trans-Atlantic Doctoral Conference, London
Participant in the 2005 OCIS Doctoral Consortium, Academy of Management, Hawaii
Leonard N. Stern School of Business Award for Teaching Excellence, 2005
Participant in the 4th Annual Webshop at the University of Maryland, College Park, 2004
University of Texas Undergraduate Research Fellowship grant recipient, Spring 1998 - \$1,000
Recipient of the EXXON Scholarship for MIS students, University of Texas, Spring 1998

Service

Management Information Systems Association - Faculty Advisor, Fall 2011-present
FAU College of Business Graduate Council, Fall 2011-present
ITOM Strategic Planning Committee, Spring 2009-present
College of Business Interim Dean's Search Committee, Summer 2012
FAU Mobile Presence Working Group, Spring 2011
FAU Student Email Outsourcing, Spring 2011
Student Representative, Stern Information Systems Department, 2004-2008
Volunteer at the 10th Americas Conference on Information Systems, New York, August 2004

Tamara Dinev

Department Chair and Professor, Department of Information Technology and Operations Management (ITOM) at College of Business.

Research interests: information privacy, avoidance and prevention of negative Information Technologies, information security – organizational and individual issues and behavior models, information security and medical records

Professional preparation

Florida Atlantic University, Florida, USA	Theoretical Physics	Ph.D.	1997
Sofia University, Sofia, Bulgaria	Applied Physics	M.S.	1985

Appointments

2013	Professor, ITOM, Florida Atlantic University
since 2011	Department Chair, ITOM, Florida Atlantic University
2010-2011	Acting Department Chair, ITOM, Florida Atlantic University
2008-2013	Assoc. Professor, ITOM, Florida Atlantic University
2002-2008	Assistant Professor, ITOM, Florida Atlantic University
2000-2002	Visiting Assistant Professor, ITOM, Florida Atlantic University
1999-2000	IBM Senior Software Engineer
1997 – 2000	Senior Consultant, Digitron Consulting

Publications (10 samples from last 5 years):

- Smith, H. J., Dinev, T., and Xu, H. 2011. The Information Privacy Research: An Interdisciplinary Review, *MIS Quarterly*, *forthcoming*
- Xu, H., Dinev, T., Smith, H. J., and Hart, P. 2011. Information Privacy Concerns: Linking Individual Perceptions with Institutional Privacy Assurances, *Journal of the Association for Information Systems*, *forthcoming*.
- Xu, H., and Dinev, T. 2011. The Security-Liberty Debate – Individuals' Attitudes towards Internet Government Surveillance, *Electronic Government: An International Journal*, *forthcoming*
- Hu, Q., Xu, Z. C., Dinev, T., and Ling, H. 2011. Does Deterrence Work in Reducing Information Security Policy Abuse by Employees? *Communications of the ACM*, 54(6), pp.34-40.
- Dinev, T., Goo, J., Hu, Q., Nam, K. 2009. User behavior towards protective information technologies: The role of cultural differences between the United States and South Korea, *Information Systems Journal*, 19, pp.391-412.
- Dinev, T., Hart, P., Mullen, M. 2008. Internet privacy concerns and beliefs about government surveillance - an empirical investigation, *Journal of Strategic Information Systems*, 17, 3, pp.214-233.
- Dinev, T. and Hu, Q. 2007. The centrality of awareness in the formation of user behavioral intention toward protective information technologies. *Journal of the Association for Information Systems*, 8, 7, pp.386-408.

- Dinev, T., Bellotto, M., Hart, P., Russo, V., Serra, I., Colautti, C. 2006. Privacy calculus model in e-commerce – a study of Italy and the United States. *European Journal of Information Systems*, 15, 4, pp.389-402.
- Dinev, T. and Hart, P. 2006. An extended privacy calculus model for E-Commerce Transactions. *Information Systems Research*, 17, 1, pp.61-80.
- Dinev, T. 2006. Why spoofing is a serious Internet fraud. *Communications of the ACM* , 49, 10, pp.77-82.
- Hu, Q. and Dinev, T. 2005. Spyware: An Internet-age nuisance or public menace. *Communications of the ACM* , 48, 8, pp.61-66.

Synergistic activities

- Guest Associate Editor, *MIS Quarterly*
- Associate Editor, *European Journal of Information Systems*
- Track Chair, IS Security and Privacy, for the *International Conferences on Information Systems* (ICIS), Shanghai, China, December 2011
- Associate Editor, International Conference on Information Systems (ICIS) 2009, 2010
- Session Chair, Academy of Management Annual Meeting, 2006
- Program Committee Member for TRUST 2010, 4th International Conference on Trust and Trustworthy Computing, June 22-24, 2011, CyLab/CMU, Pittsburgh, PA, USA,
- Program Committee Member for TRUST 2011, 3d International Conference on Trust and Trustworthy Computing, 21-23 June 2010, Berlin, Germany
- Program Committee Member, 9th International Conference on Mobile Business (ICMB) and the Global Mobility Roundtable (GMR), Athens, Greece, 13-15 June 2010, Athens, Greece
- Program Committee Member, 8th Annual Workshop on HCI Research in MIS, December 14, 2009 (Pre-ICIS), Phoenix, Arizona.

External funding

- Individuals' Information Privacy Concerns and Attitudes towards Electronic Health Records (EHR), Dean's Summer Research Grant, 2009.
- Defense Information Systems Agency (DISA), Department of Defense: Organizational Issues in Secure Communication Networks, August 2005-July 2006, \$70,000. (coPI)

KAREN CHINANDER DYE

Florida Atlantic University, College of Business
Department of Information Technology and Operations Management
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EDUCATION

Ph.D. 1997 University of Pennsylvania, Wharton School, Operations and Information Management Department
M.A. 1991 University of Pennsylvania, Wharton School, Decision Sciences Department
B.A. 1989 Gustavus Adolphus College; Economics major; Summa Cum Laude, Phi Beta Kappa

TEACHING EXPERIENCE

2011 – present Instructor, Florida Atlantic University, College of Business
2008 – 2011 Visiting Assistant Professor, Florida Atlantic University, College of Business
2003 – 2008 Assistant Professor, Florida Atlantic University, College of Business
1997 – 2003 Assistant Professor, University of Miami, School of Business Administration
1996 – 1997 Instructor, University of Miami, School of Business Administration
1993 – 1995 Instructor, University of Pennsylvania, Wharton School

TEACHING AWARDS

- FAU MacArthur Campus College of Business Exceptional Faculty Award, 2006, 2008
- Excellence in Undergraduate Teaching Award, Florida Atlantic University, 2006 (8 awarded university-wide)
- Excellence in Undergraduate Teaching Award, College of Business, FAU, 2006 (2 awarded college-wide)
- One of six finalists for the Distinguished Teacher of the Year Award, College of Business, FAU, 2004
- Excellence in Teaching Award, University of Miami School of Business, 2001 (3 awarded school-wide)

RESEARCH AWARDS AND OTHER HONORS

- Journal of Operations Management, Best Reviewer Award, 2012
- Academy of Management, Operations Management Division Best Reviewer Award, 2008
- Florida Atlantic University, College of Business, Dean's Summer Research Grant, 2004, 2006
- Florida Atlantic University, Division of Research and Graduate Studies, Travel Award Recipient, 2003, 2005
- University of Miami James W. McLamore Summer Research Award, 1998, 2002

REFEREED JOURNAL ARTICLES

- Chinander Dye, K., Eggers, J.P. and Shapira, Z., 2013. "Tradeoffs in a Tempest: Stakeholder Influence on Hurricane Evacuation Decisions," conditionally accepted, *Organization Science*.
- Chinander, K.R. and Schweitzer, M.E. (2003). "The Input Bias: The Misuse of Input Information in Judgments of Outcomes," *Organizational Behavior and Human Decision Processes*, 91, 243 – 253.
- Chinander, K.R. (2001). "Aligning Accountability and Awareness for Environmental Performance in Operations," *Production and Operations Management*, 10, 276 – 291.
- Chinander, K.R., Kleindorfer, P.R., and Kunreuther, H.C. (1998). "Compliance Strategies and Regulatory Effectiveness of Performance-Based Regulation of Chemical Accident Risks," *Risk Analysis*, 18, 135 – 143.
- McNulty, P.J., Schaller, L.C., and Chinander, K.R. (1998). "Communicating under Section 112(r) of the Clean Air Act Amendments," *Risk Analysis*, 18, 191 – 197.
- Schaller, L.C., McNulty, P.J., and Chinander, K.R. (1998). "Impact of Hazardous Substances Regulations on Small Firms in Delaware and New Jersey," *Risk Analysis*, 18, 181 – 189.

SELECTED BOOK CHAPTERS/ CONFERENCE PROCEEDINGS

- Chinander, K.R. and Schweitzer, M.E. (2000). "Judgments of Quality: Using Input Quantity to Evaluate Outcome Quality," in D. Fedor and S. Ghosh (Eds.), *Advances in the Management of Organizational Quality*, Volume 5, 193 – 214, JAI Press/ Elsevier Inc.
- Behara, R., Chinander, K.R., Wears, R., and Perry, S. (2006). "Managing Safety in Complex Services: The Case of Hospital Emergency Care Transitions," *Proceedings of the 17th Annual Conference of POMS*.
- Sroufe, R., Chinander, K.R., and Jayaraman, V. (2002). "Infrastructural Operational Issues in Measuring, Monitoring and Managing Environmental Performance." *Proceedings of the 2002 Annual Meeting of the Decision Sciences Institute*, San Diego, CA.

WORKING PAPERS

1. Behara, R., Chinander Dye, K., Wears, R., and Perry, S. "Managing Complex Operations: Understanding Operational Risk in Emergency Care Transitions."
2. Sroufe, R., Chinander Dye, K., Montabon, F., and Melnyk, S. "The Role of Motivation on Environmentally Driven Operations Performance."
3. Chinander Dye, K. "The Influence of Reputation Effects on Optimal Environmental, Health and Safety Investment Policies."
4. Chinander Dye, K. "Influences on the Marketability of Remanufactured Products."

SELECTED CONFERENCE PRESENTATIONS

1. Chinander Dye, K., Eggers, J.P. and Shapira, Z., 2013. "Decision Making Under Turbulent and Recurring Conditions: How judgment, politics, and process effect on hurricane evacuation decisions," Academy of Management Annual Meeting, Orlando, FL, August 2013.
2. Chinander Dye, K. "Input Biases in Managerial Decision Making," *BLINK Freshman Reading Program Symposium*, Florida Atlantic University, September 2010.
3. Sroufe, R., Chinander Dye, K., Montabon, F., and Melnyk, S. "The Role of Motivation on Environmentally Driven Operations Performance," Second Annual Alliance for Research on Corporate Sustainability Conference, Harvard Business School, May 12-14, 2010.
4. Chinander Dye, K., and Shapira, Z. "Organizational Learning Under Turbulent and Recurring Conditions: The Effect of the Costs of Anticipated Consequences on Hurricane Evacuation Decisions," All-Academy Symposium, Academy of Management Annual Meeting, 2008.
5. Sroufe, R., Chinander Dye, K., Montabon, F., and Melnyk, S. "A Study of Sustainable Operating Systems," POMS Annual Conference, La Jolla, CA, May 2008.
6. Behara, R., Chinander, K., Wears, R., and Perry, S. "Managing Safety in Complex Services: The Case of Hospital Emergency Care Transitions," POMS Annual Conference, Boston, MA, April 2006.

SELECTED UNIVERSITY SERVICE ACTIVITIES

- FAU Strategic Planning Committee, Instructor Review and Promotion, November 2012 - present
- ITOM Department Advising Liaison, October 2011 - present
- ITOM Department Webmaster, October 2011 - present
- Course Coordinator, MAN3506 – Operations Management, FAU, October 2003 – October 2011
- College of Business Assessment Committee, Florida Atlantic University, 2010 – October 2011
- College of Business Teaching Awards Selection Committee, 2009
- Library Advisory Committee, Florida Atlantic University, MacArthur Campus, Fall 2005 – 2008
- FAU MacArthur Campus Academic Awards Selection Committee, 2006, 2007, 2008

PROFESSIONAL SOCIETY ACTIVITIES AND SERVICE

- Executive Committee, OM Division, Academy of Management, 2009 - present
- Secretary, Academy of Management Operations Management Division, 2002 – 2009
- Program Committee, 2005 INFORMS Annual Meeting, Research Clinics Co-Chair
- Program Committee, 2001 INFORMS Annual Meeting, Doctoral Colloquium Chair
- Program Committee, Behavioral Decision Research in Management Conference, June 1998
- Discussion and Session Chair at annual meetings – POMS, INFORMS, AOM, SJD

REVIEWER SERVICES

- Associate Editor, *Journal of Operations Management*, May 2012 - present
- Editorial Review Board, *Journal of Operations Management*, May 2009 – May 2012
- Reviewer, Harvard Business School Publishing, Brief Cases, August 2011 - present
- Ad hoc Reviewer for several journals including: *JOM*, *Interfaces*, *Production and Operations Management*, *OBHDP*, *IJOPM*, *IEEE Transactions on Engineering Management*, *Organization & Environment*, *International Journal of Internet and Enterprise Management*, *Journal of Cleaner Production*, *Journal of Industrial Ecology*
- Reviewer for professional society annual meetings - Decision Sciences, Academy of Management, ICIS

PROFESSIONAL MEMBERSHIPS

Academy of Management, Production and Operations Management Society, Behavioral Dynamics in Operations Management Network, Institute of Supply Chain Management

Stuart Diaz Galup, D.B.A.

ACADEMIC EXPERIENCE

Associate Professor (1997 - present)

Director, ITOM Graduate Programs (2011 - 2013)

Information Technology and Operations Management Department

College of Business

Florida Atlantic University

Visiting Professor - (Spring 2006)

Semester at Sea (www.semesteratsea.com)

Visiting Lecturer - (Summer 2002)

Escuela Superior de Gestión Comercial y Marketing (ESIC) in Madrid, Spain.

PROFESSIONAL EXPERIENCE

Deputy Director [aka Deputy Chief Information Officer] (1995 to 1997)

Palm Beach County Information Systems Service Department, Palm Beach, Florida

Assistant Director/Commander [aka Chief Information Officer] (1990 to 1995)

Broward Sheriff's Office Information Services Bureau, Broward County, Florida

Programming Systems Supervisor (1982 to 1990)

Miami-Dade Police Department Data Systems Bureau, Miami, Florida

EDUCATION

D.B.A. H. Wayne Huizenga School of Business and Entrepreneurship

M.S. H. Wayne Huizenga School of Business and Entrepreneurship

Nova Southeastern University, Fort Lauderdale, Florida.

B.B.A. R. Kirk Landon Undergraduate School of Business

Florida International University, Miami, Florida.

PROFESSIONAL CERTIFICATION

Certified Computing Professional

Certified in the Governance of Enterprise IT

ITIL® V3 Expert Certificate

Consultant/Manager Competence Certificate in ITSM according to ISO/IEC 20000

REFEREED WORKS

1. Dattero, R., Galup, S., and Thabit, B. (December 6, 2005). U.S. Patent No. 6,973,462. Washington, DC: U.S. Patent and Trademark Office.

Journal publications in last 3 years

2. Galup, S., Dattero, R., and Groll, J. (2011). DNA Model of IT Service Assets. *International Journal of Service Science, Management, Engineering, and Technology*, 2(2), 16-47.
3. Quan, J., Dattero, R., Galup, S., and Dhariwal, K. (2011). The Determinants of Information Technology Wages. *International Journal of Human Capital and IT professionals*, 2(1), 48-65.
4. Galup, S. and Dattero, R. (2010). A Five-Step method to tune your ITSM Processes. *Information Systems Management Special Issue on Servitizing IT*, 27(2), 156-167.

Book and chapters in books in last 3 years

1. Galup, S. (2012). Introduction. In Stuart D. Galup (Ed.), *Technology Applications and Advancements in Service Science, Management, and Engineering* (pp. xvii-xxv). Hershey, PA: Business Science Reference. ISBN13: 9781466615830, ISBN10: 1466615834

SERVICE

Doctoral Dissertation Committee in last 3 years

1. Nishani Vincent "Cloud Computing contracts and ERP," School of Accounting, Florida Atlantic University; dissertation committee member, 2013-2014.
2. Robert Victor Benyon "An Investigation of Service Management Implementation in the Information Technology Sector" Department of Information Technology and Operations Management, Rhodes University – Grahamstown, South Africa; dissertation committee member, 2012.

Committees/service

- University Faculty Senator (2009 – 2014)
- Strategic Planning Committee (2007 – present) Chairperson: 2013/2014
- Program Evaluator: Computing Accreditation Commission of the Accreditation Board for Engineering and Technology to evaluate university degree programs in Information Systems.
- Technical Reviewer: Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 7, Software and Systems Engineering, Task Group (US ISO/IEC JTC1/SC7 TG) (2010 – present)

Jahyun Goo

Associate professor with the Information Technology and Operations Management Department since August 2009. His research interests include the information systems security, EHR implementation, and IT sourcing management.

Professional preparation

SUNY at Buffalo	Management Information Systems	Ph.D.	2003
SUNY at Buffalo	Management Information Systems	MBA	1998

Appointments

since 2009	Assoc. Professor at the Information Technology and Operations Management Department, Florida Atlantic University
2003 - 2009	Asst. Professors at the Information Technology and Operations Management Department, Florida Atlantic University
2001 -2003	Asst. Professors at Dept. of Business Administration, SUNY at Fredonia

Publications (10 samples from last 5 years):

- Jahyun Goo, "Structure of Service Level Agreements (SLA) in IT Outsourcing: The Construct and Its Measurement," *Information Systems Frontiers*, (12:2), 2010, pp.185-205.
- Jahyun Goo, R. Kishore, K. Nam, and H. Raghav Rao "The Role of Service Level Agreements in Relational Management of IT Outsourcing: An Empirical Study," *MIS Quarterly*, (33:1), 2009, pp. 119-145.
- C. Derrick Huang and Jahyun Goo "Rescuing IT Outsourcing with Service Level Agreements," *IEEE IT Professional*, (11:1), 2009, pp. 50-58.
- Tamara Dinev, Jahyun Goo, Qing Hu and K. Nam, "User Behavior toward Preventive Technologies – Cultural Differences between the United States and South Korea," *Information Systems Journal*, (19:4), 2009, pp. 391-412.
- Jahyun Goo and C. Derrick Huang "Facilitating Relational Governance through Service Level Agreements in IT Outsourcing: An Application of the Commitment-Trust Theory," *Decision Support Systems*, (46:1), 2008, pp. 216-232.
- Jahyun Goo, C. Derrick Huang, and Paul Hart "A Path to Successful IT Outsourcing: Interaction between Service Level Agreements and Commitment," *Decision Sciences*, (39:3), 2008, pp. 469-506.
- Namjoo Choi, Dan Kim, Jahyun Goo, and Andy Whitmore "Knowing is Doing: An Empirical Validation of the Relationship between Managerial Information Security Awareness and Action," *Information Management & Computer Security*, (16:5), 2008, pp. 484-501.
- Jahyun Goo, R. Kishore, K. Nam, H. Raghav Rao, and Yong I. Song, "An Investigation of Factors That Influence the Longevity of IS Outsourcing Relationships," *Decision Support Systems*, (42:4), 2007, pp. 2107-2125.

Teaching

Courses	Research Method I (Ph.D., QMB 7565), FAU, Fall 2012~ IT Sourcing Management (graduate, ISM 6509), FAU, Spring 2010
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Introduction to Business Intelligence, (undergraduate, ISM4220), FAU, Fall 2009~
 Information Systems Security (undergraduate, ISM 4320), FAU, Fall 2005~Fall 2008
 Business Data Communications (undergraduate, ISM4220), FAU, Fall 2003~

Theses Co-advising three ongoing Ph.D. theses

Research Projects

1999 – 2001 Research Associate for NSF #9907325 (\$8,000)
 2003 Research Fund from Canadian-American Studies Competition, the State University of New York at Buffalo, (\$1000)
 2003 – 2004 Mark Diamond Research Fund from the State University of New York at Buffalo (\$1500)

Service

Committees The National Unification Advisory Council of South Korea (US representative), 2013~; AIS Korean chapter (executives at large), 2012~; University's Center for Cyber Security (member), 2012~; University's Network/Telecommunication Advisory Committee (member), 2007~2010; Program Committee (member): International Conference and Workshop on Cyber Security, Cyber Crime and Cyber Forensics at Kochi, India, August 19-21, 2009; Program Committee (member): Pacific Asia Conference on Information Systems Conference 2008; College 2010 Scholar of the Year Award Evaluation Committee (member); College Summer Research Grant Proposal Evaluation Committee (member), 2009; College Undergraduate Committee (member), 2008~; College Faculty Development Council (chair), 2005~2007; College Faculty Development Council (member), 2004~2005; Dept. Information Systems Security Track Curriculum Development Committee (member), 2005-present; Dept. Business Intelligence Track Curriculum Development Committee (member), 2008-present; Dept. Marketing Committee (member), 2008-present.

Review Referee or reviewer for journals and conferences including MISQ, DS, DSS, JMIS, IEEE TEM, ISF, JECR, ICIS, HICSS, AMCIS, AOM, ECIS, and PACIS.

Journals AE for MIS Quarterly special issue on Information Security; Coordinating Editor for Information Systems Frontiers, AE for Information Technology Management

Conferences Post ICIS KrAIS Workshop (chair), 2012; PACIS IT sourcing and cloud computing track (chair), 2013; AMCIS IT Outsourcing Mini-track (chair) 2009~; AE for the outsourcing track in International Conference on Information Systems (ICIS) 2009~2011

Fellowships and Awards

2011 College of Business Scholar of the Year Award (\$ 2,500)
 2009 Barry Kaye College of Business Researcher of the Year Award (\$ 2,500)
 2009 Outstanding Paper Award Winner at the 2009 Emerald Literati Network Awards for Excellence
 2007 Best Paper Award in Organizational Systems and Science track at HICSS 2007
 2007, 2013 Invited to attend the 3rd (& 4th) International Conference on Information Services, in Heidelberg (Mannheim), Germany (expense paid)
 2006 Travel Award from FAU Research Enhancement Program

Professor Chingping (Jim) Han, Ph.D.

Department of Information Technology and Operations Management
Fleming Hall 214
Campus: Boca Raton
Phone: 561-297-2691
han@fau.edu



Education and Experience:

- Ph.D., Dept. of Industrial Engineering and Systems Management, Pennsylvania State University, State College, PA (1988)
- Professor, Information Technology and Operations Management Department, College of Business, FAU (2009-present)

Prior Experience:

- Professor, Computer Science and Engineering Department, FAU (2002-2009)
- Professor, Mechanical Engineering Department, FAU (2001-2002)
- Associate Professor, Manufacturing Systems Engineering, FAU (1994-2000)
- Assistant Professor, Manufacturing Systems Engineering, FAU (1988-1993)
- Co-founder and co-director, Material Handling Research Center (a NSF U/I Research Center) at FAU
- Associate Director, Manufacturing System Engineering Master of Science Program, FAU
- Coordinator, Engineering Management Master of Science program, FAU

Teaching and Research:

Dr. Han studies logistics systems and decision supporting systems, with most of his recent research focused on global supply chain management. Several other research interests encompass management information systems, artificial intelligence, and discrete systems modeling. He teaches courses on artificial intelligence, probability and statistics, systems modeling, object-oriented design and programming, computer systems evaluation, quantitative methods for business, and operations management. He has generated more than one million dollars in sponsored research at FAU. He has successfully lead projects sponsored by National Science Foundation, Ford Motor Company, IBM, Motorola, General Motor, Florida Power and Light Company, Dole Fresh Fruit Company, National Forge Company, among others.

Dr. Han was responsible for developing the curriculum for the Manufacturing Systems Engineering Master of Science program. He has created and taught more than eight graduate courses and 14 undergraduate courses for the university. Dr. Han has been the advisor for many graduate students, having mentored more than thirty Ph.D. and M.S. candidates towards their dissertations and theses. He was also the primary coordinator in developing an Engineering Management program for the College of Engineering.

Publications and Presentations:

Dr. Han has published over sixty research articles, appearing in some of the most prestigious journals in Systems Engineering related fields. These include the Annals of CIRP, Journal of Manufacturing Systems, International Journal of Production Research, Transactions of the NAMRI, and Journal of Manufacturing Technology Management.

Selected Publications:

1. Miao Lv, Chun Jin, Yoshiyuki Higuchi, and Jim C. Han, "Context-based Catering Recommendation Method using Bayesian Network and Ontology," Accepted for publishing, ICIC Express Letters, Vol. 8, No. 2, pp. 1-ICICIC2013-243, Feb. 2014
2. Xiaoyi Deng, Chun Jin, Yoshiyuki Higuchi, and Jim C. Han, "A Novel Collaborative Filtering Recommendation Method Combining Context Clustering and Social Network Analysis for Personalized Recommendation in Mobile E-Commerce," Accepted for publishing, Journal INFORMATION, 2013.
3. Aura-Maria Cardona, Zvi Roth, and Jim C. Han, "High-Throughput Automation Design Considerations for Biotechnology Processes Involving RNA Purification Protocols using Multi-Centrifuge Bioseparation Steps," Robotics and Computer-Integrated Manufacturing, Vol. 28, Issue 3, pp. 285-293, June 2012.
4. Xiaoyi Deng, Chun Jin, Yoshiyuki Higuchi, and Jim C. Han, "TMA: A novel Method for Mining Frequent Itemset Using Transaction Matrix," ICIC Express Letters, August 2012.
5. Xiaoyi Deng, Chun Jin, Yoshiyuki Higuchi, and Chingping Han, "An Efficient Hybrid Clustering Algorithm for Customer Segmentation in Mobile E-Commerce," ICIC Express Letters – An International Journal of Research and Surveys, Vol. 5, No. 4(B), April 2011, pp. 1411 – 1416.
6. GAO Peng, JIN Chun, HAN Chingping, "A Nested Heuristic Algorithm for Container Pick-up Operations Scheduling," Journal of Systems Management (in Chinese with Abstract in English), Vol.17, No.2, 2008, p203-209.
7. Jim C. Han, Montri Damrongwongsiri, "Stochastic modeling of a two-echelon multiple sourcing supply chain management problem with Genetic Algorithm," Journal of Manufacturing Technology Management, Vol. 16 No. 1, 2005, p87-107.

Chiang-Sheng Derrick Huang

Associate Professor

Department of Information Technology and Operations Management

Florida Atlantic University

Education

Harvard University	Computer Science	PhD	1994
Harvard University	Applied Physics	MS	1989

Academic Appointments

Since 2009 Associate Professor, Department of Information Technology and Operations Management, Florida Atlantic University, USA

2003—2009 Assistant Professor, Department of Information Technology and Operations Management, Florida Atlantic University, USA

Journal Publications

- C.D. Huang and R.S. Behara (2013) "Economics of Information Security Investment in the Case of Simultaneous Attacks," *International Journal of Production Economics*, 141 (1), 255-268.
- R.S. Behara, C.D. Huang, and Q. Hu (2010) "A System Dynamics Model of Information Security Investments," *Journal of Information Systems Security*, 6 (2), 30-44.
- J. Goo, C.D. Huang, and P. Hart (2008) "A Path to Successful IT Outsourcing: Interaction between Service Level Agreements and Commitment," *Decision Sciences Journal*, 39 (3), 469-506.
- C.D. Huang, Q. Hu, and R.S. Behara (2008) "An Economic Analysis of the Optimal Information Security Investment in the Case of a Risk-Averse Firm," *International Journal of Production Economics*, 114 (2), 793-804.
- C.D. Huang, R.S. Behara, and Q. Hu (2008) "Managing Risk Propagation in Extended Enterprise Networks," *IEEE IT Professional*, 10 (4), 14-19.
- J. Goo and C.D. Huang (2008) "Facilitating Relational Governance through Service Level Agreements in IT Outsourcing: An Application of the Commitment-Trust Theory," *Decision Support Systems*, 46, 216-232.
- C.D. Huang and J. Goo (2008) "Rescuing IT Outsourcing: Strategic Use of Service Level Agreement," *IEEE IT Professional*, 10 (6), 46-54.
- C.D. Huang and Q. Hu (2007) "Achieving IT-Business Strategic Alignment via Enterprise-Wide Implementation of Balanced Scorecards," *Information Systems Management*, 24 (2), 173-184.
- C.D. Huang and R.S. Behara (2007) "Outcome-Driven Experiential Learning with Web 2.0," *Journal of Information Systems Education*, 18 (3), 329-336.
- Q. Hu and C.D. Huang (2006) "The Rise and Fall of the Competitive Local Exchange Carriers in the U.S.: An Institutional Perspective," *Information Systems Frontier*, 8 (3), 225-239.

- C.D. Huang (2006) "Using Business Plans to Anchor MBA-Level E-Commerce Courses," *International Journal of Information and Communication Technology Education*, 2 (3), 88-99.
- Q. Hu and C.D. Huang (2006) "Using the Balanced Scorecard to Achieve Sustained IT-Business Alignment: A Case Study," *Communications of the AIS*, 17 (8), 181-204.
- C.D. Huang and Q. Hu (2004) "Integrating Web Services with Competitive Strategies: A Balanced Scorecard Approach," *Communications of the AIS*, 13 (6), 57-80.

Book Chapters

- R.S. Behara, C.D. Huang, and J. Goo (2013) "The Emerging U.S. Health Care Service Platform," in J. Kandampully (ed.), *Service Management: The New Paradigm in Health and Wellness Services*, Kendall Hunt Publishing, Dubuque, Iowa, in print.
- C.D. Huang (2007) "Business-Plan Anchored E-Commerce Courses at the MBA-Level," in L. Tomei (ed.), *Adapting Information and Communication Technologies for Effective Education—Advances in Information and Communications Technology Education Series*, Volume 2, Idea Group: Hershey, Pennsylvania, 156-166.
- C.D. Huang, R.S. Behara, and Q. Hu (2007) "Economics of Information Security Investment," in H. Chen, T.S. Raghu, R. Ramesh, A. Vinze, and D. Zeng (eds.), *National Security—Handbooks in Information Systems*, Volume 2, Elsevier: Amsterdam, The Netherlands, 53-69.
- C.D. Huang (1999) "Size, Growth, and Trends of the Information Industries, 1987–1996," in B. M. Compaine and W. H. Read (eds.), *The Information Resources Policy Handbook: Research for the Information Age*, The MIT Press: Cambridge, Massachusetts, 347-361.

Professional Organization and Affiliation

- Scientific Advisory Board, The Instituto Superior para el Desarrollo de Internet (Higher Institute for Internet Development), Madrid, Spain, 2011-present
- Program Committee, 10th Annual Security Conference, Las Vegas, NV, May 4-6, 2011
- Program Committee, International Workshop on Risk and Trust in Extended Enterprises (RTEE'2010), San Jose, CA, November 1-4, 2010
- AIS (Association of Information Systems), member, 2003-present
- AIS-SIGISAP (IS/IT Issues in Asia Pacific), member, 2006-present
- AIS-SIGSEC (Security), member, 2006-present

Journal Reviews

- Management Information Systems Quarterly (MISQ)
- IEEE Transactions on Engineering Management (IEEEEM)
- Journal of Strategic Information Systems (JSIS)
- European Journal of Information Systems (EJIS)
- Decision Support Systems (DSS)
- Information Systems Management (ISM)
- International Journal of Information Management (IJIM)
- Journal of Information Systems Security (JISSec)

Vitae
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EDUCATION

Ph.D., Georgia State University, Atlanta, Georgia (1988);
MBA, Troy State University, Troy Alabama (1981); Concentration: Finance.
BA, College of Literature and Foreign Languages, Tehran, Iran (1974); Major: English Literature and Linguistics.

ACADEMIC EMPLOYMENT

Fall 1988-Present: Assistant-Tenured Associate Professor, Department of Information Technology & Operations Management, Florida Atlantic University,.

Fall 1987-Summer 1988: Assistant Professor, School of Business Kennesaw College, Marietta, Georgia.

Fall 1981-Summer 1987: Assistant Professor, College of Business and Commerce, Livingston University, Livingston, Alabama

Fall 1983-Decemer 1986: Graduate Research Assistant, Management Department, Georgia State University

PUBLICATIONS

Book

Kaighobadi, M., *Flexible Manufacturing Island: Stepping Stones in FMS Implementation*, (New York: Garland Publishing Inc., 1994).

Refereed Journal Articles

Xenophon Koufteros, Sunil Babbar, Mehdi Kaighobadi, *A Paradigm for Examining Second-order Models Employing Structural Equation Modeling*, International Journal of Production Economics, 2009.

Mehdi Kaighobadi, All, M.T., “An Analysis Of Factors Affecting Academic Success For Undergraduate Business Students”, *Decision Sciences Journal of Innovative Education*. Vol. 6, No. 2, pp. 427-436 (2007).

Mehdi Kaighobadi, All, M.T., “An Analysis Of Factors Affecting Academic Success For Undergraduate Management Students”, *International Journal of Education Research*, Vol. 2, No. 1 (2007).

Allen, T. and Kaighobadi, M., “Additional Evidence Of Relationship Between Airport Noise And House Prices“, *International Journal of Business and Public Administration* (2005).

Allen, T. and Kaighobadi, M., “Using Auction Simulation to Demonstrate Real Estate Dynamics.” *Journal of Real Estate Practice and Education*, Vol. 4, No. 1 (2001).

Kurapati, V., Zhou, M., Kaighobadi, M., and Caudill, R., "A Petri Net Approach to Investigating Push and Pull Paradigms in Flexible Factory Automated Systems" *International Journal of Production Research*, Vol. 34, No. 3, (1996).

Kaighobadi M., "Inventory Issues in Flexible Manufacturing Implementation, @ *International Journal of Flexible Manufacturing Systems*, Vol. 7, No. 2 (April 1995).

Kurapati, V., Zhou, M., Kaighobadi, M., and Caudill, R., Augmented Timed Petri Nets for Modeling, Simulation, and Analysis of Robotic Systems with Breakdowns," *Journal of Manufacturing Systems*, Vol. 13, No. 4 (1995).

Kaighobadi, M. and Kurapati V., "Flexible Manufacturing Systems: An Overview," *International Journal of Operations and Production Management*, Vol. 14, No. 4 (1994).

White, E., Kaighobadi, M., and Wharton, T., "Process Goals for Quality Improvement Programs," *International Journal of Quality and Reliability Management*, Vol. 11, No. 3 (1994).

Kaighobadi, M., Kwong, K., and Wing, F., "Shop-Floor Control Practices in Three Pacific Basin Countries: A Comparative View of Small Machine Tool Industry", *Production Planning and Control Journal*, Vol. 4, No 2 (1993).

Refereed Conference Proceedings

Kaighobadi, M., Allen, M.T., "Investigating Academic Success Factors for Undergraduate Business Students", *Production and Operation Management Society (POMS) Conference Proceedings* (Dallas, TX, May 2007)

Kaighobadi, M., Allen, M.T., "An Analysis of Factors Affecting Academic Success for Undergraduate Management Students", *Academy of Business and Public Administration Disciplines Conference Proceedings* (Dallas, TX, May 2007).

Kaighobadi, M., Allen, M.T., "Investigating Academic Success Factors for Undergraduate Business Students," *Production and Operations Management Society Conference Proceedings* (Dallas, TX, May 2007, Forthcoming).

Eleven additional conference proceedings prior to 2007.

PRESENTATIONS

"*Investigating Academic Success Factors for Undergraduate Business Students*", *Production and Operation Management Society (POMS) Conference* (Dallas, TX, May 2007)

"*An Analysis of Factors Affecting Academic Success for Undergraduate Management Students*", *Academy of Business and Public Administration Disciplines Conference* (Dallas, TX, May 2007).

Ten additional presentations prior to 2007.

MARY M. SCHINDLBECK, Ph.D.

Senior Instructor
Information Technology and Operations Management
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EDUCATION

Ph.D., 2009. Educational Leadership, Adult & Community Education
Florida Atlantic University, Boca Raton, Florida
Dissertation: An Exploration of Factors Affecting the Academic Success of Students in a College Quantitative Business Course

Educational Specialist, 2007. Educational Leadership, Adult & Community Education
Florida Atlantic University, Boca Raton, Florida

Master of Applied Science, 1987. Computer and Information Systems
Florida Atlantic University, Boca Raton, Florida
Thesis Title: An Experimental Study of an Information-Based Complexity Metric.

Bachelor of Applied Science, 1983. Computer and Information Systems
Florida Atlantic University, Boca Raton, Florida

EXPERIENCE

Senior Instructor August, 1998 – present
ITOM, Florida Atlantic University, Boca Raton, FL

- Courses taught:
 - QMB3600: Quantitative Methods in Business - use of statistical and quantitative techniques in operational problem solving and decision making. Course taught in various modalities: online, face-to-face, and video streamed.
 - ISM4117: Data Mining & Data Warehousing - analytical techniques using XLMiner for predictive and descriptive data analysis of large amounts of data.
 - ISM3011: Management of Information Systems - use of spreadsheets and databases and their applications to business practices.
 - ISM2000: Information Systems Fundamentals - fundamentals of computer systems, networks and software applications.

Visiting Instructor August, 1996 - August, 1998
ITOM, Florida Atlantic University, Boca Raton, FL

Adjunct Instructor January 1988 - August, 1996
ITOM, Florida Atlantic University, Boca Raton, FL

RESEARCH INTERESTS

Quantitative literacy, instructional design, cognitive load theory with an aim toward advancing the design of learning environments, and evaluation research strategies and assessment. Understanding the business benefits of advanced analytics; exploring not only the technology issues but also the skills that are required to implement and to understand analytics.

AWARD

Recipient, Excellence in Undergraduate Teaching Award, College of Business, 2010-2011.

PUBLICATIONS

Bryan, V., Danaher-Schindlbeck, M., and Duay, D., Relationship Among Key Variables and Students' Perceptions Toward Learning Online in Postsecondary Environments. SITE 2005 Society for Information Technology & Teacher Education Conference, Phoenix, Arizona. March, 2005.

PRESENTATIONS

Schindlbeck, M. et al. (2012). *Lecture Capture and Video Streaming (LCVS) Technology at the College of Business* (panel presentation). FAU Faculty Seminar, November 9, 2012.

Schindlbeck, M. (2012). *Technology in Political Campaigns*. FAU Living Learning Community Interest Session, October 3, 2012.

Schindlbeck, M. (2011). *Does IT Matter?*. FAU Living Learning Community Interest Session, November 8, 2011.

Root, A. and Schindlbeck, M. (2011). *LectureCapture*. FAU Center for Teaching and Learning, Teaching with Technology Showcase, October 1, 2011.

Chin, P. and Schindlbeck, M. (2010). *Comparing Learning Outcomes in Face-to-Face and Online Classes*. The Scholarship of Teaching Faculty Enhancement Program. November 18, 2010.

Behara, R., Huang, D., Davis-Schindlbeck, M., Frazier, E., Ghenai, C., Hartmann, J., Sapat, A., and Teegavarapu, T. (2009). *Technology Enhanced Learning in the Classroom*. FAU Center for Teaching and Learning, Teaching with Technology Showcase, October 24, 2009

GRANT

Chin, P. and Schindlbeck, M. (2010). *An evaluation of assessment congruent to the pedagogical goals of two learning environments: online and face to face*. Faculty Assessment Grant Award \$5,000, Florida Atlantic University Office of Institutional Effectiveness and Analysis.

COMMITTEE ASSIGNMENTS

Advisory Member, Department P&T Panel, (2012 to Present)
Member, IRM eLearning Resources Committee (2011 to 2012)
Faculty member, College of Business Video Streaming Initiative (2011 to present)
Course and assessment coordinator for multi-section course QMB3600 (2007 to present)
Member, ITOM department strategic planning committee (2009 to present)
Member, College of Business subcommittee on assessment (2010 to 2011)

PROFESSIONAL DEVELOPMENT **Attended Conferences and Workshops**

Completed 16-week training course through the Center for eLearning. eLearning Designer & Facilitator Certification, Spring 2012

Faculty Learning Community: Assessment Procedures, Strategies, and Challenges in an eLearning Environment. Fall 2011 and Spring 2012. Facilitator Peter Ricci.

GRAEME WARREN

EDUCATION

PhD School of Industrial Engineering, Purdue University, 1997.

MSF Master of Science (Finance), College of Business, Florida Atlantic University, 2008.

MSIE Master of Science, School of Industrial Engineering, Purdue University, 1991.

BA Bachelor of Arts (Philosophy), Florida Atlantic University, 2011.

B.Eng Bachelor of Engineering (Industrial Engineering), with distinction, Department of Systems and Industrial Engineering, University of Pretoria, 1988. **Awards:** Gencor and SAIIIE medal for best final year student in the Department of Systems and Industrial Engineering (1988); SACPE medal for best final year student in the Faculty of Engineering (1988).

PROFESSIONAL PROGRAMS/CERTIFICATIONS

Certified Financial Risk Manager, 2002. Global Association of Risk Professionals (GARP).

CFA Program pro-forma statement: "I have passed all three levels of the CFA program and will be eligible for the CFA charter upon completion of the required work experience," 2002-2004. CFA Institute.

EXPERIENCE

Instructor Department of Information Technology and Operations Management, College of Business, Florida Atlantic University, 2006 - Present.

CFO Rehabstars Inc., 2004-2005. Rehab staffing firm.

Visiting Instructor Department of Information Technology and Operations Management, College of Business, Florida Atlantic University, 2004-2005.

Visiting Asst. Prof. School of Industrial Engineering, Purdue University, 2000.

Mgmt. Consultant Fischer Consulting, Pretoria, South Africa, 1999.

Senior Lecturer Department of Systems and Industrial Engineering, University of Pretoria, 1996-2000 (on sabbatical 2000).

Graduate Assistant School of Industrial Engineering, Purdue University, 1989-1995.

Consultant Xcel Management Consultants Inc., Pretoria, South Africa, 1989.

PUBLICATIONS & PRESENTATIONS

G. Warren, K. Dye, and D. Battistella, “Collaborative Design and Performance Evaluation of Dynamic Production Systems,” Third Annual Teaching with Technology Showcase, 2011.

G. Warren, “Production Mix Problems: Formulation and Solution Strategies,” *SAJIE*, 12 (2), 2001.

G. Warren, “Networks of Polling Systems: Heuristic Stability Analysis,” INFORMS Tel Aviv, Tel Aviv, 1998.

G. Warren, “The Product Mix Problem: Heuristics,” INFORMS/CORS Montreal, Montreal, 1998.

C.L. Moodie, J. Drolet, Y-C. Ho, and G.M.H Warren, “Cell Design Strategies for Efficient Materials Handling” in *Material Flow Systems in Manufacturing*, J.M.A. Tanchoco (ed.), Chapman Hall, 1994.

PEDAGOGICAL WORKSHOPS

Powerpointless: Building More Effective Presentations without PowerPoint, Sloan Consortium, April 2013.

Web 2.0 Tools course, Sloan Consortium, December 2012.

Certified eLearning Designer-Facilitator, Center for eLearning, FAU, 2011.