

Operations and Supply Management 2018 Program Review

9/14/18

Programs:

B.S. Operations and Supply Management
Operations and Supply Management Minor
Lean Systems Minor
Lean Systems Certificate
Manufacturing and Operations Management Certificate
Global Logistics Certificate

Committee Members:

Lisa Eshbach, Ph.D., Committee Chair
Anita Fagerman, Ph.D.
Steve Lyman, Ph.D.
Gayle Lopez, J.D., Management Department Chair
David Marion, Ph.D.

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Appendix M Deleted per Departmental request during APR Meeting.

Program Name and History

The Operations and Supply Management (OSM) major has been in existence since the late 1980's. Since its inception, the program has undergone numerous changes both in name and content to keep up with industry trends and demand. The Operations portion of the program focuses on integrating the core Lean principles (process efficiency, value stream mapping, kaizen, PDCA, 5S, pull, leveling process stability, standardized work, root-cause problem resolution and A3 Reporting), Six Sigma (process quality), Lean culture (skills development), Lean cost management (value stream performance measurement), and 5) Leadership techniques (employee centric) to assist the organization in achieving and sustaining optimal employee and organization/operational performance.

The Supply Management section of the program concentrates on how to extend the organization's internal lean system efficiencies to the organization's suppliers and customers using project management and appropriate software planning tools. Collaboration with an organization's suppliers and service providers is essential in achieving the lean goal – delivering the right product/service at the right time, in the right quantity, to the right customer, at the right cost. Managing the flow of incoming and outbound goods, services, and related information involved provide valuable tools for turning logistics problems into an opportunity for competitive advantage. This cutting edge approach provides graduates with highly sought-after capabilities to improve operational & financial performance and monitor growth within any type of organization - e.g. banks, nonprofits, offices, hospitals, restaurants, manufacturing.

The OSM program has a rich collaborative history with the College of Technology (COT) and College of Health Professions (COHP). The program continues its cooperative efforts by retaining the COT courses within the OSM curriculum as well as coordinating efforts with COHP with respect to their Lean Healthcare minor and course offerings. Since the last APR, the program experienced four curriculum revisions that were effective Fall 2013, Fall 2016, Fall 2017 and Fall 2018. The extent of these revisions are discussed further in Chapter 4 of this report. The program changes were proposed and implemented based on faculty and advisory board input. Appendix A and B provides a list of the OSM advisory board members and the 2018 advisory board minutes. OSM program stakeholders – students, faculty, staff, employers and industry partners - are updated annually through advising, department meetings, one-to-one conversations with employers and in our advisory board meetings. The 20 member advisory board is comprised of ten industry professionals – nine within the West Michigan region and one outside of Michigan, and ten FSU faculty and staff.

Program Mission

FSU, COB and OSM Program Mission Statements and Application

The mission of Ferris State University (FSU) is to “prepare(s) students for successful careers, responsible citizenship, and lifelong learning. Through its many partnerships and its career-oriented, broad-based education, Ferris serves our rapidly changing global economy and society. “(Ferris State University, 2018). FSU's College of Business has further refined its mission as: “We in the College of Business are committed to academic excellence, ethical conduct, and a learner-centered environment characterized by quality teaching, outcomes assessment, and continuous improvement. Our students will take pride in their developed competencies and the distinctiveness of the College's programs. We will be noted for being responsive to changes in workforce needs; building/maintaining good relationships with employers; preparing our students to excel in a global environment; and providing high-quality interns and graduates who meet and exceed employer expectations, deal effectively with change, and are committed to lifelong learning.” (FSU, College of Business, 2018).

The mission of the OSM Program is to provide high quality graduates who effectively and efficiently meet and exceed employer expectations in business operation careers. The program combines business, lean systems and technology disciplines to provide graduates with the requisite skills in both theory and practice.

The OSM program is an excellent fit that encompasses both the mission of Ferris State University and the College of Business by giving students an education based not only on business theories, but current skills, practices, and trends industry employers are utilizing and seeking in the workplace. The skills OSM students develop will help them to obtain an entry-level management position in Operations and/or Supply Chain Management in either the manufacturing or service industry; depending upon the student's particular interest.

The OSM program mission is accomplished by offering a breadth and depth of knowledge to students in a variety of courses. The mission is effectively communicated to all the stakeholders in the classroom, in department, college and advisory board meetings as well as with our industry partners when completing projects. We monitor the effectiveness of the program's mission with continuously reviewing the program outcomes assessment in TracDat, student internship experiences, industry partner feedback and advisory board input/feedback.

It is believed that the OSM program furthers the department, college and university's mission by offering a competitive advantage with respect to the Lean systems curriculum contained within the OSM curriculum. Linking the OSM program with a Lean Systems focus prepares students for successful careers and lifelong learning. Likewise, it assists in fulfilling the FSU's vision statement of being a "recognized leader in integrative education, where theory meets practice throughout the curriculum and where multi-disciplinary skills important in a global environment are developed" (Ferris State University, 2018, para. 2). Moreover, it emphasizes the FSU's core values of Collaboration, Excellence, Learning and Opportunity. It will enhance our collaboration with students as well as current and future industry partners by striving to produce the highest level of active learning (e.g., through industry projects) thereby, "providing skill development and career success opportunities for students" (Ferris State University, 2018, para. 3).

Program Goals

Program Goals and Implementation

The Operations and Supply Management program goals support the mission and vision of Ferris State University and College of Business. While the OSM curriculum has experienced some curricular changes to support industry demand, the overall program goals, have remained unchanged within the last five years. The program's overall goals have been integrated into the program's outcome assessment. TracDat, an objective measurement system, is used in evaluating and improving the OSM program. Additionally, the APR process requires a survey instrument that allows program stakeholders (current students, alumni, faculty and advisory board members) an opportunity to objectively determine whether program goal attainment was achieved. The goals are both specific to student skills as well as to program capabilities.

The OSM program goals are communicated to the stakeholders in the classroom and in department, college and advisory board meetings. The OSM program goals are reviewed and evaluated annually. The five OSM program goals and their respective measurement tools are listed below:

1. *Expected Outcome/Goal 1:* Apply business concepts and practices in creating and maintaining lean supply chains that support strategic goals.
External Validation: TracDat Outcomes Assessment (see Chapter 5); Current OSM students and Alumni Survey and Advisory Board Survey (See Chapter 6).

2. *Expected Outcome/Goal 2:* Communicate effectively: including both oral and written assignments incorporated throughout the program. Graduates must be able to demonstrate the ability to present ideas and information in a clear, concise and effective manner.
External Validation: TracDat Outcomes Assessment (see Chapter 5); Current OSM students and Alumni Survey and Advisory Board Survey (See Chapter 6).
3. *Expected Outcome/Goal 3:* Function as a member of a team: both, in the classroom and within a company setting, and demonstrate the ability to work with others and to accomplish tasks. *External Validation:* TracDat Outcomes Assessment (see Chapter 5); Current OSM students and Alumni Survey and Advisory Board Survey (See Chapter 6).
4. *Expected Outcome/Goal 4:* Use and apply tools learned in the classroom and in the field, to solve problems and make business decisions. Tools such as Lean, Six Sigma, and other continuous improvement methods will vary by industry and these tools are expected to change over time. *External Validation:* TracDat Outcomes Assessment (see Chapter 5); Current OSM students and Alumni Survey and Advisory Board Survey (See Chapter 6).
5. *Expected Outcome/Goal 5:* Analyze an environment, draw logical conclusions, and demonstrate the ability to make effective decisions: both independently and as part of a cooperative team.
External Validation: TracDat Outcomes Assessment (see Chapter 5); Current OSM students and Alumni Survey and Advisory Board Survey (See Chapter 6).

Changes in the OSM program goals reflect advice, feedback, and recommendations received from companies providing internships and related field experiences as well as recommendations suggested by the OSM Advisory Board. More student focused learning techniques are developed and used in response to curriculum changes and feedback to successfully attain the OSM program goals. Since the last APR, the main OSM goals were achieved through evaluating the success of outcome assessment accomplishment and stakeholder survey data.

Strategic Plan

During the April 2018 advisory board meeting, the attendees developed two additional, administrative related program goals.

Goal 1: Increase enrollment Year over Year (Y-O-Y) by 5-10%. Have 56-66 students enrolled in OSM major and OSM minors, Lean Systems minor and Lean Systems Certificate by 2023.

Goal 2: Increase marketing strategies university wide (e.g. DAWG Days, Orientation, Program and COB Website) by 25%

We used a few common strategic tools – SWOT and TOWS - to develop appropriate future OSM strategies to not only achieve the two newly created goals, but also retain the quality of, and strengthen the OSM program. See Table 3.1.

Figure 3-1 OSM Program Strategies: SWOT and TOWS Tools

External Factors	Internal Factors	Strengths (S) 1. Lean Systems Niche. 2. Experienced Faculty. 3. Experiential Learning(application) with Industry Partners 4. Strong curriculum – meets industry needs.	Weaknesses (W) 1. Volume of Online and Mixed Delivery courses - decrease in international student enrollment. 2. Location. 3. University involvement – we teach lean, but don't apply internally. 4. Marketing the OSM program Alumni relations.
	Opportunities (O) 1. Sharing real life examples of OSM alumni. 2. Sharing OSM internship examples on website. 3. Career Preparation 4. International/Domestic friendly course delivery 5. Post graduate skill development (certificate) 6. International Internship Opportunities – trades skill development 7. Partner with international education institutions (Rhein-Waal) 8. Use existing university venues to promote OSM 9. Trades skill gap Threats (T) 1. Declining state enrollment 2. Competition (online and traditional, other “attractive” programs) 3. Other schools picking up the lean niche. 4. Potential Students (needs: want to feel valued) 5. Automation/AI 6. Trades skill gap	SO Strategies (utilize opportunities) 1. Develop OSM program (include Lean Systems minor and certificate) (and graduate Leans Systems) pamphlet (S1, S3, S4, O4, O9) 2. Build/restart relationships with alumni (information card) (S2, O1) 3. Talk with International Office about International internship opportunities (S3, O7) 4. Talk with students earlier about OSM programs and minors (S4, O8) 5. Develop a “Lean Center of Excellence” (S1,S2,O9) ST Strategies (avoid threats) 1. Increase advertising on campus – collaborating with College of Technology, Career Exploration (undecided major), FSUS (S1,T1) 2. Share internship insights/experiences (stories and videos) (internship evaluation – Internship office, FSU Television Media Production Program) (S3, S4, T2,T4)	WO Strategies (overcome weaknesses) 1. Offer video conference courses (W2,O4) 2. Establish/increase social media presence (e.g., facebook) (W2,W4, 3. Investigate coursera.org re: FSU courses- pique lean topic interest; student pays only if they want a certificate. (W2, O5) 4. Incorporate university departments as a lean project opportunities (W3, O8) 5. Check out lean education opportunities with Faculty Center for Teaching and Learning (FCTL), Literacy Center, and Finance Division – Task force of lean faculty and students) (W3, O8) WT Strategies (minimize weakness) 1. Increase awareness through educating university of program offerings (W4,T2,T3) 2. Offer Lean Bronze certificate (through SME) to OSM and Lean Systems students (W2,T2)

A sample of the short-term and long-term OSM strategic plans, to accomplish the aforementioned two new goals, can be found in the Appendix C. The OSM program defined short-term strategic plans as plans that can be implemented within one year – e.g., the 2018/19 academic year. Likewise, the OSM program defined long term strategic plans as plans that will be implemented within the next two-five years. The program’s strategic plans, both short and long term, have been, and will continue to be reviewed and evaluated at least on an annual basis.

Goal Attainment

The OSM program has used and will continue to use the Plan-Do-Check/Study-Act (PDCA/PDSA) tool (a technique we teach in the lean courses) when evaluating the progress of the existing and new goal achievement. The PDCA/PDSA tool is a four step process and was popularized by Edward Deming and Walter Shewhart. The PDCA/PDSA tool is designed to be used when 1) defining a repetitive work process, 2) planning data collection and analysis in order to verify and prioritize problems or root causes or 3) implementing a change initiative to improve a situation. The iterative cycle is repeated until a success, with respect to the goal, is achieved.

As outlined in the TOWS matrix, the advisory board participants recognized several opportunities to strengthen the OSM program and suggested some plans to implement those ideas. The various short term and long term strategies are noted in the different GANTT charts presented in Appendix C. We will implement the plan by using the resources we possess and through using a collaborative process with other FSU departments/industry partners. We will check the results of the implementation against the plan. Lastly, we will take action based on what we learned with respect to implementing the strategy. For

example, if we were successful with the strategy implementation, we can incorporate what we learned from that strategy and apply it to other OSM strategies. However, if we were not successful with the implementing the strategy, we will incorporate what we learned, refine the process, and/or change some component of the implementation where needed.

Curriculum

The OSM program, OSM Minor, Lean Systems Minor, Lean Systems Certificate, Manufacturing and Operations Management (MOM), and Global Logistics Certificate check sheets are available through the FSU Checksheet Repository using the following links:

OSM Major: https://www.ferris.edu/checksheets/checksheets/BU/OSM/BS/OSM_BS_BU_2018-2019.pdf

OSM Minor: https://www.ferris.edu/checksheets/checksheets/BU/OSM/MNR/OSM_MNR_BU_2018-2019.pdf

Lean Systems Minor:

https://www.ferris.edu/checksheets/checksheets/BU/LSYS/MNR/LSYS_MNR_BU_2018-2019.pdf

Lean Systems Certificate:

https://www.ferris.edu/checksheets/checksheets/BU/LSYS/CERT/LSYS_CERT_BU_2018-2019.pdf

Manufacturing and Operations Management Certificate:

https://www.ferris.edu/checksheets/checksheets/BU/MOM/CERT/MOM_CERT_BU_2018-2019.pdf

Global Logistics Certificate:

https://www.ferris.edu/checksheets/checksheets/BU/ASGO/CERT/ASGO_CERT_BU_2018-2019.pdf

The syllabi for the 12 OSM program courses are included in Appendix D of the APR.

The OSM program courses are evaluated on a semi-annual basis, via discussions with the OSM faculty, our advisory board, and the TracDat system. This ensures that the core courses taught are of high quality, delivered consistently and are relevant to the industry standards. For example, the MGMT 370 faculty group meets to discuss how and what MGMT 370 content is delivered to the student. Consistent delivery of content with this course is important especially since it is a COB core course and there are approximately 18 sections taught annually by approximately four to six faculty.

The COB accrediting body, ACBSP, requires all programs to include 42 credits of general education courses. The OSM program meets this requirement. The OSM faculty have collaborated with the communications faculty, to offer courses that meet the students and employer's needs. In fact, in a recent curriculum proposal, an additional communications course was added to the OSM program because our advisory board and industry partners re-emphasized the need to include more soft skill types of courses (e.g., communications/presentation) in the curriculum. Several potential courses were discussed to assist in fulfilling this area. The best courses that would meet the requests, based on a May 2017 meeting with the Stephanie Thomson, Communications department program coordinator, were COMM 121 and COMM 365

Experiential education is encouraged in the OSM program's courses. Specifically, in the lean courses – MGMT 412, MGMT 432 and MGMT 492 - students have the opportunity to gain first-hand knowledge and experience in operations and supply management area by working on projects that have been sponsored by businesses and organizations located throughout the West Michigan region (e.g., Haworth, Spectrum, Gentex and Yangfeng Automotive). The students analyze a process/situation, propose/implement solutions, and report the implementation findings/results via a formal presentation with our industry partners. The

following links from the COB website provide more information about these first-hand experiences: <http://ferris.edu/business/osm-project-spring17/> and <http://ferris.edu/business/management-students-partner-with-haworth-corporation/>. The class projects allow students to apply the knowledge and skills studied in the classroom to practice thereby fortifying their overall learning experience. OSM students critically analyze and problem solve, real life, OSM problems within an organization through the OSM curriculum.

The OSM program requirements are communicated to potential students through campus visits. Current OSM students are informed of program requirements through their semi-annual advising appointments and as-needed meetings with their advisors. The OSM program requirements are shared with our advisory board during the annual advisory board meeting.

Since the last APR, the OSM program content revisions have been guided by the rapid changes observed within the industry and associated employment options. Specifically a focus on service- based industries such as healthcare, retail, administrative, construction, and technology have shown a significant interest in applying OSM principles to their operation as a way to increase efficiencies and profitability.

Additional program content changes have reflected the increased expectation by employers to hire students that can compete in a global workforce. Employers are demanding and actively seeking out students who possess the attributes and characteristics indicative of a highly skilled and knowledgeable workforce. For example, research has revealed that upper level managers and executives are looking to hire college graduates that possess the comprehensive knowledge necessary to lead a lean service initiative and/or in the Lean Systems area. Job prospect figures support these statements. The job search website *Indeed.com* has 25,000 specific listings for lean practitioners and/or candidates that possess lean knowledge. In response to the changing industry trends, along with faculty and advisory board input, the OSM curriculum underwent four main changes. This ensured that the students would be receiving education that is relevant and pertinent in preparing them for the workplace.

The main 2012 (effective Fall 2013) curriculum changes focused on adding three courses from free electives to required courses for the core program curriculum – MGMT 402, MGMT 412, and MGMT 422. The 2015 (effective Fall 2016) curriculum changes were in response to college of business changing from the required MATH 115 to using the new MATH 114 course for the required new math course. Additional administrative changes included incorporating the accounting course title changes and prerequisite modifications.

In 2016 (effective 2017), an ERP/SAP course and Project Management course were added to enhance the program's core content. Additionally, four specific tracks/concentrations were created, with respect to the existing courses contained in a program list, to assist students and advisors with selecting an appropriate track for the student's interests. Based on the advisory board's suggestions, certain courses were added/subtracted from that list.

The 2017 (effective 2018) curriculum proposal was created as a result of the general education program redesign, faculty and advisory board input. An additional communication course (COMM 120) was added to the program and one of the Self and Society courses was changed from a free elective to a directed elective – an international communications course COMM 365. Additional changes included adding an ISYS 105 course as a pre-requisite for a Finance course change and an OSM core directed elective for the student. Additional changes included a pre-requisite core course change, change required Statistics courses per OSM stakeholders (advisory board, advisors, faculty and students) recommendations, and one OSM program outcome revision.

The Lean Systems Certificate and Lean Systems Minor were created in 2012 and 2013 respectively. In 2015, two modifications for the certificate and one change for the minor were proposed and successfully implemented. The certificate changes included allowing the students to choose to take either the MGMT 402 or MGMT 422 courses as a required course. The second change involved adding the MGMT 432 (Lean Logistics and Supply Management) as a course option for the students to choose from amongst a list of six courses for the remaining three of the 12 credit certificate requirement. The changes to the minor included increasing the required courses from four to five and having one elective course instead of two to select from for the total 18 credit requirement. The MGMT 432 (Lean Logistics and Supply Management) course was added as the fifth required course.

The remaining changes to the Lean Systems Minor, Lean Systems Certificate and Operations and Supply Management certificate occurred in parallel with the changes made in the OSM program – if a course changed (e.g. STQM, MGMT, etc.) in the OSM program, it also changed in the minor and certificates accordingly. No changes occurred in the Manufacturing and Operations Management certificate since the last APR.

The OSM program continues to collaborate with the College of Technology and College of Health Professions. For example, an OSM faculty member collaborated with the COHP faculty to develop a Lean Healthcare minor which was effective fall 2014. The Lean Healthcare minor provides a combination of lean systems courses and healthcare courses. Two students, who were pursuing the Lean Healthcare minor, were recommended for internships at Spectrum, from an OSM faculty member. The students successfully completed their respective internships in Summer 2016 and Summer 2018.

The OSM faculty is not evaluating any future curricular changes at this time. However, we will continue reviewing the program annually to ensure that our students are well prepared with the proper education and skill sets for the workplace.

Table 4-1 describes the curriculum changes that have occurred in the program during this 2013-2017 academic years.

Table 4-1. OSM Program, OSM Minor, Lean Systems Minor and Lean Systems Certificate Curriculum Changes from 2013 to 2018

UCC #	When Effective	What
13-101	Fall 2013	(1) Increase number of required classes from 6 to 9 (18 to 27 credits). (2) Add MGMT 402 (Six Sigma Process Management), MGMT 412 (Lean Culture and Skills Development), and MGMT 422 (Lean Accounting) as required classes. (3) Delete MGMT 430 (Inventory and Supply Management) and replace it with new course MGMT 432 (Lean Logistics & Supplier Management) (4) Three additional courses are selected by students from a long list of options. This proposal replaced STQM 311 (Continuous Improvement Tools and Techniques) with STQM 341 (Management Science) and added STQM 360 (Risk Analysis and Strategy) as an option.
13-073	Fall 2014	(1) Create Lean Systems 18 credit minor After reviewing the lean systems certificate, that was developed in 2012, with the operations and supply management advisory board, they recommended the addition of a lean systems minor to support the industry needs and requirements.

15-087	Fall 2015	<p>(1) Two modifications for the Lean Systems certificate included: allowing the students to choose to take either the MGMT 402 or MGMT 422 courses as a required course as well as adding the MGMT 432 (Lean Logistics and Supply Management) as a course option for the students to choose from amongst a list of six courses for the remaining three of the 12 credit certificate requirement.</p> <p>(2) One change to the Lean Systems minor included increasing the required courses from four to five and having one elective course instead of two to select from for the total 18 credit requirement. The MGMT 432 (Lean Logistics and Supply Management) course was added as the fifth required course.</p>
16-082	Fall 2016	<p>(1) Add MATH 114 and MATH 109 into the curriculum for all COB programs.</p> <p>(2) Modify prerequisites for ACCT 201. ACCT 202, ACCT 310, AIMC 334, ECON 221, FINC 300, FINC 310, FINC 322, FINC 323, HSMG 215, ISYS 216, MGMT 370, STOM 260, and STOM 285.</p> <p>(3) Change title on ACCT 201 and ACCT 202.</p>
16-118		Checksheet Alignment, Management Department
17-101	Fall 2017	<p>(1) Add to OSM Major Required Courses: PROJ 320 and ISYS 482.</p> <p>(2) OSM Concentration (3 classes = 9 credits): Technical, Human Resources, Project Management, Diversified Track</p> <p>(3) Remove from OSM Major: ISYS 200, STQM 341, STQM 351, MGMT 302</p> <p>(4) Remove from OSM Minor & Lean Systems Minor: STQM 351</p> <p>(5) Add to OSM Minor MGMT 432 and STQM 360 & Add STQM 360 to Lean Systems Minor</p>
18-034	Fall 2018	<p>(1) Redirect the existing general education credits:</p> <p>A) Add two additional communication competency general education courses. The COMM 365 (Intercultural Communication is added as a directed Self and Society course). The COMM 121 (Fundamentals of Public Speaking) is added as another communications course. OSM students will be required to take both COMM 105 and COMM 121 instead of choosing one or the other. Note: Advisory board recommendation.</p> <p>B) Add ISYS 105 (Intro Micro Systems – Software).</p> <p>C) Add a directed Elective where students will choose a course from the OSM concentration area.</p> <p>(2) Delete STQM 360 (Risk Analysis and Strategy) and Add STQM 322 (Inferential Statistics) to OSM Major & Minor and Lean Systems Minor</p> <p>(3) Change OSM Program Outcome Number 5 from ‘analyze an environment, draw logical conclusions, and demonstrate the ability to make effective decisions, both independently, and as part of a cooperative team’ to ‘analyze an environment, draw logical conclusions, and demonstrate the ability to make effective decisions’</p>

Assessment of Student Learning

Program-level Student Learning Outcomes

The program-level student learning outcomes were developed by the OSM faculty, are evaluated semi-annually and reviewed annually with the faculty and advisory board. OSM graduates should be proficient and exhibit a high level of accomplishment with respect to the following areas. The OSM graduate should be able to:

1. Apply business concepts and practices in creating and maintaining lean supply chains that support strategic goals.
 - a. This area is evaluated in the classroom and assessed through the MGMT 422's Value Stream Assignment.
2. Communicate effectively; including, both oral and written assignments incorporated throughout the program. Graduates must be able demonstrate the ability to present ideas and information in a clear, concise, and effective manner.

- a. This skill is evaluated and assessed in the MGMT 412 course through a project presentation and Discussion Questions. Students demonstrate their verbal communications competence through their final industry project presentations to the industry partners. Industry partners sponsor the project that the students work on and complete during the semester - see Chapter 4 experiential learning examples completed with our industry partners for more information.

Presentations: During the presentation, student teams identify the current situation of three areas with respect to the Training Within Industry (TWI) J-programs (e.g., job instruction, job methods, job safety, program development, and job relations) at the industry partner's site. The students present how those three areas can be improved (or implemented for the first time if the process does not include the tool) using continuous improvement methods. The presentation also includes an assessment of how the industry partner's leadership and management techniques support a lean environment for sustaining optimal employee and operational performance using the Hoshin Kanri system. The student teams also share their evaluation of how the organization is using a "lean focused" personnel capability and core competency evaluation to assist in achieving the strategic priorities for the organization's recruiting, training and performance management system. The last part of the presentation includes a financial analysis, with respect to a Return on Investment and Payback Period, and final recommendations on how the industry partner can sustain the proposed/implemented suggestions.

Discussion Questions: Students exhibit their written proficiencies through effectively articulating their thoughts through written word in response to "theory-to-practice type" discussion questions throughout the semester.

3. Function as a member of a team; both, in the classroom and within a company setting, and demonstrate the ability to work with others and to accomplish tasks.
 - a. Students exhibit their aptitude to effectively work as a team member when completing a team case analysis and within their team industry project in the MGMT 432 course.

Case Analysis: The grade from the case analysis is used along with the team evaluation that each team member completes based on their assessment of how effectively the team worked together on both the case analysis and industry project. The case study includes an actual situation that the team will analyze. They identify the problems that the organization faced, develop proposed solutions using the techniques that they learned in class and then determine the benefits and drawbacks of the proposed solutions.

Team Evaluation: The team evaluation is comprised of 13 questions that each team member completes for themselves and their teammates at the end of the semester. The evaluation is completed based on how each individual team member performed (fulfilled his/her commitments, quality of product that they provided, interpersonal skills, etc.) on the case analysis and final industry project

4. Use and apply tools learned in the classroom and in the field, to solve problems and make business decisions. (Tools such as Lean, Six Sigma, and other continuous improvement methods will vary by industry and these tools are expected to change over time).

a. The student's exhibit this ability through the completing the final industry project paper requirements for the MGMT 492 course.

Paper: The paper is a comprehensive document that reflects the work that was completed throughout the semester on a specific project selected by our industry partners. See Chapter 4 experiential learning examples completed with our industry partners for more information. Specifically, students identify system/process constraints and the source of those constraints after visiting the industry partner's site. The paper also identifies the develop value stream maps along with the proposed future state map, takt time and number of workers required for the process. Students propose lean and leadership techniques to solve those constraints along with the benefits and drawbacks of the proposed techniques, they implement the lean tools/techniques (if allowed by the sponsoring industry partner) in the paper. The last part of the paper includes a financial analysis, with respect to a Return on Investment and Payback Period, and final recommendations on how the industry partner should proceed with the proposed/implemented suggestions.

5. Analyze an environment, draw logical conclusions, and demonstrate the ability to make effective decisions; both independently and as part of a cooperative team.

a. This area is evaluated in the classroom and assessed through the MGMT 370 and MGMT 402 quantitative assignment.

The OSM program-level student learning outcome data is collected every semester from the OSM faculty. The information is compiled, reviewed and shared with the faculty for continuous improvement opportunities. The information is sent to the Management Department's TracDat coordinator. The TracDat coordinator enters the information into the TracDat system for the OSM program. This process ensures that the outcomes are evaluated and monitored and changes to the outcomes are made as needed. The stakeholders are informed about the process and related outcome improvements in classroom settings, student advising sessions, advisory board/industry partner meetings, and outcomes assessment meetings.

Appendix E contains the 2013/14 -2017/18 TracDat information for the OSM program outcomes. Appendix F illustrates the curricular map relating to the program outcomes. As stated earlier, the OSM program outcomes and data are reviewed regularly during each academic year. The ability to evaluate actual outcomes with respect to anticipated results allows the OSM faculty to focus on the teaching approaches that work well for the courses and change other methods accordingly to ensure that the course content is taught in an understandable method to the students. These actions are noted in the TracDat information area for each course in the Comments and Action areas.

The success with achieving our learning outcomes means that the students are being educated well and are prepared for the workplace. This impacts the OSM graduate employability and internship opportunities for the OSM student. We also believe this impacts the short and long-term strategies of increasing program enrollment by 5-10% by 2023. The OSM faculty and Management department staff continue to spread the good word (employment opportunities, acquired skills, etc.) about the value of possessing an OSM degree through various initiatives (classroom, advising, DAWG Days, Orientation, Program and COB website).

Program Profile

The following section describes the Operations and Supply Management Program based upon official data reported by the Office of Institutional Research and Testing. The data spans academic years 2012-2013 through 2016-2017. When data was available for academic year 2017-2018, it was included.

Applications, Admissions, and Enrolled

The enrollment process is very important to all programs. Its key metrics provide a strategic look at potential student interest in the program as well as the follow through of those students that show interest and this reflects on the program’s potential growth into the future. It is measured with three metrics:

- 1) # of students that applied for admission into the program
- 2) # of students that were admitted into the program
- 3) # of students that enrolled in the program and took classes

Table 6-1 shows fourth day count data taken each fall semester on the three metrics.

Academic Year	Applied	Admitted	Enrolled
2012-2013	5	4	2
2013-2014	4	3	1
2014-2015	11	11	6
2015- 2016	14	12	2
2016- 2017	6	6	2
2017 -2018	7	6	4
Total	47	42	17

Table 6-1. Applications, Admissions, and Enrolled

The data sometimes can be misinterpreted, so it is important to explain how to read it. For example, the data for 2012-2013 reads 5 applied, 4 admitted, and 2 enrolled. The data should be interpreted as there were 5 students that applied to the program, but only 4 of them were admitted. Of the 4 students that were admitted, only 2 became enrolled. It is important to understand this relationship because only enrolled students can earn credit in the program and it is only these students that can potentially graduate from the program in the future.

Figure 6-1 displays the data visually over time. Analysis suggests there are no obvious trends; instead the data shows a stable (and random) pattern in all three measures indicating there is no obvious improvement and no obvious degradation in the enrollment process. The data indicates new enrollment in the program has been as low as 1 student per academic year to as much as 6 students per academic year with no obvious trend. The data also indicates there has been a constant interest in the program with a steady number of applications ranging from 4 to 14 each academic year.

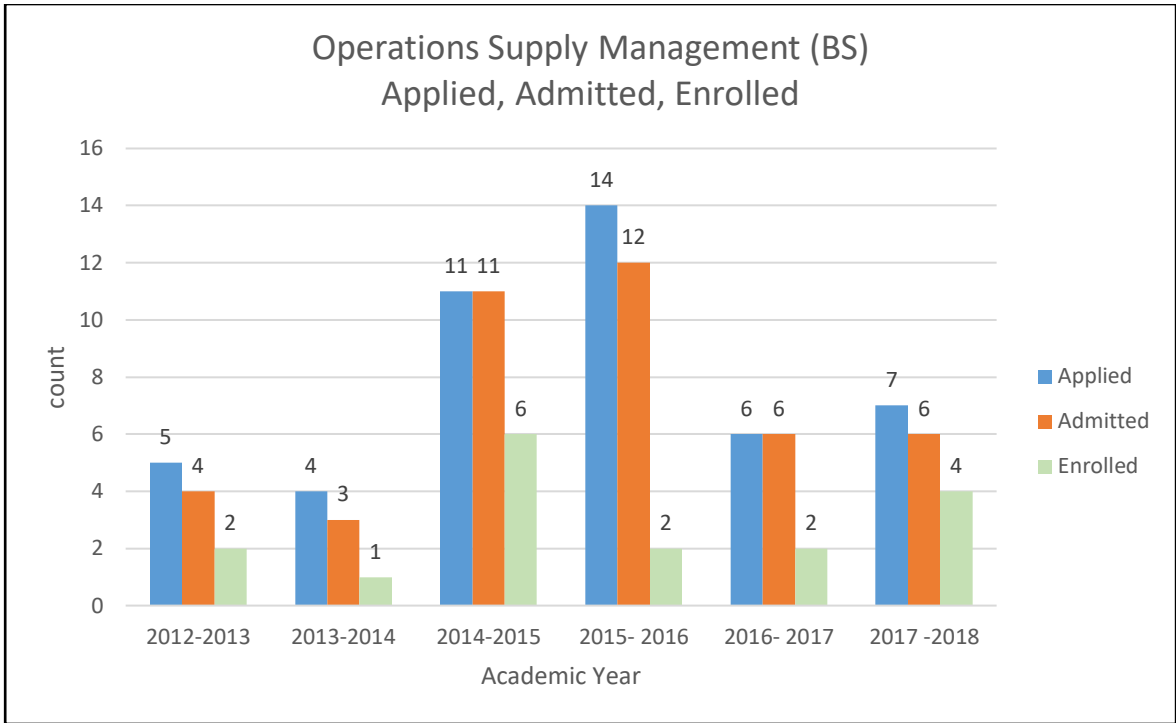


Figure 6-1. Applied, Admitted, Enrolled

Table 6-2 shows the same data from a different viewpoint. The table report the number of students that applied but did not get admitted; the number of students admitted into the program but failed to enroll; and the number of students that did enroll after being admitted.

Academic Year	Applied - not admitted	Admitted - not enrolled	Enrolled	Total	% Applied - not admitted	# Admitted - not enrolled	% Enrolled
2012-2013	1	2	2	5	20%	40%	40%
2013-2014	1	2	1	4	25%	50%	25%
2014-2015	0	5	6	11	0%	45%	55%
2015-2016	2	10	2	14	14%	71%	14%
2016-2017	0	4	2	6	0%	67%	33%
2017-2018	1	2	4	7	14%	29%	57%
Total	5	25	17	47	11%	53%	36%

Table 6-2. Applications - not admitted, Admissions - not enrolled, and Enrolled

The data in Table 6-2 separates the data in Table 6-1 into statistically independent groupings such that no person can be classified in more than one category. By splitting the data in this way, it is easier to see that no more than 2 students applied in any academic year that were not admitted. This fact suggests the application requirements are clearly stated and most students that apply are able to meet the requirements.

Figure 6-2 provides a visual display of the data, showing accumulated percentages for each of the three metrics from 2012 through 2017. It shows only 11% of the potential candidates were not admitted, 53% of the students that applied were admitted but did not enroll, and 36% of the students that applied became enrolled students.

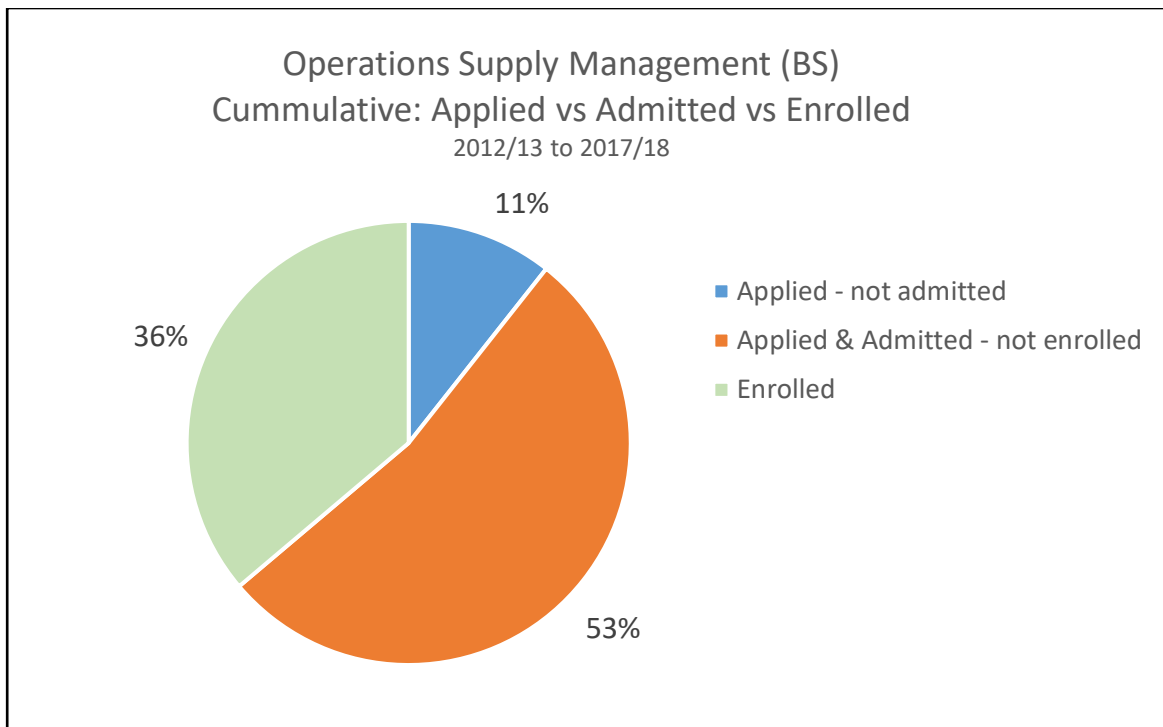


Figure 6-2. Applied vs Admitted vs Enrolled 2012/13 to 2017/18

This information suggests there is an opportunity for the program to grow by simply pursuing the 53% of the students that once showed interest in the program but did not follow through to enrollment.

Enrollment - Headcounts

Counting students in the classroom, and in turn in the program, is an important process that officially takes place on the fourth day of each semester. The counting process is essential to all programs as the counts enable programs to evaluate staffing levels, technology needs, facility requirements, and student continuing interest. It allows programs to plan for the future.

Enrollment headcounts are measured for each of the four undergraduate class standings:

- 1) Freshman 0-25 semester credit hours earned
- 2) Sophomore 26-55 semester credit hours earned
- 3) Junior 56-85 semester credit hours earned
- 4) Senior 86+ semester credit hours earned

Table 6-3 shows fourth day count data taken each fall semester on the four metrics, segmented by student enrollment locations: on-campus, off-campus, and online. The data show all students enrolled in the program are on-campus students taking on-campus courses.

Enrollment (Headcount)													
Academic Year	Freshman			Sophomore			Junior			Senior			Total
	On-campus	Off-campus	On-line	On-campus	Off-campus	On-line	On-campus	Off-campus	On-line	On-campus	Off-campus	On-line	
2012-2013	2	0	0	2	0	0	7	0	0	8	0	0	19
2013-2014	1	0	0	3	0	0	5	0	0	13	0	0	22
2014-2015	2	0	0	6	0	0	7	0	0	15	0	0	30
2015-2016	1	0	0	8	0	0	7	0	0	13	0	0	29
2016-2017	0	0	0	4	0	0	10	0	0	17	0	0	31
2017-2018	2	0	0	1	0	0	8	0	0	16	0	0	27

Table 6-3. Enrollment (Headcount) by Class Standing and Location

Table 6-4 shows the same data solely for the on-campus students. It indicates that only 1 or 2 students are freshmen in the program each academic year while the majority are juniors and seniors.

Academic Year	Freshman	Sophomore	Junior	Senior	Total
2012-2013	2	2	7	8	19
2013-2014	1	3	5	13	22
2014-2015	2	6	7	15	30
2015- 2016	1	8	7	13	29
2016- 2017	0	4	10	17	31
2017 -2018	2	1	8	16	27
Total	8	24	44	82	158

Table 6-4. On-Campus Enrollment (Headcount) by Class standing

Figure 6-3 displays the data visually over time. Analysis suggests the program has steadily been growing in enrollment over time. And while the number of juniors and seniors are steadily increasing in the program, the number of freshmen and sophomore remain stable.

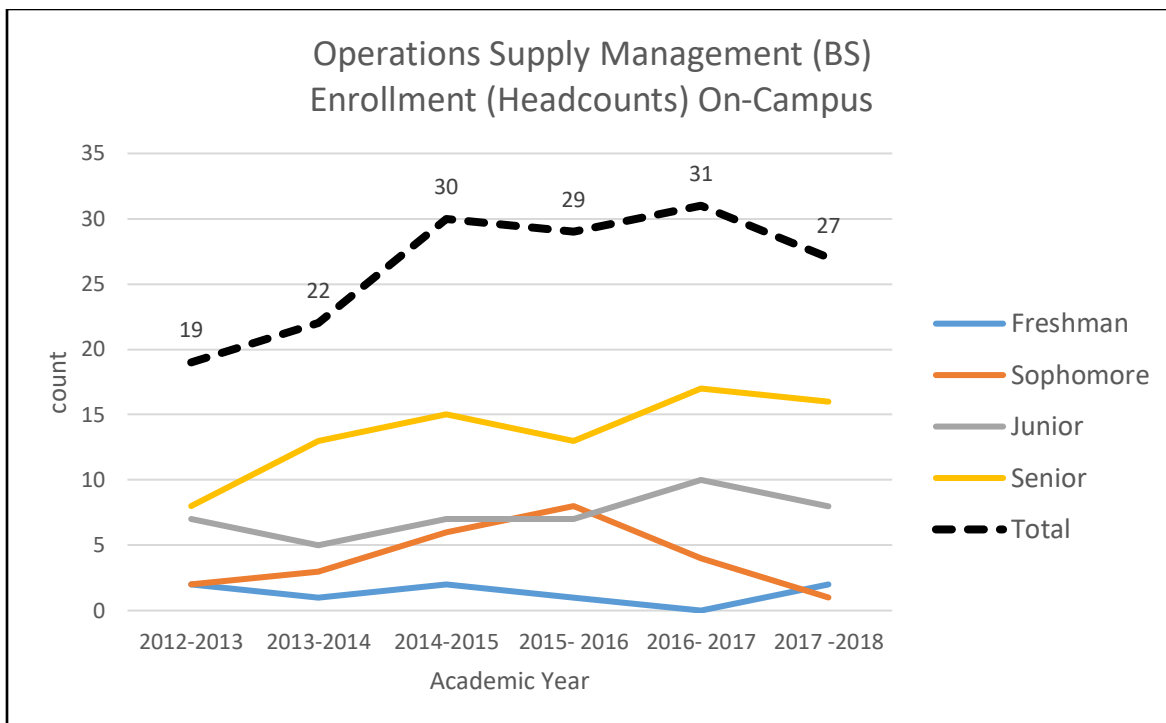


Figure 6-3. Enrollment (Headcount) by Class standing

The OSM data is further broken down into percentage categories and displayed in Table 6-5.

Academic Year	% Freshman	% Sophomore	% Junior	% Senior
2012-2013	11%	11%	37%	42%
2013-2014	5%	14%	23%	59%
2014-2015	7%	20%	23%	50%
2015-2016	3%	28%	24%	45%
2016-2017	0%	13%	32%	55%
2017-2018	7%	4%	30%	59%
Total	5%	15%	28%	52%

Table 6-5. Percentage of Enrollment by Class standing

Figure 6-4 provides a visual display of the percentage data, showing accumulated percentages for each of the four class standings from 2012 through 2017. It shows over half of the enrolled students are seniors.

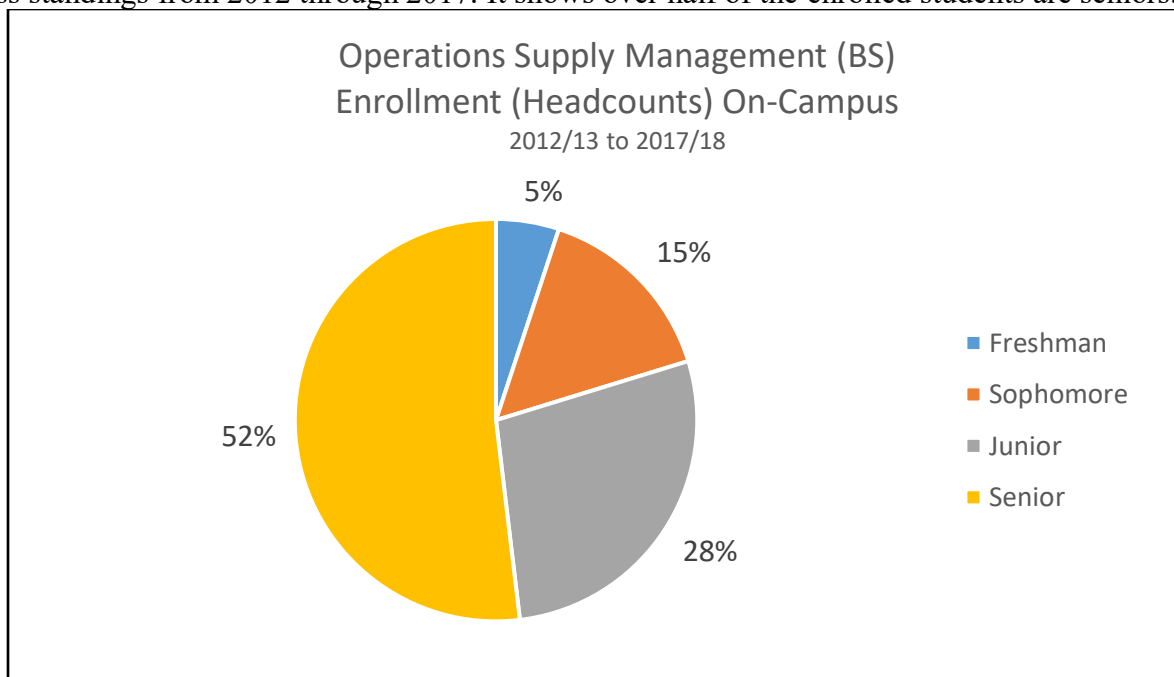


Figure 6-4. Percentage of Enrollment by Class standing 2012/13 to 2017/18

This information suggests the program is not well known and as interesting to freshmen and sophomores. There is an opportunity for the program to grow by pursuing more freshmen and sophomore students.

The ideal number of students in the program is projected to be 20 junior and 20 seniors per academic year, with any number of freshmen and sophomore. There are five unique program related courses in the major that target the junior and senior level students:

- MGMT 402 (Six Sigma Process Management)
- MGMT 412 (Lean Culture and Skills Development)
- MGMT 422 (Cost Management for Lean Systems)
- MGMT 432 (Lean Logistics and Supply Management)
- MGMT 492 (Lean Service Enterprise and Leadership)

Each of these courses require junior status.

If the program were to go much past 20 junior and 20 seniors per year, it would require double sections of the unique program related major courses, which would be difficult with our current Management Department staffing. If enrollment numbers exceed these levels, there would be need to recruit more faculty.

The positive for having 20 junior and 20 seniors per year would be that we could continue to fill our class sections each time the classes are offered.

Student Credit Hour Trends

Counting the number of credits student take in the program, offers more information than simply counting the number of students in the classroom. Students’ progress through the program at different rates due to life circumstances and while knowing how many students are present provides a big picture view of enrollment trends, knowing the number of student credit hours provides deeper knowledge as to how many classes are being taken; this in turn allows programs to plan for the future.

Student Credit Hours are measured for each of the four undergraduate class standings:

- 1) Freshman 0-25 semester credit hours earned
- 2) Sophomore 26-55 semester credit hours earned
- 3) Junior 56-85 semester credit hours earned
- 4) Senior 86+ semester credit hours earned

Table 6-6 shows fourth day count data taken each fall semester on the four metrics, segmented by student enrollment locations: on-campus, off-campus, and online. The data show all students enrolled in the program are on-campus students taking on-campus courses.

Student Credit Hours (SCH's)													
Academic Year	Freshman			Sophomore			Junior			Senior			Total
	On-campus	Off-campus	On-line	On-campus	Off-campus	On-line	On-campus	Off-campus	On-line	On-campus	Off-campus	On-line	
2012-2013	29	0	0	34	0	0	84	0	0	97	0	0	244
2013-2014	13	0	0	39	0	0	67	0	0	154	0	0	273
2014-2015	25	0	0	83	0	0	90	0	0	174	0	0	372
2015-2016	13	0	0	117	0	0	101	0	0	136	0	0	367
2016-2017	0	0	0	46	0	0	152	0	0	228	0	0	426
2017-2018	29	0	0	12	0	0	117	0	0	200	0	0	358

Table 6-6. Student Credit Hours by Class Standing and Location

Table 6-7 shows the same data solely for the on-campus students. It indicates that the majority of credits are earned as juniors and seniors.

Academic Year	Freshman	Sophomore	Junior	Senior	Total
2012-2013	29	34	84	97	244
2013-2014	13	39	67	154	273
2014-2015	25	83	90	174	372
2015-2016	13	117	101	136	367
2016-2017	0	46	152	228	426
2017-2018	29	12	117	200	358

Table 6-7. On-Campus Student Credit Hours by Class Standing

Figure 6-5 displays the data visually over time. Analysis suggests the program has steadily been growing in school credit hours over time. And while the number of student credit hours of juniors and seniors are steadily increasing in the program, the number student credit hours of freshmen and sophomore remain relatively stable.

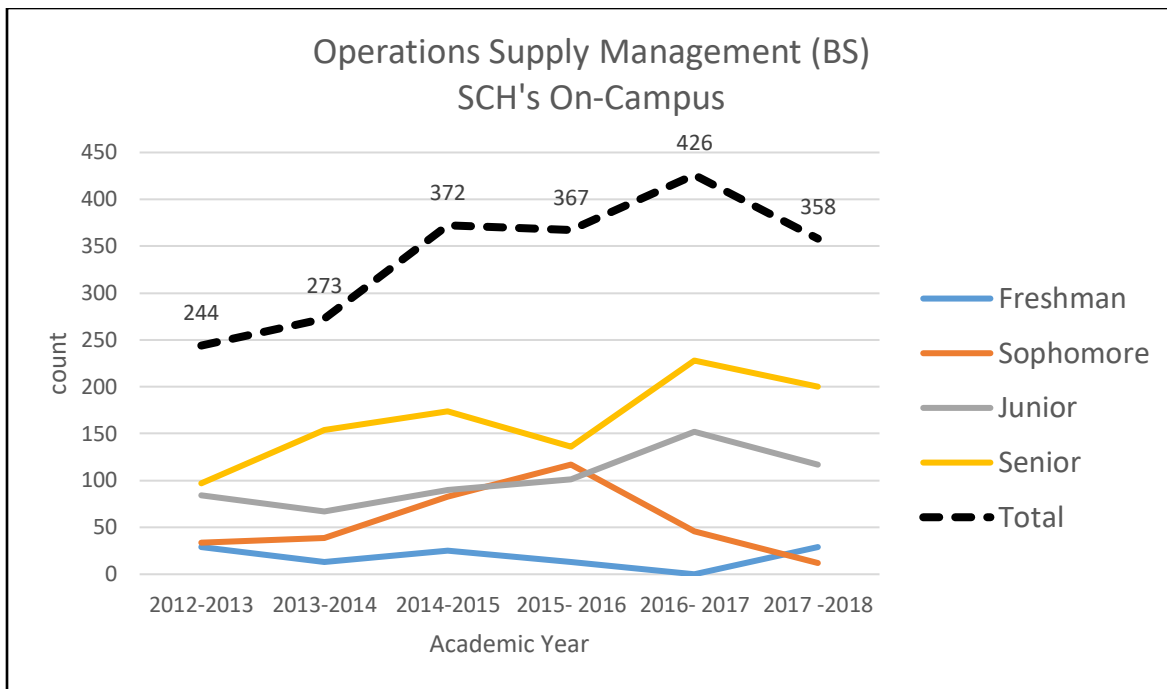


Figure 6-5. On-Campus Student Credit Hours by Class Standing

This information suggests there is a steady interest in the program.

Productivity

Knowing a program's productivity is important. Productivity is measured using three metrics:

- 1) Student Credit Hours
- 2) Full Time Equated Faculty (FTEF)
- 3) SCH/FTEF

Definitions are provided by the Office of Institutional Research and Testing as follow:

- **Student Credit Hours (SCH)** - The product of the credit value of a course and the number of students enrolled in the course on the official fourth day of classes for that semester.
- **Full-Time Equated Faculty (FTEF)** - A faculty member working full-time for fall and spring semester. Overloads and part-time faculty produce a fraction of an FTEF.
- **SCH/FTEF** - A measure of productivity. This gives the average number of student credit hours generated per full-time equated faculty member.

Unfortunately productivity values are not provided at the program level, so instead each program must interpret the data that is made available. Productivity data is provided by Course Prefix within each College and Department, therefore the courses with prefix MGMT were utilized for this program review evaluation since many of the unique program courses use the MGMT prefix. It should be noted that the use of MGMT prefix productivity measures is only an indirect measure of the program's actual productivity.

Tables 6.8 and 6.9 shows fourth day count data taken each semester. Table 6.10 show the calculated productivity values based on the fourth day count data. Data for the College of Business and University are included for comparison purposes.

Academic Year	Courses with MGMT Prefix				College of Business Average	University Average
	Summer	Fall	Spring	F+Spr	F+Spr	F+Spr
2012-2013	1,201	4,230	4,544	8,774	50,717	325,540
2013-2014	1,164	4,260	4,600	8,860	51,939	324,486
2014-2015	1,074	4,289	4,458	8,748	52,207	324,087
2015- 2016	1,196	4,079	4,462	8,541	52,901	321,422
2016- 2017	1,358	4,398	4,233	8,631	50,462	309,244

Table 6-8. Productivity measure of Student Credit Hours (SCH)

Academic Year	Courses with MGMT Prefix				College of Business Average	University Average
	Summer	Fall	Spring	Average F+Spr	Average F+Spr	Average F+Spr
2012-2013	4.93	13.23	15.35	14.29	91.05	703.63
2013-2014	5.94	12.51	14.71	13.61	89.90	691.71
2014-2015	5.5	13.5	15.17	14.34	92.68	704.13
2015- 2016	5.75	13.8	14.29	14.04	96.67	704.25
2016- 2017	6.25	14.83	13.25	14.04	91.33	684.58

Table 6-9. Productivity measure of Full Time Equated Faculty (FTEF)

Academic Year	Courses with MGMT Prefix				College of Business Average	University Average
	Summer	Fall	Spring	Average F+Spr	Average F+Spr	Average F+Spr
2012-2013	243.61	319.74	296.03	614.00	557.01	462.53
2013-2014	195.81	340.63	312.66	651.02	577.75	469.11
2014-2015	195.27	317.70	293.77	610.08	563.33	460.26
2015- 2016	208.00	295.54	312.33	608.16	547.23	456.41
2016- 2017	217.28	296.49	319.47	614.67	552.55	451.73

Table 6-10. Productivity measure of SCH/FTEF

Figure 6-6 displays the productivity data visually over time. Analysis suggests the courses with prefix MGMT have consistently exceeded the College of Business average by 50 points; similarly the courses with prefix MGMT have consistently exceeded the University average by 150 points.

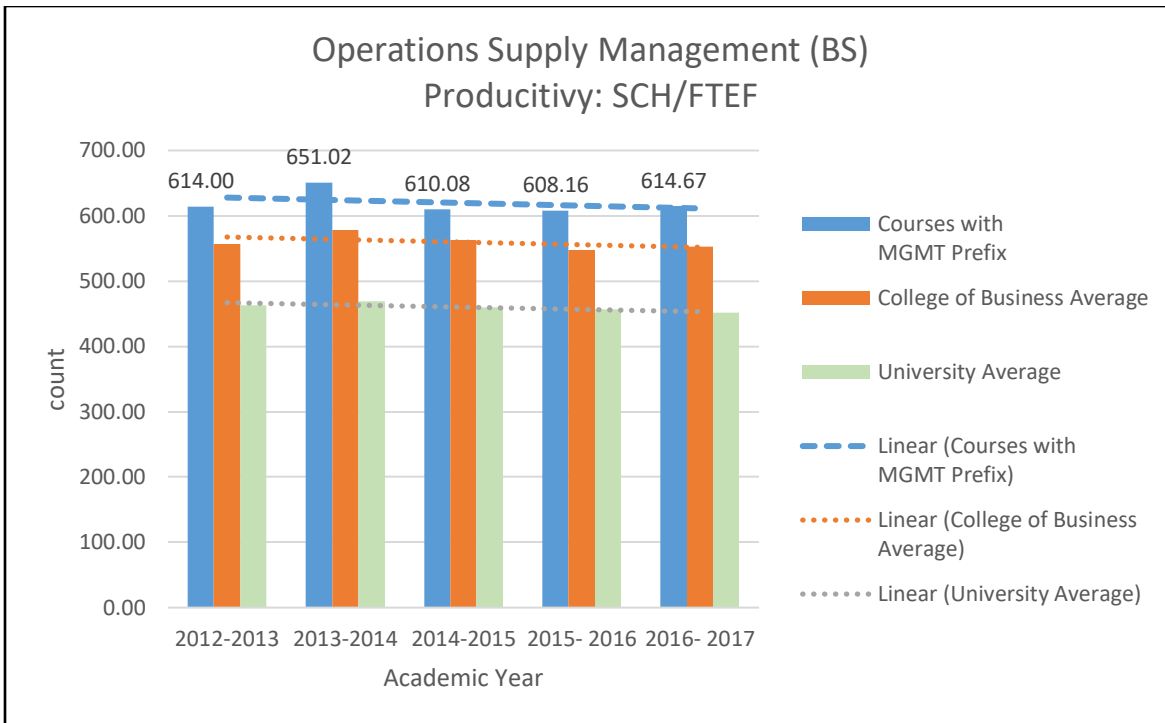


Figure 6-6. Productivity measure of SCH/FTEF

This information suggests the productivity of the program is strong and no action is needed.

Program Cost

The costs of programs is calculated every other year and the most current report is for academic year 2015-2016. Table 6-11 denotes the costs for this Management Department program. It shows the total cost per student credit hour is \$279.18.

Prog Credits Required	121
Costs	
Total Instructor Cost*	\$25,397.84
Total Dept Cost**	\$4,560.14
Total Dean's Cost***	\$2,706.40
Total Program Cost	\$32,664.38
Cost Per SCH	
Instructor Cost Per SCH	\$219.80
Dept Cost Per SCH	\$36.47
Dean's Cost Per SCH	\$22.91
Total Cost Per SCH	\$279.18

Table 6-11. Program Costs

Table 6-12 denotes the costs for other bachelor degree programs in the Management Department.

2015- 2016	HR	INSR	Bus Ad w AAS in Legal Studies	Bus Ad w conc BS
Prog Credits Required	121	121	121	124

Costs				
Total Instructor Cost*	\$21,280.59	\$21,811.33	\$19,572.72	\$20,821.09
Total Dept Cost**	\$4,108.24	\$4,590.53	\$4,142.58	\$4,554.82
Total Dean's Cost***	\$2,624.70	\$2,655.48	\$2,681.70	\$2,754.59
Total Program Cost	\$28,013.53	\$29,057.34	\$26,397.00	\$28,130.50

Cost Per SCH					
Instructor Cost Per SCH	\$176.55	\$181.89	\$161.36	\$168.98	
Dept Cost Per SCH	\$33.16	\$36.73	\$32.90	\$36.36	Average
Dean's Cost Per SCH	\$21.87	\$22.17	\$22.52	\$22.68	\$25.75
Total Cost Per SCH	\$231.58	\$240.79	\$216.78	\$228.02	

Table 6-12. Program Costs Other Bachelor Degrees in Management Department

It shows the total cost per student credit hour is \$231.58 for the Human Recourse Management BS, \$240.79 for the Insurance & Risk Management BS, \$215.78 for the Business Administration BS w/ AAS in Legal Studies, and \$228.02 for the Business Administration w/ conc. BS (O and S Mgmt). It further shows the average Dean's Cost per student credit hour is \$25.75.

In comparison with the comparative departmental data, the \$279.18 cost per SCH for the program is slightly higher than the costs per SCH for the other Department programs (which range from \$216.78 to \$240.79). The source of the cost difference can be seen as being embedded within the instructor cost per SCH metric; \$219.80 versus \$176.55 & \$181.89 & \$161.36, & \$168.98.

The Institutional Research and Testing report indicates the program ranks 87th out of the 194 programs listed on program costs, showing the cost is roughly average when compared to all programs at Ferris.

Enrollment - Residency

Demographics help the program understand its student base. One demographic consists of identifying the residency status of graduating students. Table 6-13 and Figure 6-7 indicate about 75% of the graduating students are residents and about 25% are non-residents.

Academic Year	Resident	Non-Resident	Total	Resident	Non-Resident
2013-2014	21	0	21	100%	0%
2014-2015	25	0	25	100%	0%
2015- 2016	21	8	29	72%	28%
2016- 2017	22	9	31	71%	29%
2017 -2018	20	7	27	74%	26%
Total	109	24	133	82%	18%

Table 6-13. Residency of Graduating Students

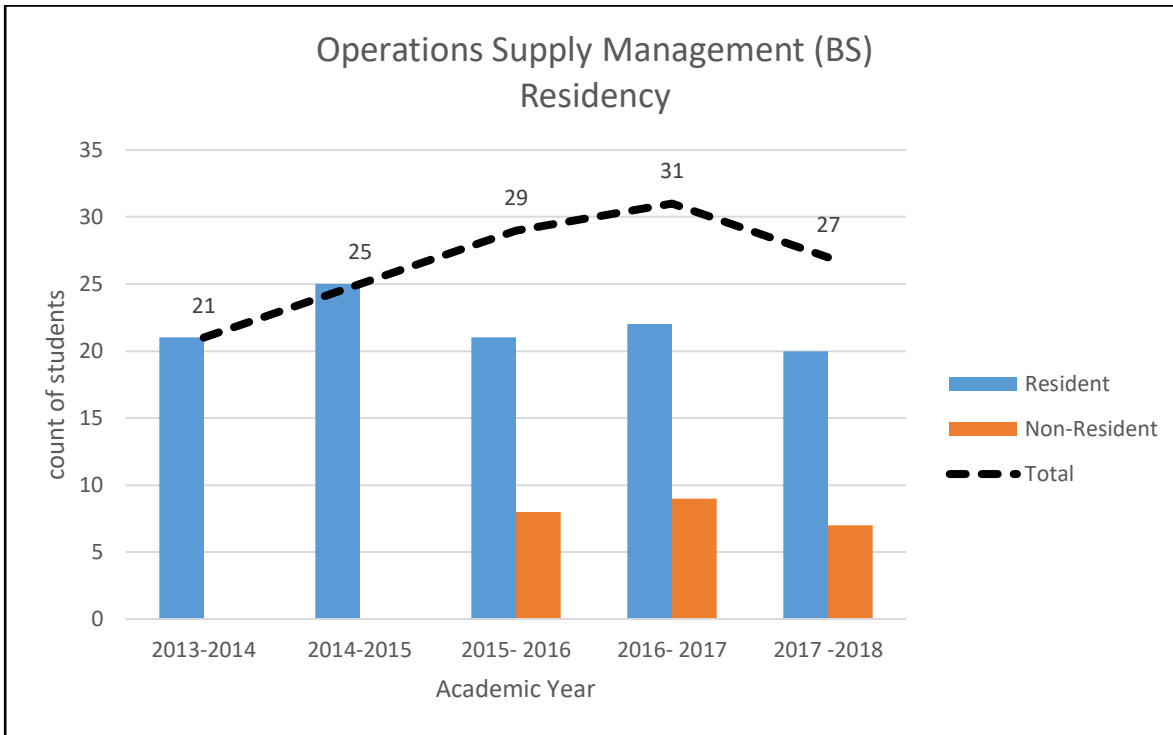


Figure 6-7. Residency of Graduating Students

Unique courses in the program are offered face-to-face on the Big Rapids campus. Students can readily take the courses during their junior or senior years. A future opportunity for the program may be to consider offering the unique courses online to enable more non-resident students to earn the degree.

Enrollment - Gender and Ethnicity

Other demographics consist of identifying the gender, ethnicity, and full- and part- time status of graduating students.

Table 6-14 and Figures 6-8 and 6-9 focus on gender. They indicate the accumulated percentages from 2012 through 2017 show 68% of the graduating students are male and about 32% are female. More recent data in 2017-2018 show those values were a bit shifted with 89% male and 11% female. In essence, the ratio of men to women in the program is about 2:1; there are about 2 males for every 1 female student.

Academic Year	Male	Female	Total	% Male	% Female
2012-2013	15	4	19	79%	21%
2013-2014	12	10	22	55%	45%
2014-2015	17	13	30	57%	43%
2015-2016	18	11	29	62%	38%
2016-2017	22	9	31	71%	29%
2017-2018	24	3	27	89%	11%
Total	108	50	158	68%	32%

Table 6-14. Gender of Graduating Students

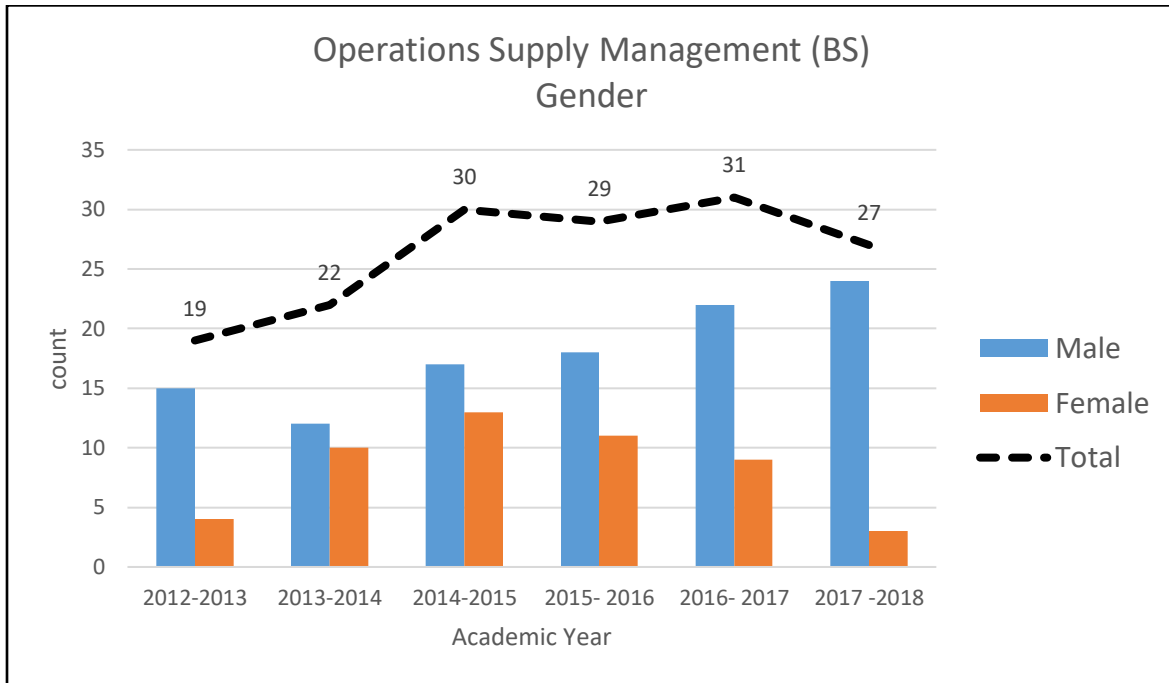


Figure 6-8. Gender of Graduating Students

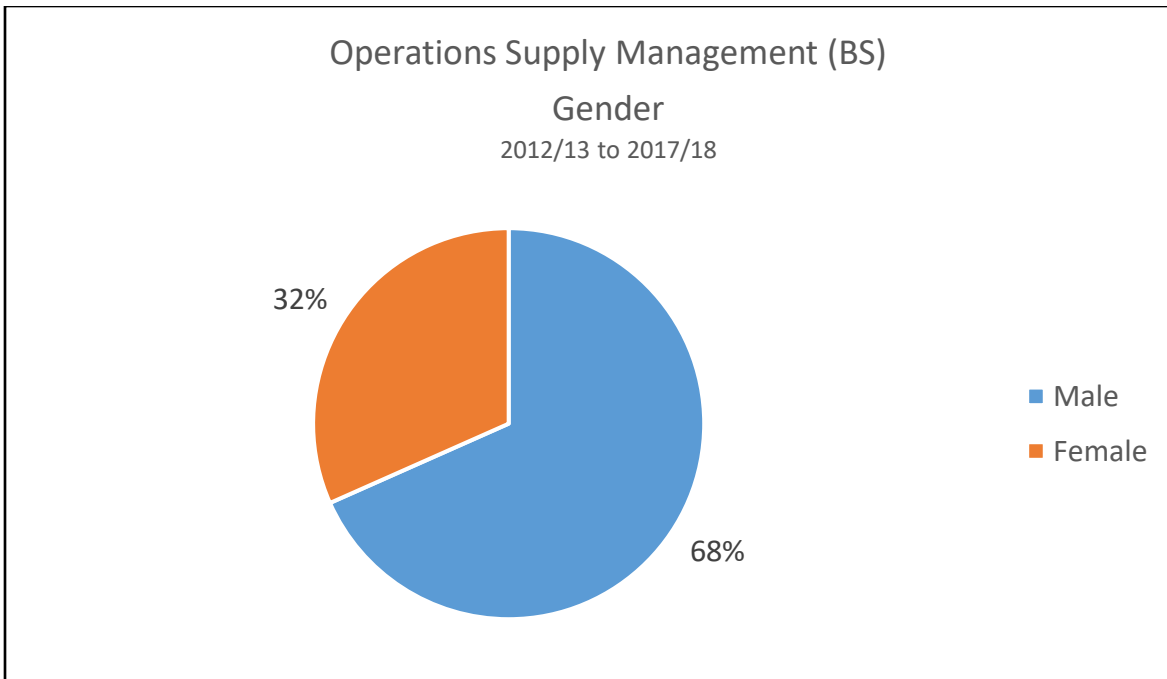


Figure 6-9. Gender of Graduating Students 2012/13 to 2017/18

Table 6-15 and Figures 6-10 and 6-11 focus on the full-time and part-time status of graduating seniors. They indicate about 84% of the students are full-time students and 16% are part-time students.

Academic Year	Full	Part	Total	% Full-time	% Part-time
2012-2013	17	2	19	89%	11%
2013-2014	17	5	22	77%	23%
2014-2015	24	6	30	80%	20%
2015- 2016	24	5	29	83%	17%
2016- 2017	27	4	31	87%	13%
2017 -2018	24	3	27	89%	11%
Total	133	25	158	84%	16%

Table 6-15. Full-time and Part-time status of Graduating Students

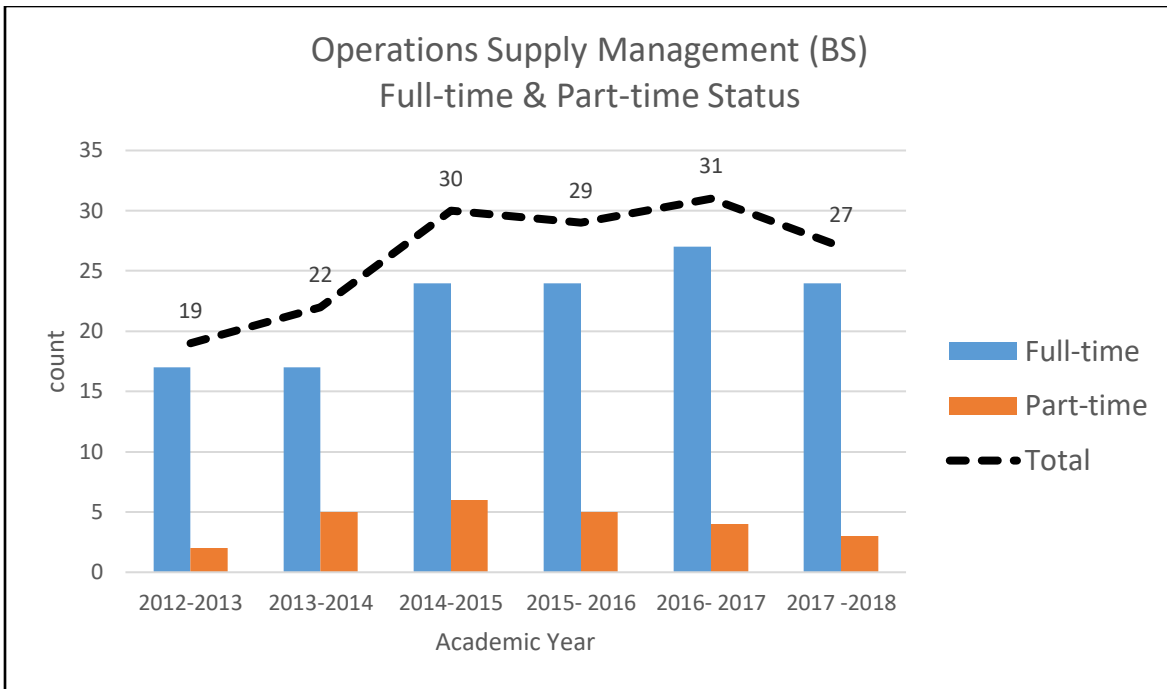


Figure 6-10. Full-time and Part-time status of Graduating Students

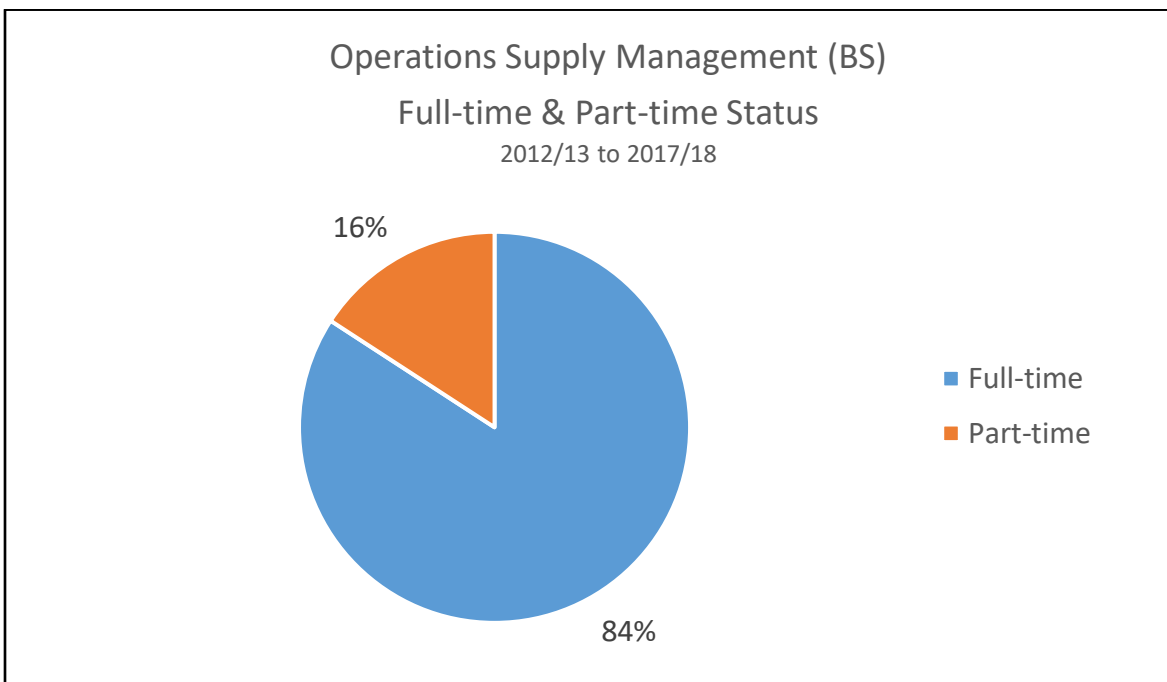


Figure 6-11. Full-time and Part-time Status of Graduating Students 2012/13 to 2017/18

Table 6-16 and Figures 6-12 and 6-13 displays the ethnicity of graduating seniors. They indicate most students are Caucasian with a small mix of Black, Hispanic, Multi-national, and Foreign students.

Academic Year	Black	Hispanic	Native	Asian	White	Hawaiian	Multi	Foreign
2012-2013	2				15		1	1
2013-2014		1			19		1	1
2014-2015	2	1			23		1	3
2015- 2016	2				19		1	7
2016- 2017	2	1			19			9
2017 -2018	1	1			18			7

Table 6-15. Ethnicity of Graduating Students

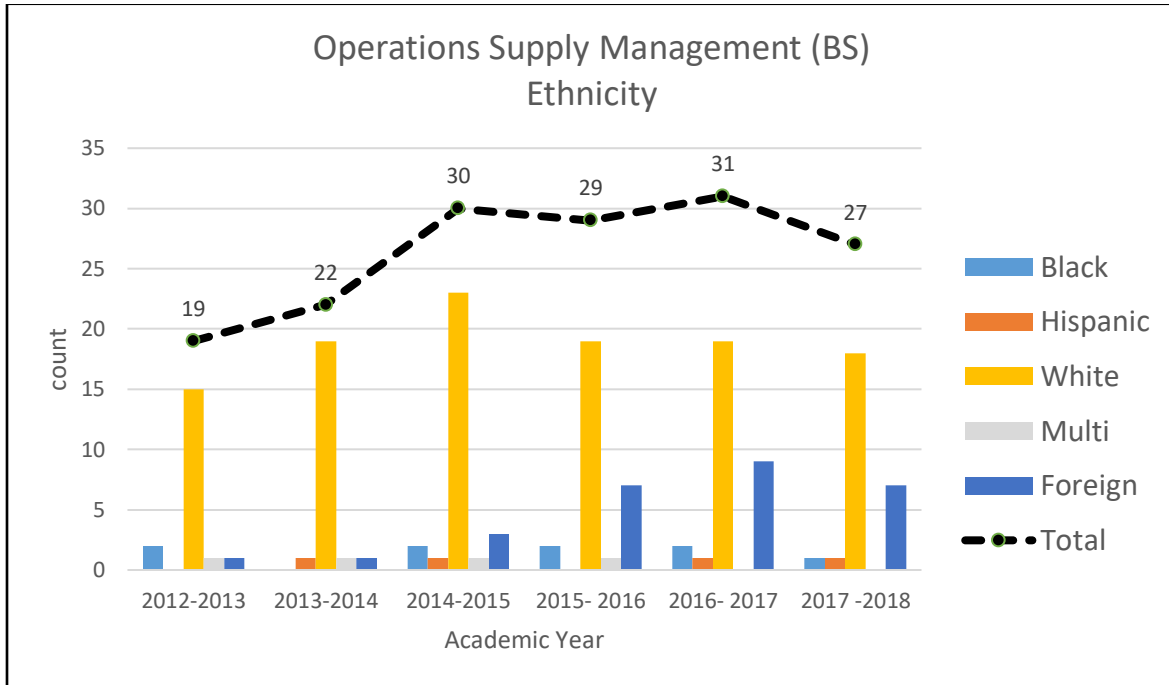


Figure 6-12. Ethnicity of Graduating Students

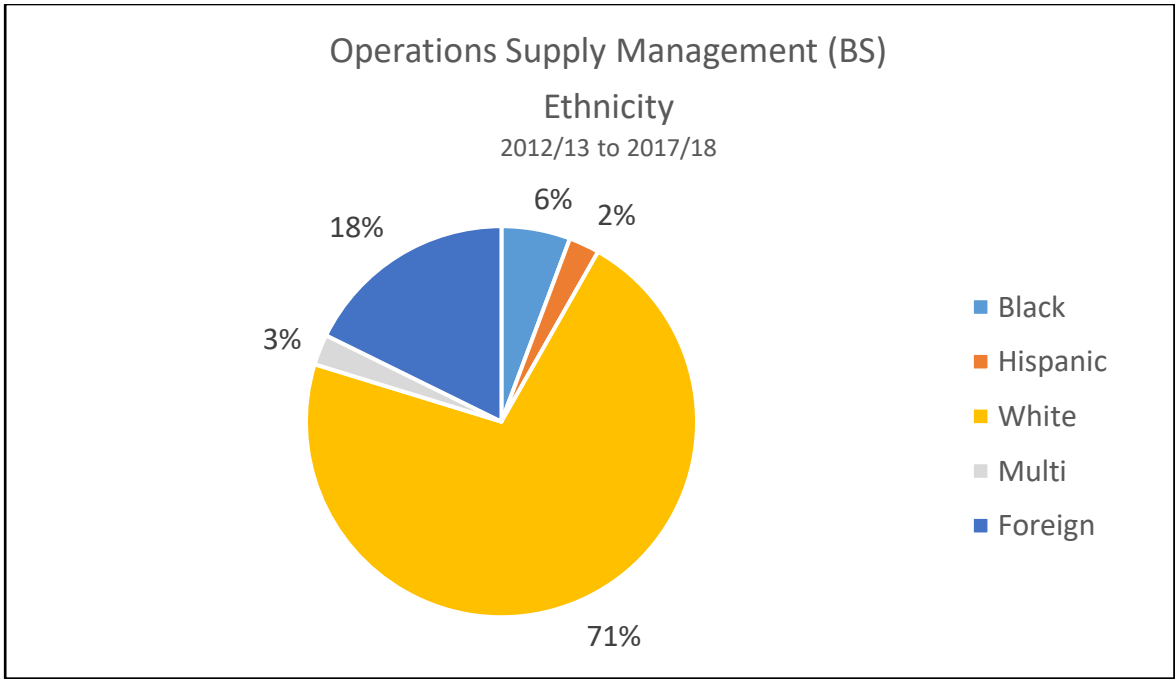


Figure 6-13. Ethnicity of Graduating Students 2012/13 to 2017/18

This information describes the average graduating student as a full-time Caucasian male.

Retention & Six Year Graduation Rate

Reporting of retention does not apply well to this program because the majority of the current graduates do not join the program as FTIACs. The retention of students who join the program is near 100%. See Table 6-17.

2008-2009					
	Year 2	Year 3	Year 4	Year 5	Year 6
% Graduated By	0				
% Still Enrolled In	100				
% Persisters	100				
% Non-Persisters	0	100	100	100	100

2010-2011					
	Year 2	Year 3	Year 4	Year 5	Year 6
% Graduated By				100	100
% Still Enrolled In	100	100	100		
% Persisters	100	100	100	100	100
% Non-Persisters					

2012-2013					
	Year 2	Year 3	Year 4	Year 5	Year 6
% Graduated By				50	50
% Still Enrolled In	50	100	100	50	50
% Persisters	50	100	100	100	100
% Non-Persisters	50				

2013- 2014					
	Year 2	Year 3	Year 4	Year 5	Year 6
% Graduated By				100	
% Still Enrolled In	100	100	100		
% Persisters	100	100	100	100	
% Non-Persisters					

Table 6-17. Retention and Graduation Rates

This information describes satisfactory retention and graduation rates of FTIACs.

Program Graduates

Table 6-18 and Figure 6-14 displays the number of graduates each academic year. A steady stream of graduates have been produced, ranging from 3 students to as high as 8 students in any given academic year per university records.

Academic Year	Total
2012-2013	3
2013-2014	4
2014-2015	8
2015- 2016	7
2016- 2017	7
Total	29

Table 6-18. Number of Graduates

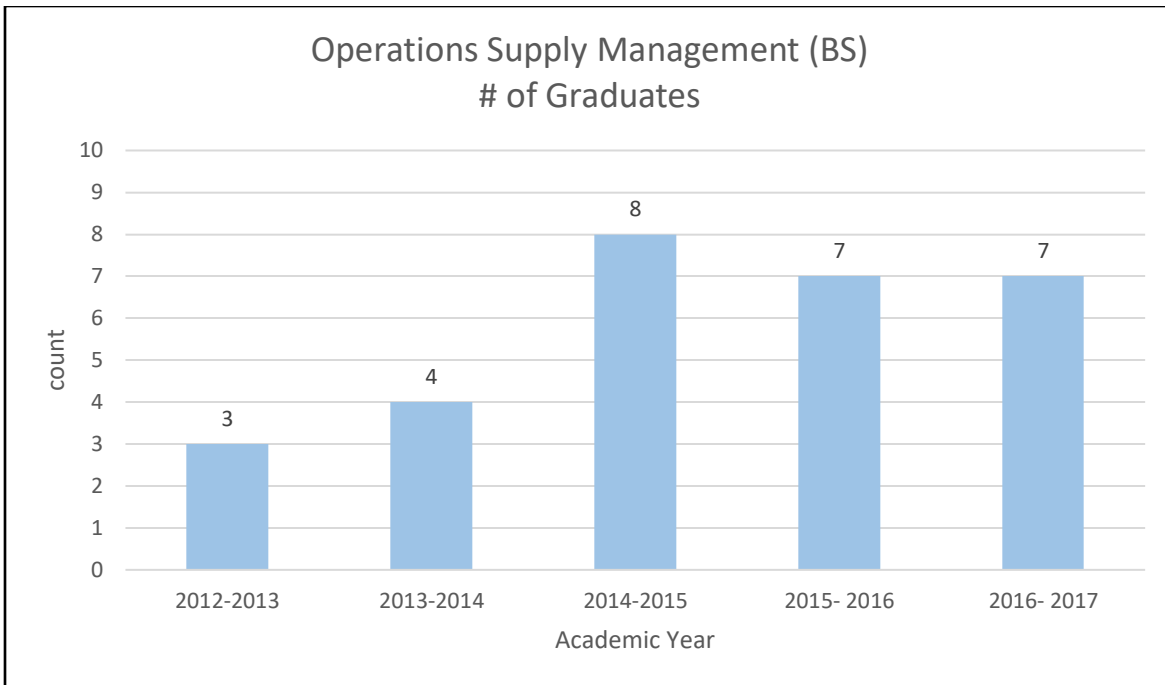


Figure 6-14. Number of Graduates – University Data

This information suggests there is a steady interest in the program. It further suggests that students are able to achieve the required outcomes and graduate.

Graduate Average GPA

Table 6-19 and Figure 6-15 displays the minimum, maximum, and average grade point averages of graduates each academic year. The GPA of graduating student runs between 2.33 and 4.0 on a 4.0 scale. University data states that the overall average GPA is about 2.8 and equates to a letter grade of B-. However, upon close examination of each OSM graduate, it was discovered that the average GPA was determined as 3.1 which is equivalent to a letter grad of B.

Academic Year	Minimum	Maximum	Average
2013-2014	2.13	3.82	2.95
2014-2015	1.84	4	2.85
2015- 2016	1.66	4	2.84
2016- 2017	1.62	4	3.06
2017 -2018	2.33	3.88	2.33
			2.81

Table 6-19. Ferris GPA of Graduating Student

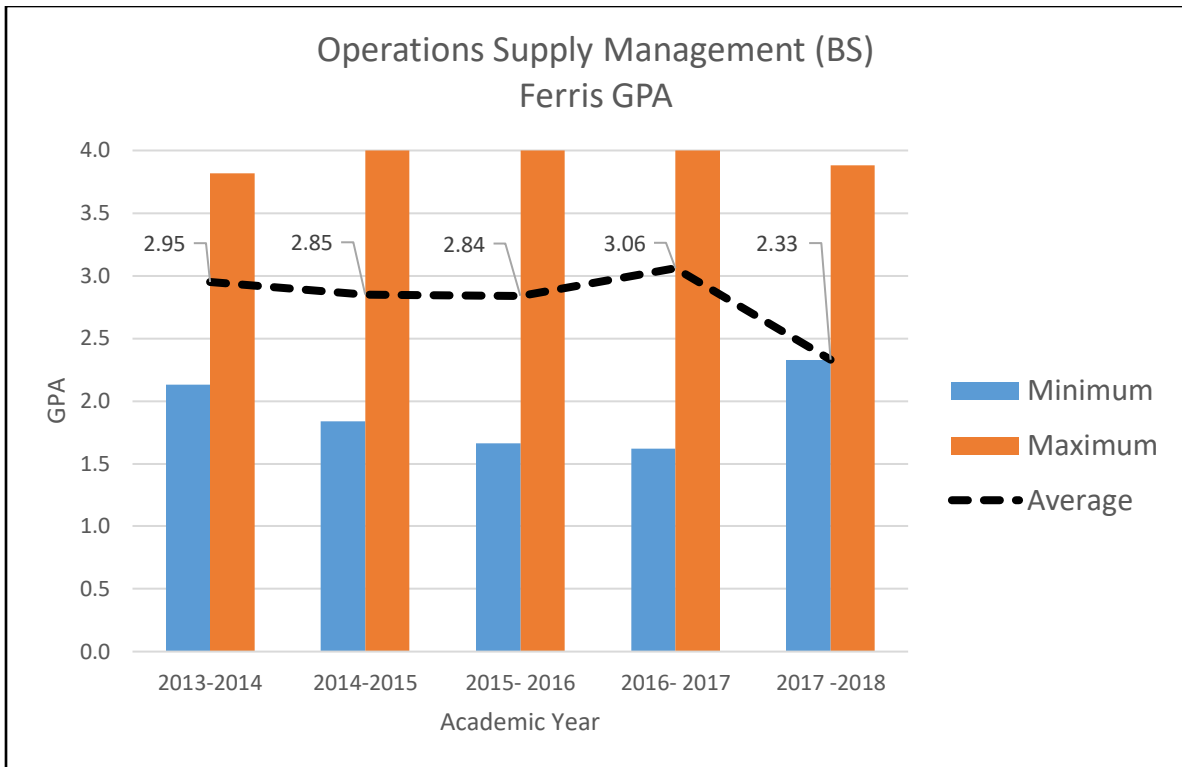


Figure 6-15. Ferris GPA of Graduating Student

Graduate Average ACT

Table 6-20 and Figure 6-16 displays the minimum, maximum, and average ACT scores of graduates each academic year. The average ACT score of the graduating student runs between 20.35 and 23.58.

Academic Year	Minimum	Maximum	Average
2013-2014	18	31	23.58
2014-2015	13	31	22.24
2015-2016	14	31	22.79
2016-2017	14	31	21.19
2017-2018	15	26	20.35
			22.03

Table 6-20. ACT Scores of Graduates

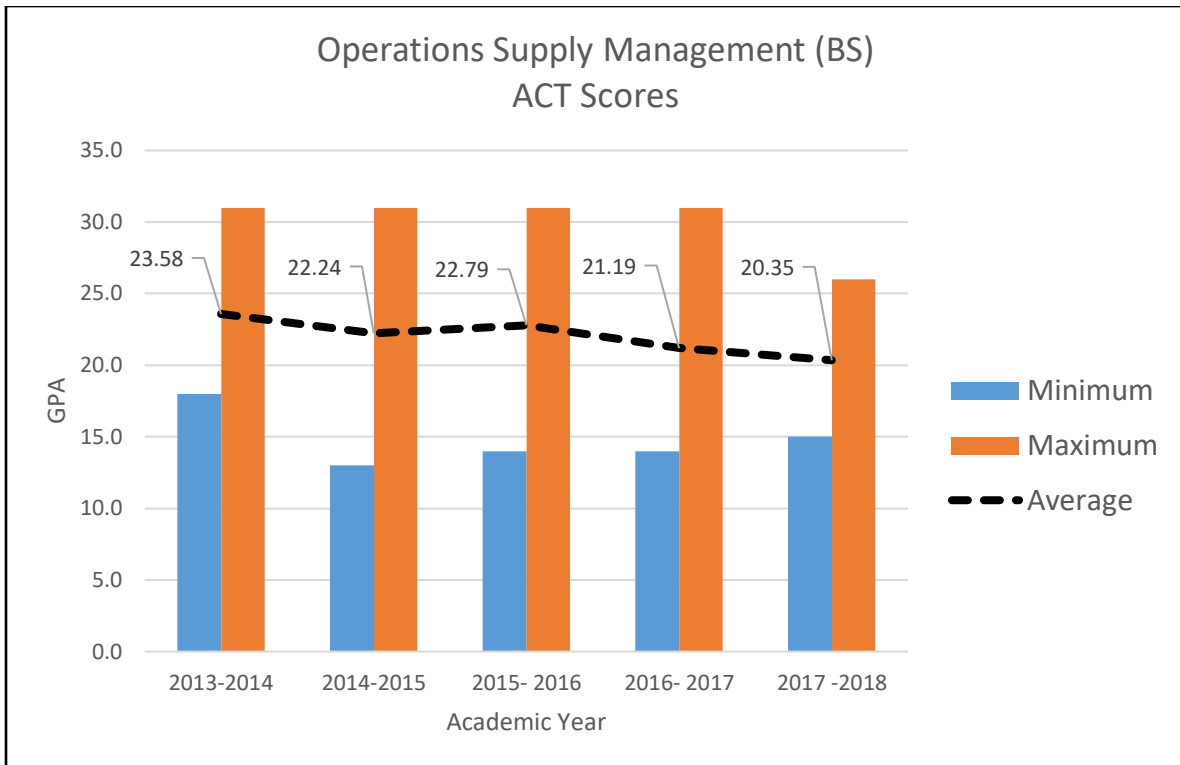


Figure 6-16. ACT Scores of Graduates

Minors, Certificates and Cumulative Enrollment

Figure 6-17 illustrates the enrollment in the OSM minor, Lean Systems Minor Lean Systems Certificate, MOM Certificate and Global Logistics Certificate. Figure 6-18 exhibits the cumulative enrollment in the OSM major, OSM minor, Lean Systems Minor Lean Systems Certificate, MOM Certificate and Global Logistics Certificate. Analysis suggests enrollment growth during the first three years, but a slight decline during the last couple of years. Students need to be reminded that it is important to declare the minor or certificate in advising sessions. The associated minors and certificates are obtained by a variety of Ferris students majoring in COB, COT (Welding, Manufacturing, HVAC, etc.), COHP and Integrative Studies programs.

We are in the process of changing the delivery format slightly for our lean courses based on the feedback we received from the International office and our COB management advisor. Some of the international students' sponsors require 2/3's of a class to include face-to-face instruction. The majority of the lean course formats are currently offered in a mixed delivery format. Each course includes a 1 hour 15 minute face-to-face instruction and the students use the other 1 hour, 15 minute session or more to work on industry projects with their teammates (at industry partner's site) and other course assignments weekly. However, effective Spring 2019, the lean course delivery format is changing to incorporate more face-to-face instruction thereby fulfilling the 67% face-to-face instruction requirement for international students. The courses will still be offered as mixed delivery, but there will be two, 50 minute sessions and one required 50 minute session (or more) per week where the students will work on industry projects and other related course assignments. We anticipate this delivery format change to positively impact the enrollment for the OSM major, minors and certificates.

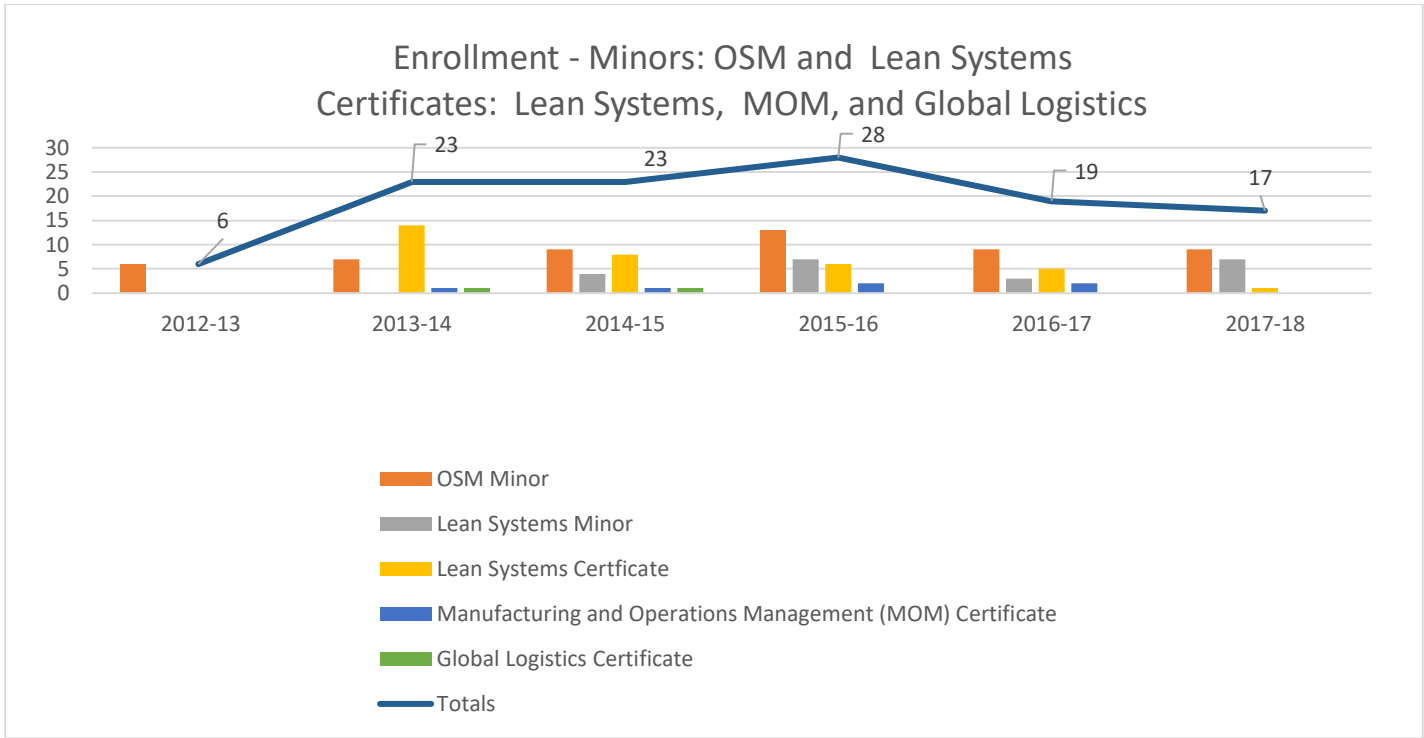


Figure 6-17. Enrollment (Headcount) by minor and certificate

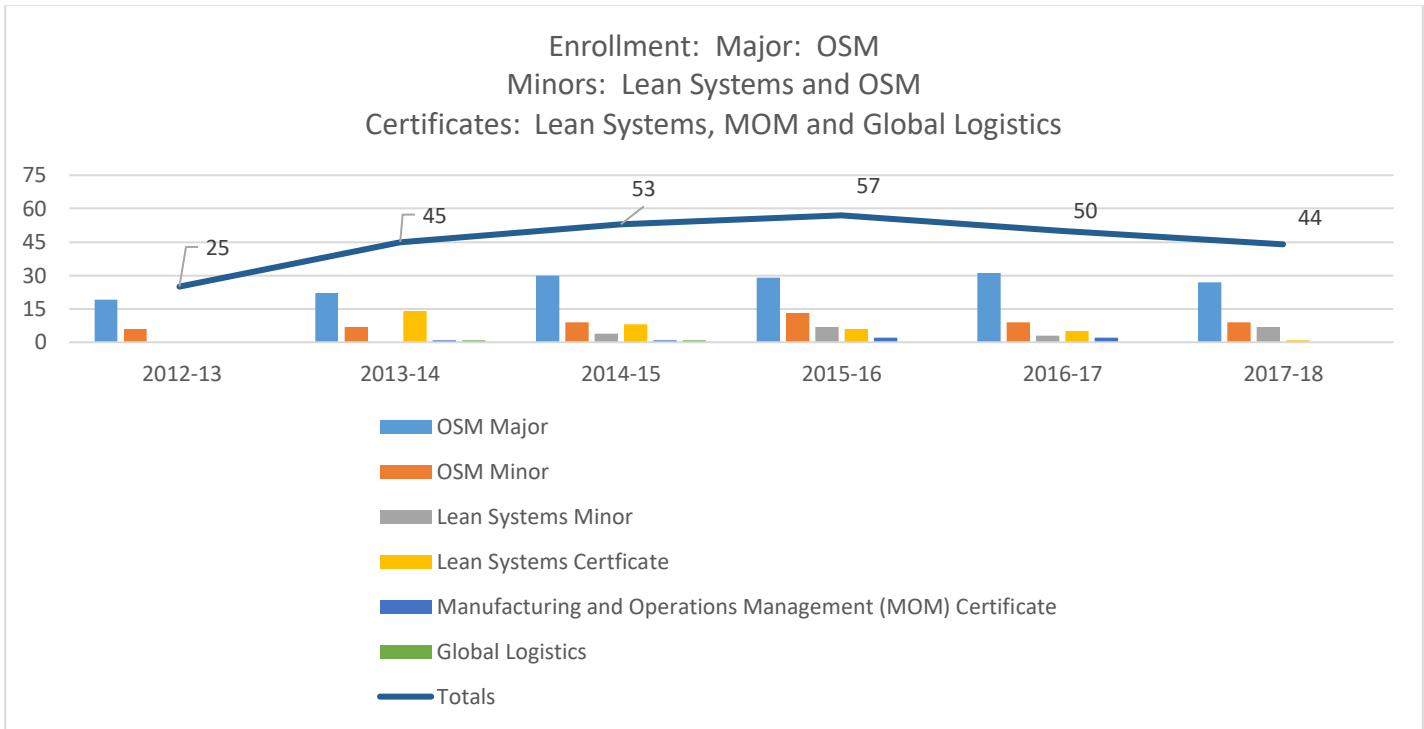


Figure 6-18 Enrollment (Headcount) by major, minors and certificate

State and National Examinations

There are no state and national examinations for the program.

Program Value beyond Productivity and Enrollment Numbers

The OSM curriculum's lean focused courses along with Project Management and ERP courses provide an essential niche for the department, college and university and future employers with respect to Lean Systems education. Most lean programs are offered at the Masters level, however, employers are looking for graduates to perform continuous improvement types of jobs (using lean systems concepts/tools) with an undergraduate degree.

Program Value beyond Enrollment Numbers

The FSU education, that the OSM graduate receives, assists the future employer with lean training costs and productivity. The OSM graduate obtains his/her lean training through successfully completing the OSM curriculum. Many employers send their current employees to lean training which can cost from \$800-\$1,000 per employee per training course. For example, the lean courses, offered through the OSM curriculum, covers at least 30 courses that the Lean Enterprise Institute offers to organizations (<https://www.lean.org/Workshops/WorkshopsAndSeminars.cfm>). So, organizations could save approximately \$24,000-30,000 in training costs when they hire a FSU OSM graduate. The OSM graduate is prepared to work on and facilitate lean initiatives as a new hire thereby, increasing the organization's productivity. The OSM faculty directly receive numerous requests for internship and full time employment opportunities. Requests for qualified OSM graduates and interns exceed the number that are available. Some employers require a minimum 3.0 GPA and experience as conditions for employment.

The lean systems courses that include the industry projects (described in Chapter 5) allow FSU students to serve the community. Students provide valuable insights and contributions to our industry partners resulting in higher efficiencies for our industry partners and their respective facilities. Several of the industry partners have reported the positive impacts of the implemented student projects not only in the pilot area, where the students proposed and implemented the solutions, but throughout the facility. Many times the organization cascaded the change and solution to other appropriate areas of the facility. Appendix G provides a summary of industry projects that were completed by OSM students from Fall 2014 – Fall 2017.

OSM students have the opportunity to take the Certified Associate Project Management (CAPM) certificate after they successfully complete the PROJ 320 course. The CAPM is sponsored by the Project Management Institute (PMI). The following website contains more information about the CAPM: (<http://www.pmi.org/certification/certified-associate-project-management-capm.aspx>). Obtaining a CAPM provides our students the opportunity to be competitive and more adaptable with respect to OSM job opportunities. In recent research published in the AACSB's BizEd Magazine, project management is listed as one of the top ten skills that employers want their employees to possess. Our OSM advisory board wholeheartedly agreed with this statement.

Future opportunities for students include an option to obtain a Lean Bronze Certificate (LBC) offered through the Society of Manufacturing Excellence (SME). The SME Lean Certification program sets the standard of lean practices and principles around the world. As such, it can complement any education/training curriculum within an organization or educational institution (e.g., university, college, etc.). The majority of the current OSM program as well as the Lean Systems minor and certificate, offered within the College of Business, is aligned with the industry-recognized standards. The MGMT 412, MGMT 432 and MGMT 492 are classes required in the aforementioned curriculum.

The (LBC) requirements include: passing a lean certification exam and completing the Lean Bronze Portfolio (<http://www.sme.org/lean-bronze-certification.aspx>). A score of 75% or higher is required to pass the lean certification exam. The students that successfully pass the exam will obtain a Lean Knowledge Certificate. The Lean Bronze portfolio requires completing 80 hours of education and training requirements, three tactical lean projects and a tactical project reflection form. The LBC candidates can achieve their

education and training requirements from any of the following seven different categories – Conference attendance (Lean, SME, ASQ, AME), Authorship/Ownership papers and presentations, Education, Involvement in Lean Activities, Leadership, Go to Gemba area, and Customer Feedback. Based on an initial assessment, through examining the education and training requirements on the SME website (SME, 2018), it appears that students who enroll and successfully complete the MGMT 412, MGMT 432 and MGMT 492 courses would be able to document at least 36 hours or 45% of the 80 hour requirement from the Education and Go to Gemba area.

Industry Lean projects are currently required from each student who is enrolled in the MGMT 412 and MGMT 492 lean courses. The projects that the students complete in these courses are considered tactical projects based on conversations with SME Lean Certification personnel. Students who enroll and successfully complete the industry lean projects, in the aforementioned lean courses, will fulfill two of the three required tactical projects required for the LBC. The third tactical project could be achieved during a student internship or their first job after s/he graduates.

The tactical projects combined with the completion of the tactical reflection form will reveal the student's abilities to implement lean principles that drive improvement and show measureable results (SME, 2018). Linking our OSM and Lean Systems curriculum with this highly regarded, globally recognized Lean Certificate is beneficial to FSU and the students. The students who complete the LBC requirements will obtain a certification that is globally recognized. Additionally, the certification will prepare them for industry roles in lean thereby, giving them a competitive advantage in the workplace. This portable credential will travel with them through their career. Graduates will be able to distinguish themselves from others and advance their career. An OSM faculty member is in the process of obtaining their Lean Silver Certification through SME.

Program Flexibility and Access

The OSM program is offered mainly through the Big Rapids campus. However, approximately 67% of the core program courses (eight of the 12) are delivered in an online and mixed delivery formats. The remaining four core program courses are offered in a 100% face-to-face format. The face-to-face classes are offered during the 9 a.m. – 4:15 p.m. Monday through Thursday. The demand for weekend or evening courses is nonexistent at this time due to the availability of the online course offerings. An accelerated program completion plan is unavailable for the OSM program due to the lean courses that are taught within the program. However, the OSM faculty continually assess courses for transfer eligibility for incoming transfer students.

Approximately, 58% of the core OSM courses (7 of the 12) are offered during the summer for students. Students can declare the OSM program as a freshman and sophomore without jeopardizing the four year degree to completion goal. Many of the courses that the student completes during his/her freshman and sophomore years are general education and business core courses related to the OSM degree and other COB degrees. However, there have been students who transfer into the program with a FSU junior/senior level standing. An advisor/OSM faculty discuss the OSM program requirements with the student at that time. The student acknowledges the fact that he/she may need to complete additional courses to at FSU to fulfill the OSM B.S. degree requirements. The OSM program is flexible and accessible for students who want to pursue the degree.

Additional sections of the lean courses (face-to-face, online, and summer) were offered during the last three years to accommodate the increase demand for students pursuing the OSM program, OSM minor, lean systems minor or lean systems certificate (see Chapter 6 – Enrollment section). The courses are continually offered annually in both the face-to-face and online formats to address student needs. The OSM faculty seek

to retain students in the program by building strong relationships with them. They are very responsive to students' requests for assistance with mentoring, advising, scheduling, etc... It is through these relationships that the students who transfer into the program stay and tell others about it. Faculty are available to students outside of office hours and throughout the year.

Visibility and Distinctiveness

The OSM program's core competencies include an outstanding curriculum that produces graduates with first-hand experience in critical thinking, problem solving, assessment and decision making, collaboration, interpersonal skills, interpersonal skills, strategy development and leadership. While the FSU OSM program has the main components of a standard Operations and Supply program, its uniqueness resides with the course specializations in lean systems, project management and Enterprise Integration software System (ERP and SAP) courses.

The program is under-advertised. Strategies to increase enrollment since the last APR were successful based on 181% student enrollment increase (11 students in 2011/2012 to 31 students in 2016/17 for OSM major). However, we will need to continue to effectively advertise on the COB's website, participate in the COB Dawg Days, participate in FSUS classes, discuss the major, minors and certificate in OSM related courses to pique student interest and collaborate with the colleges and departments on campus (COT, COHP, FCTL, etc.) to achieve our program goal to obtain enrollment of 55- 66 students in the major, minor and certificate by 2023 (See Program Goals – Strategic Plan section of this report).

Competitive Programs

Graduates of the OSM program are in demand due to the skill sets that they acquire during the program. Students gain first-hand experience with respect to the projects and assignments they complete during the program. This creates a competitive advantage for our program. While there are OSM related programs within Michigan, it appears, based on a search of undergraduate programs, that FSU is unique at providing a lean systems curriculum within its OSM program at the undergraduate level.

As shown in Table 6-21, there are a variety of programs and related minors titled Operations/Production Operations Management/Supply Chain Management programs offered throughout public Michigan colleges and universities. However, only one (Oakland University) refers to teaching a lean course in its undergraduate curriculum.

Table 6-21 – OSM Program Competitor Analysis

College/University	Major and Specialization
Central Michigan University	B.S. in Logistics Management
Eastern Michigan University	B.S. Supply Chain Management; Certificate: Supply Chain Management
Grand Valley University	B. S. Operations Management
Michigan State University	B.S. Supply Chain Management
Michigan Technological University	B.S. Management; Concentration in Supply Chain and Operations Management
Northern Michigan University	B.S. Management
Oakland University	B.S. Operations Management; Specializations within Major: Supply Chain Management, Lean & Quality Management (1 lean course), and Project Management
Western Michigan University	B.S. Integrated Supply Management
University of Michigan	B.S. Business Administration

The OSM program has a distinctive competitive advantage in the Lean Systems area. The OSM program is reviewed at a minimum, on an annual basis, to ensure that our program is relevant and competitive. At competing universities, there seems to be a trend with using the Supply Chain Management term and supply chain courses in program titles and content. Currently, we have two supply chain and logistics related courses within the OSM curriculum. Weaving more content related to customer relationship management

and supplier relationship management may be considered to strengthen the aforementioned supply management related courses. However, our advisory board stated that the curriculum is relevant as it currently stands so, this change will need to be discussed at our next 2019 meeting. At this time, we are retaining the Operations and Supply Management program title because it covers not only the management of the downstream and upstream suppliers with respect to the customer, but also the internal management of goods and services within the organization.

Preeminent Program

The preeminent lean focused operations and supply management related programs occur at the graduate level in masters programs at Ohio State University, University of Kentucky and University of Alabama. So, from an undergraduate standpoint, FSU holds a distinctive competitive advantage. We need to advertise the OSM program more effectively to ensure that our program not only attracts more students, but receives the recognition it deserves with respect to the content it provides the graduate and subsequently, the employer.

Demand

As a part of the Program review process alumni, current students, and OSM faculty were surveyed. The surveys were developed by the OSM faculty and administered by Institutional Research and Testing (IRT). All of the surveys were sent out electronically by IRT. The advisory board survey was developed, approved and administered by the OSM faculty. The advisory board surveys were sent out in April 2018. The current student and alumni surveys were sent out in May 2018. The OSM faculty surveys were sent out in June 2018. Each survey respondent had a 2-3 week period of time to submit responses.

Forty-four (44) surveys were sent out to current students and sixty-six (66) surveys were sent out to alumni. The response rate for the current students was 5% or two completed surveys. The response rate for the alumni was 6% or four completed surveys. A comparison of response rates is shown in the Table 6-22 below.

Table 6-22 – Comparison of OSM Survey Response Rates: 2012 and 2018

	2018 Completed/Sent	2018 Response Rate	2012 Completed/Sent	2012 Response Rate
Alumni	4/66	6%	9/54	16.7%
Advisory Board (Sent to Industry Partners)	2/10	20%	Employer: 9/197	4.6%
Current Students	2/44	5%	4/11	36.4%
OSM Faculty	1/5	20%	15/74	20.1%

Based on our current student data survey information, 50% of students stated that they enrolled in the OSM program because they wanted a four year business related degree and 50% stated that they wanted a degree to prepare them for a career in logistics. Furthermore, 50% of the respondents strongly agreed that the OSM program would prepare them well for their career while the remaining 50% were neutral. However, 100% of the current student responses indicated that they would recommend the OSM program to others. The majority of alumni (67%) believed that the OSM degree prepared them well for their career.

Companies that have hired Ferris graduates in the past range from Fortune 500 manufacturing firms to those in the growing service industry. Some of the companies include: Amway, Aramco, Consumers Energy, Gentex, Haworth, Ingersoll Rand, John Deere, Schlumberger, and Yangfeng Automotive.

College graduates are gaining entry-level positions in a range of career opportunities in the areas of inventory control/materials management, industrial engineering, logistics, operations management quality, plant layout, production control, purchasing, supply chain management, supplier development engineering, and training and development in the banking, construction, hospital, hotel, manufacturing, non-profits, and restaurant industries.

Figure 6-19 provides a summary of jobs and respective estimated growth rates for occupations that an OSM graduate will experience within the next 10 years (through 2028) using Bureau of Labor Statistics data.

Figure 6-19: OSM Occupations and Growth Rates 2018-2028

Occupation	Education Required	Number of Jobs in U.S. (2016)	U.S. Median Pay	Number of Jobs in MI (2016)	MI Median Pay	Employment Change in U.S. (2016-2026)	Job Outlook
Cost Estimator	Bachelor's Degree	217,900	\$63,110	6,640	\$64,450	22,900	11% (Faster than average)
Industrial Engineer	Bachelor's Degree	257,900	\$85,880	28,460	\$88,330	25,100	10% (Faster than average)
Industrial Engineer Technician	Associates Degree	63,900	\$54,280	4,750	\$51,550	400	1% (Little or no change)
Logistician	Bachelor's Degree	148,700	\$74,590	8,000	\$80,400	10,300	7% (As fast as average)
Management Analysts	Bachelor's Degree	806,400	\$82,450	16,640	\$92,030	115,200	14% (Faster than average)
Operations Research Analysts	Bachelor's Degree	114,000	\$81,390	1,710	\$85,490	31,300	27% (Much faster than average)
Purchasing Managers, Buyers, Purchasing Agents	Bachelor's Degree	520,400	\$66,610	2,480	\$114,560	-17,200	-3% (Decline)
Training and Development Specialist	Bachelor's Degree	282,200	\$60,360	5,960	\$58,730	32,500	11% (Faster than average)
Training and Development Managers	Bachelor's Degree	34,500	\$108,250	690	\$107,670	3,600	10% (Faster than average)

Source: Bureau of Labor Statistics - Occupational Outlook (2018).

The OSM faculty receive correspondence (e.g., email, phone, etc.) from alumni, who choose to stay in touch, about the relevance and demand for the OSM program content. The graduates state that the education they received are key to securing them their positions and promotions at their organizations. Likewise, the faculty who teach in the OSM program, consistently experience more requests for internships and full time employment than there are qualified OSM students and graduates, respectively. The advisory board echoes this sentiment. The respondents indicated that the OSM program content is relevant and that hiring graduates in this area will continue in the near future. See Appendix J and K for more information. The overall trend for the OSM program reveals a strong demand from the various aforementioned sources. The OSM faculty will continue to effectively respond to the trends (e.g., job openings) by acting as a liaison between the OSM students, employers, COB internship office and FSU career center.

Student Achievement

The OSM students have recorded a notable amount of achievements since the past APR. The following provides a summary of student successes from 2013/14-2017/18 timeframe.

1. According to the Current Students and Alumni survey results, approximately 33% and 50% of the alumni and current students were members of a Registered Student Organization (RSO) on campus. However, based on the OSM faculty's serving as an RSO advisor and advising conversations, we believe the figures are more in the 50-75% range.
2. The average OSM graduate GPA was 3.1. Approximately, 56% graduated with a 3.0 GPA or higher where 31% graduated with a 3.5 GPA or higher during the 2013/14-2017/18 academic years. Additionally, 12% of the students were enrolled in the honor college as a freshman through completion of their OSM degree.
3. Three students were nominated and provided a College of Business (COB) Excellence Award. The COB Excellence Awards are provided to the juniors/seniors that are in the top 3% of seniors in the COB student population. Professors nominate students who have earned 90 or more total semester credits, show evidence of intellectual growth, academic performance, significant contributions and/or involvement in extracurricular activities, and hold an overall GPA of at least 3.25.
4. Alissa Deroo and Luke Thompson, OSM students (alumni, 2015) engaged in academic research and received an award for their start up case at the North America Case Research Association 2014 conference in Austin, TX. The start up case titled, "Looking in the Rearview Mirror", discussed how to apply Lean Logistics at a tier-one automotive supplier in West Michigan. The link associated with the research and award can be found at: <http://ferris.edu/business/operations-and-supply-management-seniors-win-award-at-2014-nacra-conference/>. Alissa and Luke obtained knowledge about lean logistics concepts and relevant applications in the MGMT 432 course (Lean Logistics and Supply Development). Dr. Eshbach was the faculty advisor for the research.

Likewise, Haylee Luedtke, Business Administration major and Lean Systems minor (alumni, 2018), engaged in extensive research through writing and submitting a full case and instructor's manual for the October 4-6, 2018 NACRA conference. The case and instructors manual was accepted to the NACRA 2018 conference in Orlando, FL. It was also nominated for a best student case award. The case, titled, "Ajax Paving, Inc.: A Training and Development Opportunity", focused on implementing Training Within Industry (TWI) principles and lean concepts at a construction company in East Michigan. Haylee obtained knowledge about TWI, lean concepts and applied it to Ajax Paving, Inc. as a final industry project for the MGMT 412 course (Lean Culture and Skills Development). Dr. Eshbach was the faculty advisor for the research.

5. The majority of OSM students served as resident hall assistants on campus, played on a FSU athletic team, and/or worked part-time or full-time jobs while attending college.
6. One OSM student participated in an international study abroad experience for a semester while another OSM students participated in a 4-week summer study-abroad experience.
7. Since 2014, OSM students have participated in an industry project at one of our industry partners. Students get the chance to apply the concepts and theory while the businesses get assistance and access to research/consulting services.

The current student achievement system reflects more of a manual process. The OSM faculty learn about the student accomplishments through the advising process, in the classroom, and/or working with the students on research related projects. A preference would be to have access to an automated system where faculty and students could input achievements and an annual report could be generated. However, this initiative would need to be coordinated the FSU technical services and the Ferris State University Center for Leadership, Activities and Career Services (CLACS).

Employability of Graduates

Institutional Research reported the results of its 2015/2016 Graduate Follow-up Survey. For the program, 2 out of 7 graduates responded indicating they were both employed but did not provide any salary information.

Employment Post-Graduation

In May 2018, 66 surveys were sent out to alumni. However, only four or 6% responded. OSM graduate job titles included operations manager, supplier development engineer and purchasing agent. These job titles are in alignment with the occupations associated for an OSM graduate. Unofficially, OSM graduates keep in touch with OSM faculty via email or phone. Approximately, 55% of OSM graduates, since 2013, were employed in a related OSM occupation/field of study.

The salaries, included in the survey responses, ranged from \$50,000-\$100,001+ for the respondents. These figures are in agreement with the OSM graduate's estimated salary. The Bureau of Labor Statistics data provided in Figure 6-17 also supports this position. The alumni survey revealed that no one was pursuing a graduate degree, but 67% stated it was something they were planning to pursue in the future. However, the OSM faculty have received email correspondence from OSM graduates regarding graduate school plans. They have subsequently written recommendation letters for OSM graduates applying to graduate school. A recent OSM graduate was accepted to University of North Carolina – Chapel Hill to pursue her MBA. She received a full tuition scholarship and will start the program in Fall 2018.

Stakeholder Perceptions of the Employability of Graduates

The majority of the alumni, 67% of survey respondents, were very satisfied with how the OSM program prepared them for a career in their field of study. The remaining 33% stated they were dissatisfied with the career preparation. The related comments, of the 33%, seemed to be concerned with exercises related to supply chain management. Courses are reviewed and refined every semester to incorporate valid feedback provided in the student evaluations. As such, assignments are reviewed and revised accordingly where needed. This ensures that not only the content is properly presented and communicated to the students, but also ensures that the learning objectives are achieved with respect to assessment. For example, the MGMT 432 supplier evaluation assignment has been redesigned to reflect a situation that someone employed as a supplier development engineer/purchasing agent would encounter.

An advisory board survey was sent out to our 10 industry experts in April 2018. Two or 20% of them responded in the survey. Of the 20% that responded, 100% stated that the OSM program prepared the graduates for a career in their field of study (See Appendix K). An OSM faculty survey was sent out to the five OSM faculty in May 2018. One responded to the survey. Of the 20% that responded, 100% stated that the OSM program prepared graduates for a career in their field of study.

Current OSM students are provided at least two opportunities throughout the academic year to attend internship and job fairs sponsored by FSU career services. OSM faculty encourage students to attend these fairs because many times it is a venue that assists them in securing an internship or full-time employment. As stated in the *Demand* section, there usually is more demand for qualified current OSM students and graduates for internships and full-time employment than there is available.

The COB internship office supports current students who are seeking an internships. The COB internship office provides the necessary information for the student to prepare them for an internship. The following link provides more information about the COB internship office and services it provides: <http://ferris.edu/business/internships/>. The COB internship office also collaborates with the university career center and its new Handshake recruiting system to ensure a smooth process for the potential intern, prospective employee (e.g., OSM graduate), and employer.

The overall trend for the OSM program reveals a strong employability for OSM graduates from the various stakeholders (alumni, faculty, advisory board). The OSM faculty will continue to effectively respond to the employability trends (e.g., job openings) by being a proactive supporter of the process, and avidly respond to advisory board, alumni and employer feedback and recommendations. A goal of the OSM program is to continue to develop and expand upon business networking opportunities as well as relationships with students and local employers.

Faculty Composition and Engagement

Our six tenured and tenure track faculty members are active in many professional associations. The faculty members participate in a variety of conferences (presenter, track chair, etc.), lead as journal reviewers, and serve on the editorial board/boards of professional organizations. For a complete list of faculty activities, please refer to the vitae in Appendix L. The active faculty engagement is beneficial to students because it reflects that the OSM faculty are current in the field. Another side benefit for students is that it assists with increasing the network potential they may be able to use when seeking internships and/or full time employment after graduation.

Organization

The OSM program currently has five tenured faculty, one tenure track, and one adjunct faculty. All of the full-time faculty have terminal degrees. The OSM program tenured faculty have received three promotions and/or merit awards since the 2012 academic program review. The six full time faculty members and adjunct faculty are listed below with their rank and qualifications.

Tenured Program Faculty

Lisa Eshbach, Ph.D. (Professor, Management). Ph.D., Wayne State University. Industrial Engineering and Business Administration. Courses taught at Ferris include: Lean Service Enterprise and Leadership, Lean Culture and Skills Development, Lean Logistics and Supply Management, Leadership and Supervision, Advanced Management Cases and Problems, Business Ethics & Social Responsibility, International Business, Tools for Decision Making, Team Dynamics & Organizational Behavior, and Applied Management.

Anita Fagerman, Ph.D. (Professor, Management). Ph.D. Capella University. Organization and Management. Courses taught at Ferris include: Operations and Supply Management. Masters of Business Administration: Lean Enterprise Systems, Personal Skills Development, Intro Performance Metrics, Quality Improvement Principles-Appl., Strategic Planning Systems, Customer Systems, Process Management Systems, and Integrated Business Experience.

Steve Lyman, Ph.D. (Professor, Operations Management). Michigan State University, Ph.D., Production & Operations Management. Courses taught at Ferris include: Operations and Supply Management, Purchasing, Integrating Experience, Ski Operations Management, Applied Management, Organizational Management, Quality-Operations Mgmt, Small Business Consulting, Inventory & Materials Management, Adv Management Cases-Problems, Purchasing, and Supply Chain Management.

David Marion, Ph.D. (Professor, Operations Management) – Ph.D, University of Toledo. Manufacturing Management & Engineering. Courses taught at Ferris include: Integrating Experience, Quality-Operations Mgmt, Six Sigma Process Management, Cost Mgmt. for Lean Systems, Masters of Business Administration: Business Strategy & Innovation, Lean Six Sigma, and Lean Cost Management.

Carol Rewers, Ph.D. (Professor, Operations Management). Ph.D., Capella University College of Business. Organization and Management. Courses taught at Ferris include: Operations and Supply Management,

Human Resource Management, Human Resource Management, Recruitment and Selection, and Management Internship.

Tenure-Track Faculty

Sukup, Leslie, DBA (Assistant Professor, Management). DBA, Saint Leo University. Management. Courses taught at Ferris include: Integrating Experience, Team Dynamics - Org Behavior, Managerial Leadership, and Quality-Operations Mgmt.

Adjunct Faculty

Clark, Ken. Masters Science Administration, Central Michigan University. Courses taught at Ferris include: Quality-Operations Mgmt., Lean Service Enterprise and Leadership and Advanced Management Cases-Problems.

Edwards, Terris. Masters Business Administration, (Integrative Management), Michigan State University. Courses taught at Ferris include: Quality-Operations Mgmt.

Pawloski, Thomas. Masters of Science, Engineering Management, Western Michigan University. Courses taught at Ferris include: Quality-Operations Mgmt.

Schmitt, Mathias, Ph.D.. Ph.D. Virginia Polytechnic Institute and State University. Lean. Courses taught at Ferris include: Lean Service Enterprise and Leadership.

The OSM faculty teach approximately 4-5 classes per semester in a combination of course delivery formats. Table 7.1 illustrates the teaching load and format for each of the OSM faculty.

Table 7.1: OSM Faculty Average Semester load and Course Delivery Format

	Tenured/Tenure Track Faculty						Adjunct Faculty			
	Lisa Eshbach	Anita Fagerman	Steve Lyman	David Marion	Carol Rewers	Leslie Sukup	Mathias Schmitt	Ken Clark	Terris Edwards	Thomas Pawloski
Number of Classes/Semester	4-5 classes	4 classes	4 classes	4-5 classes	4 classes	4 classes	1 class	1-2 Classes	1	1
Face-to-Face			4			4		1-2	1	1
Mixed Delivery	3	1		3	3					
100% Online	1-2	3		1-2	1		1			

The structure of the course assignment and semester load is efficient and effective for the students. We offer all the OSM courses, with a MGMT prefix, every year. This is one the reason why there is sometimes an overload assigned to two of the instructors who teach the lean courses. The amount of adjuncts teaching the classes is minimal. As indicated in Table 7-1, only 4-5 (15-19%), of the total 27 OSM course sections (MGMT prefix) offered annually are taught by adjunct faculty.

The OSM faculty teach other courses in the Management department for the Business Administration and MBA respectively. We are working on leveling our workload to ensure that each faculty teaches four courses per semester. For example, if the OSM lean course needs to be taught and it results in a fifth class, the department chair works with other management faculty to balance the workload so that the OSM faculty are not consistently teaching 5 classes per semester.

Curriculum Vitae, Service, Research, Continuing Education

The OSM faculty are characteristic of many COB faculty. They all have an extensive amount of work related and teaching experience. They have a combined 86 years of work experience and 109 years of teaching experience. In addition to teaching a normal workload of 12 credits (four three-credit classes) per semester, the faculty actively conduct research, publish papers in both research journal and business magazines, maintain certifications and memberships, with multiple regional, national and international organizations, write grants, deliver presentations, and engage in consulting. The professional activities of the program faculty can be found in Appendix L.

A Digital Measures report (COB repository of faculty vita data) for the last three years (2015-2018) detailed the following notable reported professional activities for the four program dedicated tenure and tenure-track OSM program faculty:

- Seven papers published
- Ten awards and honors (e.g. Best Papers, Advising, Faculty Excellence, etc.)
- Seven Grants received
- 12 presentations (conference proceedings and university)
- 69 memberships on university, college, or department committees
- 92 professional development activities attended
- Serve as active reviewers for regional and national case journals.
- Actively consult with community and public organizations.
- Maintain certifications and memberships with multiple regional, national and international organizations.

Stakeholder Perceptions of the Quality and Composition of Faculty

The faculty in the program do a good job of meeting student expectations measured by the Student Assessment of Instruction (SAI) and IDEA. Appendix M exhibits the overall student evaluation scores by faculty for eight key questions selected from the SAI and IDEA evaluation tools. The alumni and advisory board concur that the quality of the OSM faculty are good, effective and an asset for the program. Below are a few comments from an alumni and advisory board member:

Alumni: “Great classes, Professors and overall experience.”

Advisory Board Member: “Faculty are highly regarded. Students appreciate the fact that professors have industry knowledge that can be applied.”

Program Policies and Procedures

The OSM faculty are encouraged to engage in research and service from colleagues, department chair and the dean. The results of these efforts are reflected in the OSM faculty's Curriculum Vitae, Service, Research, Continuing Education section. Tenured and tenure-track faculty have student advising duties every semester. They meet with students to discuss academic schedules, potential internships and general questions that the students may have regarding the discipline.

A terminal degree in a business/operations/strategy related field with 3-5 years industry experience is required for all new tenure-line faculty. A Master's degree in a business/operations/strategy related field is required for full-time temporary and adjunct faculty. Specialized certifications and experience implementing projects with lean systems, SAP/ERP, etc. is preferred.

Hiring and Retention

All management faculty requests are approved prior to proceeding with the recruitment process. In the last five years the management department has recruited and subsequently hired two faculty for strategic management positions. The new hires teach classes in a variety of disciplines within the management department. One of the new hires assisted with teaching the MGMT 370 (Quality-Operations Management) course during the 2017/18 academic year. The average seniority amongst the OSM faculty with FSU is 10.3 years. The ability to retain qualified faculty is strong.

Program Administration and Support

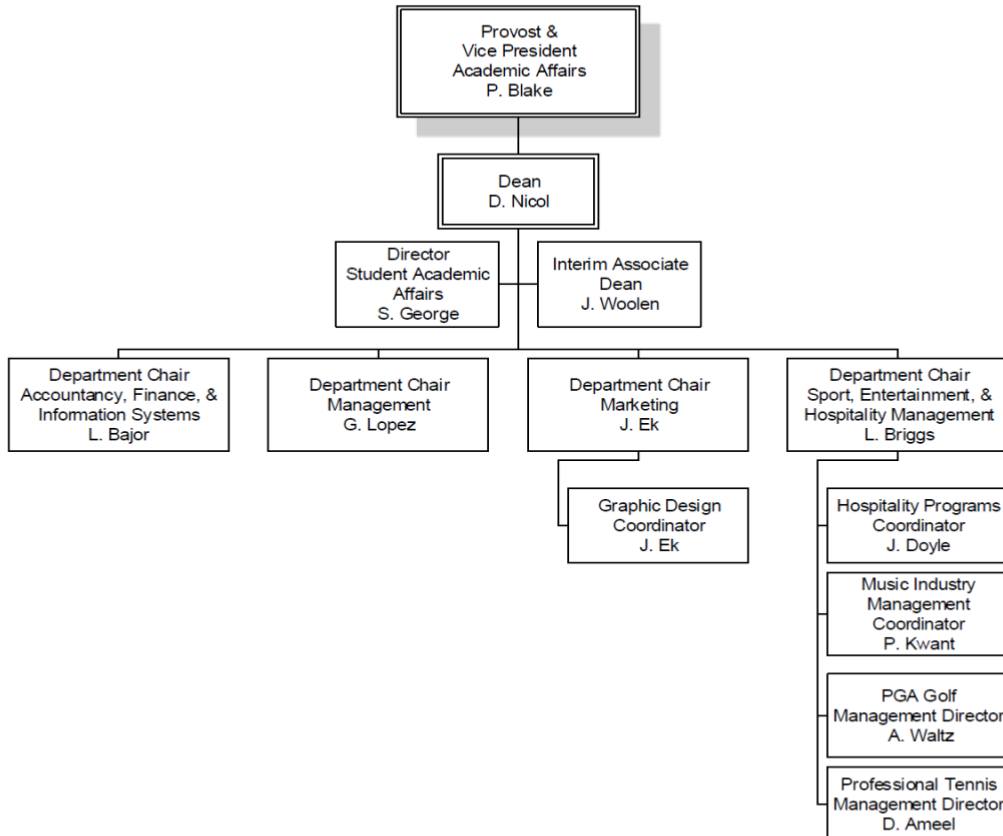
Administration and Staff

The OSM program resides in the Management Department. Figure 8-1 illustrates the COB organizational chart.

Figure 8.1: COB Organization Chart

FERRIS STATE UNIVERSITY
ACADEMIC AFFAIRS DIVISION

COLLEGE OF BUSINESS



Below are the names and credentials of the administration and staff that have oversight/are involved in the supporting the various areas for the OSM program.

David Nicol, Dean, Ph.D., Management, University of Houston

Jim Woolen, Interim Associate Dean, D.B.A., Nova Southeastern University

Gayle Lopez, Management Department Chair/Professor, J.D., University of San Francisco School of Law

Tina Smith, Management Department Secretary

The COB administration and staff have been very supportive of the OSM program. They provide the necessary assistance to all faculty as individual needs arise. The OSM faculty have access to and support from the administration with respect to program changes, professional development, and advisory board meeting preparations/attendance. Support from administration in these areas is expected to continue.

The program is run in an efficient manner. The OSM faculty shares the Department Secretary and Department Chair, with 20 other faculty, who teach in five other Bachelor of Science programs (Business Administration, Business Administration- Professional Track, Business Administration – Legal Studies, Human Resources Management, and Risk Management and Insurance), eight minors and seven certificates. Class and teaching schedules are prepared by putting the needs and preferences of the students first. The department chair along with the secretary develop a master scheduling plan so students are able to take the courses needed to complete their degrees in a timely manner. The faculty preferences are then considered when creating schedules to address the program requirements. The process works well. It is a proactive method that reduces scheduling conflicts across the curriculum.

Support Services

A review of the support services, that the OSM program uses, is included for FLITE, FCTL, Technology Assistance Center (TAC), Career Center, and the Institute for Research and Testing.

FLITE: Students enrolled in the Operations and Supply Management program, like many other FSU students, have access to computers within the main areas of the FLITE Library. The following laptop models are also available for students check out to complete their assignments: Dell Latitude E6430 running Windows 10 Enterprise, Dell Latitude E6540 running Windows 10 Enterprise, 13” MacBook Pro 8.1 running OS X, 11” MacBook 4.1 Air running OS X.

Students also have access to the Business Insights – Global, ProQuest Business Premium Collection, Gale Business Collection and Net Advantage databases. These databases contain a vast amount of articles and case studies that can be applied to the Operations and Supply Management area.

Some of the OSM faculty have used the E-reserve option for their classes. The FLITE personnel has been supportive with making the resources available to the students.

FCTL: The FCTL staff have assisted and supported the OSM faculty in developing new classes and/or suggesting methods to continuously improve existing courses (face-to-face, mixed delivery/blended and online). FCTL also offers TIMME grants to help defray professional development costs (e.g., conference). OSM faculty have applied and received TIMME grants aligned with professional development activities.

Technology Assistance Center (TAC): TAC issues university-owned computers and provides support for equipment and information technology requests to OSM faculty.

Career Center: OSM students have used the career center for career planning as well as have attended the career and internship fairs. The amount of OSM employees has increased in the past three years making obtaining an internship/full time job more accessible for the students.

Institute Research and Testing: Robin and Grace provided valuable support and were very timely with formatting the three OSM surveys that the OSM faculty developed. The surveys were sent out to current students, alumni and OSM faculty as a method to collect data required for this report.

Facilities and Equipment

Space, Computers and Equipment

The OSM program uses available classrooms in the 90,600 square-foot, three story COB building. The building includes:

- Twenty-six (26) classrooms.
- Forty-six (46) faculty offices.
- Five (5) administrative/support offices/suites.
- One auditorium.
- A Board room used for meetings.
- A student study lounge.
- Three conference rooms.

The College also has space in the Interdisciplinary Resource Center (IRC) building immediately adjacent to the Business Building and linked by a connecting facility including the following:

- Twenty-seven (27) faculty offices.
- A faculty/staff lounge.
- A testing room.
- Two meeting/conference rooms.
- A Statistical Resource Center.

The classrooms, utilized by the OSM program, are sufficient to accommodate student class sizes. Each classroom is equipped with a whiteboard, desktop computer(s) and overhead projector. The computer is installed with Microsoft Office standard software and is connected to the university network and Internet. Problems related to either faculty or classroom computer's is reported to the Technology Assistance Center (TAC) for resolution. The COB board room is available to the OSM program for the annual advisory board meeting.

Each faculty member has adequate office space. The office computer equipment has been purchased within the last four or five years and has sufficient operating capabilities for their needs. All computers are connected to the University's network and have Internet access. Any software upgrade or special software request (e.g., Visio, MS Project, etc.) is handled through TAC.

There are approximately 345 computers located in various classrooms and computer labs within the College of Business. The facilities and equipment available to the OSM program are adequate to deliver a high quality program to the students.

Perceptions of Overall Quality

TO: Academic Program Review Committee

FROM: Gayle Lopez, J.D., Management Department Chair

DATE: August 14, 2018

RE: Operations & Supply Management APR – Perceptions of Overall Quality

Overall Program Rating: 100

The Operations & Supply Management program and associated certificates/minors align perfectly with FSU and the College of Business mission statements. The program prepares students to be successful in a variety of Operations, Supply Management and Lean positions and provides experiential and team based projects while working on critical thinking and problem solving skills. Students gain valuable knowledge, skills and abilities to be highly employable for their required internship and permanent employment in their field of study. The curriculum is robust and it is a leading program in Lean education. It is an excellent, high quality program. A very strong Advisory Board provides employer input regarding current trends in the industry as well as curriculum review and assessment. Courses and program outcomes are regularly assessed and curriculum changes are made for continuous program improvement.

The associated minors and certificates are obtained by a variety of Ferris students majoring in COB programs and other programs from colleges across campus as well as COB students at State Wide locations.

The Operations and Supply Management faculty team comprised of Dr. Lisa Eshbach, Dr. David Marion, Dr. Steve Lyman, Dr. Carol Rewers, and Dr. Anita Fagerman, along with industry expert adjuncts, provide a high quality educational experience. It should be noted that none of the program faculty teach exclusively in the Operations program. Likewise, there is not a dedicated program coordinator with release time. Dr. Lisa Eshbach drafted the APR, with contributions from Dr. Fagerman in Chapters 4 & 6, she organizes and chairs the advisory board. She also authored numerous curriculum proposals for new minors/certificates as well as program revisions to meet the needs of our students.

Operations & Supply Management program faculty and students are visible throughout campus and collaborate with a number of industry partners. Students apply what they have learned in the classroom while working on lean projects with the industry partners.

Student advising is strong with a full-time academic advisor in the Management Department along with the faculty advisors. The Management Department and administration fully support the continuation of the Operations & Supply Management program along with the associated minors/certificates and appreciate the dedication of the program faculty to student success.

Dean's Comments re: Operations & Supply Management program

While enrollment in the program is not what we would hope, the program quality (curriculum and faculty) is impressive, and bodes well for program prospects. Our challenge, as with a number of our programs, is to identify and connect with student prospects who would be enthused by what we offer. I am confident that we will achieve that connection.

The value of the program is demonstrated in the market demand for graduates with the qualifications provided by this program, and reinforced by feedback from employers, alumni, and advisory boards. The commitment of our faculty to constantly assess the curriculum, and make adjustments, as appropriate, ensures program relevance and value. We are fortunate to have faculty with the academic training and industry experience required to engage in such in a meaningful and productive manner.

The openness to collaborative efforts, as noted with the Colleges of Engineering Technology and Health Professions, is yet another reason why I feel this program possesses enduring value, and the potential to expand its beneficial impact. It demonstrates the receptivity of our faculty to incorporate broad and varied perspectives within the learning environment, preparing our students for the dynamic workplace that will confront them.

Whether students pursue the complete program, or some subset, I am confident they will benefit. This program, and its faculty, are critical to the college.

Implementation of Findings

The APR review process fits nicely with the theme of the OSM program. We continuously evaluate and improve our program. The APR is an opportunity to formally share our program progress and improvements with the university. The program review results will be communicated to the stakeholders within the 2018/19 academic year through advising and advisory board meetings.

Even though the OSM program experienced 181% student enrollment increase (11 students in 2011/2012 to 31 students in 2016/17) since the last APR, the OSM faculty plans to continue to build the reputation of the program. The faculty can achieve this by publicizing the successes of former students/alumni and market the program to interested undergraduate students. Other methods that could be used to advertise and communicate the benefits of pursuing an OSM degree include: posting OSM student internship stories and experiences on the COB's website, participating in the COB Dawg Days, participating in FSUS classes, discussing the major, minors and certificate in OSM related courses to pique student interest and collaborate with the colleges and departments on campus (COT, COHP, FCTL, etc.). These methods will assist us with achieving the program goal to achieve enrollment of 55- 66 students in the major, minors and certificates by 2023 (See Program Goals – Strategic Plan section of this report).

Signatures

Operations and Supply Management – BS
119 State Street, COB Room 212
Big Rapids, MI 49307
231-591-2427

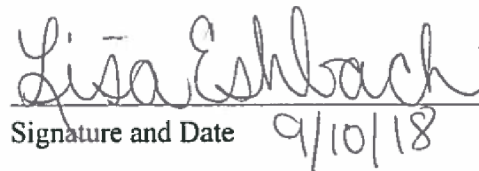
My signature below indicates that I have reviewed the Academic Program Review report submitted for review by the Academic Program Review Council, Academic Senate, Provost and President of Ferris State University and attest to its completeness and soundness.


Signature and Date

David Nicol
Dean
231-591-2422 DavidNicol@ferris.edu


Signature and Date 9.12.18

Gayle Lopez
Management Department Chair
231-591-2427 GayleLopez@ferris.edu


Signature and Date 9/10/18

Lisa Eshbach
OSM Program Faculty
231-591-3197 LisaEshbach@ferris.edu

Appendices

Appendix A: OSM Advisory Board Members

Operations Advisory Committee Members

April 19, 2018

Paul Flynn	Gentex Corporation	600 N. Centennial Street Zeeland, MI 49464	616-772-1800 or 616-748-8517 paul.flynn@gentex.com
Dana Hall	Haworth Steel and Wood Plant	BRC 300 N. Bronson or BRW 1919 Industrial Drive, Big Rapids, MI 49307 USA	231-527-6621 or cell: 231-218-6544 Dana.Hall@Haworth.com
Bart Hogarth	Retired from Visteon Corporation (Consultant)	250 Ootsima Way Loudon, TN 37774	734-710-4461, cell 734-756-6619 or 734-710-5000 kathienbart@charter.net
Ron Kopp	Flexco Corporation	1995 Oak Industrial Dr, N.E. Grand Rapids, MI 49505	616-459-3196 rkopp2525@yahoo.com
Amanda Knuth	Spectrum Health	605 Oak Street Big Rapids, MI 49307	amanda.knuth@spectrumhealth.org
Dakota Dotson	Spectrum Health	605 Oak Street Big Rapids, MI 49307	Dakota.Dotson@spectrumhealth.org
Jonathan Eppley	Michigan Works! West Central	14330 Northland Drive Big Rapids, MI 49307	231-660-0253 or cell: 231.349.4144 jeppley@michworkswc.org
Merri Bennett	Michigan Works! West Central	920 E. Tinkham Ave. Ludington, MI 49431	231-583-2029 or cell: 231-907-9097 mbennett@michworkswc.org
Doug Saunders	Flexco Corporation	1995 Oak Industrial Dr, N.E. Grand Rapids, MI 49505	616-459-3196 dsaunders@flexco.com

Mathias Schmitt	Yangfeng Automotive	701 South Waverly Road Holland, MI 49423	Office: 616-394-1550 Mobile: 616-212-5079 mathias.schmitt@yfai.com
Greg Zimmerman	College of Health Professionals	200 Ferris Drive Big Rapids, MI 49307	231-591-2313 gregzimmerman@ferris.edu
Anita Fagerman, Ph.D. Professor	College of Business Ferris State University	119 South Street Big Rapids, MI 49307	231-591-3162 anitafagerman@ferris.edu
Lisa Eshbach, Ph.D. Professor	College of Business Ferris State University	119 South Street Big Rapids, MI 49307	231-591-3197 lisaeshbach@ferris.edu
Gayle Lopez, J.D. Management Department Chair	College of Business Ferris State University	119 South Street Big Rapids, MI 49307	231-591-2427 lopezgj@ferris.edu
Lori Armstrong, M.S. Academic Advisor/Undergraduate Development Facilitator	College of Business Ferris State University	119 South Street Big Rapids, MI 49307	231-591- 2483 LoriArmstrong@ferris.edu
Megan Connaghan Internship Coordinator	College of Business Ferris State University	119 South Street Big Rapids, MI 49307	231-591-3049 MeganConnaghan@ferris.edu
Steve Lyman, Ph.D. Professor	College of Business Ferris State University	119 South Street Big Rapids, MI 49307	231-591-2469 stevelyman@ferris.edu
David Marion, Ph.D. Professor	College of Business Ferris State University	119 South Street Big Rapids, MI 49307	231-591-3164 davidmarion@ferris.edu
Dave Nicol, Ph.D. COB Dean	College of Business Ferris State University	119 South Street Big Rapids, MI 49307	231-591-2422 davidnicol.ferris.edu
Carol Rewers, Ph.D. Professor	College of Business Ferris State University	119 South Street Big Rapids, MI 49307	231-591-2447 carolrewers@ferris.edu

Appendix B: 2018 OSM Advisory Board Minutes

Operations and Supply Management Advisory Board Minutes

April 26, 2018

Present:

Bart Hogarth - Visteon Corporation, Retired
Amanda Knuth - Spectrum Big Rapids
Mathias Schmitt - Yangfeng Automotive
Lori Armstrong – MGMT Student Advisor
Megan Connaghan – COB Internship Coordinator
Lisa Eshbach, Ph.D. – MGMT Professor
Gayle Lopez, J.D. – MGMT Department Chair
David Marion, Ph.D. – MGMT Professor
Shannon Yost – Graduate Programs Secretary
Greg Zimmerman – FSU College of Health Professionals

Absent:

Jon Eppley - Michigan Works! West Central
Paul Flynn - Gentex Corporation
Dana Hall - Haworth Steel and Wood Plant
Ron Kopp - Flexco Corporation
Doug Saunders - Flexco Corporation
Anita Fagerman, Ph.D. – MGMT Professor
Steve Lyman, Ph.D. – MGMT Professor
Mike Pethick – FSU Director of Purchasing
Carol Rewers, Ph.D. – MGMT Professor
Jim Woolen, Ph.D. – COB Associate Dean

1. Introductions

Eshbach called the meeting to order, welcomed everyone, and introductions were made.

2. Current State of the OSM Program

Eshbach shared a presentation with an overview of the programs, the resources, enrollment data, curriculum history, and assessment, as well as outlook data and program goals. This armed the committee with information to develop a SWOT and TOWS analysis for the OSM program.

a. Resources of the OSM Program

Five tenured faculty and two adjunct faculty.

MGMT Dept. Chair, MGMT Dept. Advisor, MGMT Secretary (currently vacant).

Support from Faculty Center Training and Learning.

Classrooms with up-to-date computers, software, and equipment.

b. Enrollment Trends for OSM Bachelor, OSM and Lean Systems Minors, and Lean Systems Certificate

Though enrollment numbers peaked in AY 2015-2016, numbers are currently down slightly in all four programs.

- Zimmerman indicated that College of Health Professions is also seeing enrollment numbers decline.
- Armstrong noted that international enrollment has declined and now with mixed delivery classes it would be difficult to recoup because of the restrictions on online classes.

Minors are attracting students from Welding, HVAC, Construction Management, and Health Professions

- Knuth noted that Lean is preferred in Health Professions.

Discussion ensued about how the minors and certificate could fill skills gaps for students in other programs. One challenge is how to advertise or get the word out.

- Zimmerman agreed that a Bachelor degree with a minor is much more marketable.
- Lopez suggested working with other Program Advisors and Coordinators to encourage their advisees to add value by adding the minor at the onset of their degree.
- Eshbach offered that because members of the Society of Manufacturing Engineers (SME) are potential employers that perhaps Ferris OSM should collaborate with them and get Bronze Certified.
- Marion is recognizing a lot of interest but would like to see the momentum turn into enrollment.
- Hogarth expressed that students will not recognize need for the additional skill set until they are immersed into the need in the job force.

c. Curriculum Status Including Updates

Eshbach thanked the Board members and stated that “our OSM curriculum is this great because of your input.” This fall at the Board’s request more interpersonal communication will be added as well as intercultural which is not only needed country to country, but even within facilities.

d. Assessment Data Results

Assessment data was shared. All Lean courses are using continuous improvement every semester.

- It is difficult to keep track of alumni, and alumni feedback is sporadic and entirely voluntary. Social media can be helpful, though as Marion stated, “many alums close the door on their college life and don’t look back.”

3. Growth Opportunities

a. Industry Demand – BLS vs. Local Demand

A list of companies who provide our students with internships, and I list of companies who hire our students after graduation was reviewed, as was the Bureau of Labor Statistics Outlook for OSM Major related areas.

- We do not offer any international internships primarily because there is not a demand. International students prefer to intern in the United States.
- The report showed faster than average growth in all areas except purchasing including many jobs in Michigan.
- Schmitt observed interest in the growth in training and attributed it to the growth in industry.

b. Goals – Program, Minors, and Certificate

The previously set S.M.A.R.T goals were reviewed and the group brainstormed ideas to obtain the two goals.

- 5-10% growth would be 75-100 students Y-O-Y in 5 years (2023).
- Regarding resources: Lopez explained that faculty teach multiple courses, which requires multiple course preps, however multiple sections of the same course reduces the number of course preps, so growth of the OSM programs could be managed.
- Connaghan feels strongly that the minors would be the logical place for growth, and Armstrong committed to advise students to add minors earlier in the academic planning process.
- Areas to pursue are Orientation, Career Exploration, FSUS 100, and in general to increase marketing strategies University wide.
- Increase web presence and add and link to student success stories.

c. Strategies to achieve Goals – SWOT and TOWS

See the table on page 3 for the Strengths, Weaknesses, Opportunities, and Threats, that the committee discussed and prioritized.

d. Advisory Board Survey

Board members were asked to complete the OSM AB Survey to provide information about their organization and their impression of the FSU OSM programs, their hiring trends, and expectations of OSM graduates.

4. Adjourn

Attendees were given a gift of appreciation and meal tickets for The Rock Cafe were distributed for those planning to stay for lunch and informal continued discussion. Meeting was adjourned.

<p style="text-align: center;">Internal Factors</p> <p style="text-align: center;">External Factors</p>	<p>Strengths (S)</p> <ol style="list-style-type: none"> 1. Lean Systems Niche. 2. Experienced Faculty. 3. Experiential Learning(application) with Industry Partners 4. Strong curriculum – meets industry needs. 	<p>Weaknesses (W)</p> <ol style="list-style-type: none"> 1. Volume of Online and Mixed Delivery courses - decrease in international student enrollment. 2. Location. 3. University involvement – we teach lean, but don't apply internally. 4. Marketing the OSM program Alumni relations.
	<p>Opportunities (O)</p> <ol style="list-style-type: none"> 1. Sharing real life examples of OSM alumni. 2. Sharing OSM internship examples on website. 3. Career Preparation 4. International/Domestic friendly course delivery 5. Post graduate skill development (certificate) 6. International Internship Opportunities – trades skill development 7. Partner with international education institutions (Rhein-Waal) 8. Use existing university venues to promote OSM 9. Trades skill gap 	<p>SO Strategies (utilize opportunities)</p> <ol style="list-style-type: none"> 1. Develop OSM program (include Lean Systems minor and certificate) (and graduate Leans Systems) pamphlet (S1, S3, S4, O4, O9) 2. Build/restart relationships with alumni (information card) (S2, O1) 3. Talk with International Office about International internship opportunities (S3, O7) 4. Talk with students earlier about OSM programs and minors (S4, O8) 5. Develop a “Lean Center of Excellence” (S1,S2,O9)
<p>Threats (T)</p> <ol style="list-style-type: none"> 1. Declining state enrollment 2. Competition (online and traditional, other “attractive” programs) 3. Other schools picking up the lean niche. 4. Potential Students (needs: want to feel valued) 5. Automation/AI 6. Trades skill gap 	<p>ST Strategies (avoid threats)</p> <ol style="list-style-type: none"> 1. Increase advertising on campus – collaborating with College of Technology, Career Exploration (undecided major), FSUS (S1,T1) 2. Share internship insights/experiences (stories and videos) (internship evaluation – Internship office, FSU Television Media Production Program) (S3, S4, T2,T4) 	<p>WT Strategies (minimize weakness)</p> <ol style="list-style-type: none"> 1. Increase awareness through educating university of program offerings (W4,T2,T3) 2. Offer Lean Bronze certificate (through SME) to OSM and Lean Systems students (W2,T2)

Appendix C: OSM Program Short-Term and Long-Term Strategies

Strategy (What)	Academic Year Implementation (When)	Resources (Who)
<i>OSM Program Short Term Strategies</i>		
Build /Restart alumni relationships - idea to use information card to gather valuable data about alumni (TOWS - SO2)	2018/19	OSM Faculty
Talk with Internation Office about International internship opportunities. (TOWS - SO3)	2018/19	OSM Faculty
Discuss OSM major and lean systems curriculum with students earlier - use the FSUS course to facilitate this discussion (TOWS - SO4)	2018/19	OSM Faculty
Check out lean education opportunities with FCTL, Literacy Center and Finance Division- idea create a task force of lean faculty. (TOWS - WO5).	2018/19	OSM Faculty
Increase advertising campus – collaborating with COT, Career Exploration (undecided major) (TOWS -ST1)	2018/19	OSM Faculty
Share internship insights/experiences (stories and videos) (internship evaluation – Internship office, TMP) (TOWS- ST2)	2018/19	OSM Faculty
<i>OSM Program Long Term Strategies</i>		
Develop OSM program pamphlet (include Lean Systems minor and certificate information as well) (TOWS - SO1)	2019/20	OSM Faculty, Marketing Faculty
Incorporate university departments as lean project opportunities (TOWS - WO4)	2019/20	OSM Faculty, University departments (e.g., TAC, Birkham Health Center, etc.)
Increase awareness through educating university of program offering	2019/20	OSM Faculty
Offer video conference courses (TOWS - WO1)	2019/20	OSM Faculty, FCTL
Establish/increase social media presence (e.g., facebook) (TOWS - WO2)	2019/20	OSM Faculty, Marketing Faculty
Investigate coursera.org re: FSU courses to pique lean topic interest; student pays only if they want a certificate (TOWS - WO3)	2019/20	OSM Faculty, FCTL
Offer Lean Bronze Certificate (through SME) to OSM and Lean Systems students (TOWS - WT2)	2019/20	OSM Faculty, FCTL
Develop a "Lean Center of Excellence" (TOWS - SO5)	2020/21	OSM Faculty, Management Department, COB

Appendix D: Faculty Syllabi for OSM Program Courses

SYLLABUS

FERRIS STATE UNIVERSITY

ONLINE COURSE (INTB-320VL1)

Spring 2018, 1/8 – 4/27

INTB 320 – International Logistics, 3 credit hours

TEXT BOOK

International Logistics, The Management of International Trade Operations by Pierre David, 4th Edition, 2013, Cicero Books, ISBN 13: 978-0-9894906-0-3

CONTACT INFORMATION

Instructor: David Kelson, Associate Professor

Office Hours: Bus. 344, Tuesday from 9:00 – 11:00am and 1:15 – 3:15pm or 231-344-4664
or via course messages.

Location: Room 344, Ferris State University, College of Business, Big Rapids, MI 49307

Phone: 231-591-2464

Mail: **use course messages for contact.**

TECHNICAL SKILL REQUIREMENTS

You should be comfortable with the following:

- Using a word processor
- Using email for communications
- Sending an email attachment
- Navigating the Internet
- Downloading appropriate plug-ins
- Using the Internet search engine
- Using the discussion room icon
- Familiarity with Blackboard

*NOTE: This course requires use of Word software.

WHAT TO EXPECT

This Internet class demands that the student be self-motivated and possess self-discipline. You are responsible to keep up with the schedule, assignments, and cases. I will contact you throughout the course via email and Internet postings.

What You Should Understand About Internet Classes:

- Be realistic about the amount of time required to do the coursework □ Plan to spend 3 to 5 hours per week for each credit-hour
- Schedule “class time” as if you were attending class on-campus □ Turn in your work ON TIME □ On-line is NOT easier!
- Participate actively in the class
- Use messages and the discussion boards to communicate with your instructor and other students, and plan to communicate *often*
- Log onto the class at least 3 times per week (every day is best)
- Do not fall behind in your assignments
- ASK for help when you need it

Regular participation in the online classroom is essential for maintaining the best learning environment. Learning occurs in relationship not only between student and course materials, but also peer to peer, professor to student, and student to professor. You are expected to log on to the course site at least three times per week. Students should plan to spend between 9-15 hours per week engaged in the course, depending on your beginning level of expertise.

COURSE DESCRIPTION

Concepts and elements involved in international business in general and of commerce in particular, standard organizations within private business and government for conducting and controlling exports and imports and transportation and banking procedures for facilitating those procedures.

The course covers topics essential to the understanding of international logistics.

- Documentation
- Terms of payment
- Terms of trade
- Exchange rate exposure
- International insurance
- Customs clearance
- Agency and distributorship sales contracts

COURSE OUTCOMES

- 1) Problem solving & critical thinking: configuring international modes of transportation
- 2) Problem solving & critical thinking: international packaging needs for shipments
- 3) Problem solving & critical thinking: terms of international trade (selection process)
- 4) Problem solving & critical thinking: international means of payment (risk management)
- 5) Problem solving & critical thinking: customs clearance
- 6) Problem solving & critical thinking: managing inventory

GOALS

Upon successful completion of this course students will be able to:

- Arrange transportation of goods
- Understand the trade-offs between the different modes of transportation available
- Make sure goods are packaged properly
- Insure the goods appropriately while in transit
- Minimize the risks associated with international payments
- Make sure the goods are accompanied by the proper documents
- Determine which method is most suitable for payment

ASSESSMENT METHODS & CRITERION FOR SUCCESS:

Students should strive to achieve 100% of the Course Goals. Minimally, students are expected to achieve goals as follows:

- Instructor topics class discussions – average 75%
- Research paper – average 75%
- Tests - average 75%

INSTRUCTOR TOPIC CLASS DISCUSSIONS

Discussion Topics are found under the Discussion Tab. Discussions are intended to be particularly meaningful and relevant and will be graded as follows: 5 postings = 10 points, 4 postings = 8 points, 3 postings = 6 points, 2 postings = 4 points, 1 posting = 2 points and 0 postings = 0 points. Discussions will be closed, as indicated on the dates identified in the Course Schedule section of the Syllabus. Be sure to post on the appropriate week in the Discussions area of the INTB 320 Ferris Connect/Learn site. Topic Class Discussions are intended for the class as a whole. As is true with group discussions, students are expected to post and respond to Topic Discussions *throughout* the week. Topic Class Discussions are worth up to ten (10) points each. Your posting must be done on at least three different days during the week. A posting should be at least five sentences. You are also to evaluate the student postings that you reply to. You must do at least one original posting and four responses weekly.

Missed postings cannot be made up.

Group Research Paper

See Assignment Tab for instructions..

Evaluation/Grading – clicking on the calculated grade will link you to the feedback on your score.

(10) Instructor Topic Class Discussions (10) pts each 110 points (3) Tests (100 pts.

each) 300 points

Group Research Paper 100 points

TOTAL POINTS: **500 points**

Grading Scale

A = 95-100%	A- = 90-94%,	B+ = 87-89%	B = 84-86%,
B- = 80-83%	C+ = 77-79%	C = 74-76%	C- = 70-73%
D+ = 67-69%	D = 64-66%	D- = 60-63%	F = <60%

COURSE SCHEDULE:

Week 1: 1/8

Read Chapter 1: International Trade and watch the video “Humanity from Space.”

See Topic Discussion #1, Postings begin on Monday and end on Sunday.

Week 2: 1/16, Martin Luther King Jr. Holiday

Read Chapter 2: International Supply Chain Management

See Topic Discussion #2, Postings begin on Tuesday and end on Sunday.

Week 3: 1/22

Read Chapter 3: International Infrastructure

Read Chapter 4: International Methods of Entry.

See Topic Discussion #3, Postings begin on Monday and end on Sunday.

Week 4: 1/29

Read Chapter 5: International Contracts

No discussion topic this week

Test 1 (Ch. 1-5) Released on 2/2 Friday at 6:00am and due by midnight. You have 90 minutes from the time you sign in.

Week 5: 2/5

Read Chapter 6: Terms of Trade/Incoterms

Read Chapter 7: Terms of Payment

See Topic Discussion #4, Postings begin on Monday and end on Sunday

Week 6: 2/12

See Topic Discussion #5, Postings begin on Monday and end on Sunday

Chapter 8: Managing Transaction Risks.

Week 7: 2/19

Read Chapter 9: International Commercial Documents.

Read Chapter 10: International Insurance.

No discussion topic this week.

Test 2 (Ch. 6-10) Released on 2/23 (Friday) at 6:00am and due by midnight
You have a 90 minutes time limit from the time you sign in.

Week 8: 2/26

Read Chapter 11: International Ocean Transportation

See Topic Discussion #6, Postings begin on Monday and end on Sunday **Spring Recess. 3/5 –**

3/11

Week 9: 3/12

Read Chapter 12: International Air Transportation.

See Topic Discussion #7, Postings begin on Monday and end on Sunday

Week 10: 3/19

Read Chapter 13: International Land and Multi-Modal Transportation and Read Chapter

See Topic Discussion #8, Postings begin on Monday and end on Sunday

Week 11: 3/26 Mid-term recess 3/29 – 4/1

Read Ch.14: Packaging

No discussion topic this week

Week 12: 4/2

Read Chapter. 15: International Logistics Security for Export.

Topic Discussion #9 Postings begin on Monday and end on Sunday

Week 13: 4/9

Chapter 16: Customs Clearance.

No discussion topic this week.

Group Research Project due Friday, 4/13 by midnight.

Week 14: 4/16

Read Chapter 17, Developing a Competitive Advantage

Topic Discussion #10 Postings begin on Monday and end on Sunday

Week 15: 4/23

Test 3 (Ch. 11-17) released on 4/27 (Friday) at 6:00am and due by midnight. Time limit is 90 minutes from the time you sign in

Note: The instructor reserves the right to amend this syllabus at any time. Students will be notified of any amendments via the course e-mail system.

TEACHING METHODS

This is an online course and the tool icons of discussions and e-mail will be utilized fully, for student submissions and instructor feedback. Strategies include: Evaluation of group and class discussions, tests, research papers, through the application of course materials, interaction with the Instructor, group and other class members, and the use of postings, email, the Internet, PowerPoint and other resources.

NOTE: *The Instructor reserves the right to amend this Syllabus at any time. Students will be notified of any amendments via the course e-mail system.*

ISYS 105 Spring 2018 Syllabus

Professor: Richard Hewer	Office: BUS348	Office Hours: M-W 9:00 – 10:00 M-W 11:00 – 12:00	Phone: Office 231-591-2455 Cell 231-832-4419	Email: Please use Course Messages in Blackboard.																																										
<p style="text-align: center;">Course Objectives:</p> <p>CO1. Learners will demonstrate the ability to use Microsoft Office to present information appropriate for the intended audience.</p> <p>CO2. Learners will demonstrate the ability to use Microsoft Office to interpret and express mathematical information. CO3. Learners will demonstrate the ability to use Microsoft Office to present information appropriate for the intended audience.</p> <p>CO4. Learners will demonstrate the ability to use Microsoft Office to interpret and express mathematical information.</p> <p style="text-align: center;">Click here for more Information</p> <p>Teaching Methods: All material will be distributed on the class web sites, Blackboard and McGraw Hill. Class notes, instructional material, and student assignments will be posted on this class websites.</p> <p style="text-align: center;">McGraw Hill</p> <p>Assignments: The tutorials will be given in conjunction with the quizzes. These assignments will be given throughout the reading in the e-text, which is found by clicking an assignment icon in McGraw the Guided Projects. Hill. Other assignments found in McGraw Hill are</p>			<p>Prerequisite: This course covers a full semester and no prerequisites are necessary.</p> <p>Text: Microsoft Office 2016 in Practice by Nordell published by McGraw Hill ISBN: 978-0-07-802032-2</p> <p>Assignments : Due dates are posted on the course calendar in Blackboard. If they are turned in on the due date, you may receive up to 100% of the points available. If they are turned in from 1 minute to 7 days after the due date, you may receive up to 70% of the points available. Extra Credit: There is a Web Page Project that will be worth 50 extra opportunities. for 20 extra credit points for each and there may or may not be points, you may submit your Resume and Transcript to your advisor extra credit additional</p>																																											
			<p>Letter Grades: will be given as outlined below.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>A</td><td>93%</td><td>1860</td></tr> <tr><td>A-</td><td>90%</td><td>1800</td></tr> <tr><td>B+</td><td>87%</td><td>1740</td></tr> <tr><td>B</td><td>83%</td><td>1660</td></tr> <tr><td>B-</td><td>80%</td><td>1600</td></tr> <tr><td>C+</td><td>77%</td><td>1540</td></tr> <tr><td>C</td><td>73%</td><td>1460</td></tr> <tr><td>C-</td><td>70%</td><td>1400</td></tr> <tr><td>D+</td><td>67%</td><td>1340</td></tr> </table>		A	93%	1860	A-	90%	1800	B+	87%	1740	B	83%	1660	B-	80%	1600	C+	77%	1540	C	73%	1460	C-	70%	1400	D+	67%	1340	<p>Grade Points: will be computed as outlined below.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><th colspan="2" style="text-align: center;">McGraw Hill</th></tr> <tr><td>Training/Quizzes</td><td style="text-align: right;">260</td></tr> <tr><td>Guided Projects</td><td style="text-align: right;">320</td></tr> <tr><td>Word-PP Exam</td><td style="text-align: right;">100</td></tr> <tr><td>Excel Exam</td><td style="text-align: right;">200</td></tr> <tr><th colspan="2" style="text-align: center;">Blackboard</th></tr> <tr><td>Projects</td><td style="text-align: right;">1,120</td></tr> <tr><td>TOTAL</td><td style="text-align: right;">2,000</td></tr> </table>		McGraw Hill		Training/Quizzes	260	Guided Projects	320	Word-PP Exam	100	Excel Exam	200	Blackboard		Projects
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Section Tests A test will be given at the end of each section. They are worth 100 points each and are open book.

Exams: One final exam will be given at the end of the course, which is worth 200 points.

Blackboard

Projects: Projects will be given for each of the major areas of study:

- OneDrive Bio – 1 Project
- OneDrive Word- 2 Projects •
OneDrive Excel- 4 Projects
- OneDrive PowerPoint- 1 Project
- OneDrive Integration- 1 Project

Attendance: You are expected to be in class (unless you work ahead). You will be deducted 20 points for absences over 3.

Cheating Policy: First offense: You will receive a grade of negative maximum value for the assignment, it will be reported to student conduct and it will be recorded

Ferris State University Course Syllabus Fall 2017

Course Information

Course Title:	Enterprise Integration and BPR (ERP)
Course Number:	ISYS 482
Pre-requisites:	Junior Standing
Co-requisites:	none
Term:	Fall 2017
Meeting times:	6:00 – 8:50 PM
Location:	BUS 118

Instructor Information

Name:	Felix Bollou
Office Location:	BUS 318
Office Hours:	T/R 1:30 - 3:00 PM
Telephone:	231 598 0968
Email:	bollouf@ferris.edu

Course Objectives

Catalogue Description:

In the wake of **globalization**, businesses all over the world are exposed to the five competition forces depicted by Potter. Nowadays, no matter where the business is located or its history, it will have to constantly rework its **competitive strategy** in order to survive the effects of **Substitute products or services or the thread of new entrants**. These new developments have forced business to anticipate and make informed decisions on a constant basis. As a consequence, more and more jobs are being created every year in Analytics, Big data, Business Intelligence.... All of the above are forms of integrating hard data and soft data inside each organization but also integrate **external data** from other organizations and **social media** to help the business managers make the decisions they have to make in order to refine their competitive strategy. One of the instruments that allows organizations to collect ALL the data and organize it and at the same time define the necessary **workflows** to improve their **processes** is **Integration**. Enterprise Resource Planning (**ERP**) is the other name for this course. ERP programs are core software used by companies to coordinate and integrate information in every area of the business. ERP programs help to manage company-wide **business processes** or **workflows** using a **common database** and **shared** management reporting tools. In this course, students will learn the principles of integration, in addition to the theory, the customization of a ERP software will provide students with hands on experience in this exciting field.

Learning Outcomes:

Students who successfully complete this course will be able to:

- Explain the fundamental concepts of Enterprise Integration
- Explain the importance of Business Process Reengineering
- Draw a business process diagram
- Implement Internal Controls
- Navigate an ERP software
- Acquire Hands-on experience on SAP R/3, world leader of ERP systems.

Learning Process:

In this, the Outcome base Action learning approach is used. Students are assigned real life exercises that are designed to train them to master the techniques of modeling and design.

Resources

Textbook(s): Integrated Business Processes with ERP Systems

Simha R. Magal & Jeffrey Word

ISBN: 978-0-470-47844-8

Course Outline

TOPIC OVERVIEW

Week	Days	Topics	Readings	Exams Quizzes
1		Introduction/Discussion of Course Administration		
2		Introduction to Business Processes Business Functions of GBI	Pages 1 - 16	Unit test
2		Introduction to Enterprise Systems <ul style="list-style-type: none"> - Enterprise Systems - Data in Enterprise Systems - Reporting 	Pages 23 -37	Unit test

3		Introduction to Accounting <ul style="list-style-type: none"> - Organizational data - Master data - Key concepts - Processes - Reporting 	Pages 49 - 72	Unit test
4		The Procurement Process <ul style="list-style-type: none"> - Organizational data - Master data - Key concepts - Processes - Reporting 	Pages 83 - 119	Unit test
5		The Fulfilment Process <ul style="list-style-type: none"> - Organizational data - Master data - Key concepts - Processes - Reporting 	Pages 127 - 170	Unit test
6		The Production Process <ul style="list-style-type: none"> - Master data - Processes - Reporting 	Pages 179 - 215	Unit test
8		Inventory and Warehouse Management <ul style="list-style-type: none"> - Inventory Management - Organizational data in WM - Master Data in WM - Processes in WM - Reporting 	Pages 221 - 257	Unit test
		The Material Planning <ul style="list-style-type: none"> - Master data - Processes - Reporting 	Pages 269 - 304	Unit test
10		Process Integration Procurement, Fulfillment and IWM processes	Pages 315 - 332	Unit test
12		Process Integration Procurement, Fulfillment, Production and IWM processes	Pages 315 - 332	Unit test
		Project Presentations		
14		Final Exam		

STUDENT EVALUATION

The grade for this course is composed of marks received for the term project, in-class assignments, mid-term and final exam (see the table below). Note that students **MUST** pass the combination of the mid term and final exam in order to pass the course.

Course Requirements	Time	Grades
In-Class unit tests	Every week	25%
Homework & Case study Participation		25%
Mid Term Exam	Week 7	20%
Final Term Exam	TBA	30%
Total		100%

Students are given a final grade in the course according to the following system:

Course Policies

Students who miss classes are responsible for obtaining notes, handouts, assignments or test information from other students.

All cellular phones pagers and other communication devices should be turned off during the class sessions. Any student who wishes to use one of these devices should do so outside the classroom

Plagiarism is a serious academic offence and penalties range from zero in an assignment all the way to expulsion from the university. In any academic exercise, plagiarism occurs when one offers as one's own work the words, data, ideas, arguments, calculations, designs or productions of another without appropriate attribution or when one allows one's work to be copied.

The granting of extensions or the privilege to write the quizzes or exams after their scheduled date and time is entirely at the discretion of the professor and usually is restricted to documented medical or compassionate reasons. Assignments must be submitted at the beginning of the class meeting at which they are due. Late Assignments will be accepted only at the discretion of the instructor and will be penalized 5% per day.

MGMT 370: Operations Management

This syllabus may be modified by the instructor.

INSTRUCTOR CONTACT INFORMATION

Instructor: Dr. Anita Fagerman, Professor

Contact: Utilize Blackboard mail tool

Backup e-mail is fagerman@ferris.edu

Course Schedule: January 8, 2018 – May 4, 2018

Face to Face Meetings: 6:00 pm to 8:50 pm on the following Tuesdays:

- January 16
- February 27
- March 20
- April 3, 17 Room: ATC 221

COURSE DESCRIPTION

The philosophy of continuous quality improvement, basic process improvement tools, basic management and planning tools, teaming, and models for improvement. Maximizing customer service and satisfaction, optimizing inventory investment, and maximizing operations efficiency. Principles of operations management; dependent and independent demand, forecasting; work measurement; work standards. Practical application of these techniques on a variety of business-related problems will enhance the ability to carry out the operation's aspect of a business.

COURSE OUTCOME TOPICS:

- **#1:** International awareness. Understand global operations issues and strategies. This includes global sourcing, logistics, facility location, and environmental/sustainability. Articulate the reason why companies support international business such as new markets or outsourcing activities.
- **#2:** Process management and improvement. Demonstrate knowledge of and ability to apply the tools of process analysis and improvement. Tools include project management (CPM), quality improvement (TQM, Six Sigma, ISO9000), process mapping, lean tools (value stream mapping, 5S, TPM).
- **#3:** Process control/management. Selection of processes that produce goods or service customers. Scheduling and control of resources. Understanding and apply techniques

- to plan output given labor, capacity and materials through tools like ERP. Tools like ERP/MRP will demonstrate the planning process.
- #4: Operational strategies. Understand the roles and drivers of operational strategy and the interrelationship to other functional area. Specific strategies to be focused on include capacity, improvement tools, and international operations.
 - #5: Customer service and the expanding role of service operations. Includes relating systems to support customer demands, scheduling, and resources. Understand the role customer contact has on revenue generation, impact quality has, and the role inventory control has.
 - #6*. Analyze an environment, draw logical conclusions, and demonstrate the ability to make effective decisions.

COURSE MATERIALS REQUIRED

#	Required Materials
1	<p>McGraw-Hill (MH) Connect • Grand Rapids signup at http://connect.mheducation.com/class/a-fagerman-spring-2018-online---gr</p> <ul style="list-style-type: none"> • Cost: about \$130 when bought direct • Registration opens 01/08/2018 and runs until 05/04/2018. • You may receive courtesy access for two weeks without cost. • An electronic version of the book comes with McGraw-Hill (MH) Connect (at no additional cost). The relevant textbook information is as follows: <i>Stevenson, W. J. (2017). Operations management (13th ed.). New York, NY: McGraw Hill Education.</i> • You are able to buy a hardcopy of the book, but please know <u>it is not required</u>. The ebook that accompanies the software should be sufficient.
2	A simple calculator for very basic math. (You may not use your phone during testing.)
3	<p>Access to a scanner (or camera) to scan (or take a picture) of your hand written homework assignments into electronic PDF files. Name each of your files using 3 components: <i>FirstName LastName Item</i></p>

Other materials will be required and are available on-line through the Blackboard course room.

Course Outline	using <i>Stevenson (2017). Operations management (13th ed.)</i>
Chapter 1	Introduction to Operations Management
Chapter 2	Competitiveness, Strategy, and Productivity
Chapter 3	Forecasting

Chapter 5 Strategic Capacity Planning for Products and Services

Test 1

Chapter 14 JIT and Lean Operations

Chapter 6 Process Selection and Facility Layout

Chapter 18 Management of Waiting Lines

Chapter 8 Location Planning and Analysis

Test 2

Chapter 10 Quality Control

Chapter 11 Aggregate Planning and Master Scheduling

Chapter 12 MRP and ERP

Chapter 13 Inventory Management

Test 3

Chapter 15 Supply Chain Management

Chapter 9 Management of Quality **Final**

Exam (optional)

45 hours

SPECIAL COURSE TECHNICAL NEEDS

Students in this mixed delivery course must use **Respondus Lockdown browser** to take tests. The browser is a secure browser for taking tests in Blackboard; it prevents users from printing, copying, or going to another application or URL. For download and installation instructions go to https://ferris.edu/it/blackboard/student_support/respondus/index.htm

Students must also have a functioning **webcam** and **microphone** for use during testing.

Your instructor will be using **Respondus Monitor**, which is a webcam feature for LockDown Browser. It records students during online, non-proctored exams. When this feature is enabled for a test, students are required to use a webcam and microphone with LockDown Browser. After the exam is complete, an instructor can review details of the assessment, even the recorded videos.

COURSE GRADING

Learnsmart Modules (14 chapters)		42 (see MH Connect)
Assignments (14 chapters)		42 (see MH Connect)
	(14 chapters)	Online Quizzes 42 (see MH Connect)
Homework		64
In class participation		-

- You must watch your instructor’s Tegrity Lecture Capture videos for Chapters 3, 5, 14, & 6. You will lose 3 points for each missed video set (per chapter)
- You must attend & participate in 3 of 5 face-to-face classes. You will lose 6 points for each additional class you miss

Online Tests (3 total @ 150 each)	450
<u>Final Exam (optional - replaces lowest test score)</u>	<u>-</u>
Total points	640

COURSE GRADES

The following grading scale will be utilized:

Grade	Percentage	Minimum Score	Maximum Score
A	95-100	608	640
A-	90-94	576	607
B+	87-89	557	575
B	84-86	531	556
B-	80-83	512	530
C+	77-79	493	511
C	74-76	467	492
C-	70-73	448	466
D+	67-69	407	447
D	64-66	383	406
D-	60-63	365	382
F	below 60		

COURSE REQUIREMENTS

You are required to

- attend 3 of 5 face-to-face classes,
- watch your instructor’s Tegrity Lecture Capture videos for four chapters,
- read each chapter,
- complete assignments, quizzes, & LearnSmart activities for each chapter,
- complete hand written homework, and.
- Take tests using Respondus Lockdown browser with a webcam and microphone. A file containing due dates and point distributions will be provided in Blackboard.

MH Connect:

Activities within McGraw-Hill Connect (i.e. Learnsmart, assignments, & quizzes) have due dates. Stay current - don't fall behind. If you forget MH Connect work, I will not reopen it. Do not wait until the semester end to report concerns.

Online Tests:

Tests will cover several chapters and will tend to be problems (requiring you to calculate math solutions) and short essays regarding topics that are related and may also include articles. The tests are created to challenge you to promote and show higher learning.

Articles & Videos

For some chapters there may be assigned articles and/or videos. The purpose of the articles and videos is to highlight current issues within industry that relates to the specific topic.

COURSE DELIVERY IS MIXED DELIVERY

This course meets five Tuesday in a face-to-face setting in Grand Rapids. Between the face-to-face sessions you will be completing work on-line through McGraw Hill Connect.

We will also use Blackboard – the on-line learning platform utilized by Ferris State University – for communications outside of the face-to-face meeting times and for homework assignments. There will be four chapters that require viewing of online lecture recordings in Tegrity. Once the course begins, all two-way communication about the course should take place within Blackboard using the mail tool.

- You can access Blackboard courses through the MyFSU Portal.
- You can access McGraw Hill Connect at the URL provided above

COURSE COMMUNICATION

Outside the face-to-face meetings, we will communicate in an **asynchronous** manner; **in an asynchronous environment, communication** and activities take place outside of real time, enabling participants to send and receive information at times convenient for them. Use Blackboard for this communication.

COURSE PARTICIPATION AND ACADEMIC INTEGRITY

Each of you is expected to **do your own work** in this course. Failure to do your own work will result in failure in this course.

COURSE TECHNICAL NEEDS

You must have regular weekly access to the internet during this course. You are expected to be able to easily navigate the web, send and receive e-mail*, utilize Microsoft Word, utilize Microsoft Excel, utilize Blackboard, utilize McGraw Hill Connect, and read PDFs. Select a simple calculator for use during the testing portion of this class. A scanner or camera is required to scan/copy your hand written homework assignments into PDF form so that you may give copies of the files to your instructor. Respondus Lockdown browser must be used with a webcam and microphone to take tests.

*If you use e-mail, use your Ferris e-mail; do not use your personal e-mail account.

DISABILITY STATEMENT

Ferris State University is committed to following the requirements of the Americans with Disabilities Act Amendments Act and Section 504 of the Rehabilitation Act. If you are a student with a disability or think you may have a disability, contact the Disabilities Services office at 231.591.3057 (voice), or email ecds@ferris.edu to discuss your request further. More information can be found on the web at

<http://www.ferris.edu/htmls/colleges/university/disability/>. Any student registered with Disabilities Services should contact the instructor as soon as possible for assistance with classroom accommodations. More information can be found in the syllabus attachment.

INCLEMENT WEATHER

GRCC on occasion will close the campus if the weather gets really bad. If GRCC closes, our face-to-face class will be cancelled. Students should watch the local TV stations for closing information and sign up for RAVE text alerts:

GRCC RAVE Emergency Notification Service

To register for GRCC's RAVE emergency notification service, go to <https://www.getrave.com/login/grcc> and click on "Register" in the upper right hand corner. You can then create an account which will allow you to receive text messages regarding campus closings and other emergency situations impacting the GRCC campus.

If a face-to-face class is cancelled, your instructor will hold the class online. When a class is canceled, your instructor will confirm the class cancellation via an e-mail to each student using Ferris e-mail addresses. (Be sure to check your Ferris e-mail.) Information will be provided to you inside Blackboard detailing the online learning plan and required activities.

MISCELLANEOUS

The “Syllabus Attachment” is adopted and incorporated into this syllabus.

The key to success in this course is to complete deliverables thoroughly, accurately, thoughtfully, and on time. If you begin experiencing major difficulties, refer to the “Syllabus Attachment” located in the Blackboard course room. Of particular assistance may be the Technology Assistance Center (TAC). You can contact TAC at 231-591-4822 or toll free at 877-779-4822.

Incomplete grades should not be expected. Incomplete grades, if any, will only be issued in strict conformance with University policies.

The course officially begins January 8, 2018 and ends May 4, 2018. No work will be accepted after 11:55 pm May 4, 2018. All time periods used in this course are assumed to be in the Eastern Time Zone.

This course will move very rapidly. **Do not fall behind.** Do not delay in starting to work.

Expect to spend approximately 10 hours per week on this class. (10 hours is a rough average; don't be surprised if you spend as much as 10+ hours per week on this class.)

There is no EXTRA CREDIT.

RESERVATION TO CHANGE SYLLABUS

Instructor reserves the right to make modifications to the course and to this syllabus.

MGMT 370: Operations Management

This syllabus may be modified by the instructor.

Ferris State University

08/22/2017

MGMT370 Syllabus – Online Sections VL2 & VL3

INSTRUCTOR CONTACT INFORMATION

Instructor:	Dr. Anita Fagerman, Professor
Contact:	Utilize Blackboard mail tool Backup e-mail is fagerman@ferris.edu
Course Schedule:	August 28, 2017 – December 15, 2017

COURSE DESCRIPTION

The philosophy of continuous quality improvement, basic process improvement tools, basic management and planning tools, teaming, and models for improvement. Maximizing customer service and satisfaction, optimizing inventory investment, and maximizing operations efficiency. Principles of operations management; dependent and independent demand, forecasting; work measurement; work standards. Practical application of these techniques on a variety of business-related problems will enhance the ability to carry out the operation's aspect of a business.

COURSE OUTCOME TOPICS:

- #1: International awareness: understand global operations issues and strategies.
- #2: Process management and improvement.
- #3: Operational strategies.
- #4: Scheduling and resource control.
- #5: Customer service and the expanding role of service operations.
- #6*. Analyze an environment, draw logical conclusions, and demonstrate the ability to make effective decisions.

SPECIAL COURSE TECHNICAL NEED

Students in this totally online course must use **Respondus Lockdown browser** to take tests. The browser is a secure browser for taking tests in Blackboard; it prevents users from printing, copying, or going to another application or URL. For download and installation

instructions go to

http://www.ferris.edu/HTMLS/mytechsupport/ferrisconnect/student_support/respondus/index.htm

Students must also have a functioning **webcam** and **microphone** for use during testing.

Your instructor will be using **Respondus Monitor**, which is a webcam feature for LockDown Browser. It records students during online, non-proctored exams. When this feature is enabled for a test, students are required to use a webcam and microphone with LockDown Browser. After the exam is complete, an instructor can review details of the assessment, even the recorded videos.

COURSE MATERIALS REQUIRED

#	Required Materials
1	<p>McGraw-Hill (MH) Connect • Section VL2: signup at http://connect.mheducation.com/class/a-fagerman-fall-2017-online---vl2</p> <ul style="list-style-type: none">• Section VL3: signup at http://connect.mheducation.com/class/a-fagerman-fall-2017-online---vl3• Cost: about \$130 when bought direct• Registration opens 08/28/2017 and runs until 12/15/2017.• You may receive courtesy access for two weeks without cost.• An electronic version of the book comes with McGraw-Hill (MH) Connect (at no additional cost). The relevant textbook information is as follows: <i>Stevenson, W. J. (2014). Operations management (12th ed.). New York, NY: McGraw Hill Education.</i>• Note: we are <u>NOT</u> using the 13th edition of the Stevenson book this semester.• You are able to buy a hardcopy of the book, but please know <u>it is not required</u>. The ebook that accompanies the software should be sufficient.
2	A simple calculator for very basic math. (You may not use your phone during testing.)
3	<p>Access to a scanner (or camera) to scan (or take a picture) of your hand written homework assignments into electronic PDF files. Name each of your files using 3 components:</p> <p style="text-align: center;"><i>FirstName LastName Item</i></p>

Other materials will be required and are available on-line through the Blackboard course room.

Course Outline using *Stevenson (2014). Operations management (12th ed.)*

Chapter 1 Introduction to Operations Management

Chapter 2 Competitiveness, Strategy, and Productivity
 Chapter 3 Forecasting
 Chapter 5 Strategic Capacity Planning for Products and Services

Test 1

Chapter 14 JIT and Lean Operations
 Chapter 6 Process Selection and Facility Layout
 Chapter 18 Management of Waiting Lines
 Chapter 8 Location Planning and Analysis

Test 2

Chapter 11 Aggregate Planning and Master Scheduling
 Chapter 12 MRP and ERP
 Chapter 13 Inventory Management

Test 3

Chapter 15 Supply Chain Management
 Chapter 9 Management of Quality **Final**

Exam (optional)

45 hours

COURSE GRADING

Learnsmart Modules (13 chapters)		39 (see MH Connect)
Assignments (13 chapters)		39 (see MH Connect) Online Quizzes
	(13 chapters)	39 (see MH Connect)
Homework		64
In class participation		-
You must watch your instructor's Tegrity Lecture Capture videos. You will lose 3 points for each missed video set per chapter		
Online Tests (3 total @ 150 each)		450
<u>Final Exam (optional - replaces lowest test score)</u>		-
Total points		631

COURSE GRADES

The following grading scale will be utilized:

Grade	Percentage	Minimum Score	Maximum Score
A	95-100	599	631

A-	90-94	568	598
B+	87-89	549	567
B	84-86	524	548
B-	80-83	505	523
C+	77-79	486	504
C	74-76	461	485
C-	70-73	442	460
D+	67-69	401	441
D	64-66	377	400
D-	60-63	359	376
F	below 60		

MH Connect:

Activities within McGraw-Hill Connect (i.e. Learnsmart, assignments, & quizzes) have due dates. Stay current - don't fall behind. If you forget MH Connect work, I will not reopen it. Do not wait until the semester end to report concerns.

Online Tests:

Tests will cover several chapters and will tend to be problems (requiring you to calculate math solutions) and short essays regarding topics that are related and may also include articles. The tests are created to challenge you to promote and show higher learning.

Articles & Videos

For some chapters there may be assigned articles and/or videos. The purpose of the articles and videos is to highlight current issues within industry that relates to the specific topic.

Class Requirements:

You are required to

- watch your instructor's Tegrity Lecture Capture videos,
- read each chapter,
- complete assignments, quizzes, & LearnSmart activities for each chapter,

- complete hand written homework, and.
- Take tests using Respondus Lockdown browser with a webcam and microphone.

A file containing due dates and point distributions will be provided in Blackboard.

COURSE DELIVERY IS 100% ONLINE

This course is completely on-line and all activities will take place through Blackboard (the on-line learning platform utilized by Ferris State University) and McGraw Hill Connect. Once the course begins, all communication about the course should take place within Blackboard.

COURSE COMMUNICATION

Communication within this course will be **asynchronous; in an asynchronous course, communication** and activities take place outside of real time, enabling participants to send and receive information at times convenient for them.

- You can access Blackboard courses through the MyFSU Portal
- You can access McGraw Hill Connect at the URL provided on page 1

COURSE TECHNICAL NEEDS

You must have regular weekly access to the internet during this course. You are expected to be able to easily navigate the web, send and receive e-mail, utilize Microsoft Word, utilize Microsoft Excel, utilize Blackboard, utilize McGraw Hill Connect, and read PDFs. Select a simple calculator for use during the testing portion of this class. A scanner or camera is required to scan/copy your hand written homework assignments into PDF form so that you may give copies of the files to your instructor. Respondus Lockdown browser must be used with a webcam and microphone to take tests.

COURSE PARTICIPATION AND ACADEMIC INTEGRITY

Each of you is expected to **do your own work** in this course. Failure to do your own work will result in failure in this course.

DISABILITY STATEMENT

Ferris State University is committed to following the requirements of the Americans with Disabilities Act Amendments Act and Section 504 of the Rehabilitation Act. If you are a student with a disability or think you may have a disability, contact the Disabilities Services office at 231.591.3057 (voice), or email ecds@ferris.edu to discuss your request further. More information can be found on the web at

<http://www.ferris.edu/htmls/colleges/university/disability/>. Any student registered with Disabilities Services should contact the instructor as soon as possible for assistance with classroom accommodations. More information can be found in the syllabus attachment.

MISCELLANEOUS

The “Syllabus Attachment” is adopted and incorporated into this syllabus.

The key to success in this course is to complete deliverables thoroughly, accurately, thoughtfully, and on time. If you begin experiencing major difficulties, refer to the “Syllabus Attachment” located in the Blackboard course room. Of particular assistance may be the Technology Assistance Center (TAC). You can contact TAC at 231-591-4822 or toll free at 877-779-4822.

Incomplete grades should not be expected. Incomplete grades, if any, will only be issued in strict conformance with University policies.

The course officially begins August 28, 2017 and ends December 15, 2017. No work will be accepted after 11:55 pm December 15, 2017.

All time periods used in this course are assumed to be in the Eastern Time Zone.

If you use a MacIntosh system, it is your responsibility to confirm all Deliverables are displayed properly on a Microsoft system. If discrepancies are found (by you) you must inform your Instructor within 5 days of your Instructor’s feedback to you; you may be required to submit additional documentation (such as a PDF version of each Deliverable) if discrepancies exist.

This course will move very rapidly as we are completing an entire semester of work in just over six weeks. **Do not fall behind.** Do not delay in starting to work.

Expect to spend approximately 20 hours per week on this class. (20 hours is a rough average; don’t be surprised if you spend as much as 20+ hours per week on this class.)

There is no EXTRA CREDIT.

RESERVATION TO CHANGE SYLLABUS

Instructor reserves the right to make modifications to the course and to this syllabus.

Ferris
State
University

MGMT 370

Online: Spring 2018

Instructor: Dr. Steven B. Lyman

Office Hours: Tuesday/Thursday 8:00-9:30, Tuesday 1:15-2:00 in COB rm 336. I am online usually every day and I usually respond within 24 to 48 hours with the exception of weekends and holidays.

Contact: 231-591-2469,

E-mail: lymans@ferris.edu or Within Blackboard (best method)

Course Description:

The course focuses on strategies, processes and techniques used from material acquisition to production and finally through delivery of a product or service. Students will learn about operational efficiency and effectiveness and how this relates to product/service costs. Operations focus on the supply side of the supply and demand relationship where marketing and consumer create demand. Extensive use of discussion related to current topics and publications (Business Week and Wall Street Journal) will be used so students can apply the concepts to real life industries. The student will also develop a working knowledge of what the various issues and concepts are in operations like: Lean Manufacturing, Supply Chain Management, Operation Strategies, Value Stream Mapping, Kaizen, and various elements of Quality from ISO 9000 to Six Sigma.

Learning Objectives and Outcome:

The objective of this course is to develop awareness of current methods used in operations, both in manufacturing and service industries. The general categories of outcome base learning are International, Social/Ethical Responsibility, Sustainable/Environmental, Processes management: Mfg/Service, HR/Organizational Issue, and Technology. Collectively, discussions, problems, and cases, required for this course are intended both to develop as well as to demonstrate student's key competencies as follows:

1. Awareness and understand of global operations issues and strategies within manufacturing and service organizations.
2. Process management and improvement. Demonstrate knowledge of and ability to apply the tools of process analysis and improvement.
3. Demonstrate understanding of operational strategies; capacity, location, layout/flow, quality, supply management, and lean.
4. Understand and demonstrate scheduling and resource control and its impact on customers.

Outcomes & Measurable	Class projects	Quizzes & Tests	Homework	Special Projects
1. Awareness and understand of global operations issues and strategies within manufacturing and service organizations.	X	X		X
2. Process management and improvement. Demonstrate knowledge of and ability to apply the tools of process analysis and improvement.	X	X	X	X
3. Demonstrate understanding of operational strategies; capacity, location, layout/flow, quality, supply management, and lean.	X	X	X	
4. Understand and demonstrate scheduling and resource control and its impact on customers.		X		X

Required Text & Readings:

- 1) Stevenson, W. J., Operations Management, 2018, 13th edition, ISBN: 9781260234190. This is a complete package with Connect and loose-leaf Book. (about \$140)
- 2) In addition, there will be assigned reading for most chapters. These articles will be found with Blackboard, Articles icon on the home page which is a URL link to the Library. These articles will not cost anything and will be part of each chapter's discussions and will enhance understanding.

3) Your section is paired between blackboard and MH Connect so you can access MH either by going through Blackboard (**have to first time, see Learning Module Week 1**) or going direct to MH Connect.

Materials for Grading (Please note: all attached documents (excel and word) are to be in Office 2003 version or higher.) Please note that there are 15 chapters. All assignment types involve questions to be answer for points.

Introduction	15
Problems: in Learning Module (20 pts each)	40
Quizzes: 20 points each, (15 quizzes)	300 (MH Connect)
Learnsmart Module (15@ 5 pts each)	75 (MH Connect)
Chapter Assignments (15 but pts vary)	115 (MH Connect)
<u>Discussion (8@15 pts-answer & 5pts*2 responses)</u>	<u>200</u>
Total points	645

Grading Scale (these are percentages)

A	95-100	B-	80-83.9	D+	67-69.9
A-	91-94.9	C+	77-79.9	D	64-66.9
B+	87-90.9	C	74-76.9	D-	60-63.9
B	84-86.9	C-	70-73.9	F	0-59.9

Learning Modules list due dates for each weeks work, stay current, don't fall behind. If you miss a discussion or any work for an excused reason (athletics or family emergencies), you have ONE DAY after due date to notify me and complete the work. No exceptions! Do not wait until the semester end and expect any consideration (requesting MH connect assignments to be reopened). If you have a systems connection issue, notify me when it happens so I can reset the quiz or address problem. **Special Note:** Missed Quizzes will NOT be reopened or extended after due date. NO EXTRA CREDIT PROJECTS or PAPERS will be given, extra credit can be found in Discussion only. You must inform me of any issues or problems with MH Connect (Learnsmart, quizzes, and Assignments). **Failure to try the MH Connect Assignments during the allotted week will result in no extensions except for excused reasons.** Learnsmart, Quizzes, and Assignments involve questions which are graded for points and will show up in MH connect and blackboard. Check your points within MH Connect Often, Blackboard may take a day or two to show grades. For the first several weeks I will be sending out "At Risk" reports within McGraw Hill to those students who are falling behind, you are required to figure out what you are missing!

MH Connect

You have many graded activities within MH Connect which start in week one. See above for details on number of points per activity. Learnsmart used interactive questions linked to the e-book so you can find and learn the materials. Quizzes test your knowledge and are similar to learnsmart. Assignments involve question related to either a video or series of math problems. If the computer system does not show your grade or points, either for learnsmart, quizzes, or assignment, within a day past the due date please contact me and MH connect (800-331-5094). ***DO NOT WAIT UNTILL THE END OF CLASS, I WILL NOT FIX IT AT THAT TIME Nor Give POINTS FOR MISSED MATERIALS.*** So notify me no later than 1 day from due date of work if you have a problem.

Chapter Quizzes

Quizzes will be utilized as a measure of your growing understanding. Quizzes are available on-line through MH Connect, with one attempt per chapter. Students may do their quizzes "open book" but remember there is a time limitation. **Once you start you must finish**, you can't stop and come back later. Time is limited to 60 minutes for 20 questions so keep your speed up.

Problems

Under certain Learning Modules in Blackboard you will find a file with a problem to assist you in doing problems in the midterm and final.

Projects

Under certain Learning Modules in Blackboard you will find a file with a project which you may work with others or by yourself. Submit your answer on Blackboard assignment for credit.

Articles

The purpose of the articles is to highlight current issues within industry that relates to the specific topic. The articles should also be used to support some of the discussion/responses.

Discussion Policy/Points (only area where extra credit is available)

There will be discussion which will cover a topic within specific chapters. You will be required to meet certain requirements. Being active in discussions (see Blackboard discussion icon on left tool bar) is critical in online learning. I will be posting questions each week on many chapters. I recommend taking your experiences, the articles (from "Articles & Powerpoints" icon), the book, plus the internet to formulate your answers. Students will answer the questions online by threaded links to the posted question. This way I know you are answering the question and not just responding to a classmate. Please limit your answers to one or two pages, or 300 to 800 words. Answers for the original question are worth up to 15 points each. **Note:** First responders to questions will receive more credit. Late or last minute responses which restate past answers from fellow students will be graded down or not receive full credit. If you respond later in the time period, then be creative if you wish to receive full credit. I look for references to other books, articles, or web sites related to the topic. If you have a position, support with other sources. All discussion must be complete by the due date.

Two responses are required and are worth 5 points each and involves your treaded links responses to your online classmates. Remember: **You will need to respond twice**. For example, post your answer to a question a discussion, then go and read two answers from other classmates and respond with a short comments which ranges from 100 to 200 words or more. ***You may also respond to additional student responses and may be counted for extra credit (up to 5 pts per discussion and each response after the initial 2 is worth 1 to 2 pts each for 5 more extra credit points)***. I will read every student response. The number and quality of answers and responses will be graded. I **strongly encourage different viewpoints and tend to give better grades or added extra points**. Simply responding to classmate (friend) with an "I agree ...", "Great job on your answer ..." is a limited response and is graded accordingly if at all. If you say "I agree BUT...." This peaks my interest, creates discussion, and enhances grading!

There will be numerous discussions and are students will need to check the learning Module in Blackboard to see which week and the topic of discussion. Also check the syllabus "class schedule" (below) for the specific week.

Discussion Grading Rubrics:

Individual and group grades on cases and discussion will be based on:

	Discussion Answer	Discussion Response
Depth of Analysis (sect I to III) 8 section too Sect II & III	15 pts (5 pts per sect part)	5 pts/each
Professionalism, quality of writing	(subtraction of points 3)	(subtraction of points 1-2)

Class Schedule and outcome assessment (see Learning Modules for Dates):

Date s	Topic	Assignment	Measurable Outcomes					
			Process Control	Process Improvement	Operation Strategy	Internation Operations	Sustainable Business	Customer Service
Week 1	Chapter 1: Intro to Operations Management	Do Introduction Learnsmart ch 1 Ch 1 quiz Assignment ch1			X		X	X
Week 2	Chapter 2: Operations Strategy in a Global Environment	Discussion Learnsmart ch2 Ch 2 quiz Ch 2 assignment	X		X	X	X	X
Week 3	Chapter 3: Forecasting	Learnsmart ch3 Ch 3 quiz Assignment ch3	X		X			X
Week 4	Chapter 4: Product & Service design	Learnsmart ch4 Ch 4 quiz Assignment ch4		X			X	X
Week 5	Chapter 5: Strategic Capacity Planning	Discussion Learnsmart ch5 Ch 5 quiz Assignment ch5	X	X	X	X		X
Week 6	Chapter 6 & 18 Process	Learnsmart ch 6 & Learnsmart ch 18 Ch6	X		X	X	X	

	Selection and Layout	Assignment ch 6						
Week 7	Chapter 8: Location Strategies	Learnsmart ch8 Ch 8 quiz Assignment ch8			X	X	X	X
Week 8	Chapter 9: Management of Quality	Learnsmart ch9 Ch 9 quiz Assignment ch9	X	X				
Week 9	Chapter 10 Quality	Learnsmart ch10 Ch 10 quiz Assignment ch10	X	X				
Week 10	Chapter 11: Aggregate Plan & MPS	Learnsmart ch 11 Ch 11 quiz Assignment ch 11	X			X		X
Week 11	Chapter 12 MRP	Learnsmart ch 12 Ch 12 quiz Assignment ch 12	X	X				X
Week 12	Chapter 16 Scheduling	Learnsmart ch 16 Ch 16 quiz Assignment ch 16						
Week 13	Chapter 13: Inventory Control	Discussion Learnsmart ch 13 Ch 13 quiz Assignment	X	X	X			X
Week 12	Chapter 14: JIT and Lean	Discussion Learnsmart ch14 Ch14 quiz Assignment ch14	X			X	X	
Week 14	Chapter 15: Supply Chain Management	Discussion Assignment ch15 Learnsmart ch15 Quiz ch15			X	X		X
Week 15	No Final							

Links Related to Subject:

- Operations and supply management topics and training: www.apics.org
- Purchasing and supply management topics and training: www.ismggr.org or www.napmgrr.org
- Logistics and Distribution topics: www.mi-clm.org
- Quality Management topics and training: www.asq.org
- Quality and Six Sigma topics and training: www.isixsigma.com
- Project Management topics and training: www.pmi.org

Final Note

I reserve the right to make needed and appropriate adjustments in this syllabus.

Bio

Dr. Lyman came to FSU's College of Business in May 2002, after teaching for 3 years at Eastern Michigan University and 5 years at Michigan State University. He has taught courses in Industrial Distribution, Quality Management, Purchasing, and Operations Management. Professor Lyman currently teaches courses in Operations Management and Logistics and serves as the faculty advisor the student chapter of American Production and Inventory Control Society (APICS) at FSU.

Prior to his academic endeavors, Steve served in numerous leadership roles in the automotive industry for over 13 years. During his years at General Motors Lansing Assembly, he was an industrial engineer working with suppliers in the Just-In-Time program. More recently, Steve served as Supplier Develop Engineer and later as Buyer and Materials Manager for TRW Commercial Steering Division. His duties included implementing various supply chain management initiatives along with assisting in the installation of SAP, ISO 9000 certification, and lean production.

Steve holds certifications with the American Production and Inventory Control Society (CPIM), Institute of Supply Management (formerly NAPM) (C.P.M.), and with American Society of Quality (CQA). He is also a certified lead auditor for ISO/QS 9000 and has conducted over 20 quality audits. Steve is also an active member of the Decision Sciences Institute and the Society for Case Research. Steve has recently published articles in both in *Inside Supply Management* and *APICS The Performance Advantage*. He has also published in *International Journal of Operations & Production Management* on issues of supply management and also in both the *International Journal of Production Research* and *Simulation* journals.

Ferris State University	MGMT 370 Online: Spring 2018
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Instructor: Dr. Steven B. Lyman

Office Hours: Tuesday/Thursday 8:00-9:30, Tuesday 1:15-2:00 in COB rm 336. I am online usually every day and I usually respond within 24 to 48 hours with the exception of weekends and holidays.

Contact: 231-591-2469,

E-mail: lymans@ferris.edu or Within Blackboard (best method)

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4. Understand and demonstrate scheduling and resource control and its impact on customers.

Outcomes & Measurable	Class projects	Quizzes & Tests	Homework	Special Projects
1. Awareness and understand of global operations issues and strategies within manufacturing and service organizations.	X	X		X
2. Process management and improvement. Demonstrate knowledge of and ability to apply the tools of process analysis and improvement.	X	X	X	X
3. Demonstrate understanding of operational strategies; capacity, location, layout/flow, quality, supply management, and lean.	X	X	X	
4. Understand and demonstrate scheduling and resource control and its impact on customers.		X		X

Required Text & Readings:

- 1) Stevenson, W. J., Operations Management, 2018, 13th edition, ISBN: 9781260234190. This is a complete package with Connect and loose-leaf Book. (about \$140)
- 2) In addition, there will be assigned reading for most chapters. These articles will be found with Blackboard, Articles icon on the home page which is a URL link to the Library. These articles will not cost anything and will be part of each chapter's discussions and will enhance understanding.

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A-	91-94.9	C+	77-79.9	D	64-66.9
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The purpose of the articles is to highlight current issues within industry that relates to the specific topic. The articles should also be used to support some of the discussion/responses.

Discussion Policy/Points (only area where extra credit is available)

There will be discussion which will cover a topic within specific chapters. You will be required to meet certain requirements. Being active in discussions (see Blackboard discussion icon on left tool bar) is critical in online learning. I will be posting questions each week on many chapters. I recommend taking your experiences, the articles (from "Articles & Powerpoints" Icon), the book, plus the internet to formulate your answers. Students will answer the questions online by threaded links to the posted question. This way I know you are answering the question and not just responding to a classmate. Please limit your answers to one or two pages, or 300 to 800 words. Answers for the original question are worth up to 15 points each. **Note:** First responders to questions will receive more credit. Late or last minute responses which restate past answers from fellow students will be graded down or not receive full credit. If you respond later in the time period, then be creative if you wish to receive full credit. I look for references to other books, articles, or web sites related to the topic. If you have a position, support with other sources. All discussion must be complete by the due date.

Two responses are required and are worth 5 points each and involves your treaded links responses to your online classmates. Remember: **You will need to respond twice**. For example, post your answer to a question a discussion, then go and read two answers from other classmates and respond with a short comments which ranges from 100 to 200 words or more. ***You may also respond to additional student responses and may be counted for extra credit (up to 5 pts per discussion and each response after the initial 2 is worth 1 to 2 pts each for 5 more extra credit points)***. I will read every student response. The number and quality of answers and responses will be graded. I **strongly encourage different viewpoints and tend to give better grades or added extra points**. Simply responding to classmate (friend) with an "I agree ...", "Great job on your answer ..." is a limited response and is graded accordingly if at all. If you say "I agree BUT...." This peaks my interest, creates discussion, and enhances grading!

There will be numerous discussions and are students will need to check the learning Module in Blackboard to see which week and the topic of discussion. Also check the syllabus "class schedule" (below) for the specific week.

Discussion Grading Rubrics:

Individual and group grades on cases and discussion will be based on:

	Discussion Answer	Discussion Response
Depth of Analysis (sect I to III) 8 section too Sect II & III	15 pts (5 pts per sect part)	5 pts/each
Professionalism, quality of writing	(subtraction of points 3)	(subtraction of points 1-2)

Class Schedule and outcome assessment (see Learning Modules for Dates):

Date s	Topic	Assignment	Measurable Outcomes					
			Process Control	Process Improvement	Operation Strategy	Internation Operations	Sustainable Business	Customer Service
Week 1	Chapter 1: Intro to Operations Management	Do Introduction Learnsmart ch 1 Ch 1 quiz Assignment ch1			X		X	X
Week 2	Chapter 2: Operations Strategy in a Global Environment	Discussion Learnsmart ch2 Ch 2 quiz Ch 2 assignment	X		X	X	X	X
Week 3	Chapter 3: Forecasting	Learnsmart ch3 Ch 3 quiz Assignment ch3	X		X			X
Week 4	Chapter 4: Product & Service design	Learnsmart ch4 Ch 4 quiz Assignment ch4		X			X	X
Week 5	Chapter 5: Strategic Capacity Planning	Discussion Learnsmart ch5 Ch 5 quiz Assignment ch5	X	X	X	X		X
Week 6	Chapter 6 & 18 Process	Learnsmart ch 6 & Learnsmart ch 18 Ch6	X		X	X	X	

	Selection and Layout	Assignment ch 6						
Week 7	Chapter 8: Location Strategies	Learnsmart ch8 Ch 8 quiz Assignment ch8			X	X	X	X
Week 8	Chapter 9: Management of Quality	Learnsmart ch9 Ch 9 quiz Assignment ch9	X	X				
Week 9	Chapter 10 Quality	Learnsmart ch10 Ch 10 quiz Assignment ch10	X	X				
Week 10	Chapter 11: Aggregate Plan & MPS	Learnsmart ch 11 Ch 11 quiz Assignment ch 11	X			X		X
Week 11	Chapter 12 MRP	Learnsmart ch 12 Ch 12 quiz Assignment ch 12	X	X				X
Week 12	Chapter 16 Scheduling	Learnsmart ch 16 Ch 16 quiz Assignment ch 16						
Week 13	Chapter 13: Inventory Control	Discussion Learnsmart ch 13 Ch 13 quiz Assignment	X	X	X			X
Week 12	Chapter 14: JIT and Lean	Discussion Learnsmart ch14 Ch14 quiz Assignment ch14	X			X	X	
Week 14	Chapter 15: Supply Chain Management	Discussion Assignment ch15 Learnsmart ch15 Quiz ch15			X	X		X
Week 15	No Final							

Links Related to Subject:

- Operations and supply management topics and training: www.apics.org
- Purchasing and supply management topics and training: www.ismggr.org or www.napmgrr.org
- Logistics and Distribution topics: www.mi-clm.org
- Quality Management topics and training: www.asq.org
- Quality and Six Sigma topics and training: www.isixsigma.com
- Project Management topics and training: www.pmi.org

Final Note

I reserve the right to make needed and appropriate adjustments in this syllabus.

Bio

Dr. Lyman came to FSU's College of Business in May 2002, after teaching for 3 years at Eastern Michigan University and 5 years at Michigan State University. He has taught courses in Industrial Distribution, Quality Management, Purchasing, and Operations Management. Professor Lyman currently teaches courses in Operations Management and Logistics and serves as the faculty advisor the student chapter of American Production and Inventory Control Society (APICS) at FSU.

Prior to his academic endeavors, Steve served in numerous leadership roles in the automotive industry for over 13 years. During his years at General Motors Lansing Assembly, he was an industrial engineer working with suppliers in the Just-In-Time program. More recently, Steve served as Supplier Develop Engineer and later as Buyer and Materials Manager for TRW Commercial Steering Division. His duties included implementing various supply chain management initiatives along with assisting in the installation of SAP, ISO 9000 certification, and lean production.

Steve holds certifications with the American Production and Inventory Control Society (CPIM), Institute of Supply Management (formerly NAPM) (C.P.M.), and with American Society of Quality (CQA). He is also a certified lead auditor for ISO/QS 9000 and has conducted over 20 quality audits. Steve is also an active member of the Decision Sciences Institute and the Society for Case Research. Steve has recently published articles in both in *Inside Supply Management* and *APICS The Performance Advantage*. He has also published in *International Journal of Operations & Production Management* on issues of supply management and also in both the *International Journal of Production Research* and *Simulation* journals.

Ferris
State
University

MGMT 370

Fall 2017 - MW 12 pm

Instructor: Dr. Carol Rewers

Campus Office Location: BUS 358

Campus Office Phone: (231) 591-2447

E-Mail: Ferris Blackboard Course email

Campus Office Hours – Mon & Wed. 11:00 am-12:00pm and Wed's 1:00-3:00pm.

The above office hours are in effect from 8/28/2017 – 12/8/2017. Office hours by appointment only during final exam week, at a mutually convenient time, although most questions can be handled via our course email or phone.

Course Description:

This course focuses on strategies, processes, and techniques used from material acquisition to production and finally through delivery of a product or service. Students will learn about different tools/techniques that will help improve an organization's efficiency, effectiveness, and overall organizational costs. Operations focus on the supply side of the supply and demand relationship where marketing and consumer create demand. Extensive use of discussion related to current topics and publications (Business Week and Wall Street Journal) will be used so students can apply concepts covered to real life industries. Student will also develop knowledge of what the various concepts and issues are in operations like: Lean Manufacturing, Supply Chain Management, Operation Strategies, Value Stream Mapping, and various elements of Quality from ISO 9000 to Six Sigma.

Learning Objectives and Outcome:

The objective of this course is to develop awareness of current methods used in operations, both in manufacturing and service industries. The general categories of outcome base learning are International, Social/Ethical Responsibility, Sustainable/Environmental, Processes management: Mfg/Service, HR/Organizational Issue, and Technology. Collectively, classroom discussions, assignments, problems, quizzes/tests, and/or cases required for this course are intended to develop an awareness of operational issues; as well as, to demonstrate the key operational learning objectives that students have learned throughout the semester, including:

- Outcome #1: International awareness, understand global operation's issues and strategies. This includes global sourcing, logistics, facility location, and environmental/sustainability. Students will be able to articulate the reason(s) why

companies support international business such as new markets or outsourcing activities and be able to identify some of the potential risks of sourcing from other countries.

- Outcome #2: Process management and improvement. Demonstrate knowledge of and ability to apply the tools of process analysis and improvement. Tools covered include quality improvement techniques (TQM, Six Sigma, ISO 9000), process mapping, lean (value stream mapping, 5S, TPM, project management, and use of policies and procedures that provide standardization and operational control.
- Outcome #3: Operational strategies. Students will understand the roles and drivers of operational strategy and the interrelationship to other functional area. Specific strategies focused on include: capacity, location, layout/flow, quality, and lean.
- Outcome #4: Customer service and the expanding role of service operations. Students will understand the important role that production/service design, manufacturability/serviceability, scheduling, inventory and supply chain management has on meeting and/or exceeding customer expectations and revenue generation.
- Outcome #5: Scheduling and resource control. Students will be able to develop demand forecast, aggregate and material requirement plans, and develop personnel and inventory schedules.

Required Text & Readings:

1) Stevenson, W. J., Operations Management, 2015, 12th edition **or** McGraw-Hill Operations Management Student Value Edition. ISBN: 9781308284439 **or** an electronic version of the text. You will also need a McGraw Hill “access code”.

2) For access to course study modules, quizzes, and the homework lab, simply access our Blackboard class and at the bottom of the Week One Learning Module you will see the McGraw Hill LS (learnsmart) and quiz links. Click on either McGraw Hill link and the system will automatically connect you to McGraw’s registration website. Follow the prompts and either enter the access code you’ve purchased through bookstore, or purchase your text/access code directly via McGraw Hill.

Grading:

Final grades in this course will be calculated based on the total points earned as a percentage of the total possible points for the entire class. **Keep in mind, if you fail to complete an assignment, the system records in the “student view” only those items you’ve “attempted” – so please make sure you refer to the total points possible for the class when calculating your grade throughout the semester.** Students can calculate their standing at any given point in time by dividing the points they’ve earned to date by the total possible points for all class assignments to date (Example: 540 points earned / 745 total possible points = 72.4% = "C-"). The total points possible for the class are allocated as followed:

Materials for Grading

Ch. Study Modules (13 @ 10pts each)	130
Quizzes: (13 @ 15 pts)	195
Assignments/Homework (12 @ 10 pts)	120
In-class Tests (best 3 out of 4 @ 100 each)	300
Extra Credit -In-class, pop quizzes or assignments	<u>2-10 pts</u>
Total points	745

Grading Scale (these are percentages)

A	94-100	B-	80-83	D+	67-69
A-	90-93	C+	77-79	D	64-66
B+	87-89	C	74-76	D-	60-63
B	84-86	C-	70-73	F	0 -59

Chapter Quizzes/Exams

Weekly quizzes can be found in our Blackboard learning module via the McGraw Hill Connect link. A total of 13 quizzes will be taken throughout the term, plus three (3) in seat exams, and an in seat final comprehensive exam that will be administered during final exam week.

Each online quiz will cover a chapter. Students may do their quizzes "open book" but remember there is a time limitation. Quizzes usually have time limit of 40-50 minutes depending on chapter content – be sure to note the specific time limits before beginning each quiz.

The in-seat exams will cover multiple chapters and will be drawn from material covered in the text, materials/articles distributed in class, videos, etc. The exams will consist of T/F, multiple choice, and multiple problems. It is highly recommended that you show your work related to any problems for partial credit considerations.

In calculating final grades, I will use your best 3 out of the 4 exams offered during the semester. If you will be attending a university sponsored activity, you must notify me **in advance** of your intended exam absence and make pre-arranged plans either immediately before or after your departure/return to take the exam. Regarding non-university related exam day absences; **verifiable documentation will be required** and only for extenuating circumstances. *Anyone who misses an exam (1-3) without a verified excuse (medical, hospitalization, death of an immediate family member, etc.) will not have an opportunity to take a "makeup" exam (1-3). In which case, the final comprehensive exam that is administered during final exam week will serve as your third and final exam. If the optional final comprehensive exam is missed, no makeup final comprehensive exam alternative will be provided and any exams previously taken will be used to calculate your final course grade.*

Note, once or twice a semester a “pop” quiz or assignment will be given in class. The “pop” quiz or problem based assignment will be competed in class and counted as “extra credit”. Individuals not present when the “pop” quiz or problem assignment is given will be ineligible to make up extra credit activity.

Assignments-Homework and Learn Smart

Throughout the semester you will be completing weekly Learn Smart study modules and assignments. These modules and assignments can be found in their corresponding weekly Blackboard learning module via the McGraw Hill Connect link. The modules provide students an opportunity to read important chapter content and respond to questions. The chapter assignments will consist of interactive case videos, questions, and problems. Note, approximately 1-2 times during the semester an assignment may be handed out in class in lieu of the McGraw-Hill site assignment. If you are absent when the assignment is handed out, it is *your responsibility* to obtain and submit your question responses by the due date. Refer to the course schedule and/or the assignments for posted due date.

****Note:** It is highly recommended that students complete all McGraw Hill study modules, assignments and quizzes well in advance of the assigned chapter’s due date. Keep in mind, these items are “available/open” for at least a week; which is usually sufficient time to accommodate those who are involved with university approved travel and/or work related activities. If you know you will be absent from class when a quiz or assignment is due, it is your responsibility to complete the assignment in advance.

Absolutely no end of semester request to make up any past due assignments, quizzes/exams, study modules or request for individualized extra credit will be considered.

Classroom Policies:

It is my hope that we can develop a classroom environment that is interactive and fosters meaningful dialogues pertaining to operations management. To promote such a learning environment and as a courtesy to others, use of cell phones, ipods/pads, tablets, headphones, watches, or other electronic devices are not permitted during class time. Socializing while class is in session, wandering in and out of the classroom, or arguing in a way that is rude or disrespectful to the instructor or other students will not be tolerated. **If addressed and such behavior persists, the student will be withdrawn from the course and receive an “F” for a course grade.**

Academic Integrity/Dishonesty:

Each student is expected to present his or her own work. All quizzes and examinations, or any other assignment(s) must be original. Cases of academic dishonesty may be referred to the Student Discipline Committee. Academic dishonesty includes plagiarism, cheating, forgery, or other acts. The usual penalty for academic dishonesty can include failing the assignment, exam, course, and/or expulsion from the University.

Links Related to Subject:

Operations and supply management topics and training: www.apics.org

Purchasing and supply management topics and training: www.ismggr.org or
www.napmgrr.org

Logistics and Distribution topics: www.mi-clm.org

Quality Management topics and training: www.asq.org

Quality and Six Sigma topics and training: www.isixsigma.com

Project Management topics and training: www.pmi.org

Tentative Class Schedule and Outcome Assessment:

Wk of	Topic	Assignment	Measurable Outcomes					
			Process Control	Process Improvement	Operation Strategy	International Operations	Sustainable Business	Customer Service
8/28	Chapter 1: Intro to Operations Management	Ch 1 Study Module, On-line quiz	X	X	X	x	X	X
9/4	*No Class 9/4 Labor Day. Chapter 2: Operations Strategy	Ch 2 Study Module, On-line quiz & assignment 1			X	X	X	X
9/11	Chapter 3: Forecasting	Ch 3 Study Module, On-line quiz & assignment 2		X	X		X	X
9/18	Chapter 3 cont. & Chapter 5: Capacity Planning	Ch 5 Study Module, On-line quiz & assignment 3	X	X	X		X	X
9/25	Chapter 5: Capacity Planning Cont Exam 1 (Wed)	Covers Ch 1-3 & 5	X	X	X			
10/2	Chapter 6: Process Selection and Layout	Ch 6 Study Module, On-line quiz & assignment 4	X	X	X		X	X
10/9	Chapter 8: Location	Ch 8 Study Module, On-line quiz & assignment 5	X	X	X	X	X	X
10/16	Chapter 9: Quality Chapter 11: Aggregate Planning	Ch 9 Study Module, On-line quiz & Assignment 6 (Handout)	X		X	X	X	X
10/23	Chapter 11: Aggregate Planning Cont	Ch 11 Study Module, On-line quiz & assignment 7	X	X			X	X

	Exam 2 (Wed)	Cover Ch 6, 8-9 & 11.						
10/30	Chapter 12 MRP & ERP	Ch 12 Study Module, Online quiz & assignment 8	X	X	X			X
11/6	Chapter 13: Inventory Control	Ch 13 Study Module, On-line quiz & assignment 9	X	X	X			X
11/13	Chapter 14: JIT and Lean	Ch 14 Study Module, On-line quiz & assignment 10 (Handout)	X	X	X	X	X	X
11/20	Chapter 15: Supply Chain Management *No Class 11/22 Happy Thanksgiving!	Ch 15 Study Module, On-line quiz & assignment 11	X	X				X
11/27	Chapter 15: SCM Cont. Chapter 16: Scheduling	Ch 16 Study Module, On-line quiz & assignment 12	X		X		X	X
12/4	Chpt. 16 Scheduling Cont. Exam 3	Cover Ch 12-16	X	X	X			
12/11	Final's Week	Comprehensive Exam TBD						

*****Professor reserves the right to make needed and appropriate adjustments to this syllabus.



Instructor: Dr. Leslie Sukup

Student/Office Hours: Monday/Wednesday 9:00 -10:00 and 1:00 – 2:00, BUS Room 303. I am also available via e-mail and phone.

Office: BUS 303

Contact: 231-591-2044,

E-mail: sukupl@ferris.edu or within Blackboard course

Course Description:

The course focuses on strategies, processes and techniques used from material acquisition to production and finally through delivery of a product or service. Students will learn about operational efficiency and effectiveness and how this relates to product/service costs. Operations focus on the supply side of the supply and demand relationship where marketing and consumer create demand. Extensive use of discussion related to current topics and publications (Industry Week and Wall Street Journal) will be used so students can apply the concepts to real life industries. The student will also develop a working knowledge of what the various issues and concepts are in operations like: Lean Manufacturing, Supply Chain Management, Operation Strategies, Value Stream Mapping, Kaizen, and various elements of Quality from ISO 9000 to Six Sigma.

Learning Objectives and Outcome:

The objective of this course is to develop awareness of current methods used in operations, both in manufacturing and service industries. The general categories of outcome base learning are International, Social/Ethical Responsibility, Sustainable/Environmental, Processes Management: Manufacturing/Service, HR/Organizational Issue, and Technology. Collectively, discussions, assignments, problems, quizzes/tests, and/or cases, required for this course are intended both to develop an awareness of operational issues; as well as, to demonstrate the key operational learning objectives that students have learned throughout the semester; including:

- Learning Outcome #1: Awareness and understanding of global operations issues and strategies within manufacturing and service organizations. This includes global sourcing, logistics, facility location, and environmental/sustainability. Students will be able to articulate the reason(s) why companies support international business such as new markets or outsourcing activities and be able to identify some of the potential risks of sourcing from other countries.
- Learning Outcome #2: Process management and improvement. Demonstrate knowledge of and ability to apply the tools of process analysis and improvement. Tools covered include quality improvement techniques (TQM, Six Sigma, ISO 9000), process mapping, lean value stream mapping, 5S, TPM, project management, and use of policies and procedures that provide standardization and operational control.
- Learning Outcome #3: Operational strategies. Students will understand the roles and drivers of operational strategy and the interrelationship to other functional areas. Specific strategies focused on include: capacity, location, layout/flow, quality, and lean.

- Learning Outcome #4: Understand and demonstrate scheduling and resource control and its impact on customers

Required Text & Readings:

- 1) Stevenson, W. J., Operations Management, 2014, 13th edition, ISBN 9781259667473. This is a complete package with Connect and an eBook.
- 2) For access to course study modules, quizzes, and the homework lab, simply access our Blackboard class and at the bottom of Week One Learning Module you will see the McGraw Hill Learnsmart and quiz/test links. Click on either the McGraw Hill link and the system will automatically connect you to McGraw Hill's registration website. Follow the prompts and either enter the access code you've purchased through bookstore, or purchase your text/access code directly via McGraw Hill.
- 3) In addition, there will be assigned reading for most chapters. These articles will be found within Blackboard, Articles icon on the home page which is a URL link to the Library. These articles will not cost anything and will be part of each chapter's discussions and will enhance understanding.

Materials for Grading:

Final grades in this course will be calculated based on the total points earned as a percentage of the total points possible for the entire class. **Keep in mind, if you fail to complete an assignment, the system records in the "student view" only those items you've "attempted" – so please make sure you refer to the total points possible for the class when calculating your grade throughout the semester.**

Students can calculate their standing at any given point in time by dividing the points they've earned to date by the total possible points for all class assignments to date (Example: 430 points earned / 550 total possible points = 78.1% = "C+"). The total points for the class are allocated as follows:

Learnsmart Modules (10pts, best 10 of 12)	100 (see MH Connect)
Assignments/Homework (best 10 of 12 @ 10 pts)	100 (see MH Connect)
Homework-Projects	50
Tests (3 @ 100 each)	300
<u>*Extra Credit (Pop quizzes, assignments, etc)</u>	<u>2 – 10</u>
Total points	550

Grading Scale (these are percentages):

A	95-100	B-	80-83.9	D+	67-69.9
A-	91-94.9	C+	77-79.9	D	64-66.9
B+	87-90.9	C	74-76.9	D-	60-63.9
B	84-86.9	C-	70-73.9	F	0-59.9

Chapter Quizzes/Exams:

The exams will cover multiple chapters and will be drawn from material covered in the text, materials/articles distributed in class, videos, etc. The exams will consist of T/F, multiple choice, multiple problems, and short answer. It is highly recommended that you show your work related to any problems for partial credit considerations.

If you will be attending a university sponsored activity, you must notify me **in advance** of your intended exam absence and make prearranged plans either immediately before or after your departure/return to take the exam. Regarding non-university related exam day absences; **verifiable documentation will be required** and only for extenuating circumstances. *Anyone who misses an exam (1-3) without a verified excuse (medical, hospitalization, death of an immediate family member, etc.) will not have an opportunity to take a “makeup” exam (1-3). In which case, the final exam that is administered during final exam week will serve as your third and final exam. If the final exam is missed, no makeup final exam alternative will be provided and any exams previously taken will be used to calculate your final course grade.*

Note, once or twice a semester a “pop” quiz or assignment will be given in class. The “pop” quiz or problem based assignment will be competed in class and counted as “extra credit”. Individuals not present when the “pop” quiz or problem assignment is given will be ineligible to make up extra credit activity.

MH Connect, Assignments, Homework, and LearnSmart:

Throughout the semester you will be completing weekly Learnsmart study modules and assignments. These modules and assignments can be found in their corresponding weekly Blackboard learning module via the McGraw Hill Connect link. The modules provide students an opportunity to read important chapter content and respond to questions. The chapter assignments will consist of interactive case videos, questions, and problems. Note, approximately 1-2 times during the semester an assignment is handed out, it is *your responsibility* to obtain and submit your question responses by the due date. Refer to the course schedule and/or the assignments for poste due date.

****Note:** It is highly recommended that students complete all McGraw Hill study modules, assignments, and quizzes/tests well in advance of the assigned chapter’s due date. Keep in mind, these items are “available/open” for at least a week; which is usually sufficient time to accommodate those who are involved with university approved travel and/or work related activities. If you know you will be absent from class when a quiz/test or assignment is due, it is your responsibility to complete the assignment in advance.

Absolutely no end of semester request to make up any past due assignments, quizzes/exams, study modules, or request for individualized extra credit will be considered.

Articles:

Most chapters there are assigned articles. Some will be tested on. The purpose of the articles is to highlight current issues within industry that relates to the specific topic. The articles should also be used to support some of the discussion/responses.

Projects:

Projects may involve in-class activities which usually involve groups or take home work which each student will be required to submit materials. Each project will vary in point totals and are due on a specific date to receive credit.

Classroom Policies:

It is my hope that we can develop a classroom environment that is interactive and fosters meaningful dialogues pertaining to operations management. To promote such a learning environment and as a courtesy to others, use of cell phones, ipods/ipads, tablets, headphones, watches, or other electronic devices are not permitted during class time. Socializing while class is in session, wandering in and out of the classroom, or arguing in such a way that is rude or disrespectful to the instructor or other students will not be tolerated. **If addressed and such behavior persists, the student will be withdrawn from the course and receive an “F” for a course grade.**

Academic Integrity/Dishonesty:

Each student is expected to present his or her own work. All quizzes and examinations, or any other assignment(s) must be original. Cases of academic dishonesty may be referred to the Student Discipline Committee. Academic dishonesty includes plagiarism, cheating, forgery, or other acts. The usual penalty for academic dishonesty can include failing the assignment, exam, course, and/or expulsion from the University.

Tentative Class Schedule and Outcome Assessment:

Week of Dates	Topic	Assignment	Measurable Outcomes					
			Process Control	Process Improvement	Operation Strategy	International Operations	Sustainable Business	Customer Service
Week 1 8/28	Chapter 1: Intro to Operations Management	Week 1 Learning Module (LM) Learnsmart ch 1 Ch 1 Homework			X		X	X
Week 2 9/4	Chapter 2: Competitiveness, Strategy, and Productivity	Week 2 LM Learnsmart ch2 Ch 2 Homework	X		X	X	X	X
Week 3 9/11	Chapter 3: Forecasting	Week 3 LM Learnsmart ch3 Ch 3 Homework	X		X			X
Week 4 9/18	Chapter 5: Strategic Capacity Planning for Products and Services	Week 4 LM Learnsmart ch5	X	X	X		X	
Week 5 9/25	Test #1	Chapters 1-3, 5						
Week 6 10/2	Chapter 6 Process Selection and Facility Layout	Learnsmart ch 6 Ch 6 Homework	X		X	X	X	
Week 7 10/9	Chapter 8: Location Planning and Analysis	Ch 8 Homework Learnsmart ch8	X			X		X
Week 8	Chapter 9: Management of Quality	Ch 9 Homework Class Project: Quality	X	X	X	X		

10/16		Learnsmart ch9						
Week 9 10/23	Chapter 14: JIT and Lean Operations	Ch 14 Homework Learnsmart ch14	X	X	X			
Week 10 10/30	Test #2	Ch 6, 8, 9 & 14						
Week 11 11/6	Chapter 11: Aggregate Planning & Master Scheduling	Ch 11 Homework Master Scheduling Class project, Learnsmart ch 11	X	X				X
Week 12 11/13	Chapter 12: MRP and ERP	Ch 12 Homework Class project: Simulation Learnsmart ch 12	X			X		X
Week 13 11/20	Chapter 13: Inventory Control	Ch 13 Homework Learnsmart ch 13	X			X	X	X
Week 14 11/27	Chapter 15: Supply Chain Management	Ch 15 Homework Class Project: supplier selection Learnsmart ch15	X	X	X	X	X	
Week 15 12/4	Chapter 16 Scheduling	Ch 16 Homework Scheduling	X	X	X			
Exam Week 12/11	Test #3	Chapters 11-13, 15, & 16						

Links Related to Subject:

Operations and supply management topics and training: www.apics.org

Purchasing and supply management topics and training: www.ismggr.org or www.napmgrr.org

Logistics and Distribution topics: www.mi-clm.org

Quality Management topics and training: www.asq.org

Quality and Six Sigma topics and training: www.isixsigma.com

Project Management topics and training: www.pmi.org

Final Note

Changes to the syllabus or assignments are sometimes necessary throughout the semester and are at the discretion of the instructor. All changes will be communicated to the students.

SYLLABUS ATTACHMENT
COLLEGE OF BUSINESS – FERRIS STATE UNIVERSITY

COB VALUES
 Learning—Excellence—Respect—Change—Diversity—Integrity—Continuous Improvement

FALL 2017- IMPORTANT DATES

Late Registration	Wednesday – Friday	August 23, 24, 25
First Day of Classes	Monday	August 28
Last Day to Add/Drop	Thursday at 5:00 pm	August 31
Labor Day - no classes	Monday	September 4
Mid-term Grades Due	Monday	October 16
Last Day for "W" Grades (full semester)	Thursday	November 2
Thanksgiving recess begins at 12 noon	Wednesday	November 22
Thanksgiving recess ends – classes start	Monday	November 27
Last Day of Classes	Friday	December 8
Examination Week	Monday-Friday	December 11-15
Commencement	Saturday	December 16
Grades Posted to MyFSU Account	Monday	December 18

<i>Sessions</i>	<i>Dates</i>	<i>Drop Deadline</i>	<i>Withdraw Deadline</i>
1	August 28-December 8	August 31	November 2
Session A	August 28-October 17	August 31	September 28
Session B	October 18-December 8	October 23	November 17
Session D	August 28-September 29	August 31	September 18
Session E	October 2-November 2	October 3	October 20
Session F	November 3-December 8	November 6	November 27

CLASS ATTENDANCE IS IMPORTANT!
 Many instructors have mandatory attendance policies by which grades will be affected by student absences. To encourage students to be present for the full class period, some instructors have policies about class tardiness. Check your course syllabus or talk to your instructor about their policies.

TO CONTACT A FACULTY MEMBER/ADVISOR

If you have questions or need help, talk to your instructor. Faculty office locations, phone numbers, and office hours may be obtained from the class syllabus, department office, MyFSU, or through the College of Business web page at <http://www.ferris.edu/cob>.

DROP/ADD CLASSES (first four days of classes)

Use MyFSU to drop and add classes only during the add/drop time period (ends the 4th day at 5:00 pm). Tuition reimbursement is issued **ONLY** during the first four days of classes.

WITHDRAWING FROM CLASSES-(after 4th day.)

To withdraw from a class, go to your Dean's Office for the OFFICIAL paperwork. A "W" grade in the course will go on your transcript. To totally withdraw from the University, OFFICIAL paperwork must be filled out at Admissions and Records in CSS 101. The last day to withdraw or drop a class may be different (please review the above dates in chart). In case of medical reasons requiring a complete withdrawal from school, contact Birkam Health Center at 591-2614.

INCOMPLETES

The "I" is only considered for extenuating circumstances that have led to a student's missing a portion of the course. Extenuating circumstances are generally defined as those situations over which the student has little or no control—e.g., illness, birth, jury duty, death of a parent, serious injury. Instructors may require suitable documentation. Please contact your Dean's Office as soon as possible at 591-2420 to keep us informed.

Students must complete at least 75% of the coursework at passing levels before an "I" will be considered. A signed agreement regarding course completion may be required. An "I" grade automatically changes to an "F" after one semester (not counting summer) unless the faculty member files another grade change or extends the incomplete.

The intent and appropriate use of the "I" grade is NOT to avoid student probation, dismissal, or unacceptable grades, nor should it be considered as an extended alternative to withdraw from a class (W).

Ferris
State
University

MGMT 402
Fall 2017

Instructor: David M. Marion, PhD, MQC

Office: BUS 342

Office Phone: 231-591-3164

Office Hours: 3-5pm Tuesday and Thursday or by appointment

E-mail: mariond@ferris.edu (this is the best/fastest way to contact me)

Course Description:

This course includes a multi-faceted approach to improve organizational processes that meets or exceeds customer needs/expectations. Students will learn how to apply of the Six Sigma, DMAIC (Define, Measure, Analyze, Improve and Control) methodology, specifically, statistical analysis tools. Metrics will be used as techniques to reduce process variability, increase process control and sustainability to increase the organization's process quality. The course is designed to assist students with preparation for the Six Sigma Green Belt Certification. Prerequisites: MGMT 492 or MFGR 354.

Learning Objectives and Outcome:

The objective of this course is to develop awareness of current methods used from an operations perspective to solve common problems found within organizations that increase costs and therefore affect the bottom line results. The goals of this course are displayed as objectives or outcomes leading to students possessing new knowledge.

- **Outcome #1: Process Overview** in that a student will be able to properly trace a process from cradle to grave.
- **Outcome #2: Process Controls** demonstrated by different functions that occur within the process that effect its overall outcome. For example, when one checks out of a grocery store there are two choices, self-serve or to be serviced in paying for your items. In each case, the bagging is regulated by the rate at which the items are accounted or charged. This alone could represent a control portion of the process.
- **Outcome #3: Six Sigma Strategies** is a practice of looking at all processes in a certain light which allows for process improvement using specific tools. These tools may be modified, but they still have the same purpose at their root.
- **Outcome #4: Create a cross platform understanding** in that processes that improve a manufacturing organization are transferrable to any organization from hospitals to car dealerships.

- **Outcome #5:** to include **sustainable/environmental** issues in the planning of a process implementation or change so that resources will be used wisely for future considerations.

Required Text & Readings:

NOTE: There is not a required text for this course.

Lean Six Sigma, Process Improvement Tools and Techniques

Donna C.S. Summers, 2011

Prentice Hall

ISBN-0-978-0-13-512510-6

The text can be found several places, you can choose.

<http://www.amazon.com/Lean-Six-Sigma-Donna-Summers/dp/0135125103>

Grading Scale:

93+ = A	73-76 = C
90-92 = A-	70-72 = C-
87-89 = B+	67-69 = D+
83-86 = B	63-66 = D
80-82 = B-	60-62 = D-
77-79 = C+	59 and below = F

Deliverables

Every other week there will be a set of homework problems to be completed. These problems were chosen based on the material in the Six Sigma Green Belt primer. You will have work due every week except for two. There will also be an extra weeks assignment due exam week.

Note: (read this one please)

The instructor holds the right to make alterations to this syllabus as necessary.

ALSO: Make sure you treat this class like you would a job. Contacting me after you have missed an assignment will automatically lose you points and after a certain point, there will be no credit given. There are exceptions for extreme cases, but they must be approved.

Rule Number 1: If you do not ask, I will not know and I cannot read minds so make sure to ask if you are unsure!

Rule Number 2: Abide by Rule Number 1

A Short Bio

Dr. Marion has only recently, within the past five years, switched to being a professor. He is a graduate of the University of Toledo in all of his degrees. As an undergrad, he is a mechanical engineer. Both his graduate degrees, Masters and PhD, are in Manufacturing Management with Engineering. Some of the classes used in obtaining the graduate degrees were obtained from Kettering University while working for General Motors Powertrain Division

Previously he had worked primarily as a contract engineer. Within this realm, he had designed plastic bottles for Coca-Cola, Graham Products, and Lever Brothers. This position entailed fitting the requesting company's constraints into a specified area and creating a new design that would not only be functional but aesthetically pleasing. He also spent time at Mazda where he worked with aftermarket accessory design. A notable project would have been the tenth anniversary Miata. This project required a new gearshift knob, fog lamps, spoiler, and floor mats for the anniversary model. These accessories required working with suppliers from around the globe such as Blazer and Bosch. Another position entailed the designing of interiors for service vans as a ship-through for the big three automakers (at that time). Also, he worked at a design facility that built secondary tooling for large manufacturers. Secondary tooling is typically a secondary operation performed to a product just after it is created. For example, when a fiberglass box for a pickup truck comes down the assembly line just after it is formed, a secondary operation would be to attach the dually fenders to it. This was a project undertaken by the company in conjunction with Dodge Trucks.

Class Schedule and outcome assessment:

Week	Topic	Process Overview	Process Controls	Measurable Outcomes		
				Lean/Six Sigma Strategies	Cross Platform Understanding	Sustainable Environmental
1	Week 1	X				X
2	Week 2		X	X		X
3	Week 3	X	X	X	X	X
4	Week 4	X	X	X	X	X
5	Week 5	X	X	X		X
6	Week 6	X	X	X		X
7	Week 7		X	X	X	X
8	Week 8 & 9	X	X	X	X	
9	Week 10		X	X		X
10	Week 11 & 12		X	X		X
11	Week 13	X	X	X		X
12	Week 14	X	X	X	X	X

Links Related to Operations Management to give you an overview:

Operations and supply management topics and training: www.apics.org

Purchasing and supply management topics and training: www.ism.org or www.napmgr.org

Logistics and Distribution topics: www.mi-clm.org

Quality Management topics and training: www.asq.org

Quality and Six Sigma topics and training: www.isixsigma.com

Project Management topics and training: www.pmi.org

Ferris
State
University

MGMT 412

Spring 2017

INSTRUCTOR: Dr. Lisa Eshbach

OFFICE: Office Phone: 231- 591- 3197 or 616-263-7501

E-mail: eshbacl@ferris.edu

OFFICE HOURS: 11 a.m. - 1 p.m.. M-W, COB 340

COURSE TITLE: MGMT 412 Lean Culture and Skills Development (**100% Online & Mixed Delivery**)

TEXTBOOKS

Creating a Lean Culture: Tools to Sustain Lean Conversions. Author: David Mann. Productivity Press (2014) ISBN: 978-1482243239.

Training Within Industry: The Foundation of Lean. Author: Donald Dinero. Productivity Press (2005). ISBN: 978-1-56327-307-0.

COURSE DESCRIPTION

The most universally misinterpreted concept of lean is that it relates to how people *perform* work. Finding ways to eliminate bureaucracy and implement appropriate processes is a vital part of this course. The course will concentrate on the leadership, management and employee behaviors as well as capabilities required to implement a lean culture and sustain optimal organizational performance. Areas of concentration include evaluating an organization's current leadership and management techniques, applying the Training Within Industry method (identifying employee's development needs, creating appropriate organization training plans, and developing an internal coaching/mentor program) and how the continuous learning/improvement culture enhances organizational growth, innovation, profitability and process excellence. Prerequisite: Junior standing or instructor permission (Prerequisite: MGMT 492 or MFGE 354)

COURSE OBJECTIVES

By the end of this course, student competence is required in several key areas of lean. Specifically, students will learn how to eliminate bureaucracy and implement appropriate

systems by concentrating on the leadership, management and employee behaviors as well as capabilities required to implement a lean culture and sustain optimal organizational performance. The Skills Development portion of the course will be comprised of defining the relationship between coach/mentor and employee while improving specific activity and production/service process performance. The Training Within Industry method (how to find competent employees for specific positions, identifying employee’s development needs, creating appropriate organization training plans, and breaking complicated jobs into teachable skills) will be used as the curriculum delivery approach. A “Train-the-trainer” program is an important factor in sustaining lean. As such, the course will provide guidelines on how to develop a coaching/mentoring/trainer program within the organization. Additional course content includes how the continuous learning/improvement (improving daily work processes) culture enhances organizational growth, innovation, profitability and process excellence.

The general categories of outcome base learning are intended both to develop as well as to demonstrate student’s key competencies as follows:

Outcome 1: Assess the extent to which the organization’s leadership and management techniques support a lean environment for sustaining optimal employee and operational performance.

Outcome 2: Evaluate, prioritize and perform a “lean focused” personnel capability and core competency evaluation to assist in achieving the strategic priorities for an organization.

Outcome 3: Develop and integrate an employee centric lean culture resulting in consistent organizational growth, innovation, profitability and process excellence.

Outcome 4: Examine and communicate the sensei coaching/mentoring techniques and its value in lean implementation.

MAKE-UP PROJECTS, ASSIGNMENTS, etc.

There will be no make-up projects or exams, unless the absence has been approved by the instructor prior to the exam. In case of emergency, you must, **prior to any assignment, presentation, etc.**, contact the instructor or leave a message with the department. There will be no make-ups for “no shows”.

COURSE CALENDAR – TENTATIVE SCHEDULE . The instructor reserves the right to adjust the syllabus to better serve the overall learning needs of the class.

WEEK	CHAPTER MATERIAL	ASSIGNMENTS DUE
		(I): Individual (T): Team

Week 1	Chapter 1: The Missing Link in Lean: The Management System (Mann)	Online Discussion Questions and Participation Due January 15 (I)
Jan. 9	Chapter 1: Benefits of TWI Programs(Dinero)	
Week 2	Chapter 2: Brief History Outlining the Principles of TWI (Dinero)	
Jan. 16	Chapter 2: The Lean Management System's Principal Elements (Mann)	
	No Face-to-Face Class – University Holiday <i>Face-to Face Class students should listen to the narrated notes this week to assist in answering the questions.</i>	
Week 3	Chapter 3: Why TWI Is a Foundation of Lean Thinking (Dinero)	Online Discussion Questions and Participation Due January 29 (I)
Jan. 23	Chapter 4: Characteristics that Made and Sustain TWI's Success (Dinero)	
Week 4	Chapter 5: How TWI Developed the Job Instruction Program (Dinero)	
Jan. 30	Chapter 9: Delivering Job Instruction (Dinero)	
Week 5	Chapter 6: Lean in Administrative, Technical and Professional Work (Mann)	Job Instruction 4-Step Assignment due February 12 (I)
Feb. 6	Chapter 10: People – Predictable Interruption; Source of Ideas (Mann)	Online Discussion Questions and Participation Due February 12 (I)
Week 6	How TWI Developed Job Safety (Blackboard Notes)	
Feb. 13	Delivering Job Safety (Blackboard Notes) ROI and Payback Period Notes	
Week 7	Chapter 9: Solving Problems and Improving Processes – Rapidly (Mann)	Job Safety 4-Step Assignment due February 26 (I)

Feb. 20		Online Discussion Questions and Participation Due February 26 (I)
Week 8	Chapter 7: How TWI Developed the Job Methods Program (Dinero)	
Feb. 27	Chapter 11: Delivering Job Methods Program (Dinero)	
Spring Break Week of March 6-12, 2017		
Week 9	Chapter 8: How TWI Developed Program Development (Dinero)	Job Methods Assignment Due March 19
March 13	Chapter 12: Delivering Program Development (Dinero)	Online Discussion Questions and Participation Due March 19 (I)
Week 10	Chapter 3: Standard Work for Leaders (Mann)	Program Development Assignment Due March 26
March 20	Chapter 7: Learning Lean Management: The Sensei and Gemba Walks (Mann)	
Week 11	Chapter 6: How TWI Developed the Job Relations Program (Dinero)	Online Discussion Questions and Participation Due April 2 (I)
March 27	Chapter 10: Delivering Job Relations (Dinero)	
Week 12	Chapter 8: Leading a Lean Operation (Mann)	Job Relations Assignment due April 9
April 3	Hoshin Kanri (See Blackboard Notes)	
Week 13	Chapter 13: Continually Developing TWI – Where Do you Go From Here? (Dinero)	Online Discussion Questions and Participation Due April 16 (I)
April 10		
Week 14	Chapter 11: Sustain What you Implement (Mann)	

April 17	Performance Management: Team Promotion and Rewards (See Blackboard Notes)	
Week 15	Work on Final papers and presentations	
April 24		
Week 16	Final Project Presentations and Papers due	Lean Culture and Skills Development Team Paper and Presentation Due May 2, 2017 at 2 p.m.
May 2		

Final Note

Subject to changes as determined and deemed appropriate by the instructor.

Appendix A – Assessment of MGMT 412 Outcomes

Course Outcome	Job Instruction Assignment	Job Methods Training Assignment	Program Development Multi-Function Training Plan Assignment	Job Relations Assignment	Job Safety Assignment	Discussion Questions & Online Participation	Lean Culture and Skills Development Project	Peer Participation
	Learning Outcome 1: Assess the extent to which the organization’s leadership and management techniques support a lean environment for sustaining optimal employee and operational performance.				X	X	X	X
Learning Outcome 2: Evaluate, prioritize and perform a “lean focused” personnel capability and core competency evaluation to assist in achieving the strategic priorities for an organization.		X	X	X	X	X	X	
Learning Outcome 3: Develop and integrate an employee centric lean culture resulting in consistent organizational growth, innovation, profitability and process excellence.	X	X	X		X	X	X	
Learning Outcome 4: Examine and communicate the sensei coaching/mentoring techniques and its value in lean implementation.	X	X		X		X	X	X

SYLLABUS ATTACHMENT

COLLEGE OF BUSINESS – FERRIS STATE UNIVERSITY

COB VALUES

Learning—Excellence—Respect—Change—Diversity—Integrity--Continuous Improvement

2017 Spring Semester

Late registration	Wednesday-Friday	January 4, 5, 6
First day of classes	Monday	January 9
Drop/Add (closes at 5:00 PM Thursday)	Monday-Thursday	January 9-12
Martin Luther King Day (no classes)	Monday	January 16
Mid-term grades due	Monday	March 6
Spring recess begins (no classes)	Saturday	March 4
Spring recess ends (classes resume)	Monday	March 13
Last day for "W" grades (full semester)	Thursday	March 23
Mid-semester recess begins (no classes)	Thursday	April 13
Mid-semester recess ends (classes resume)	Monday	April 17
Last day of classes	Friday	April 28
Examination week begins	Monday	May 1
Examination week ends	Friday	May 5

CLASS ATTENDANCE IS IMPORTANT!

Many instructors have mandatory attendance policies by which grades will be affected by student absences. To encourage students to be present for the full class period, some instructors have policies about class tardiness. Check your course syllabus or talk to your instructor about their

TO CONTACT A FACULTY MEMBER/ADVISOR4

If you have questions or need help, talk to your instructor. Faculty office locations, phone numbers, and office hours may be obtained from the class syllabus, department office, MyFSU, or through the College of Business web page at <http://www.ferris.edu/cob>. A faculty directory is also located outside of the dean's office (BUS 200).

DROP/ADD CLASSES (first four days of classes)

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WITHDRAWING FROM CLASSES-(after 4th day.)

To withdraw from a class, go to your Dean's Office for the **OFFICIAL** paperwork. A "W" grade in the course will go on your transcript. To totally withdraw from the University, **OFFICIAL** paperwork must be filled out at Admissions and Records in CSS 101. The last day to withdraw or drop a class may be different (please review the above dates in chart). In case of medical reasons requiring a complete withdrawal from school, contact Birkam Health Center at 591-2614.

INCOMPLETES

The "I" is only considered for extenuating circumstances that have led to a student's missing a portion of the course. Extenuating circumstances are generally defined as those situations over which the student has little or no control—e.g., illness, birth, jury duty, death of a parent, serious injury. Instructors may require suitable documentation. Please contact your Dean's Office as soon as possible at 591-2420 to keep us informed.

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WHERE TO GO FOR HELP

The following services are available to any Ferris student, free of charge. They are designed to help students succeed in courses, in career planning, and in meeting the challenges of college life. Don't hesitate to explore and use these services at Ferris.

Academic Support Center...ASC 1017 – 591-3543

The Writing Center.....ASC 1017 – 591-2534

The Writing Center, Tutorial Services and Academic Skills Center offer FSU students an array of academic support services, e.g.

- tutoring for many Ferris courses
- individual help and workshops with writing skills and writing assignments for English or other courses
- help in developing better reading and study strategies
- workshops to help you meet the challenges of college life

Scholar Program.....ASC 1025 – 591-5976

SCHOLAR is an academic support program that aids in the student’s successful progression by offering a Peer Mentor Program, a Student Retention Program, and an Academic Student Advisory Committee.

Disabilities Service.....STR 313 – 591-3057

Ferris State University is committed to following the requirements of the Americans with Disabilities Act Amendments Act and Section 504 of the Rehabilitation Act. If you are a student with a disability or think you may have a disability, contact the Disabilities Services office at 231.591.3057 (voice), or email ecds@ferris.edu to discuss your request further. More information can be found on the web at <http://www.ferris.edu/htmls/colleges/university/disability/>

Any student registered with Disabilities Services should contact the instructor as soon as possible for assistance with classroom accommodations.

Personal Counseling, Sexual Assault, Substance Abuse

Birkham Health Center - 2nd Floor.....591-5968

Personal counseling is available confidentially and free of charge. Counselors are available to assist with personal and stress-related problems, family and relationship issues, substance abuse, sexual assault, depression, or other similar problems. Call or stop by to obtain an appointment.

Career Counseling.....STR-313 - 591-3057

Educational & Career Counseling Center

Change Academic Programs:

COB Dean’s OfficeBUS 200 - 591-2420

Instructor: David M. Marion, PhD

Office: BUS 342

Phone: 231-591-3164

Office Hours: 8:00 to 11:00 and 2:00 to 3:00 Tuesday or by appointment

E-mail: mariond@ferris.edu (this is the best way to contact me)

Course Description:

This course will focus on the improvement of business through the utilization of practices known to Lean technicians to allow for the difference between standard accounting practices and Lean costing practices in terms of inventory control. Since Lean focuses on the reduction of waste, inventory becomes a burden on the bottom line causing organizations to abandon Lean all together not realizing the benefits. This course will teach the student more about Lean practices and a new way of looking at the inventory.

Learning Objectives and Outcome:

As stated in the course description, this course will focus on the benefits found through proper costing of inventory as Lean techniques take affect in changing the bottom line for an organization. This process can be difficult under standard accounting methods, as inventory is no longer looked at as an asset. The individuals in this course will be able to:

- **Outcome #1: Technical knowledge:** Learning the fundamental principals of lean management and acquire the knowledge of the managerial techniques to function as a Lean technician.
- **Outcome #2: Critical thinking and decision-making:** build a solid foundation that allows students to keep track and think through issues that arise as changes in the organization occur while the organization progresses.
- **Outcome #3: Understand practices** correct changes in costing principles that allow for changes in inventories that typically halt a Lean initiative.
- **Outcome #4:** Have the ability **Create and Comprehend changes** by standardized and recognized methods using charting and processes to align Lean efforts.
- **Outcome #5:** Set standards for **sustainable business** performance in terms of Lean initiatives that translate the improvements to the bottom line in terms of seeing the improvements.

Required Text & Readings:

There is not a required text for this class, as material will be handed out.

Note

The class overview that follows in this syllabus is to show topics that will be covered and the outcome expectations. It is not by any means an outline for the class to follow as the class will proceed in a manner fitting to the flow of the class.

Grading

Grades will be calculated over in class assignment, quizzes, and video reviews.

Grading Scale:

93+ = A	73-76 = C
90-92 = A-	70-72 = C-
87-89 = B+	67-69 = D+
83-86 = B	63-66 = D
80-82 = B-	60-62 = D-
77-79 = C+	59 and below = F

Exams/Quizzes

There will be quizzes over the semester delivered in alignment with the problems combined in class.

Deliverables

Each week during the live class sections topics will be covered and corresponding work will be assigned on Thursdays that will be due by Sundays, 11:59PM. Deadlines may be extended for projects requiring more time, otherwise there will be no extension.

Note: (read this one please)

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ALSO: Make sure you treat this class like you would a job. Contacting me after you have missed an assignment will automatically lose you points and after a certain point, there will be no credit given. There are exceptions for extreme cases, but they must be approved.

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Previously he had worked primarily as a contract engineer. Within this realm he had designed plastic bottles for Coca-Cola, Graham Products, and Lever Brothers. This position entailed fitting the requesting company’s constraints into a specified area and creating a new design that would not only be functional but aesthetically pleasing. He also spent time at Mazda where he worked with aftermarket accessory design. A notable project would have been the tenth anniversary Miata. This project required a new gearshift knob, fog lamps, spoiler, and floor mats for the anniversary model. These accessories required working with suppliers from around the globe such as Blazer and Bosch. Another position entailed the designing of interiors for service vans as a shipthrough for the big three automakers (at that time). Also, he worked at a design facility that built secondary tooling for large manufacturers. Secondary tooling is typically a secondary operation performed to a product just after it is created. For example, when a fiberglass box for a pickup truck comes down the assembly line just after it is formed, a secondary operation would be to attach the dually fenders to it. This was a project undertaken by the company in conjunction with Dodge Trucks.

Class Overview and Assessment: This is not meant to be a **READING LIST (this layout is based on a text used as a guideline, not a timeline)**

Topic	Technical Knowledge	Critical Thinking and Decision Making	Understand Lean Practices	Create and Comprehend Changes	Sustainable Business
Chapter 1- Why is lean accounting important?			X	X	
Chapter 2 – Maturity path to lean accounting		X	X		X
Chapter 3 – Cell performance measurements	X	X	X		
Chapter 4 – Financial benefits of lean manufacturing		X	X	X	X

Chapter 5 – Eliminating wasteful transactions	X	X	X	X	X
Chapter 6 – Lean financial accounting		X	X	X	
Chapter 7 – Managing by value stream	X	X	X	X	X
Chapter 8 – Value stream performance measurements	X	X			X
Chapter 9 – Value stream costing		X	X	X	
Chapter 10 – Using the box score		X	X	X	X
Chapter 11 – Calculating product costs- features and benefits		X	X	X	X
Chapter 12 – Eliminating wasteful transactions		X	X	X	X
Chapter 13 – Sales, operational, and financial planning		X	X		X
Chapter 14 – Lean financial accounting II	X	X	X		X
Chapter 15 – The lean enterprise		X			X
Chapter 16 – Target costing	X	X	X		
Chapter 17 – Expanding value streams outside our four walls	X	X	X	X	X
Chapter 18 – The lean accounting diagnostic		X	X	X	

Chapter 19 – Performance measurement linkage chart		X			X
Chapter 20 – Transaction elimination maturity path table	X		X	X	X
Chapter 21 – Value stream cost analysis		X	X	X	X
Chapter 22 – Value stream mapping		X	X	X	X

Links Related to Lean Accounting to give you an overview:

Lean Accounting Summit: <http://leanaccountingsummit.com/> What is Lean Accounting:
http://www.maskell.com/lean_accounting/subpages/lean_accounting/components/What_is_Lean_Accounting.pdf The Lowdown on Lean Accounting:
<http://www.journalofaccountancy.com/issues/2004/jul/thelowdownonleanaccounting.htm> Lean Accounting's Fat Problem:
<http://www.forbes.com/2009/07/28/accounting-management-enterprise-technology-cio-network-accounting.html> Lean Accounting Resources:
<http://www.aicpa.org/InterestAreas/BusinessIndustryAndGovernment/Resources/OperationalFinanceAccounting/StrategicCostManagement/Pages/Lean%20Accounting%20Resources.aspx>

Ferris
State
University

MGMT 432
Fall 2017

INSTRUCTOR: Dr. Lisa Eshbach

OFFICE: Office Phone: 231- 591- 3197 or 616-263-7501

E-mail: eshbacl@ferris.edu

OFFICE HOURS: 12 p.m. – 2 p.m.. M-W, Room COB 340

COURSE TITLE: MGMT 432 Lean Logistics and Supply Management (**Mixed Delivery**)

TEXTBOOKS

Building a Lean Fulfillment Stream: Rethinking The team Supply Chain and Logistics to Create Maximum Value at Minimum Cost, Martichenko, Robert and vonGrabe, Kevin, Lean Enterprise Institute. ISBN 978-1-934109-19-9, Copyright 2010.

Making Materials Flow: A Lean Material-Handling Guide for Operations, Production-Control, and Engineering Professionals Harris, Rick, Harris, Chris, and Wilson, Earl. Lean Enterprise Institute, ISBN-13: 978-0974182490 ISBN-10: 0974182494, Copyright 2003

McGraw-Hill Create Case eBook: ISBN: 9781307120042. Steps to access the casebook:

1. Go to <https://create.mheducation.com/shop/>;
2. Search for and select book by Title, ISBN, Author, or State/School.
ISBN: 9781307120042.; Title: Lean Logistics and Supply Development
3. Add the book to your cart and pay using a credit card, debit card, etc.

Ferris Connect Notes – Select Chapters are available through the FLITE e-reserve system. Select the Weblinks on the main course page and type in “logistics” when prompted for the password The Information Obtained from the following Sources OR use the following web link to access the cases for the case analysis. <http://ferris.libguides.com/er.php?ecid=10613>.
The password for this course is: **logistics**

Blackboard Notes – The notes for all chapters including weeks 12-14 are included in Blackboard under the respective weekly folders.

COURSE DESCRIPTION

A common misconception of lean philosophy is that it only finds application in manufacturing settings. However, the impact of lean on the logistician is significant. A goal of lean is to eliminate waste, decrease work-in-process inventories, and, in turn, decrease process and product and service lead-times. This results in ultimately increasing supply chain capability and flow. Logistics flow is paramount to lean thinking!

Lean also has a vital cultural element, called “total logistics cost” that is crucial to the logistician. The lean practitioner does not focus on individual cost factors such as transportation or warehousing, but rather focuses on “total logistics cost.” With inventory carrying costs representing 15-40% of total logistics costs for many industries, making decisions based on total cost has dramatic implications for the logistician.

This course teaches students the importance of the synergies involved in the logistics process. From order management through transportation and warehousing and completing with customer fulfillment, lean applications in the logistics function are relevant and significant.

The course will focus on how to examine the wastes involved with the existing processes and the lean tools required for turning logistics and supplier issues into a competitive advantage. Areas of concentration include managing the flow of incoming and outbound goods, services, and related information, reducing logistics costs, improving logistics service, and removing impediments as well as bottlenecks to create an efficient, effective synergistic lean logistics and supplier operation network.

COURSE OBJECTIVES

By the end of this course, student competence is required in several key areas of lean.

The general categories of outcome base learning are intended both to develop as well as to demonstrate student’s key competencies as follows:

Learning Outcome 1: Design a lean logistics transportation strategy to reduce total cost of fulfillment, inventory, logistics costs, and lead time and space requirements creating level flow and improving the overall efficiency of the process.

Learning Outcome 2: Create collaborative lean –focused supplier network. Construct a supplier performance and accountability matrix.

Learning Outcome 3: Evaluate an existing supplier network.

Learning Outcome 4: Develop the architecture for an optimized supplier network that improves supplier performance and accountability.

Learning Outcome 5: Exhibit a high level of team collaboration, leadership, and change management capabilities.

COURSE CALENDAR – TENTATIVE SCHEDULE. The instructor reserves the right to adjust the syllabus to better serve the overall learning needs of the class.

WEEK	CHAPTER MATERIAL	ASSIGNMENTS DUE
		(I): Individual (T): Team
Week 1	C1: The Lean Fulfillment Stream (Martichenko & von Grabe)	
Aug. 28		
Week 2	C2: Getting Started and the Current State (Martichenko & von Grabe)	Online Discussion Questions and Participation Due Sept. 10 (I)
Sept. 4		
Week 3	C3: Envisioning the Future State (Martichenko & von Grabe)	
Sept. 11		
Week 4	Lean Fulfillment Map In-class Exercise	Online Discussion Questions and Participation Due Sept. 24 (I)
Sept. 18		
Week 5	C4: Customer Collaboration & Outbound Logistics (Martichenko & von Grabe)	

Sept. 25	NO CLASS – Research Trip	
Week 6	C4: Customer Collaboration & Outbound Logistics (Martichenko & von Grabe)	Online Discussion Questions and Participation Due Oct. 8 (I)
Oct. 2	C5: Shipping, Receiving, and Trailer-Yard Management , and Material Ordering (Martichenko & von Grabe)	Current State Value Stream Fulfillment Map (I) Due Oct. 8
Week 7	C5: Shipping, Receiving, and Trailer-Yard Management , and Material Ordering (Martichenko & von Grabe)(cont'd)	
Oct. 9	C6: Inbound Logistics and Supplier Collaboration (Martichenko & von Grabe)	
Week 8	C6: Inbound Logistics and Supplier Collaboration (Martichenko & von Grabe) (cont'd)	Online Discussion Questions and Participation Due Oct. 22 (I)
		Future State Value Stream Fulfillment Map (I) Due Oct. 22
Oct. 16		JSW Steel, Ltd. Case Analysis Presentation Due: Oct. 18
Week 9	C1: Getting Started (Harris, Harris, & Wilson)	Pepsico Case Analysis Paper and Presentation Due: Oct. 25
Oct. 23	C2: The Plan for Every Part (PFEP) (Harris, Harris, & Wilson)	
Week 10	C3: Developing a Purchased Parts Market (Harris, Harris, & Wilson)	
Oct. 30	PFEP Exercise	
Week 11	C3: Developing a Purchased Parts Market (Harris, Harris, & Wilson) (cont'd)	Hospital Network Supply Chain Support Warehouse Outsourcing

		Case Analysis Paper and Presentation Due Nov. 8
Nov. 6	PFEP Exercise (cont'd)	Plan for Every Part Due Nov. 12
Week 12	C4: Designing the Delivery Route and the Information Management System (Harris, Harris, & Wilson)	
Nov. 13	Blackboard Notes - C2: Supply Chain Strategy and the Five Steps to Achieving Excellence (Slone, Dittmann, and Mentzer)	Online Discussion Questions and Participation Due Nov. 19 (I)
Week 13	Blackboard Notes- C14: Metrics and Measurement: How are We Doing? (Myerson)	Royal Beginnings: Choosing the Best Suppliers for a Bridal Shop Case Analysis Paper and Presentation Due Nov. 22
Nov. 20	Blackboard Notes - Case 30: Supply Chain Risk Management for Macro Risks (Munson – pp. 272-284)	
Week 14	Blackboard Notes - C12: Lean & Technology: Why Can't We all Just Get Along? (Myerson)	Lean Supplier Network and Supplier Measurement/Evaluation Assignment Due Dec. 3 (I)
Nov. 27	Blackboard Notes - C13: Beyond the Four Walls: I Can See Clearly Now (Myerson)	Extra Credit: Online Discussion Questions and Participation Due Dec. 3 (I)
Week 15	Catch up and Review for Final Exam	
Dec. 4		
Week 16	Final Exam	Final Exam per University Exam Schedule
Dec. 11		

Subject to changes as determined and deemed appropriate by the instructor.

Appendix A – Assessment of MGMT 432 Outcomes

Course Outcomes			CSM and FSM Value Stream Fulfillment Maps	Lean Supplier Network and Supplier Measurement & Evaluation	Case Study Analysis Paper and Presentation	Discussion Questions & Online	Final Exam	Peer Evaluation
Learning Outcome 1: Design a lean logistics transportation strategy to reduce total cost of ownership, inventory, logistics costs, and lead time and space requirements.	X				X	X	X	
Learning Outcome 2: . Create collaborative lean –focused supplier network. Construct a supplier performance and accountability matrix.		X		X		X	X	
Learning Outcome 3: Evaluate an existing supplier network.				X		X		
Learning Outcome 4: Develop the architecture for an optimized logistics and supplier network.	X	X	X		X	X	X	
Learning Outcome 5: Exhibit a high level of team collaboration, leadership, and change management capabilities.					X			X

INSTRUCTOR: Dr. Lisa Eshbach

OFFICE: Office Phone: 231- 591- 3197 or 616-263-7501

E-mail: eshbacl@ferris.edu

OFFICE HOURS: 12 p.m.- 2 p.m.. M-W, Room 340 College of Business

COURSE TITLE: MGMT 492: Lean Service Enterprise and Leadership (100% online)

TEXTBOOKS:

Keyte, B & Locher, D. (2016). *The Complete Lean Enterprise: Value Stream Mapping for Administrative and Office Processes*. New York, NY. Productivity Press. ISBN: 978-1-4822-0613-5

Kotter, J.P. and Cohen, D. (2002). *The Heart of Change: Real-Life Stories of How People Change Their Organizations*. Harvard Business School Press.

Liker, J. & Meier, D. (2006). *The Toyota Way Fieldbook*. New York. McGraw- Hill Publishing ISBN: 0-07-144893-4.

Suggested: Lean Enterprise Institute, Inc. (2014). *Lean Lexicon*. ISBN-10: 0-9667843-6-7

COURSE DESCRIPTION

This course concentrates on how to design, continuously improve, and lead a lean service business process initiative. Specific areas of concentration include Systems Planning and Thinking (seeing the whole business as a value stream), Human relations skills (leadership, strategy development and deployment, change management, and team problem solving) and Lean Principles (kaizen, PDCA, 5S, pull, leveling process stability, standardized work, root-cause problem resolution and A3 Reporting).

COURSE OBJECTIVES

Learning Outcome 1: Develop and deploy a systems planning/thinking process within a service organization that leads to a sustainable competitive advantage.

Learning Outcome 2: Perform a service business process assessment identifying inefficiencies.

Learning Outcome 3: Analyze opportunities and problem areas within existing business Value Streams. Model and assess the impact of any proposed changes to a key process.

Learning Outcome 4: Utilize the foundations of lean practice and tools - including value stream mapping, kaizen, PDCA, 5S, pull, leveling process stability, standardized work, root-cause problem
COURSE CALENDAR – TENTATIVE SCHEDULE . The instructor reserves the right to adjust the syllabus to better serve the overall learning needs of the class.

Final Note

Subject to changes as determined and deemed appropriate by the instructor.

WEEK	CHAPTER MATERIAL	ASSIGNMENTS DUE
Week 1	Systems Planning and Thinking (seeing the whole business as a value stream)	
Aug. 28	The Toyota Way Fieldbook (Part I: Learning from Toyota - Chapter 1)	
Week 2	No Class per University Schedule – See Chapter 2 Narrated Notes in Blackboard	A1: Online Discussion Questions and Participation Due Sept. 10
Sept. 4	The Toyota Way Fieldbook (Part II: Why Does your company Exist – Chapter 2)	
Week 3	Lean Principles (Value Stream Mapping)	
Sept. 11	Current State Mapping: The Toyota Way Fieldbook (Part III: Creating Lean Processes Throughout the Enterprise - Chapter 3)	
	The Complete Lean Enterprise (Chapters 1,2, and 3)	
Week 4	Lean Principles (Value Stream Mapping – Cont’d)	A2: Online Discussion Questions and Participation Due Sept. 24
Sept. 18	Current State Mapping: The Toyota Way Fieldbook (Part III: Creating Lean Processes Throughout the Enterprise - Chapter 3)	
	The Complete Lean Enterprise (Chapters 1,2, and 3)	
Week 5	Lean Principles (Value Stream Mapping – cont’d)	

Sept. 25	Future State Mapping The Complete Lean Enterprise (Chapters 4, 5, 6)	
Week 6	Lean Principles (5S, Process Stability, Pull, Flow)	A3: Online Discussion Questions and Participation Due Oct. 8
Oct. 2	The Toyota Way Fieldbook (Part III: Creating Lean Processes Throughout the Enterprise - Chapters 4 and 5)	Current State Map Due Oct. 8
	The Complete Lean Enterprise (Chapters 7, 8, and 9)	
Week 7	Lean Principles (Standardize work, leveling, and poke yoke)	
Oct. 9	The Toyota Way Fieldbook (Part III: Creating Lean Processes Throughout the Enterprise - Chapters 6, 7, and 8)	
Week 8	Lean Principles (Root-cause problem resolution and A3 Reports)	A4: Online Discussion Questions and Participation Due Oct. 22
Oct. 16	The Toyota Way Fieldbook (Part V: Root Cause Problem Solving for Continuous Learning - Chapters 13, 14, 15)	Future State Map Due Oct. 22
Week 9	Lean Principles (Root-cause problem resolution and A3 Reports) (cont'd)	5S Exercise and Virtual Presentations Due Oct. 29 (Submit to 5S Discussion Board)
Oct. 23	The Toyota Way Fieldbook (Part V: Root Cause Problem Solving for Continuous Learning - Chapters 16, 17, 18)	
	The Complete Lean Enterprise (Chapter 10)	
	ROI Notes	
Week 10	Human relations skills (Strategy development and deployment, change management, and team problem solving)	A5: Online Discussion Questions and Participation Due Nov. 5
Oct. 30	The Toyota Way Fieldbook (Part IV: Develop Exceptional People and Partners - Chapters 10, 11, 12)	
Week 11	Leading the Change	A3 Exercise Due Nov. 12

Nov. 6	The Heart of Change (Introduction, Step 1 – Increase Urgency and Step 2 – Build the Guiding Team)	
	The Toyota Way Fieldbook (Part VI: Managing the Change – Chapter 19)	
Week 12	Leading the Change(cont'd)	A6: Online Discussion Questions and Participation Due Nov. 19
Nov. 13	The Heart of Change (Step 3 – Get the Vision Right and Step 4 – Communicate for Buy-in, Step 5 – Empower/Enable Action)	
	The Toyota Way Fieldbook (Part VI: Managing the Change – Chapter 20)	
Week 13	Leading the Change(cont'd)	
Nov. 20	The Heart of Change (Step 6 – Create Short Term Wins, Step 7 – Don't Let Up, Step 8- Make Change Stick)	
Week 14	Work on Final Lean Projects	A7: Online Discussion Questions and Participation Due Dec. 3
Nov. 27		
Week 15	Final Lean Project Presentations and Papers	Final Lean Project Papers and Presentations Due Dec. 10
Dec. 4		

Appendix A

Assessment of Lean Service Enterprise Leadership Outcomes

Course Outcome						
	5S Exercise	Value Stream Map Exercise	Lean Service Project & Presentation	Discussion Questions	Participation	Peer Participation
Learning Outcome 1: Develop and deploy a systems planning/thinking process within a service organization that leads to a sustainable competitive advantage.		X	X	X		
Learning Outcome 2: Perform a service business process assessment identifying inefficiencies.		X	X		X	
Learning Outcome 3: Analyze opportunities and problem areas within existing business Value Streams. Model and assess the impact of any proposed changes to a key process.		X	X		X	
Learning Outcome 4: Utilize the foundations of lean practice and tools - including value stream mapping, kaizen, PDCA, 5S, pull, leveling process stability, standardized work, root-cause problem resolution and A3 Reports – to design an operating system for managing innovation and continuous improvement in service related business processes.	X	X	X	X	X	
Learning Outcome 5: Exhibit a high level of team collaboration, leadership, and change management capabilities through implementing a lean service project/initiative.			X		X	X

**SYLLABUS ATTACHMENT
COLLEGE OF BUSINESS – FERRIS STATE UNIVERSITY**

COB VALUES

Learning—Excellence—Respect—Change—Diversity—Integrity--Continuous Improvement

Fall 2017 Important Dates

Late Registration	Wednesday – Friday	August 23, 24, 25
First Day of Classes	Monday	August 28
Last Day to Add/Drop	Thursday at 5:00 pm	August 31
Labor Day - no classes	Monday	September 4
Mid-term Grades Due	Monday	October 16
Last Day for “W” Grades (full semester)	Thursday	November 2
Thanksgiving recess begins at 12 noon	Wednesday	November 22
Thanksgiving recess ends – classes start	Monday	November 27
Last Day of Classes	Friday	December 8
Examination Week	Monday-Friday	December 11-15
Commencement	Saturday	December 16
Grades Posted to MyFSU Account	Monday	December 18

<i>Sessions</i>	<i>Dates</i>	<i>Drop Deadline</i>	<i>Withdraw Deadline</i>
1	August 28- December 8	August 31	November 2
Session A	August 28-October 17	August 31	September 28
Session B	October 18- December 8	October 23	November 17
Session D	August 28- September 29	August 31	September 18
Session E	October 2- November 2	October 3	October 20
Session F	November 3- December 8	November 6	November 27

TO CONTACT A FACULTY MEMBER/ADVISOR

If you have questions or need help, talk to your instructor. Faculty office locations, phone numbers, and office hours may be obtained from the class syllabus, department office, MyFSU, or through the College of Business web page at <http://www.ferris.edu/cob>. A faculty directory is also located outside of the dean's office (BUS 200).

DROP/ADD CLASSES (first four days of classes)

Use MyFSU to drop and add classes only during the add/drop time period (ends the 4th day at 5:00 pm). Tuition reimbursement is issued ONLY during the first four days of classes.

WITHDRAWING FROM CLASSES-(after 4th day.)

To withdraw from a class, go to your Dean's Office for the **OFFICIAL** paperwork. A "W" grade in the course will go on your transcript. To totally withdraw from the University, **OFFICIAL** paperwork must be filled out at Admissions and Records in CSS 101. The last day to withdraw or drop a class may be different (please review the above dates in chart). In case of medical reasons requiring a complete withdrawal from school, contact Birkam Health Center at 591-2614.

INCOMPLETES

The "I" is only considered for extenuating circumstances that have led to a student's missing a portion of the course. Extenuating circumstances are generally defined as those situations over which the student has little or no control—e.g., illness, birth, jury duty, death of a parent, serious injury. Instructors may require suitable documentation. Please contact your Dean's Office as soon as possible at 591-2420 to keep us informed.

Students must complete at least 75% of the coursework at passing levels before an "I" will be considered. A signed agreement regarding course completion may be required. An "I" grade automatically changes to an "F" after one semester (not counting summer) unless the faculty member files another grade change or extends the incomplete.

The intent and appropriate use of the "I" grade is NOT to avoid student probation, dismissal, or unacceptable grades, nor should it be considered as an extended alternative to withdraw from a class (W).

WHERE TO GO FOR HELP

The following services are available to any Ferris student, free of charge. They are designed to help students succeed in courses, in career planning, and in meeting the challenges of college life. Don't hesitate to explore and use these services at Ferris.

Academic Support Center...ASC 1017 – 591-3543

The Writing Center.....ASC 1017 – 591-2534

The Writing Center, Tutorial Services and Academic Skills Center offer FSU students an array of academic support services, e.g.

- tutoring for many Ferris courses
- individual help and workshops with writing skills and writing assignments for English or other courses
- help in developing better reading and study strategies
- workshops to help you meet the challenges of college life

Scholar Program.....ASC 1025 – 591-5976

SCHOLAR is an academic support program that aids in the student’s successful progression by offering a Peer Mentor Program, a Student Retention Program, and an Academic Student Advisory Committee.

Disabilities Service.....STR 313 – 591-3057

Ferris State University is committed to following the requirements of the Americans with Disabilities Act Amendments Act and Section 504 of the Rehabilitation Act. If you are a student with a disability or think you may have a disability, contact the Disabilities Services office at 231.591.3057 (voice), or email ecds@ferris.edu to discuss your request further. More information can be found on the web at <http://www.ferris.edu/htmls/colleges/university/disability/>

Any student registered with Disabilities Services should contact the instructor as soon as possible for assistance with classroom accommodations.

**Personal Counseling, Sexual Assault, Substance Abuse
Birkham Health Center - 2nd Floor.....591-5968**

Personal counseling is available confidentially and free of charge. Counselors are available to assist with personal and stress-related problems, family and relationship issues, substance abuse, sexual assault, depression, or other similar problems. Call or stop by to obtain an appointment.

Career Counseling.....STR-313 - 591-3057

Educational & Career Counseling Center

**Change Academic Programs:
COB Dean’s OfficeBUS 200 - 591-2420**

Safety

Please observe the posted shelter and evacuation routes in the hallway nearest your classroom.

LIBRARY (FLITE) / COMPUTER LAB HOURS

Please check on MyFSU and click on the FLITE tab.

COMPUTER LAB HOURS (College of Business)

Please call 591-2291 or go to BUS 104 for posted hours.

ACADEMIC MISCONDUCT

Academic misconduct refers to dishonesty or misrepresentation with respect to assignments, tests, quizzes, written work, oral presentations, class projects, internship experience, or computer usage; violation of computer licenses, programs, or data bases; or unauthorized acquisition or distribution of tests or other academic material belonging to someone else.

It includes such behaviors as cheating, copying materials from the internet without documentation, presenting another person's ideas or work as your own, resubmitting work done for previous class without permission, taking someone else's exam for her a particular them, violating computer software licenses or program/data ownership, etc. If you are uncertain about what behavior might represent academic misconduct, be sure to ask your professor for clarification.

Penalties for academic misconduct can include **FAILURE** of the assignment or the course, and/or disciplinary action up to and including probation or dismissal from the University.

DISRUPTIVE BEHAVIOR

The College of Business strives to maintain a positive learning environment and educational opportunity for all students. Consequently, patterns of behaviors which obstruct or disrupt the teaching/learning environment will be addressed. The instructor is in charge of his or her course (e.g., assignments, due dates, attendance policy) and classroom (e.g., behaviors allowed, tardiness). Harassment, in any form, will not be tolerated.

Penalties for disruptive behavior can include involuntary withdrawal from the course and/or disciplinary action up to and including probation or dismissal from the University.

Course : **MKTG 466: Purchasing**

Instructor: Jina Jackson Rockwell

Phone: (616) 676-7290

PREFERRED method

Email

Please use the email function within Blackboard

Office Location

BUS Room 305

Office Hours

Tuesday 8:15 AM-9:15 AM and 4:30 PM -6:30 PM Thursday 8:15 AM- 9:15 AM and 11:00 AM- 12:00 PM

COURSE DESCRIPTION Purchasing functions and procedures; organization and operation of the purchasing department, selecting and managing sources of supply, control of quality, inventory, delivery, legal aspects of purchasing, contracts, international procurement, understanding the role of the buyer within the firm. The business student will gain a greater understanding of the buyer's needs, procedures, and policies. The course will also assist students who have an interest in preparing to take purchasing professional certification exam modules. Pre-Requisites: MKTG 321 w/C- or higher

OBJECTIVES AND COURSE OUTCOMES The objective of this course is to develop awareness of current methods used in Purchasing, Supply Management. The general categories of outcome base learning are Global Sourcing, Social/Ethical Responsibility, Sustainable/Environmental, Process-operational Management, Contractual issues. Collectively, discussions, problems, and cases, required for this course are intended both to develop as well as to demonstrate student's key competencies as follows: Demonstrate understanding of current issues within purchasing (sustainability, ethical and global).

- Prepare a request for quote, proposal or bid
- Locate, evaluate and develop potential suppliers for materials or services
- Analyze supplier quotes and support the selection of a supplier
- Develop specifications for a request for quote (RFQ). Given specification, develop list of potential suppliers to meet the RFQ and potential purchasing issues.

INSTRUCTIONAL METHODS

The course activities may include lectures, role-plays, guest speakers, class discussions, cases, exercises, small group dialogue, class presentation, audio/visual aids, and video recording.

REQUIRED TEXT

Purchasing & Supply Chain Management, 6th edition, Monczka, Handfield, Giunipero & Patterson, South-Western, ISBN: 978-1-285-86968-1.

<http://www.instituteforsupplymanagement.org> Institute for Supply Management
<http://www.APICS.org> American Production and Inventory Control Society
<http://www.thomasnet.com/> Product Sourcing and Supplier Discovery Platform.
<https://asq.org/> Quality Management topics and training <https://www.isixsigma.com/>
 Quality and Six Sigma topics and training <https://www.pmi.org/> Project Management
 topics and training. **RADING SCALE (THESE ARE PERCENTAGES)**

A	93-100	B-	80-82	D+	67-69
A-	90-92	C+	77-79	D	63-66
B+	87-89	C	73-76	D-	60-62
B	83-86	C-	70-72	F	0

-59

These are the activities that contribute to your final grade:

Grading

Quizzes: 20 points each, (best 12 quizzes)	240
Individual Project (RFQ creation)	100
Group Project (Supplier Evaluation) + Presentations (15 pts)	100
Individual Project (Supplier Selection)	50
Written Discussion/Exercise	50
Individual Cases	150
FINAL CASE and EXAM	210
Class Attendance and Participation	<u>100</u>
Total points	1000

The activities identified above may be graded using a variety of points per assignment/test/exercise; it is the weighted score that will contribute to your final grade percentage

Chapter Quizzes

Quizzes will be utilized as a measure of your growing understanding. Quizzes are available on-line through Blackboard. The quizzes are "open book", but must be completed in an hour. Each quiz may be attempted only once. Quizzes are DUE at the end of the day on SUNDAY. No late or make-up quizzes will normally be

granted.

240 PTS

Project

On certain weeks projects will be given that involve elements of purchasing contracts. Most will look at some aspects of a contract like request for quote (RFQ) or looking at supplier submissions. You may develop specifications or create a statement of work (SOW) to determine which supplier to use. There will be a presentation (Supplier Evaluation) that each team will do together and use PowerPoint slides as needed. You will be asked to choose a supplier (Supplier Selection) that you feel is best and provide a recommendation to source.

250 PTS

Written Discussion

There will be class discussions, which will cover a topic, related to the learning outcomes and/or upcoming chapter. You will be required to complete exercises for that week's activities, either as an individual or as a group. **To receive full credit on discussion answers you should answer the questions in detail.**

100

PTS

Cases

There will be two assigned individual cases during the semester. The purpose of the cases is to promote critical thinking, expose you to real world scenarios, as well as equip you with concise business writing skills. You may work on the cases in small groups, but I would prefer that you submit individual responses. Cases are due on **Tuesday at the beginning of class.**

Case write-ups should be at most 5 pages and single-spaced (11 or 12-point font), with appendices attached. The write-up should begin with an executive summary and organized as follows:

- Brief description of the company and its environment (OVERVIEW/EXEC SUMMARY)
- Accurate description of the specific situation (OVERVIEW/EXEC SUMMARY)
- Statement/Sentence citing the recommendation (OVERVIEW/EXEC SUMMARY)
- Identification of key issues and concerns (BODY)
- Identification of several possible alternatives to address the issues and concerns (BODY)
- Analysis of the advantages/disadvantages of each alternative (BODY)
- Detailed discussion of your recommendation, including rationale; Why is this your choice (BODY)
- Answer the questions at the end of the case The appendices should include:
- Supporting documentation, if applicable any tables, worksheets, or graphs used to help form your conclusions

Please avoid repetition of case facts and long expositions. General solutions to specific problems will get you little credit. Consider what and why you believe are the most important factors. Both quantitative and qualitative analyses are important. Creativity in analysis and suggestions that are grounded in case facts will be given high credit. Please state any assumptions made clearly.

100 PTS

**FINAL CASES ARE DUE THE WEEK OF DEC 5TH.
210 PTS FINAL EXAM MONDAY DECEMBER 11, 2017 2:00 PM- 3:40 pm**

Class Participation & Attendance: Attendance is a critical component of success in this class. You are expected to attend and participate in each class section. Attendance will be taken at the beginning of each class. Any student arriving more than five (5) minutes late will be considered absent. In addition, students who spend class time on electronic devices rather than participating in class will also be considered absent. Three absences will be exempt. Four (4) unexcused absences will reduce your final grade by one full letter; five (5) unexcused

absences will result in a failing grade.

100 PTS

COURSE SCHEDULE

DATES	TOPIC	Assignment	Measurable Outcomes			
			Global Supply	Process Operations	Contractual & Ethical	Sustainable Business
Wk 1 08/29	Chapter 2: Purchasing Process	Quiz		X	X	X
Wk 2 09/05	Chapter 3: Purchasing Policy & Procedures	Quiz & Discussion: Group _Commodity Price		X	X	X
Wk 3 09/12	Chapter 4: Supply integration	Quiz & Discussion: Group _Supply Risk	X	X	X	
Wk 4 09/19	Chapter 5: Supply Management Organization	Quiz	X	X		
Wk 5 09/26	Chapter 6: Commodity Strategy	Quiz & Case	X	X	X	
Wk 6 10/03	Chapter 7: Supplier Evaluation and Selection	Quiz & Case:	X		X	X
Wk 7 10/10	Chapter 8: Quality	Quiz & Discussion: Group _ Quality	X	X		X
Wk 8 10/17	Chapter 9: Supplier Management & development	Quiz & Project: RFQ DUE		X	X	X

Wk 9 10/24	Chapter 10: Worldwide Sourcing	Quiz & Project: Supplier Evaluation DUE	X	X		X
Wk 10 10/31	Chapter 11: Cost Management	Quiz & Project: Supplier Selection DUE		X	X	
Wk 11 11/07	Chapter 13: Negotiation				X	X
Wk 12 11/14	Chapter 13: Negotiation	Quiz & Discussion: Group _Negotiation	X	X		
Wk 13 11/21	Chapter 14: Contract Management	Quiz		X	X	X
Wk 14 11/28	Chapter 15: Law and Ethics	Quiz:			X	X
Wk 15 12/5		FINAL CASES DUE				

ATTENDANCE POLICY

Three (3) absences will be exempt. Four (4) unexcused absences will reduce your final grade by one full letter; five (5) unexcused absences will result in a failing grade

DEADLINES

All assignments are due at the beginning of class on the designated date via Bb. All documents (excel and word) are to be submitted using Office 2003 version or higher.)

ADDITIONAL INFORMATION

Due to what are often unforeseen circumstances, such as University closures, spending more-than-expected time on a given topic, etc., the schedule presented here may change. I will keep you well informed should such changes occur.

University Resources:

Diversity Statement: Ferris State University is committed to creating inclusive learning environments in which people of all backgrounds are encouraged to contribute. As it is important to honor our differences based on race, sex, religion, sexual orientation, national origin, and socioeconomic status, this course also affirms and respects participants whose gender identity and expression may be situated beyond the male-female binary. We may share our preferred pronouns and names through e-mail, class name tents, and/or personal introductions. These preferences will be recognized throughout the semester, and any confidentiality related to such requests will be honored.

Disability Services: Ferris State University is committed to following the requirements of the Americans with Disabilities Act Amendments Act and Section 504 of the Rehabilitation Act. If you are a student with a disability or think you may have a disability, please contact the Disabilities Services office at 231.591.3057 or send an email message to ecds@ferris.edu to discuss your request further. More information can be found online at: <http://www.ferris.edu/htmls/colleges/university/disability>. If you have already registered with Disabilities Services, please let me (your instructor!) know as soon as possible for assistance with classroom accommodations.

University and College Standards, Procedures, and Policies: Other policies exist that are designed to support your success in this course, at Ferris State, and in your professional life. To be clear, these policies apply to you in this course. Examples of additional policies include:

- Code of Student Community Standards, including Disciplinary Procedures: http://www.ferris.edu/HTMLS/administration/studentaffairs/judicial/14-15_Code_web.pdf
- Academic Misconduct, including Cheating, Fabrication, Facilitating Academic Dishonesty, Interference, Plagiarism, Violation of Course Rules, and Violation of Professional Standards and Ethics (from the Code of Student Community Standards (see, specifically, http://www.ferris.edu/HTMLS/administration/studentaffairs/judicial/14-15_Code_web.pdf)
- Student Dignity and Harassment Policy (from the Code of Student Community Standards (see, specifically, http://www.ferris.edu/HTMLS/administration/studentaffairs/judicial/14-15_Code_web.pdf)

Other Student Support Services: In addition to the support and assistance I can provide to help you be successful in this course, Ferris State University has a number of offices and services to support you. They include:

- Academic Support Center and Tutoring: <http://www.ferris.edu/HTMLS/colleges/university/ASC/>
- The Writing Center: <http://www.ferris.edu/HTMLS/statewide/resources/writing.htm> “Strategies for YOUR Educational Success” workshops; <http://www.ferris.edu/HTMLS/colleges/university/eccc/strategies.htm>
- Personal Counseling Center: <http://www.ferris.edu/HTMLS/studentlife/PersonalCounseling/index.htm>
- Educational and Career Counseling: <http://www.ferris.edu/HTMLS/colleges/university/eccc/assessment.htm>
- Librarians at FSU Library for Information Technology and Education (FLITE; see <http://www.ferris.edu/library/>)
- Student Support Services Guide: <http://www.ferris.edu/HTMLS/colleges/University/services.pdf>
- Academic Affairs Policy Letters

Appendix E – OSM Program Outcomes Assessment – TracDat Information for Academic Year 2013/14

Operations Program Assessment - 2013/2014						
Outcomes					Method	Criteria
1. Apply business concepts and practices in creating and maintaining lean supply chains that support strategic goals.					portfolio	70% at a high or medium
2. Communicate effectively; including, both oral and written assignments incorporated throughout the program. Graduates must be able demonstrate the ability to present ideas and information in a clear, concise, and effective manner.					portfolio	70% at a high or medium
3. Function as a member of a team; both, in the classroom and within a company setting, and demonstrate the ability to work with others and to accomplish tasks.					portfolio	70% at a high or medium
4. Use and apply tools learned in the classroom and in the field, to solve problems and make business decisions. (Tools such as Lean, Six Sigma, and other continuous improvement methods will vary by industry and these tools are expected to change over time).					project paper	70% at a high or medium
5. Analyze an environment, draw logical conclusions, and demonstrate the ability to make effective decisions; both independently and as part of a cooperative team.					portfolio	70% at a high or medium
O 1 (MGMT 422 Value Stream Assignment)						
O 2 (MGMT 412- Project presentation and Discussion Questions)		O3 (MGMT 432 - Case Analysis and Team Evaluation)		O4 (MGMT 492 Final Project Paper)		O5 (Assignment: MGMT 370 & MGMT 402)
% H, M, L	H: 48%;M: 31%; L: 21%	H: 71%;M: 16%; L: 13%	H:50% ; M: 33% L: 17%	H: 58%; M: 37%; L: 5%	H: 57%, M: 40%, L: 3%	H: 51%;M: 27%; L: 22%
Comments	Newer class as the topic is difficult in theory, requires more hands-on learning to boost interest.	Students with internship or prior work experience (full time or part time) were able to answer discussion questions and develop the final project (both apply theory to practice) better than those without and internship or prior work experience.	Some team members did not fulfill obligations resulting in social loafing.	Continuous Improvement: Re-emphasize the importance of completing all components of the assignment, due dates, and time management. Some students encounter challenges applying theory to practice.	Only 6 sections have been used to develop score out of 18.	Only two textbooks with actual material available to cover the required material.
Actions	Develop more material gathered from the web to supplement the text.	Provide relevant examples and hands on exercises in class. Remind students of posted example assignments in Blackboard. Encourage students to seek out an internship or obtain work experience prior to taking the course.	Incorporate a team contract as part of the course. Roles and responsibilities of the analysis and project are defined in the team contract.	Remind students of posted example assignments in Blackboard. Incorporate more examples and in-class exercises.		supplement the material with more material from the web to go more indepth with topics.
Criteria Key						
High	greater/ equal to 85					
Med	Between 70 and 84					
Low	Less than 70					

Appendix E– OSM Program Outcomes Assessment – TracDat Information for Academic Year 2014/15

Operations Program Assessment - 2014/2015						
Outcomes			Method	Criteria		
1. Apply business concepts and practices in creating and maintaining lean supply chains that support strategic goals.			portfolio	70% at a high or medium		
2. Communicate effectively; including, both oral and written assignments incorporated throughout the program. Graduates must be able demonstrate the ability to present ideas and information in a clear, concise, and effective manner.			portfolio	70% at a high or medium		
3. Function as a member of a team; both, in the classroom and within a company setting, and demonstrate the ability to work with others and to accomplish tasks.			portfolio	70% at a high or medium		
4. Use and apply tools learned in the classroom and in the field, to solve problems and make business decisions. (Tools such as Lean, Six Sigma, and other continuous improvement methods will vary by industry and these tools are expected to change over time).			project paper	70% at a high or medium		
5. Analyze an environment, draw logical conclusions, and demonstrate the ability to make effective decisions; both independently and as part of a cooperative team.			portfolio	70% at a high or medium		
	O 1 (MGMT 422 Value Stream Assignment)	O 2 (MGMT 412- Project presentation and Discussion Questions)	O 3 (MGMT 432 - Case Analysis and Team Evaluation)	O4 (MGMT 492 Final Project Paper)	O5 (Assignment: MGMT 370 & MGMT 402)	
% H, M, L	H:50%;M: 32%; L:18%	H:59%;M: 16%; L:25%	H:75% ; M: 25% L:0%	H: 65%; M: 35%; L: 0%	H: 77%, M: 18%, L: 5%	H:52%;M: 27%; L:21%
Comments	A lot of this class was the students desire to do well. It was difficult, but they stayed with it.	Students with internship or prior work experience (full time or part time) were able to answer discussion questions and develop the final project (both apply theory to practice) better than those without and internship or prior work experience.	Some team members did not fulfill obligations resulting in social loafing.	Continuous Improvement: Re-emphasize the importance of completing all components of the assignment, due dates, and time management. Some students encounter challenges applying theory to practice.	A lot of interest as this too was a good group, but some are willing to settle.	
Actions	Try more hands on exercises as that peaked more interest.	Provide relevant examples and hands on exercises in class. Remind students of posted example assignments in Blackboard. Encourage students to seek out an internship or obtain work experience prior to taking the course.	Incorporate a team contract as part of the course. Roles and responsibilities of the analysis and project are defined in the team contract.	Remind students of posted example assignments in Blackboard. Incorporate more examples and in-class exercises.	Decrease point allocation for McGraw Hill connect and assign more problems.	Add more variety to the topic of the maps covered.
Criteria Key						
High	greater/ equal to 85					
Med	Between 70 and 84					

Appendix E– OSM Program Outcomes Assessment – TracDat Information for Academic Year 2015/16

Operations Program Assessment - 2015/2016					
Outcomes				Method	Criteria
1. Apply business concepts and practices in creating and maintaining lean supply chains that support strategic goals.				portfolio	70% at a high or medium
2. Communicate effectively; including, both oral and written assignments incorporated throughout the program. Graduates must be able demonstrate the ability to present ideas and information in a clear, concise, and effective manner.				portfolio	70% at a high or medium
3. Function as a member of a team; both, in the classroom and within a company setting, and demonstrate the ability to work with others and to accomplish tasks.				portfolio	70% at a high or medium
4. Use and apply tools learned in the classroom and in the field, to solve problems and make business decisions. (Tools such as Lean, Six Sigma, and other continuous improvement methods will vary by industry and these tools are expected to change over time).				project paper	70% at a high or medium
5. Analyze an environment, draw logical conclusions, and demonstrate the ability to make effective decisions; both independently and as part of a cooperative team.				portfolio	70% at a high or medium
O 1 (MGMT 422 Value Stream Assignment)	O 2 (MGMT 412- Project presentation and Discussion Questions)	O3 (MGMT 432 - Case Analysis and Team Evaluation)	O4 (MGMT 492 Final Project Paper)	O5 (Assignment: MGMT 370 & MGMT 402)	
H:61%;M: 21%; L: 18%	H:47%;M: 22%; L: 31%	H:73% ; M: 9% L: 18%	H: 85%; M:15%; L: 0%	MGMT 370; H: 63%, M: 24%, L: 13%	H:60%;M: 30%; L: 10%
Second year of this class and still a learning curve on how to deliver the material	Students with internship or prior work experience (full time or part time) were able to answer discussion questions and develop the final project (both apply theory to practice) better than those without and internship or prior work experience.	Some team members did not fulfill obligations resulting in social loafing.	Continuous Improvement: Re-emphasize the importance of completing all components of the assignment, due dates, and time management. Some students encounter challenges applying theory to practice.		Stronger in this area as the basic concepts are easier to get across concerning process improvements
Revamp the class to have more hands on learning since a lot of it is math based	Provide relevant examples and hands on exercises in class. Remind students of posted example assignments in Blackboard. Encourage students to seek out an internship or obtain work experience prior to taking the course.	Incorporate a team contract as part of the course. Roles and responsibilities of the analysis and project are defined in the team contract.	Remind students of posted example assignments in Blackboard. Incorporate more examples and in-class exercises.		Develop more of the analytical parts into the in-class assignments
greater/ equal to 85					
Between 70 and 84					
Less than 70					

Appendix E – OSM Program Outcomes Assessment – TracDat Information for Academic Year 2016/17

Operations Program Assessment - 2016/2017						
Outcomes				Method	Criteria	
1. Apply business concepts and practices in creating and maintaining lean supply chains that support strategic goals.				portfolio	70% at a high or medium	
2. Communicate effectively; including, both oral and written assignments incorporated throughout the program. Graduates must be able demonstrate the ability to present ideas and information in a clear, concise, and effective manner.				portfolio	70% at a high or medium	
3. Function as a member of a team; both, in the classroom and within a company setting, and demonstrate the ability to work with others and to accomplish tasks.				portfolio	70% at a high or medium	
4. Use and apply tools learned in the classroom and in the field, to solve problems and make business decisions. (Tools such as Lean, Six Sigma, and other continuous improvement methods will vary by industry and these tools are expected to change over time).				project paper	70% at a high or medium	
5. Analyze an environment, draw logical conclusions, and demonstrate the ability to make effective decisions; both independently and as part of a cooperative team.				portfolio	70% at a high or medium	
Summary of Outcomes						
	O1 (MGMT 422 Value Stream Assignment)	O2 (MGMT 412- Project presentation and Discussion Questions)	O3 (MGMT 432 - Case Analysis and Team Evaluation)	O4 (MGMT 492 Final Project Paper)	O5 (Assignment: MGMT 370 & MGMT 402)	
% H, M, L	H:68%;M: 15%; L: 17%	H:75%;M: 8%; L: 17%	H:98% ; M: 2% L: 0%	H: 55%; M: 36%; L: 9%	MGMT 370; H: 54%, M: 36%, L: 10%	MGMT 402: H:70%;M:12%; L: 18%
Comments	Student application of knowledge is mixed as some really grasp the concepts whereas others simply want to get by.	Students with internship or prior work experience (full time or part time) were able to answer discussion questions and develop the final project (both apply theory to practice) better than those without and internship or prior work experience.	The team contract was implemented into the MGMT 412 and MGMT 492 course due to team projects and Advisory Board recommendations. The MGMT 432 course is usually taken, by students, after the aforementioned courses. The team contract seems to be working well and hopefully prepares students to be valuable team members in the workplace after graduation.	Continuous Improvement: Re-emphasize the importance of completing all components of the assignment, due dates, and time management. Some students encounter challenges applying theory to practice.	MGMT 370; Forecasting, Quality Management, and Scheduling math problem for most non-management students	MGMT 402: Being more of a math driven course, this is more difficult for some students.
Actions	Creating more relevant material to all fields of study for the students taking the class. There is a real increase in healthcare students.	Provide relevant examples and hands on exercises in class. Remind students of posted example assignments in Blackboard. Encourage students to seek out an internship or obtain work experience prior to taking the course.	None at this time.	Remind students of posted example assignments in Blackboard. Incorporate more examples and in-class exercises.	MGMT 370; Add more assignment. Diversity of students and instructors is a problem as well.	MGMT 402: Similar to MGMT 422, creating more relevant material to all fields of study for the students taking the class.
Criteria Key						
High	greater/ equal to 85					
Med	Between 70 and 84					
Low	Less than 70					

Appendix E– OSM Program Outcomes Assessment – TracDat Information for Academic Year 2017/18

Operations Program Assessment - 2017/2018					
Outcomes				Method	Criteria
1. Apply business concepts and practices in creating and maintaining lean supply chains that support strategic goals.				portfolio	70% at a high or medium
2. Communicate effectively; including, both oral and written assignments incorporated throughout the program. Graduates must be able demonstrate the ability to present ideas and information in a clear, concise, and effective manner.				portfolio	70% at a high or medium
3. Function as a member of a team; both, in the classroom and within a company setting, and demonstrate the ability to work with others and to accomplish tasks.				portfolio	70% at a high or medium
4. Use and apply tools learned in the classroom and in the field, to solve problems and make business decisions. (Tools such as Lean, Six Sigma, and other continuous improvement methods will vary by industry and these tools are expected to change over time).				project paper	70% at a high or medium
5. Analyze an environment, draw logical conclusions, and demonstrate the ability to make effective decisions; both independently and as part of a cooperative team.				portfolio	70% at a high or medium
	O1 (MGMT 422 Value Stream Assignment)	O2 (MGMT 412- Project presentation and Discussion Questions)	O3 (MGMT 432 - Case Analysis and Team Evaluation)	O4 (MGMT 492 Final Project Paper)	O5 (Assignment: MGMT 370 & MGMT 402)
% H, M, L	H: 88%;M: 6 %; L:6 %	H:81%;M: 15%; L: 4%	H:100%; M: 0% L: 0%	H: 85%; M:15%; L: 0%	MGMT 370; H:33 %, M: 33%, L:33 % MGMT 402: H:86 %;M:13 %; L:1 %
Comments	New layout for the class has improved student success as being more problem based is a plus. Students have been working more real world problems which leads to better comprehension of the material.	Students with internship or prior work experience (full time or part time) were able to answer discussion questions and develop the final project (both apply theory to practice) better than those without and internship or prior work experience.	The team contract was implemented into the MGMT 412 and MGMT 492 course due to team projects and Advisory Board recommendations. The MGMT 432 course is usually taken, by students, after the aforementioned courses. The team contract seems to be working well and hopefully prepares students to be valuable team members in the workplace after graduation. Likewise, the case analysis approach of applying theory to practice is working well.	Continuous Improvement: Re-emphasize the importance of completing all components of the assignment, due dates, and time management. Students without internship experience encounter challenges applying theory to practice.	Class was redesigned using the outline from the Indiana Quality Control Board as they are the testing body for this practice. Students have much more to cover as the material is at a slightly higher level, but a decent textbook does not yet exist.
Actions	Continue to develop new problems in conjunction with known businesses employing such techniques. Also finding new material through research.	Provide relevant examples and hands on exercises in class. Remind students of posted example assignments in Blackboard. Encourage students to seek out an internship or obtain work experience prior to taking the course.	None at this time.	Remind students of posted example assignments in Blackboard. Incorporate more examples and in-class exercises.	I will continue to pursue a usable textbook, but the manual from the quality council gives me several leads to keep the class moving forward.
Criteria Key					
High	greater/ equal to 85				
Med	Between 70 and 84				
Low	Less than 70				

Appendix F- OSM Program Curriculum Map

	MGMT 370	MGMT 402	MGMT 412	MGMT 422	MGMT 432	MGMT 492
Learning Outcome	LO5: Analyze an environment, draw logical conclusions, and demonstrate the ability to make effective decisions; both independently and as part of a cooperative team (Assessment: Assignment – Problem Sets).	LO5: Analyze an environment, draw logical conclusions, and demonstrate the ability to make effective decisions; both independently and as part of a cooperative team. (Assessment – Problem Sets)	LO2: Communicate effectively; including, both oral and written assignments incorporated throughout the program. Graduates must be able demonstrate the ability to present ideas and information in a clear, concise, and effective manner. (Assessment – Industry Project presentation and Discussion Questions)	LO1: Apply business concepts and practices in creating and maintaining lean supply chains that support strategic goals. (Assessment: Value Stream Map)	LO3: Function as a member of a team; both, in the classroom and within a company setting, and demonstrate the ability to work with others and to accomplish tasks. (Assessment: Case Analysis and Team Evaluation)	LO4: Use and apply tools learned in the classroom and in the field, to solve problems and make business decisions. (Tools such as Lean, Six Sigma, and other continuous improvement methods will vary by industry and these tools are expected to change over time). (Assessment: Industry Project Paper)
Content	Problem Sets	Problem Sets	Training Within Industry (TWI) J-programs (e.g., job instruction, job methods, job safety, program development, and job relations); Hoshin Kanri/Strategy Deployment; Personnel Capability Analysis (e.g., recruiting, training and performance management system); Return on Investment and Payback Period; Sustainment strategies	Value Stream Mapping	Lean logistics and supply management technique(s): (cross-docking, packaging strategy, logistics engineering, supplier engagement, inventory supermarket strategy, MOQ, delivery frequency, PFEP); Inventory strategies; Carrying Costs; Cost of capital: (Inventory damages, Insurance on inventory, Inventory obsolescence, and Inventory shrinkage); Team work	Eight wastes Value Stream Mapping Takt Time, Quality Lean Tools (5S, Pull, Kanban, A3, 5-why/Fishbone, PDCA, Process Stability, Standardized work, and kaizen); Return on Investment and Payback Period
Skills/Strategies	<ul style="list-style-type: none"> · Analytical · Problem Solving 	<ul style="list-style-type: none"> · Analytical · Problem Solving 	<ul style="list-style-type: none"> · Continuous Improvement - Training Within Industry (TWI) J-programs · Communication – Presentation and Written · Collaboration · Conflict Management · Problem Solving · Strategy Development (Process, Organization Culture, Management) · Coaching/Mentoring 	<ul style="list-style-type: none"> · Value Stream Mapping 	<ul style="list-style-type: none"> · Strategy Development (Logistics & transportation design, Supplier performance and accountability, process efficiency). · Collaboration · Leadership · Change Management · Problem Solving · Conflict Management · Interpersonal Skills 	<ul style="list-style-type: none"> · Continuous Improvement · Value Stream Mapping · Critical Thinking · Problem Identification · Problem Solving · Appropriate application of Lean Tools · Financial Analysis · Assessment and Decision Making

			· Financial Analysis · Assessment and Decision Making		
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Outcome Mapping:

LO	INTB 320	ISYS 482	MGMT 350	MGMT 370	MGMT 402	MGMT 412	MGMT 422	MGMT 432	MGMT 491	MGMT 492	MTKG 466	PROJ 320
1						R	A	R		I		
2						A, M		R	R	R		
3						M		A, M		I, R		
4						R		R		A, M		
5				A	A					R		

LO= Learning Outcome, I= Introduced, R= Reinforced, M = Mastered, A= Assessed

Assessment Methods:

Internal Data and Information	External Data and Information
Case Analysis, Final Project, and Quantitative Problem Solving.	Annual Advisory Board Meeting
Summative Data and Information	Formative Data and Information
Final Project, Final Presentation, and Final Exam	Discussion Questions, Value Stream Mapping, Problem Sets

Definition of the above areas:

Internal assessments: Data generated from measures that we construct.

External assessments: Data from assessments that an outside body controls (e.g., industry test, advisory board, etc.).

Summative Data: Assessment that occurs at the conclusion of the learning process (e.g., final exams or final projects)

Formative Data: Assessment that occurs as part of the learning process (assignments to prepare for summative). For example, final exams or final projects are summative while an assignment that is meant to prepare a student for the final exam or project is a formative assessment.

Appendix G: Industry Projects – Fall 2014 through Fall 2017

Industry Projects by Semester and Course (Fall 2014 - Fall 2017)						
Semester	Course	Industry Partner	Industry Contact	Project Objective	Project	Number of Team Project Proposals
Fall 2017	MGMT 432	Haworth Corporation Steel Plant	Dana Hall, Adam Tye and Mark Vandervelde	The lean project's objective was to analyze a process and provide improvement recommendations, based on lean logistics and supply management concepts learned in the MGMT 432 class.	The Haworth project focused on creating a physical direct ship visual board at the shipping and receiving dock. The final project included specific applications of current and future state fulfillment maps, PDCA, and a direct ship white board for Haworth to better optimize space and operate the process. The student teams presented their proposal to Haworth on December 12, 2017.	1
Fall 2017	MGMT 492	Haworth Corporation Steel Plant	Dana Hall, Adam Tye and Mark Vandervelde	The lean project's objective was to analyze a process and provide improvement recommendations, based on lean principles and leadership concepts learned in the MGMT 492 class.	The Haworth project focused on creating transportation maps for each commodity product (raw materials – purchased parts) being shipped into Haworth. The final project included specific applications of value stream mapping, kaizen, PDCA, pull, standardized work and A3 to the Haworth process. The student teams presented their proposal to Haworth on December 12, 2017.	1
Fall 2017	MGMT 492	Spectrum Hospital	Steve Meter and Amanda Knuth		The Spectrum project focused on redesigning the process flow for the OB-GYN department follow up. The final project included specific applications of value stream mapping, kaizen, PDCA, standardized work and A3 for the department's process at Spectrum. The student teams presented their proposal to Haworth on December 12, 2017.	1
Fall 2017	MGMT 492	Yanfeng Automotive	Brian Roberts and Daniel Baxter		The Yanfeng project focused on creating a Yamazumi Board and training for the employees to increase productivity and efficiency for a specific assembly line. The final project included specific applications of value stream mapping, yamazumi board, Kanban/Pull, PDCA, standardized work and A3 to the Yanfeng assembly line process. The student teams presented their proposal to Haworth on December 12, 2017.	1

Appendix G: Industry Projects – Fall 2014 through Fall 2017 (cont'd)

Spring 2017	MGMT 412	Gentex Corporation	Michael Tate	The lean project's objective was to analyze a process, make improvement recommendations, based on lean principles and Training Within Industry (TWI) guidelines learned in class.	The Gentex project focused on improving the Interplant Just In Time process and Warehouse Operations using the Training Within Industry and lean principles. The implemented solution improved the process efficiency. Specifically, it improved the cycle time by 25-40%, as well as safety through applying visual controls principles. The students presented their results to Gentex Corporation on May 2, 2017	1
Spring 2017	MGMT 412	Haworth Corporation Steel Plant	Dana Hall, Adam Tye, Lucas Hansen and Dennis Huver	The lean project's objective was to analyze a process, make improvement recommendations, based on lean principles and Training Within Industry (TWI) guidelines learned in class.	The Haworth project involved creating and implementing a proposed process to improve the operational flow for obtaining parts from fabrication to the paint area using the Training Within Industry and lean principles. The implemented solution considerably improved the process's efficiency. It improved equipment productivity by 25% and employee morale as well as decreased the process cycle time by 10%. The student teams presented their findings to Haworth on May 2, 2017.	2
Spring 2017	MGMT 412	Spectrum Hospital	Steve Meteer and Amanda Knuth	The lean project's objective was to analyze a process, make improvement recommendations, based on lean principles and Training Within Industry (TWI) guidelines learned in class.	The Spectrum project focused on the check-in process flow for the patient in the Radiology department using the Training Within Industry and lean principles. The implemented solution improved the process efficiency. Specifically, it improved the patient wait time by 23%, increased the service quality by 5%, and improved the patient and employee satisfaction rates. The students presented their results to Spectrum Hospital on May 2, 2017	1
Fall 2016	MGMT 492	Haworth Corporation Steel Plant	Dana Hall and Mark Vandervelde	The lean project's objective was to analyze a process and provide improvement recommendations, based on lean principles and leadership concepts learned in the MGMT 492 class.	The Haworth project focused on developing a plan for creating a process to track parts from fabrication to paint using a manual and electronic Kanban system. The final project included specific applications of value stream mapping, kaizen, PDCA, pull, standardized work and A3 to the Haworth process. The student teams presented their proposal to Haworth on December 6, 2016.	1
Fall 2016	MGMT 492	Spectrum Health	Steve Meteer and Amanda Knuth	The lean project's objective was to analyze a process and provide improvement recommendations, based on lean principles and leadership concepts learned in the MGMT 492 class.	The Spectrum Hospital project focused on developing a plan for improving the surgical services process and radiology patient process. The final project included specific applications of value stream mapping, kaizen, PDCA, pull, standardized work and A3 to the aforementioned Spectrum processes. The student teams presented their proposal to Spectrum on December 6, 2016.	1

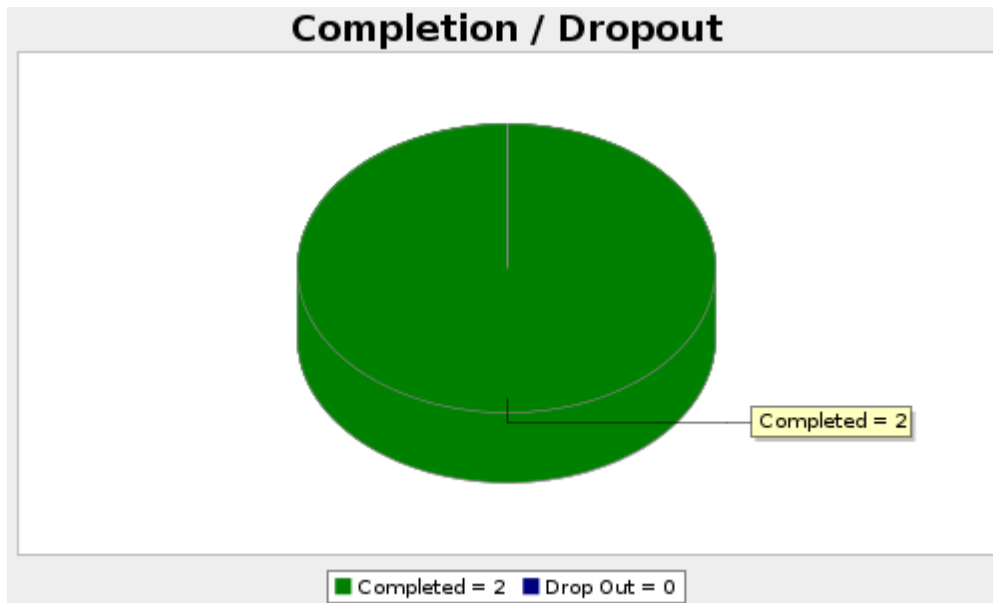
Spring 2016	MGMT 412	Haworth Corporation Steel Plant	Dana Hall, Adam Tye and Mark Vandervelde	The lean project's objective was to analyze a process, make improvement recommendations, based on lean principles and Training Within Industry (TWI) guidelines learned in class.	The Haworth project focused on improving the excessive hi-lo congestion and stoppage using the Training Within Industry and lean principles. The implemented solution improved the process efficiency. Specifically, they included a current state and proposed a future state for incoming/outgoing material and wrote a standardized work for the employees in the new layout process and employees. The student team presented their proposal and results to Haworth on May 3, 2016.	1
Spring 2016	MGMT 432	Haworth Corporation Steel Plant	Dana Hall and Mark Vandervelde	The lean project's objective was to analyze a process, make improvement recommendations, based on the lean logistics and supply management principles learned in the MGMT 432 class.	The students revised and implemented a Plan for Every Part (PFEP) Marketplace for an area within the Haworth Steel Plant. The students' project proposals included a Map of Inventory Racking Locations & Drop Zones and recommendations on where the maps should be displayed throughout the plant. The students provided information on how map should be updated, who should maintain the map, how long it would take to update changes as racks/etc. move. The map was for the ENTIRE Steel manufacturing plant. The map was implemented by Haworth to support their SAP system. The student team presented their proposal and results to Haworth on May 3, 2016.	1
Fall 2015	MGMT 492	Haworth Corporation Wood Plant	Dana Hall and Holly Allan	The lean project's objective was to analyze a process and provide improvement recommendations, based on lean principles and leadership concepts learned in the MGMT 492 class.	The Haworth project focused on how to make the wood supply purchasing process more efficient. The final project included specific applications of value stream mapping, kaizen, PDCA, pull, standardized work and A3 to the Haworth process. The student teams presented their proposal to Haworth on December 14, 2015.	3
Spring 2015	MGMT 432	Haworth Corporation Steel Plant	Dana Hall, Adam Tye and Mark Vandervelde	The lean project's objective was to analyze a process, make improvement recommendations, based on lean logistics and supply management principles learned in the MGMT 432 class.	The students revised and implemented a Plan for Every Part (PFEP) Marketplace, with the main suppliers, for one of the main purchased part marketplaces within the Haworth Steel Plant. They also proposed a Plan for Every Part for other areas within the Haworth facility. The student teams presented their proposal and results to Haworth on May 5, 2015.	1
Fall 2014	MGMT 492	Haworth Corporation Steel Plant	Dana Hall, Adam Tye and Lukas Thompson	The lean project's objective was to analyze a process and provide improvement recommendations, based on lean principles and leadership concepts learned in the MGMT 492 class.	The Haworth project focused on how to improve the e-coat/unload process thus, making it more efficient. The final project included specific applications of value stream mapping, kaizen, PDCA, pull, standardized work and A3 to the Haworth process. The student teams presented their proposal to Haworth on December 9, 2014.	3
						Total Project Proposals: 19

Appendix H: OSM Current Student Survey Results

OSM-APR-Current Students

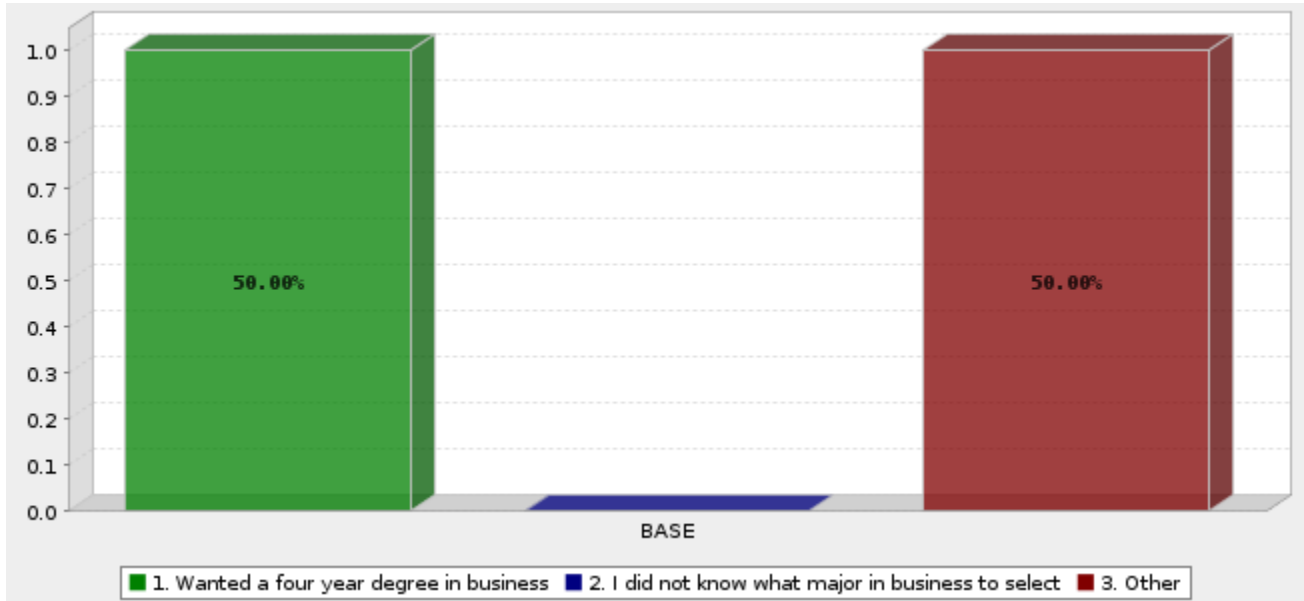
IRTSurvey@ferris.edu

Survey Overview



Viewed	Started	Completed	Completion Rate	Drop Outs (After Starting)	Average Time to Complete Survey
3	2	2	100%	0	13 minutes

Q1. Why did you choose to enter into the Quality and Supply Management Degree program? (Please indicate All that apply)

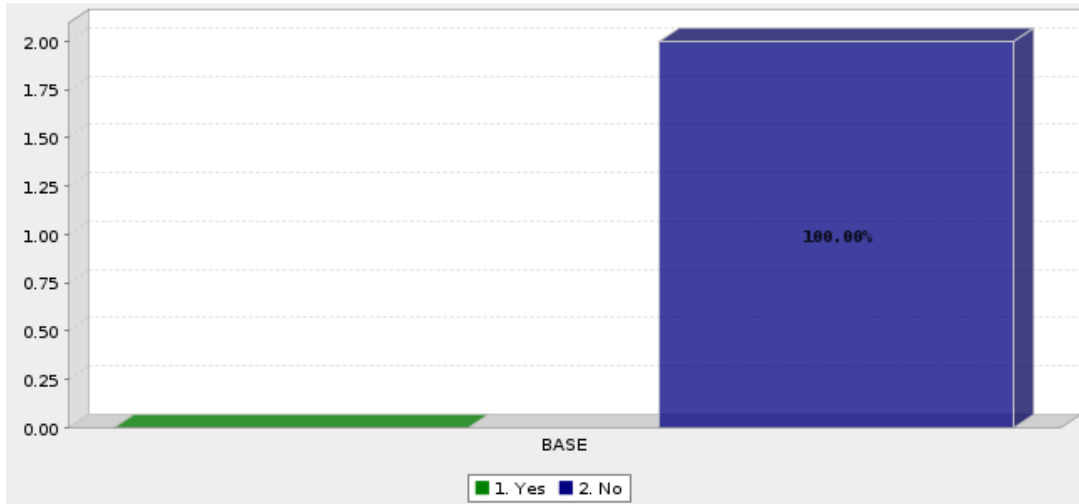


	Answer	Count	Percent
	1. Wanted a four year degree in business	1	50.00%
	2. I did not know what major in business to select	0	0.00%
	3. Other	1	50.00%
	Total	2	100%

Mean : 2.000	Confidence Interval @ 95% : [0.040 - 3.960]	Standard Deviation : 1.414	Standard Error : 1.000
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86705226	I wanted a degree that would prepare me for a career in logistics.
86593699	

Q2. Did you transfer into this program from another university?

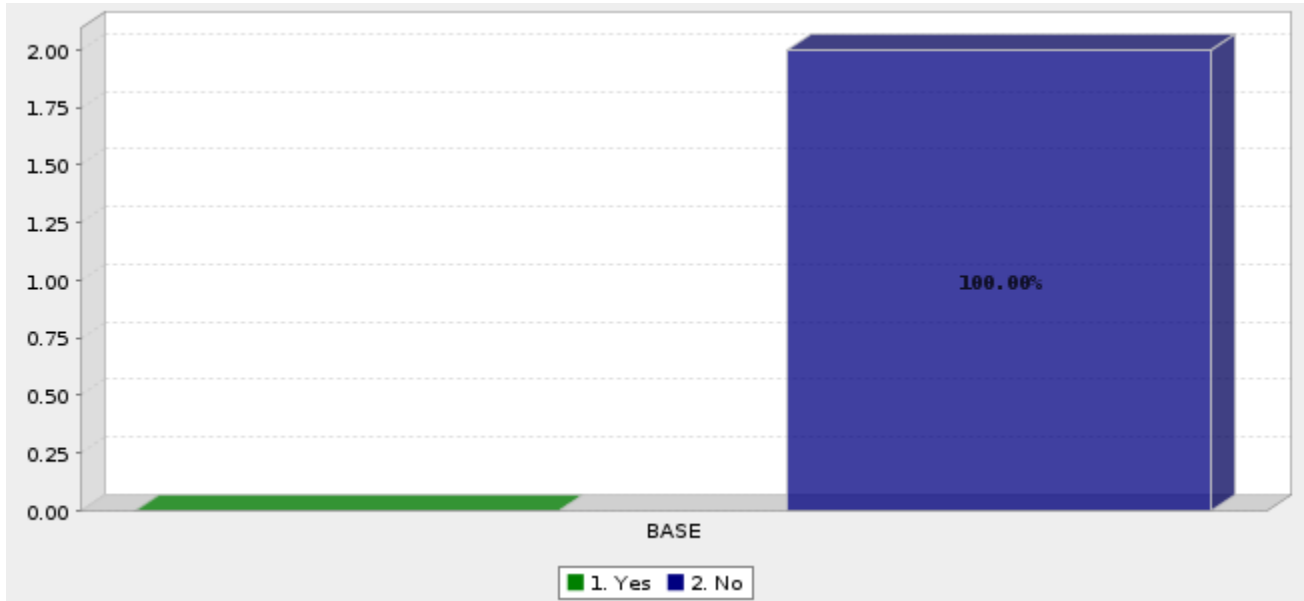


	Answer	Count	Percent
	1. Yes	0	0.00%
	2. No	2	100.00%
	Total	2	100%
Mean : 2.000	Confidence Interval @ 95% : [2.000 - 2.000]	Standard Deviation : 0.000	Standard Error : 0.000

Q3. If answered yes to the above question, which university did you transfer from?

86705226	
86593699	

Q4. Did you transfer into Operations and Supply Management from another program at Ferris?



	Answer	Count	Percent
	1. Yes	0	0.00%
	2. No	2	100.00%
	Total	2	100%
Mean : 2.000	Confidence Interval @ 95% : [2.000 - 2.000]	Standard Deviation : 0.000	Standard Error : 0.000

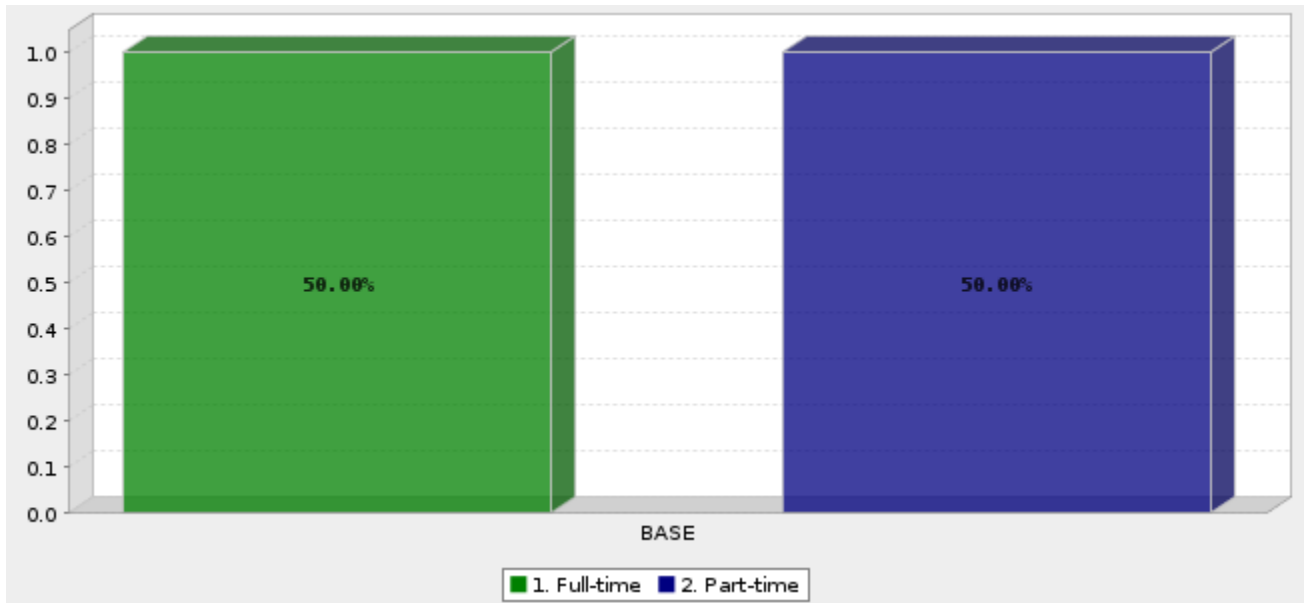
Q5. If you answered yes to the above question, which program did you transfer from?

86705226	
86593699	

Q6. What is the average number of credit hours per semester at Ferris State University that you enroll in? (Use numbers please.)

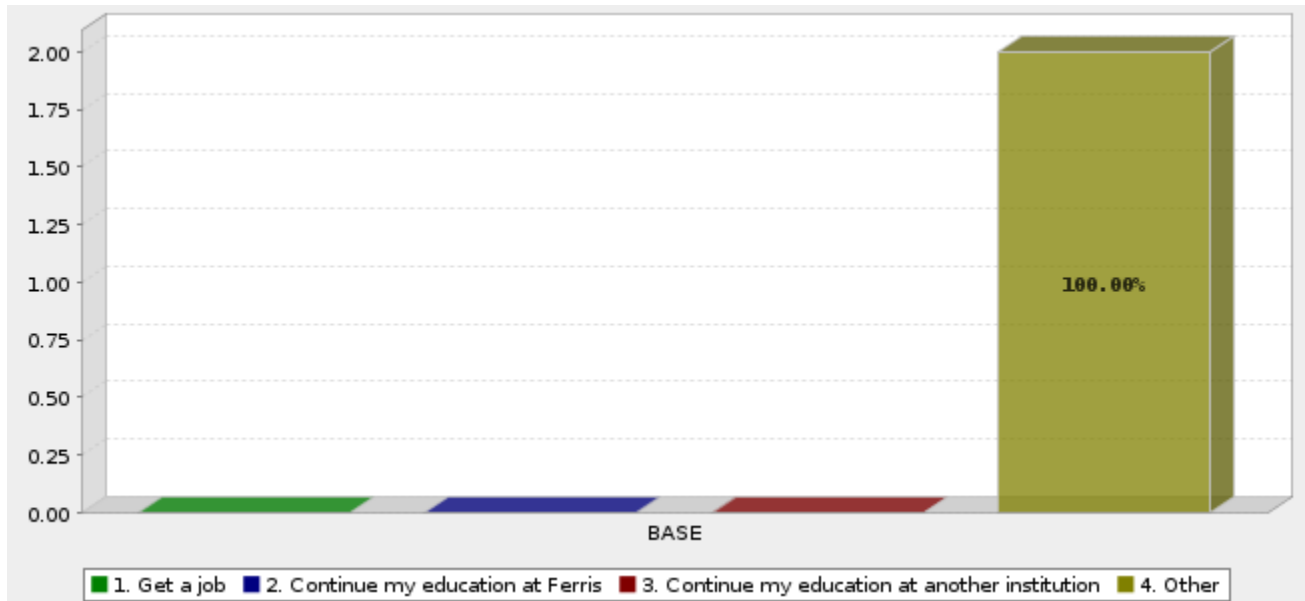
86705226	12
86593699	12

Q7. Are you currently:



	Answer	Count	Percent
	1. Full-time	1	50.00%
	2. Part-time	1	50.00%
	Total	2	100%
Mean : 1.500	Confidence Interval @ 95% : [0.520 - 2.480]	Standard Deviation : 0.707	Standard Error : 0.500

Q8. What do you expect to do after completing your degree in Operations and Supply Management? Please select the option that BEST describes your plan.



	Answer	Count	Percent
	1. Get a job	0	0.00%
	2. Continue my education at Ferris	0	0.00%
	3. Continue my education at another institution	0	0.00%
	4. Other	2	100.00%
	Total	2	100%
Mean : 4.000	Confidence Interval @ 95% : [4.000 - 4.000]	Standard Deviation : 0.000	Standard Error : 0.000

86705226	Get a job and continue my education.
86593699	I want to move out of the state & pursue my degree in a different industry than automotive.

Q9. If you plan on continuing your education, please specify the institution where you will pursue additional education.

86705226	Ferris State University.
86593699	

Q10. What major do you plan on studying?

86705226	Certificates in International Business, Global Logistics
86593699	

Q11. Please indicate your level of agreement with each of the following statements.

Question	Count	Score	Agree	Strongly Agree	Neutral	Somewhat Disagree	Strongly Disagree
My bachelor's degree in Quality and Supply Management will help me achieve my career goals.	2	2					
I am satisfied with the academic preparation received in the Operations and Supply Management Degree program.	2	2.5					
I am satisfied with the advising received while I was in the Operations and Supply Management Program.	2	2.5					
I would recommend the Operations and Supply Management program to prospective students.	2	1					
The operations and Supply Management program is a quality program.	2	1.5					

Q12. Please explain your responses to the previous question.

86705226	My advisor wasn't very helpful early on in my studies. Some classes were the same topic and very repetitive. The global business and international logistics classes were very disappointing. I was the most interested in those classes, but they were a joke. I was forced to watch youtube videos every week to learn material. Youtube videos were the center of a few online classes I had in this degree so far. It makes me very frustrated when a professor in this field does not show me what they have learned, and only show me what
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	they can find on the internet. If I knew a class was going to be based off of youtube videos I wouldn't have wasted my time and money taking the course.
86593699	

Q13. Please indicate the extent to which you expect each of the following courses in your Operations and Supply Management program to be helpful in your career.

Question	Count	Score	Very Helpful	Somewhat Helpful	Not Helpful
Presentation Skills-Written & Verbal	2	1.5			
Interpersonal Skills	2	1			
Decision Making & Analysis Skills	2	1			
Leadership Skills (MGMT)	2	1			

Teamwork Skills (MGMT)	1	1			
Quantitative Skills -Math, Finance, Accounting/Budgeting (ACCTG, FINC, MATH)	2	1.5			
English	2	1.5			
Principles of Economics (Econ)	2	1.5			
Business Law (BLAW)	2	1.5			
Applied Management (MGMT)	2	1			
Principles of Marketing (MKTG)	2	1.5			
Statistics (STQM)	2	1			
Lean Systems Courses (MGMT)	2	1			
Foreign Language	2	2			
Microcomputer Applications (ISYS 105, ISYS 321)	2	1			
Business Strategy (BUSN)	2	1			
Financial Management (FINC)	2	2			
Human Resource Management (MGMT)	2	2.5			
International Business (INTB)	2	1			
Production/Operations Management (MGMT)	2	1			

Q14. What subjects do you think should be added or improved? Why and in what way?

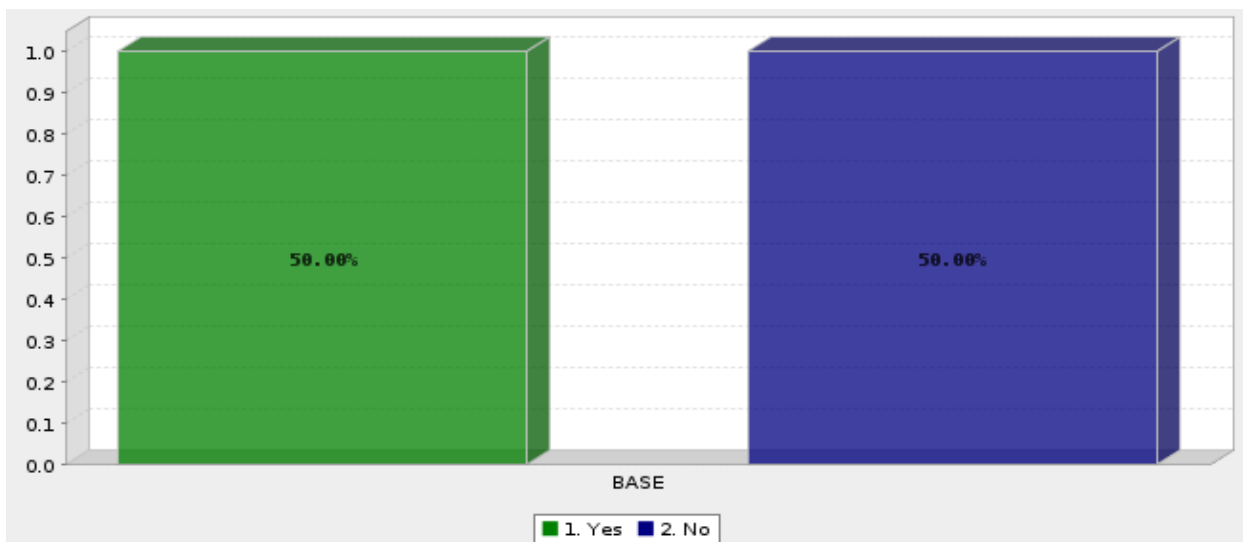
86705226	The global business and international logistics classes were very disappointing. I was the most interested in those classes, but they were not engaging. Youtube videos were the center of a few online classes I had in this degree so far. It makes me very frustrated when a professor in this field does not show me what they know, and only show me what they can find on the internet. If I knew a class was going to be based off of youtube videos I
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	wouldn't have wasted my time and money taking the course. This was also the case for an online six sigma course and a few global logistics classes. A professor only showing youtube videos every week is robbery. Online curriculum could use re-configuring. It is only certain professors that use the youtube style teaching. Not all.
86593699	

Q15. What subject areas do you think should be eliminated? Why?

86705226	
86593699	

Q16. Did you have the opportunity to pursue an internship/cooperative education while at Ferris?

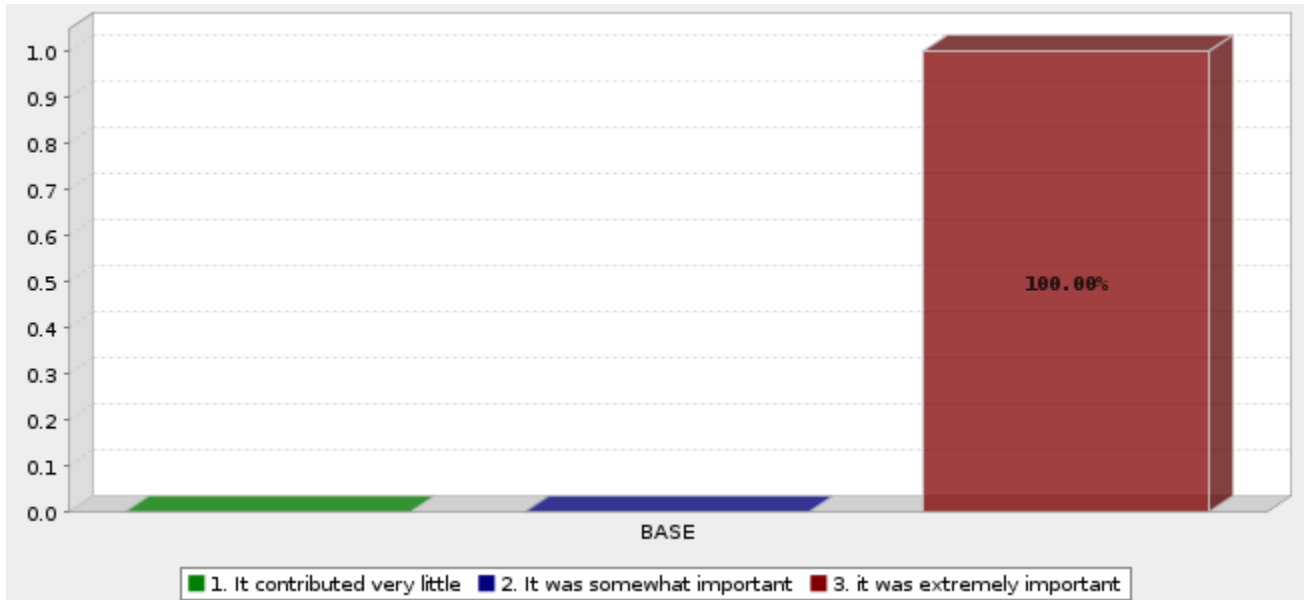


	Answer	Count	Percent
	1. Yes	1	50.00%
	2. No	1	50.00%
	Total	2	100%
Mean : 1.500	Confidence Interval @ 95% : [0.520 - 2.480]	Standard Deviation : 0.707	Standard Error : 0.500

Q17. What experience did you have?

86705226	
86593699	

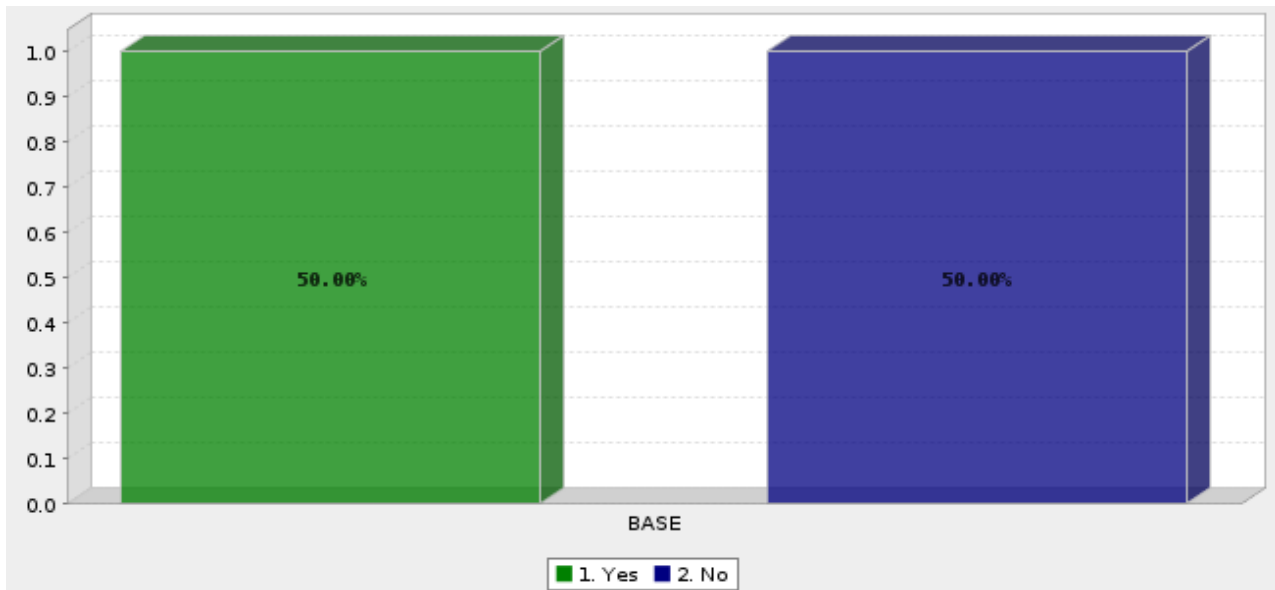
Q18. If answered yes to an internship/cooperative education, please indicate the extent to which the experience enhanced your business career preparation.



Q19. If you did not have an internship experience yet, please indicate whether you have plans to pursue one prior to graduation.

86705226	Yes, I will pursue on summer 2019.
86593699	

Q20. Are you involved in any extracurricular activities (such as clubs, fraternities/sororities, sports, RSO's, etc.) at Ferris?



	Answer	Count	Percent
	1. Yes	1	50.00%
	2. No	1	50.00%
	Total	2	100%
Mean : 1.500	Confidence Interval @ 95% : [0.520 - 2.480]	Standard Deviation : 0.707	Standard Error : 0.500

Q21. If you answered yes to the above question, which activities were you involved in at Ferris?

86705226	
86593699	a sorority, residence hall association, and oscma for a brief period

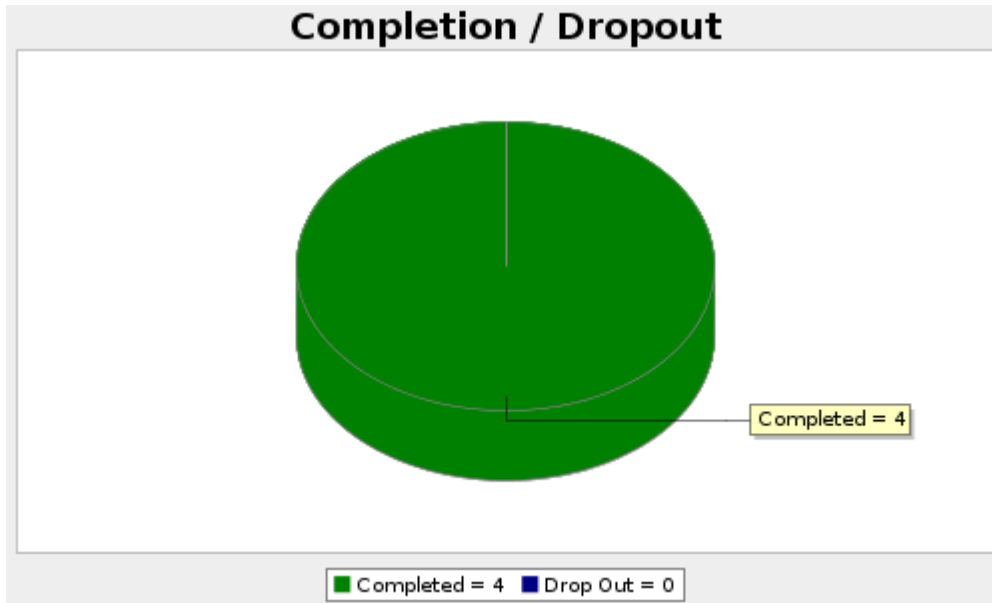
Q22. Please use this space for additional comments.

86705226	
86593699	

Appendix I – OSM Alumni Survey Results

IRTSurvey@ferris.edu

Survey Overview



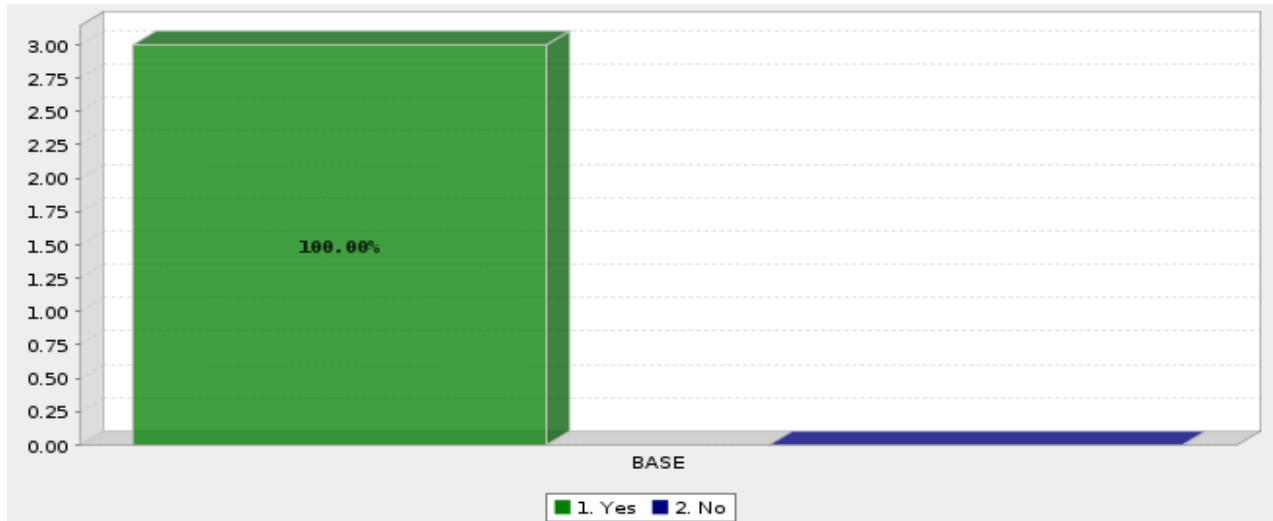
Viewed	Started	Completed	Completion Rate	Drop Outs (After Starting)	Average Time to Complete Survey
17	4	4	100%	0	15 minutes

Q1. Year you graduated from Ferris State? (YYYY format)

87462224	
86363298	2013
86359081	2015

86312939	2017
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Q2. Are you presently employed full-time?



	Answer	Count	Percent
	1. Yes	3	100.00%
	2. No	0	0.00%
	Total	3	100%

Mean : 1.000	Confidence Interval @ 95% : [1.000 - 1.000]	Standard Deviation : 0.000	Standard Error : 0.000
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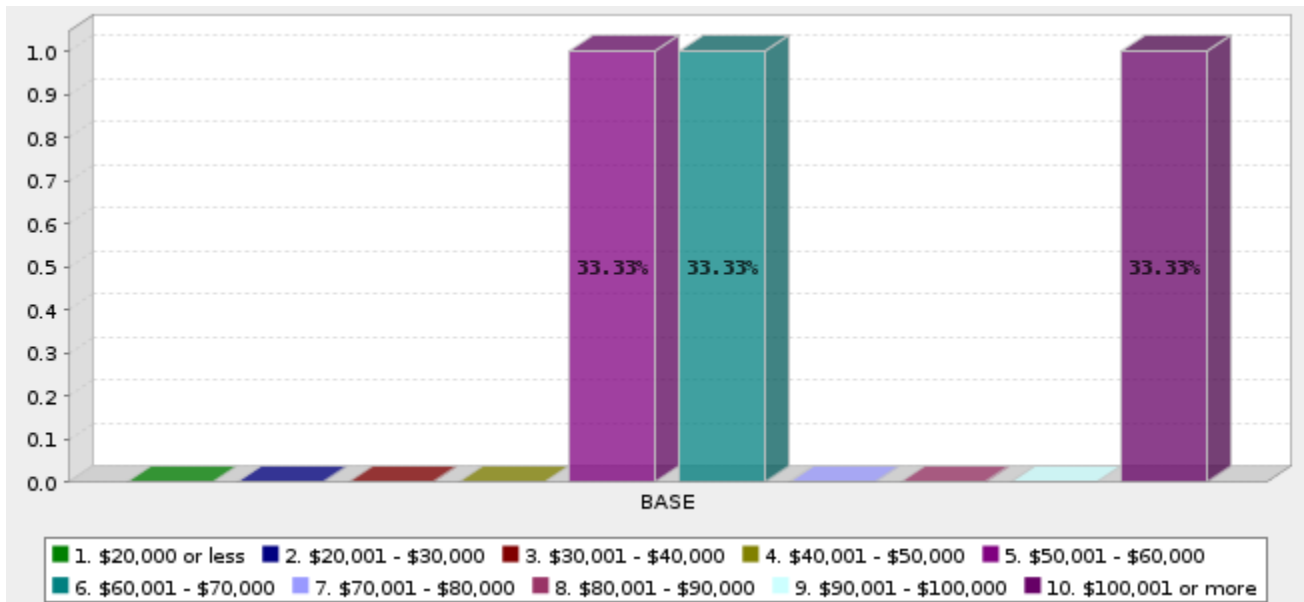
Q3. If answered yes to the above question, what is your present job title?

87462224	
86363298	Operations Manager
86359081	Supplier Development Engineer
86312939	Purchasing Agent

Q4. What other job titles have you had?

87462224	
86363298	Operations Supervisor
86359081	Inventory Analyst
86312939	Procurement Intern Global Forwarding Intern

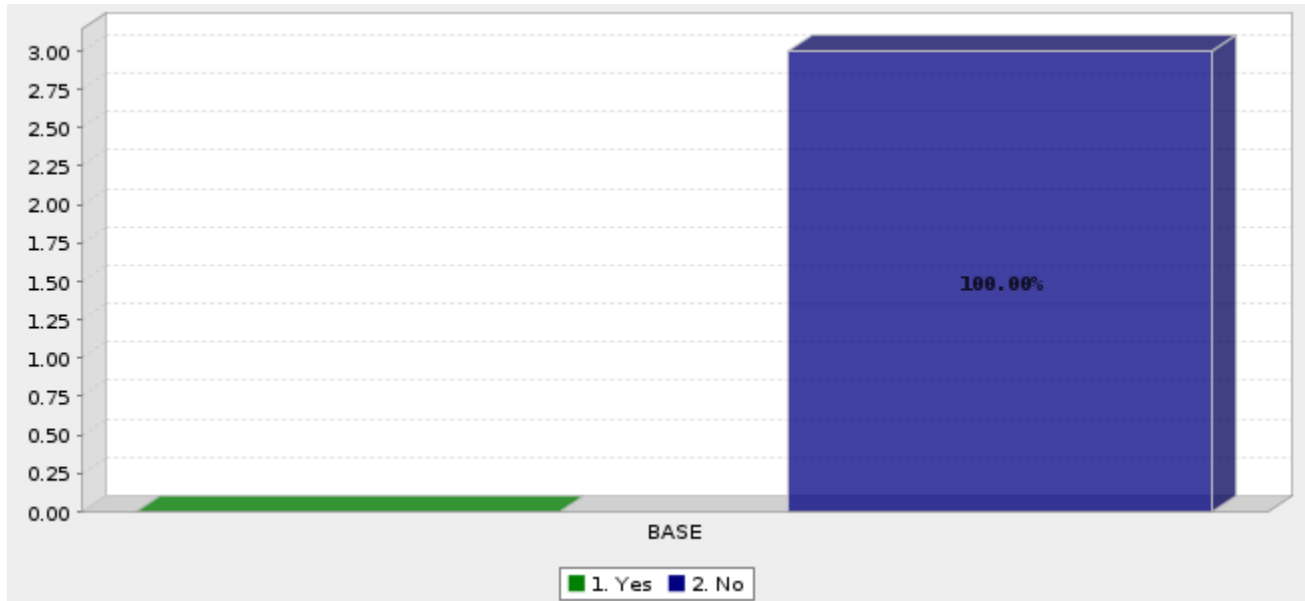
Q5. What is your salary range? (optional)



Q6. If you are not presently employed full-time, what is the reason for your unemployment (e.g., graduate school, layoff, etc.)? Have you used the OSM degree since you graduated from Ferris?

87462224	
86363298	
86359081	
86312939	

Q7. Do you belong to any professional organizations?



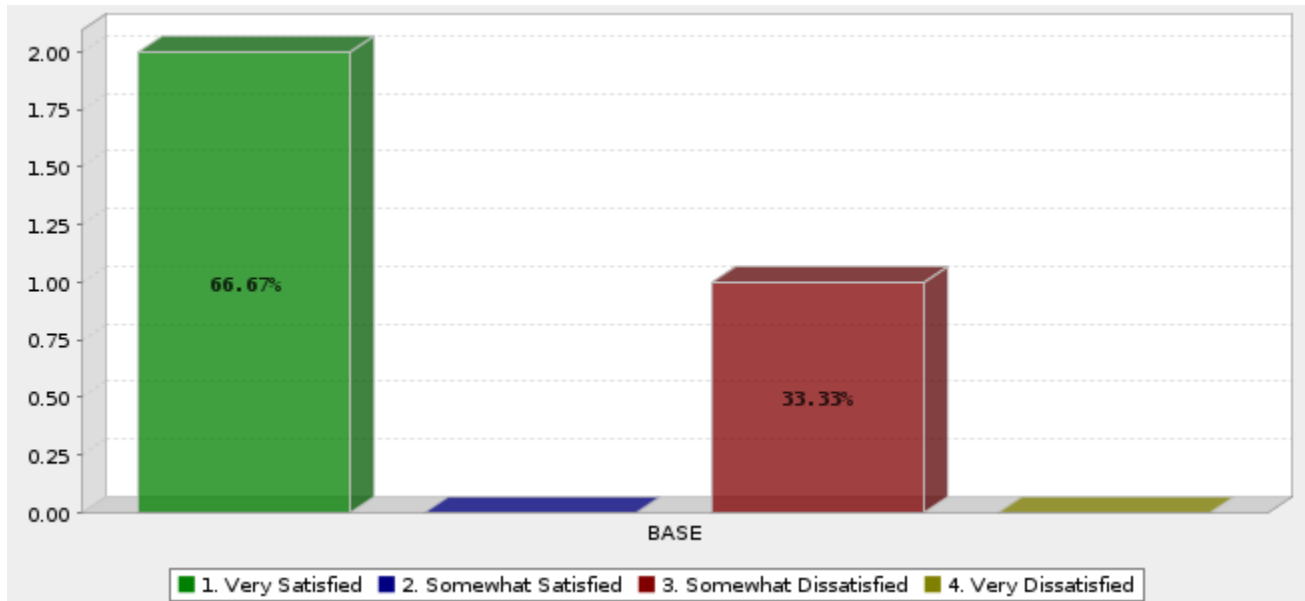
	Answer	Count	Percent
	1. Yes	0	0.00%
	2. No	3	100.00%
	Total	3	100%

Mean : 2.000	Confidence Interval @ 95% : [2.000 - 2.000]	Standard Deviation : 0.000	Standard Error : 0.000
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Q8. State the professional organization(s)?

87462224	
86363298	
86359081	
86312939	

Q9. How satisfied are you with your Operations and Supply Management degree in terms of preparation for a career?




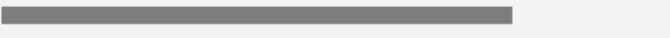

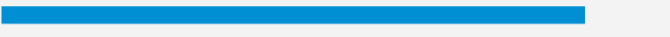


	Answer	Count	Percent
	1. Very Satisfied	2	66.67%
	2. Somewhat Satisfied	0	0.00%
	3. Somewhat Dissatisfied	1	33.33%
	4. Very Dissatisfied	0	0.00%
	Total	3	100%
Mean : 1.667	Confidence Interval @ 95% : [0.360 - 2.973]	Standard Deviation : 1.155	Standard Error : 0.667

Q10. Please explain your response to the previous question.

87462224	
86363298	Great classes, Professors and overall experience.

86359081	I thought this when in college, and my experience since has confirmed this, but my degree did little to actually prepare me for my career. That said, we live in a world where a 4yr degree is required for positions like the one I have now regardless of the benefit you received from it. That being said, I was happy with Ferris in that I could complete the bachelors degree quickly (less than four years) and without a lot of effort while still working roughly 30 hours per week. It is true that everyone goes into college with different levels of understanding and with a business degree there isn't a huge technical knowledge component. So, you either get it or you don't and I was fortunate to enter college having a good understanding of most areas of business.
86312939	I have always felt very prepared to enter the workforce and I haven't had too much difficulty transitioning into a full-time role.

Q11. Please indicate the extent to which you use each of the following computer programs:

Question	Count	Score	Daily	Weekly	Monthly
Microsoft Word	3	2			
Powerpoint	3	2.33			
Excel	3	1			
Microsoft Project (Project Management applications)	3	2.67			
Databases (e.g., Access)	3	1			
Other	2	1.5			

Q12. Please specify other

87462224	
86363298	
86359081	SAP, Tableau, Visio, Visual Basic, Business Objects
86312939	Microsoft Office 365

Q13. Please indicate the extent to which each of the following courses has been helpful in your career.

Question	Count	Score	Extremely Helpful	Very Helpful	Somewhat Helpful	Not Helpful	Shoud Be Eliminated	Did Not Take
Applied Management	3	2.67						
Business Ethics & Social Responsibility	3	2.33						
Business Law	3	2.67						
Business Strategy/Policy	3	3						
Business Writing	3	2.33						
Contracts and Sales (BLAW)	3	1.67						
Financial Management	3	3						
Human Resources Management	3	3.33						
Information Systems	3	3						
International Business	3	3.67						
Team Dynamics/Organizational Behavior	3	3						
Principles of Accounting (ACCT)	3	2.33						
Principles of Economics (ECON)	3	1.67						
Principles of Marketing (MKTG)	3	3.33						
Production/Operation Management (MGMT)	3	1.67						
Statistics (STQM)	3	2.33						
Lean Systems (MGMT)	3	2						

Q14. What subjects areas do you think should be added or improved? Why?

87462224	
86363298	
86359081	<p>Out of all the classes I had I will say that the Business Law class had the most real life application out of anything I took. I think that this is something that should be continually developed as it is helpful personally and professionally. Lean Systems: I understand the concepts trying to be conveyed in the Lean management class, however the actual exercises were not realistic. For example: in the business world, you are more than likely never going to actually sit down and create a VSM manually and calculate everything manually as you would have multiple products and production lines that would all be unique. Instead, I think there is more value in teaching the basic concepts of various Lean tools but then base exercises around tools such as MCT which are simpler to use in the real world and are somewhat more cutting edge than VSM's. It all needs to relate back to</p>

	meeting cost goals for your department, reducing lead time/inventory on hand, etc. and the lessons instead (for the purpose of this example) focused on correct formatting of a VSM that you will likely never need to make.
86312939	I think there needs to be more of a focus on ERP systems. I use these types of software more than any other types of software. There was a bit of a learning curve for these as well. Learning how the systems work would be a very beneficial. Please also try to include more supplier development. This is my biggest issue as a buyer is how to deal with suppliers and something I have really had to learn on the job.

Q15. What subject areas do you think should be eliminated? Why?

87462224	
86363298	
86359081	Information Systems: This is very specific to the given company you end up working for. You may end up using systems such as SAP, M1, Microsoft Dynamics, etc. and nothing you are provided training on in a college setting will directly help you with those systems. The reason I say eliminate the class is because when it was taught in 2015, the professor taught a whole unit on Lotus notes email which hasn't been in use in my knowledge since the 90's. It is hard to improve on that without completely starting over and restructuring everything (which likely would have value).
86312939	I don't see anything that I would eliminate from a curriculum standpoint. I think all classes have benefitted me in some way or another.

Q16. Among the objectives of the Operations and Supply Management Program is to assist students in developing an awareness of business-related areas and skills. How well do you feel you were prepared for your career in the following skills?

Question	Count	Score	Excellent	Good	Average	Fair	Poor
Presentation Skills-Written and Verbal	3	2.33					
Interpersonal Skills	3	2					
Decision Making & Analysis Skills	3	1.67					
Leadership Skills	3	2					
Teamwork Skills	3	1.67					
Quantitative Skills-Math, Finance, Accounting/Budgeting	3	1.67					
English	3	1.67					
Principles of Economics	3	1.67					

Business Law	3	2					
Applied Management	3	2.33					
Principles of Marketing	3	3					
Statistics	3	1.67					
Lean Systems Courses (offered effective 2011)	3	2.33					
Foreign Language	3	3					
Other	1	3					

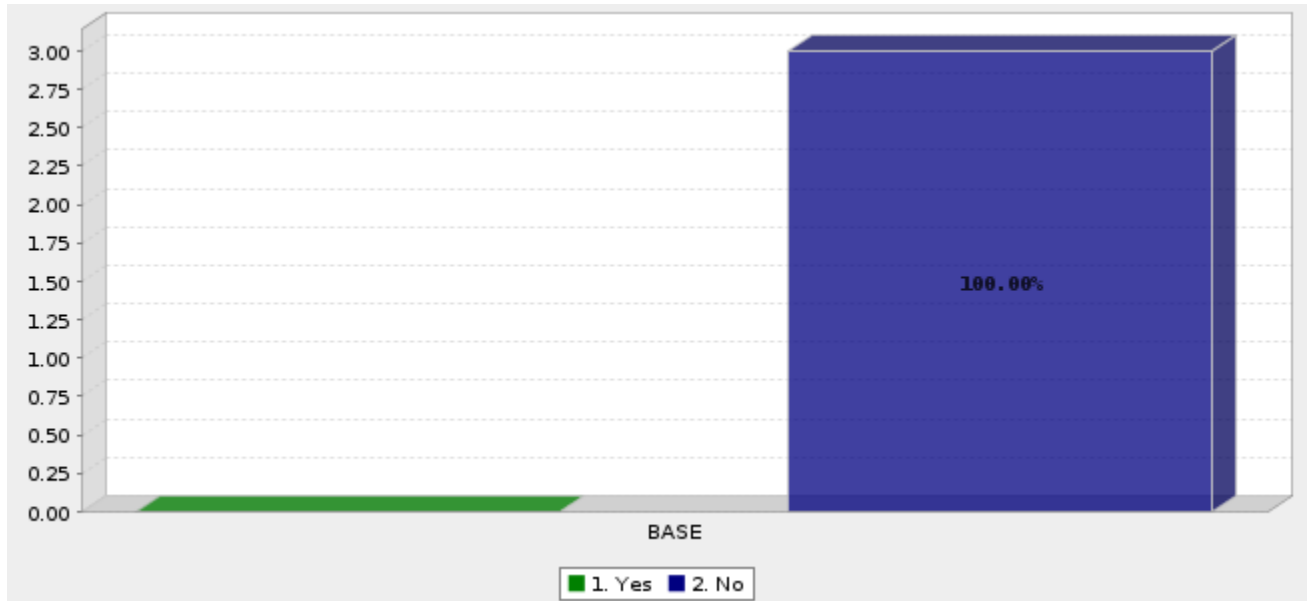
Q17. What areas of your Quality and Supply Management degree do you feel needed strengthening? Please specify:

87462224	
86363298	
86359081	This is somewhat unique to my position, but I travel around the US and soon to be around the world auditing suppliers for OF readiness. I think that something that would be very helpful with a Supply Management degree would be to actually have the students go and visit a supplier. There were a couple instances where the class would go to Haworth or another local manufacturing facility. However, Haworth is a manufacturer that outputs finished consumer/commercial goods. Instead, going to a place like Big Rapids Products would make more sense as you could learn about the relationships between BRP as a supplier and the OEM's that they sell to. Better yet, get one of BRP's customers to get involved and get students involved in the actual material flow and ordering processes. That would be really beneficial.
86312939	-Supplier Management -ERP integration -Change management within an organization - Inventory control

Q18. Where you have indicated skills that needed strengthening, could you please provide the specifics of the skills training which would have been beneficial to your career? Also, why do you think these skills need strengthening?

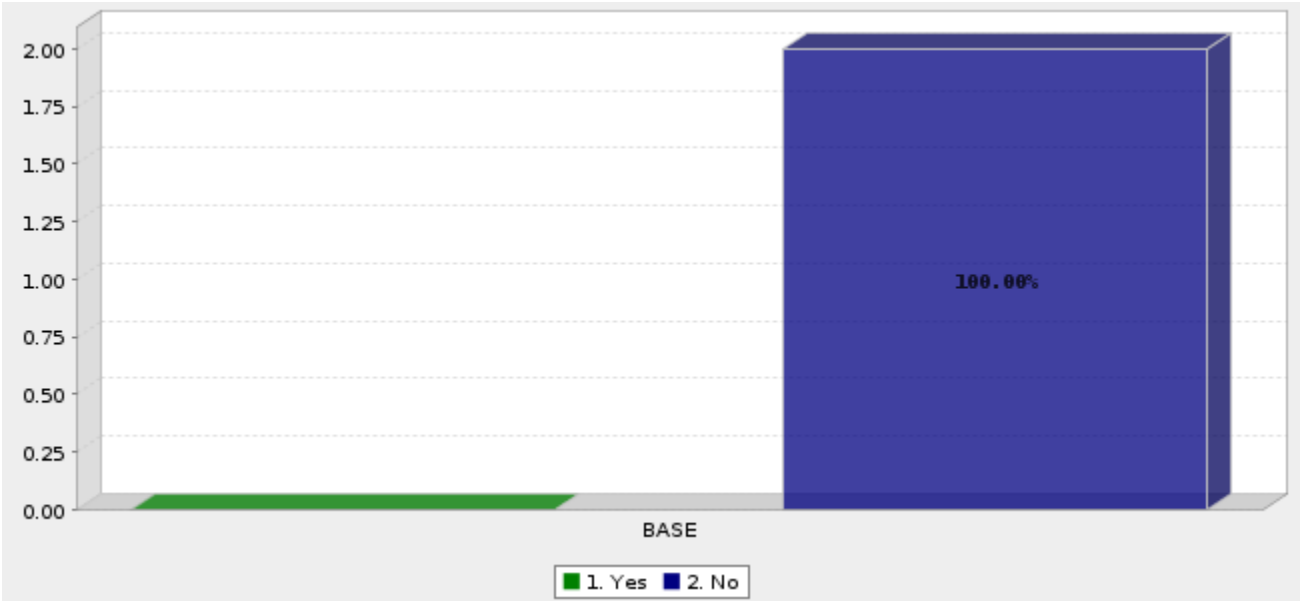
87462224	
86363298	
86359081	To reaffirm my previous comment, in retrospect it is really strange in my opinion that in an Supply Management degree you would never actually discuss or get hands on with a delivery, commercial, etc. situation between a supplier and the customer (assuming you are the buyer for the customer in this scenario). That is the day to day focus of anybody in SM and this just was not every addressed enough or at least in a realistic way.
86312939	Skills that would have been beneficial would have been ERP training.

Q19. Have you attended graduate school since your graduation?



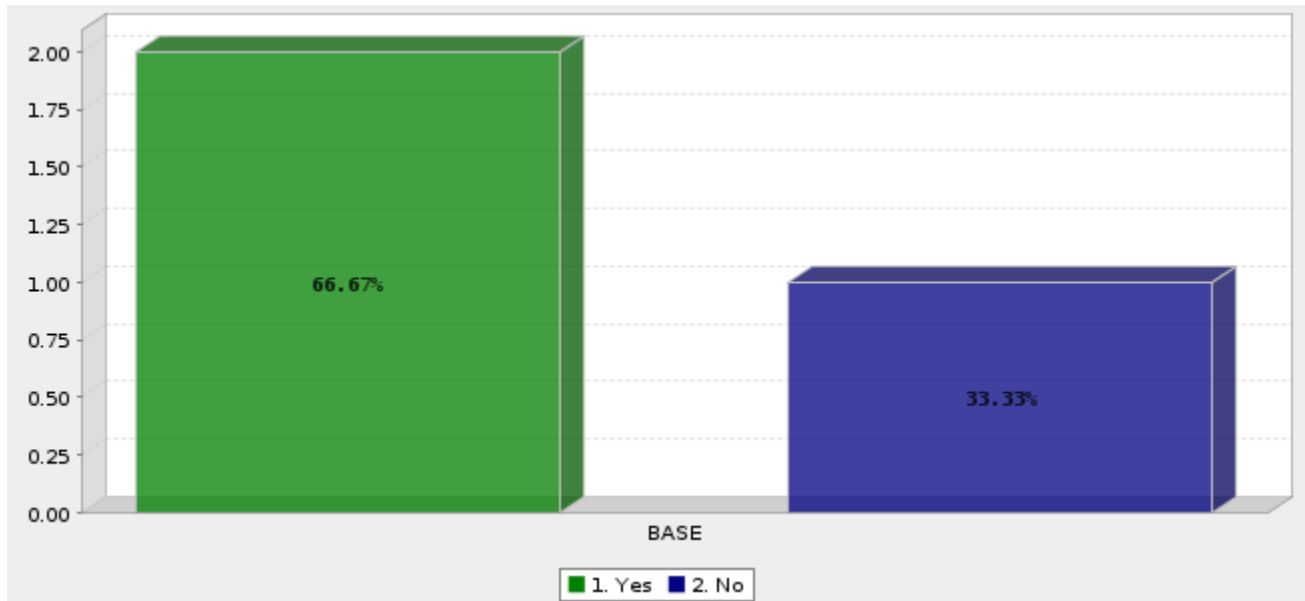
	Answer	Count	Percent
	1. Yes	0	0.00%
	2. No	3	100.00%
	Total	3	100%
Mean : 2.000	Confidence Interval @ 95% : [2.000 - 2.000]	Standard Deviation : 0.000	Standard Error : 0.000

Q20. Did you complete your degree?



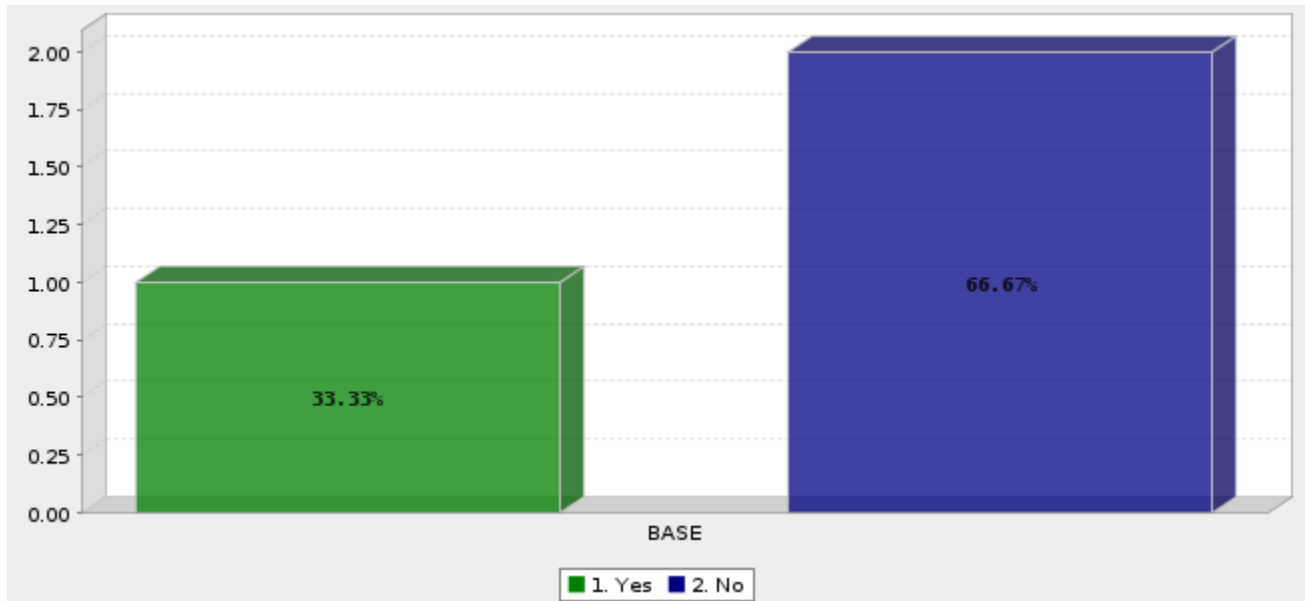
	Answer	Count	Percent
	1. Yes	0	0.00%
	2. No	2	100.00%
	Total	2	100%
Mean : 2.000	Confidence Interval @ 95% : [2.000 - 2.000]	Standard Deviation : 0.000	Standard Error : 0.000

Q21. If you answered no to completing your graduate degree, do you have future plans for graduate study?



	Answer	Count	Percent
	1. Yes	2	66.67%
	2. No	1	33.33%
	Total	3	100%
Mean : 1.333	Confidence Interval @ 95% : [0.680 - 1.987]	Standard Deviation : 0.577	Standard Error : 0.333

Q22. Were you involved in a student professional business organization while you were at Ferris?

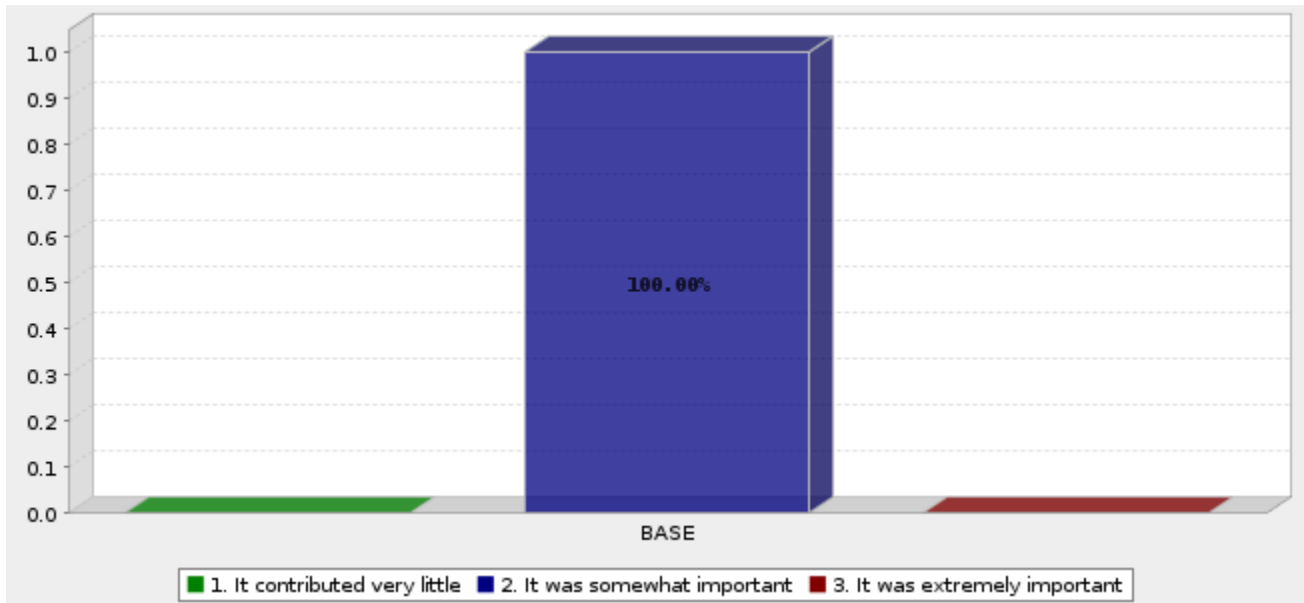


	Answer	Count	Percent
	1. Yes	1	33.33%
	2. No	2	66.67%
	Total	3	100%
Mean : 1.667	Confidence Interval @ 95% : [1.013 - 2.320]	Standard Deviation : 0.577	Standard Error : 0.333

Q23. If you answered yes to the previous question, please list which professional business organization(s).

87462224	
86363298	
86359081	
86312939	APICS

Q24. To what extent did your participation enhance your business preparation and career?



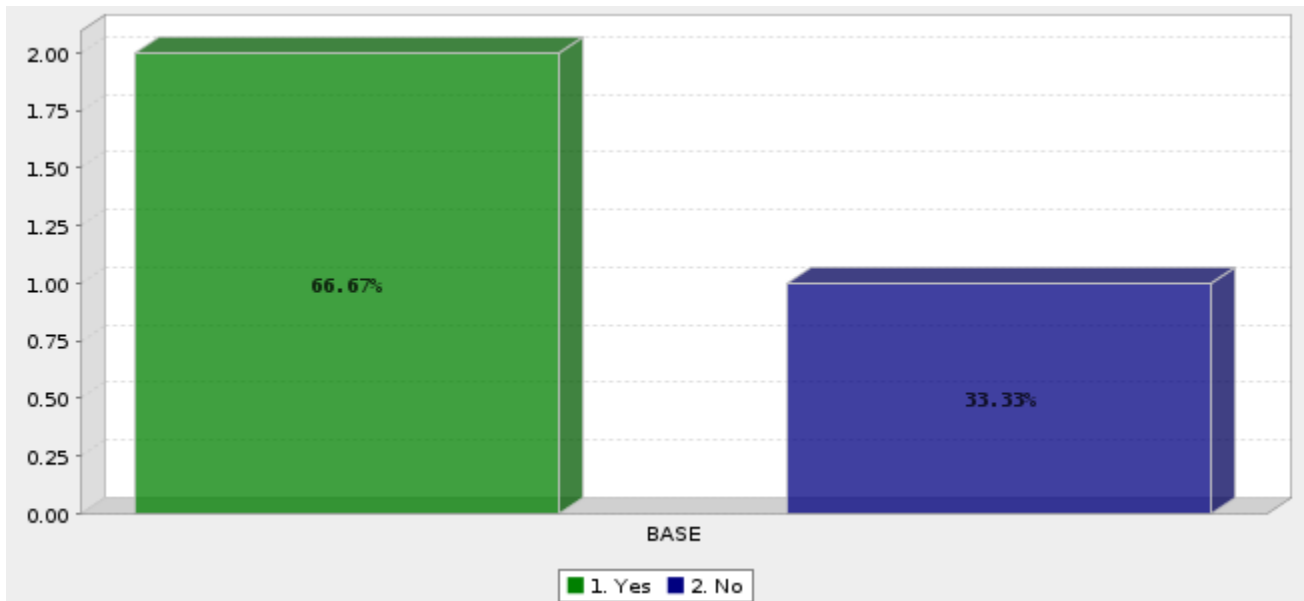
	Answer	Count	Percent
1.	It contributed very little	0	0.00%
2.	It was somewhat important	1	100.00%
3.	It was extremely important	0	0.00%
	Total	1	100%

Mean : 2.000	Confidence Interval @ 95% : [2.000 - 2.000]	Standard Deviation : 0.000	Standard Error : 0.000
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Q25. Please explain your response to the above question.

87462224	
86363298	
86359081	
86312939	I think that it was beneficial. I think that I should have joined sooner and it would have been much more beneficial for me. So this is my own doing.

Q26. Did you have the opportunity to pursue an internship/cooperative education while at Ferris?



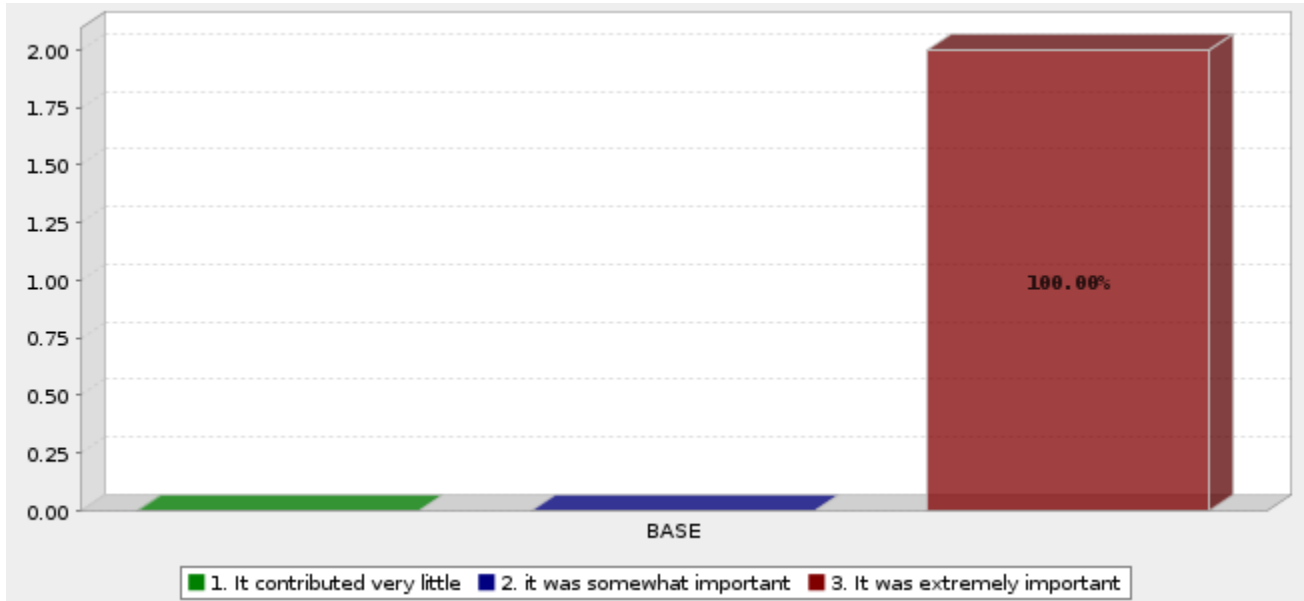
	Answer	Count	Percent
	1. Yes	2	66.67%
	2. No	1	33.33%

	Total		3	100%
Mean : 1.333	Confidence Interval @ 95% : [0.680 - 1.987]	Standard Deviation : 0.577	Standard Error : 0.333	

Q27. What experience did you have?

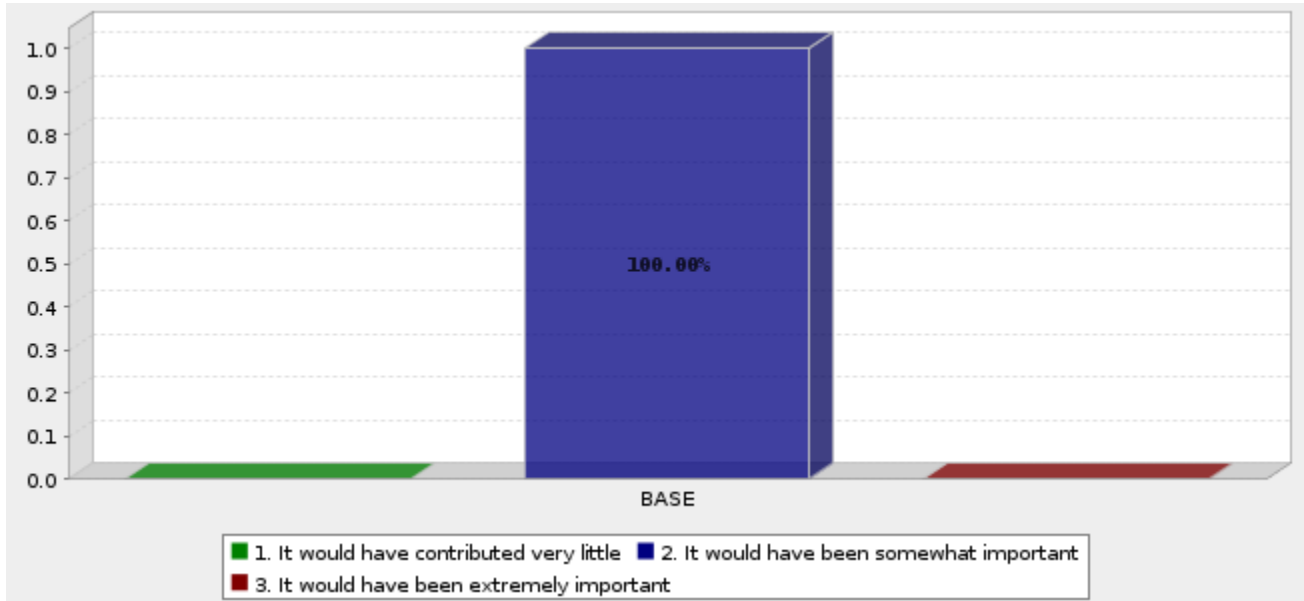
87462224	
86363298	
86359081	I had two internships at a Fortune 500 manufacturer in two different capacities within Supply Management and Operations. On a side note, the process of Ferris assisting with finding Internships was comical. I obtained these internships and received college credit in spite of the program leader who made it horrendously difficult to submit and document the initial paperwork in final grades. In addition, the delays on final grades nearly cost me a thousand dollars in tuition reimbursement from my employer for the internship. I then resumed school in the fall and what did I see but my picture on a TV outside the office for the internship coordinator talking about all the wonderful internships that Ferris finds for its students. I will say this taught me an excellent lesson in self control by me holding back from going in the office and venting my concerns which ironically is a very real world skill required in Supply Management.
86312939	I was an intern for a Fortune 500 3PL company and worked as a global forwarding coordinator.

Q28. Please indicate the extent to which the experience enhanced your business career preparation.



	Answer	Count	Percent
	1. It contributed very little	0	0.00%
	2. it was somewhat important	0	0.00%
	3. It was extremely important	2	100.00%
	Total	2	100%
Mean : 3.000	Confidence Interval @ 95% : [3.000 - 3.000]	Standard Deviation : 0.000	Standard Error : 0.000

Q29. If you did not have a cooperative education or internship experience, please indicate whether or not such an experience would have enhanced your career.



	Answer	Count	Percent
	1. It would have contributed very little	0	0.00%
	2. It would have been somewhat important	1	100.00%
	3. It would have been extremely important	0	0.00%
	Total	1	100%
Mean : 2.000	Confidence Interval @ 95% : [2.000 - 2.000]	Standard Deviation : 0.000	Standard Error : 0.000

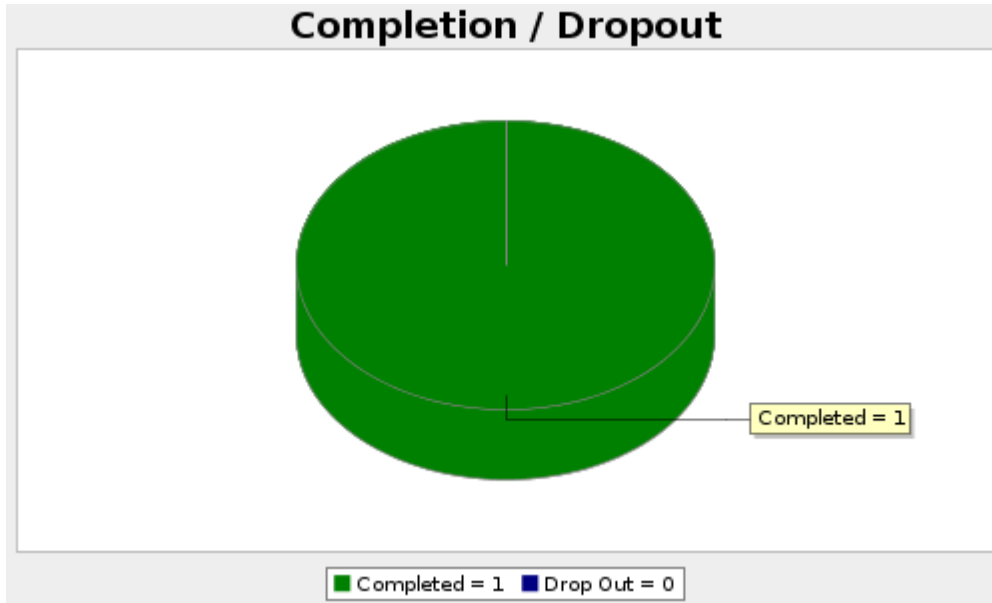
Q32. Please provide any comments you would like to make about the quality of, or deficiencies in, your Operations and Supply Management undergraduate degree at Ferris State University.

87462224	
86363298	
86359081	<p>I think that Ferris tries really hard and I think that there are some absolutely phenomenal professors and some that probably need to move along. I found that the professors who either still ran a business/were otherwise employed or those who were (not that this is a requirement) were independently wealthy as a result of previous ventures and taught because they wanted to were by far the best. Their classes were the toughest but actually were the most realistic for the world I now work in and they barely used a textbook. My recommendation would be to get more of those people on staff and let them tell some of the stories from their business dealings and history. Learning from real world experience will always surpass a pure academic with a textbook and it is a much more pleasant experience go through.</p>
86312939	<p>Overall, I really enjoyed my time and felt that I received great career preparation. I have used a lot of the tools I learned in classes at Ferris in my current job. Please continue to improve the program and even look at modeling the program to other universities in the state that have programs that are known around the nation. For example, Western Michigan and Michigan State. I know a lot of people in these programs and they receive very high paying jobs right out of school and often work for Fortune 500 companies. Please continue to build the internship program. I believe a good internship is the best way to prepare you for post graduate careers.</p>

Appendix J: OSM Faculty Survey Results

OPSM APR- Faculty Survey

IRTSurvey@ferris.edu Survey Overview



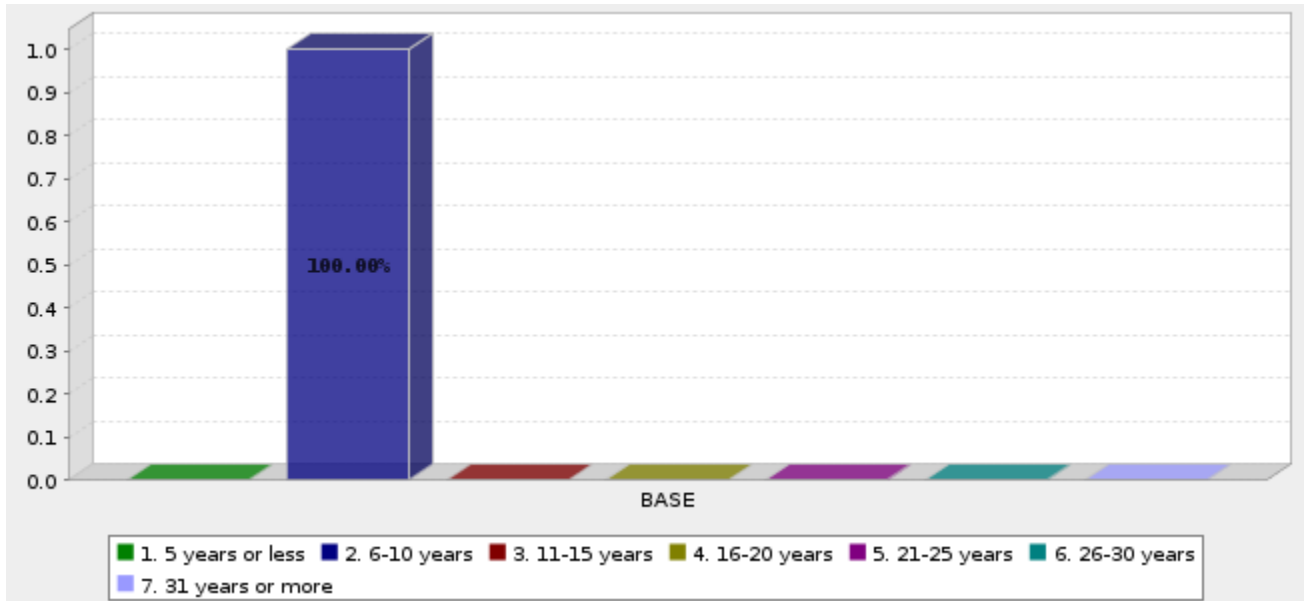
Viewed	Started	Completed	Completion Rate	Drop Outs (After Starting)	Average Time to Complete Survey
14	1	1	100%	0	11 minutes

Q1. Please indicate your level of agreement with each of the following statements. If you have no experience or knowledge of the statement, please leave the item blank.

Question	Count	Score	Strongly Agree	Somewhat Agree	Neutral	Somewhat Disagree	Strongly Disagree
The Bachelors in Operations & Supply Management Degree is of benefit to students in the College of Business.	1	1	██████████				
The program curriculum includes courses relevant to current business practices.	1	1	██████████				
The quality of the Bachelors in Operations & Supply Management Degree at FSU is comparable to the quality found in similar bachelor programs across the country.	1	1	██████████				
There is adequate facilities and equipment to meet the current instructional needs of the program.	1	2	██████████	██████████			
The students in the Bachelors in Operations & Supply Management Degree receive appropriate course advising.	1	2	██████████	██████████			

Students enrolled in the Bachelors in Operations & Supply Management Degree should be required to complete an internship.	1	1	██████████				
There is currently a sufficient number of tenured track faculty teaching within the program to meet student program needs.	1	3	██████████	██████████	██████████		
Students graduating with a Bachelors in Operations & Supply Management Degree are prepared to enter the workforce.	1	1	██████████				

Q2. How long have you been employed at Ferris State University?



	Answer	Count	Percent
	1. 5 years or less	0	0.00%
	2. 6-10 years	1	100.00%
	3. 11-15 years	0	0.00%
	4. 16-20 years	0	0.00%
	5. 21-25 years	0	0.00%
	6. 26-30 years	0	0.00%
	7. 31 years or more	0	0.00%
	Total	1	100%
Mean : 2.000	Confidence Interval @ 95% : [2.000 - 2.000]	Standard Deviation : 0.000	Standard Error : 0.000

Q3. What are the strengths of the current Bachelors in Operations & Supply Management Degree program?

87669910	The curriculum has been revised during the last five years to continuously adapt to business/industry needs. The Lean Systems, ERP, and Project Management courses are some of the key curriculum strengths. The current OSM students, who are actively looking for internships and jobs, are able to successfully secure them because of the strong curriculum core. Many companies are pleasantly surprised to find out that our students possess capabilities that their employees are acquiring through a company training program. The advisory board agrees that our curriculum is solid.
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Q4. What suggestion(s) would you recommend to improve the current Bachelors in Operations & Supply Management Degree?

Q5. What types of additional equipment or facility needs would enhance student program learning?

87669910	VISIO software.
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Q6. Please use this space for additional comments.

87669910	The existing two faculty who serve as the "program coordinators" are stretched thin. They are generally teaching 4-5 courses/semester with approximately 3-4 preps/semester. We need some type of release time and/or administrative support to ensure that the OSM program continues to successfully grow.
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Appendix K: OSM Advisory Board Survey Results



Operations and Supply Management APR – Advisory Board Survey

As a part of the continuing effort to improve the Operations and Supply Management - Bachelor's degree program, the College of Business at Ferris State University periodically conducts a program evaluation. This evaluation includes an advisory board meeting and surveys of present students, graduates, potential employers, and the university community.

As an advisory board member, your opinion will provide important information in this process. As you would take a few minutes to complete the survey, you will be contributing to the improvement of education at Ferris State University. Please be assured that the confidential information you provide will be anonymous.

1. What is the total number of employees in your organization?

1,100

2. What is the number of employees with a Bachelor's degree in Operations and Supply Management or related degree within your organization?

2 (estimated)

3. Does your organization expect to hire new employees within the next 5 years with a Bachelor's degree in Operations and Supply Management? Why?

Yes, we experience turn over in our SCM leadership

No

4. How many?

1

5. Please list expected position titles and approximate competitive salary offers.
 Supervisor, SCM

6. Does your organization expect to decrease the number of positions for a Bachelor's degree in Operations and Supply Management?

Yes
 No

7. If answered yes to question 6, How many does your organization anticipate not hiring? What is the reason for the decrease in demand for Operations and Supply Management graduates?

8. How important is it for an Operations and Supply Management graduate to be able to use the following computer applications?

	Very Important	Somewhat Important	Not Important
Microsoft Word		X	
Powerpoint		X	

Excel	X		
Microsoft Project (Project Management applications)		X	
Databases (e.g., Access)	X		
Other – Please Specify			

9. Among the objectives of the University is to assist students in the development of certain skills. Please indicate the extent to which each of the following subjects would be helpful to an Operations and Supply Management graduate in their employment with you.

	Very Important	Somewhat Important	Not Important
Presentation Skills – Written and Verbal	X		
Interpersonal Skills	X		
Decision Making & Analysis Skills	X		
Leadership Skills	X		
Teamwork Skills	X		
Quantitative Skills – Math, Finance, Accounting/Budgeting		X	
English		X	
Principles of Economics		X	
Business Law		X	
Applied Management		X	
Principles of Marketing			X
Statistics		X	
Lean Systems Courses	X		
Foreign Language		X	
Other – Please Specify			

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10. What type of goals do you view as important for the Operations and Supply Management program?

Increasing enrollment, collaborating with local industry, and identifying opportunity for improvement based on post-graduate success.

11. How do the goals listed in question 10's response impact the industry demand and requirements for an Operations and Supply Management graduate.

12. What types of "demand" trends do you see in the Operations and Supply Management area? Are these trends increasing, decreasing or remaining the same?

Moving to centralized buying and distribution. We have reduced our local SCM staff (non-college educated) by 40% over the past 2 years by eliminating a local warehouse and centralizing buying functions.

13. Based on your understanding of the Ferris State University's (FSU's) Operations and Supply Management program, does FSU prepare graduates for a career at your organization? Why or Why not?

Yes, based on the required courses and their descriptions, FSU provides adequate education for the OSM program.

14. What is your perception of the composition and quality of the Operations and Supply Management faculty?

Faculty are highly regarded. Students appreciate the fact that professors have industry knowledge that can be applied.

15. What suggestions would you have to improve the Operations and Supply Management Program at FSU?

Market the program to local industry. Work with manufacturing companies to offer an on-site program. Take students on tours of manufacturing facilities.
Thank you for your time and input.



FERRIS STATE UNIVERSITY

Imagine More

Operations and Supply Management APR – Advisory Board Survey

As a part of the continuing effort to improve the Operations and Supply Management - Bachelor's degree program, the College of Business at Ferris State University periodically conducts a program evaluation. This evaluation includes an advisory board meeting and surveys of present students, graduates, potential employers, and the university community.

As an advisory board member, your opinion will provide important information in this process. As you would take a few minutes to complete the survey, you will be contributing to the improvement of education at Ferris State University. Please be assured that the confidential information you provide will be anonymous.

1. What is the total number of employees in your organization?

None – I am retired since 2013

2. What is the number of employees with a Bachelor's degree in Operations and Supply Management or related degree within your organization?

N/A

3. Does your organization expect to hire new employees within the next 5 years with a Bachelor's degree in Operations and Supply Management? Why?

Yes

No

4. How many?

5. Please list expected position titles and approximate competitive salary offers.

6. Does your organization expect to decrease the number of positions for a Bachelor’s degree in Operations and Supply Management?

Yes

No

7. If answered yes to question 6, How many does your organization anticipate not hiring? What is the reason for the decrease in demand for Operations and Supply Management graduates?

8. How important is it for an Operations and Supply Management graduate to be able to use the following computer applications?

	Very Important	Somewhat Important	Not Important
Microsoft Word	X		
Powerpoint	X		
Excel	X		

Microsoft Project (Project Management applications)		X	X
Databases (e.g., Access)		X	
Other – Please Specify	Understand SPC software.		

9. Among the objectives of the University is to assist students in the development of certain skills. Please indicate the extent to which each of the following subjects would be helpful to an Operations and Supply Management graduate in their employment with you.

	Very Important	Somewhat Important	Not Important
Presentation Skills – Written and Verbal	X		
Interpersonal Skills	X		
Decision Making & Analysis Skills	X		
Leadership Skills	X		
Teamwork Skills	X		
Quantitative Skills – Math, Finance, Accounting/Budgeting		X	
English		X	
Principles of Economics		X	
Business Law			X
Applied Management		X	
Principles of Marketing			X
Statistics		X	
Lean Systems Courses	X		
Foreign Language		X	
Other – Please Specify	X		
Cultural Differences			

10. What type of goals do you view as important for the Operations and Supply Management program? 1) Partnering with alumni – could lead to stronger relationships with employers. 2) On campus advertising along with examples of (this could be tough) how lean has been applied internally at the school. 3) I think that an assessment of domestic industry should be solid before stretching too far into the international – build the current alumni relationships first.

11. How do the goals listed in question 10's response impact the industry demand and requirements for an Operations and Supply Management graduate.
I think constant communication with alumni and key employers is important – the change in industry (AI, automation, etc.) is pushing current industry into process change within their own systems. The need to stay in touch I believe is important.

12. What types of "demand" trends do you see in the Operations and Supply Management area? Are these trends increasing, decreasing or remaining the same?
I think the largest demand is "speed" – speed of delivery, information, change, etc.

13. Based on your understanding of the Ferris State University's (FSU's) Operations and Supply Management program, does FSU prepare graduates for a career at your organization? Why or Why not?

This is tough for me to answer – I don't know that many of the professors and have only participated in your classes. Based on some of the comments in the meeting – I think there is still some "old" processes and thinking within the departments. So preparation to me is basic understanding of lean in all areas. Yes – it's **better than the classic** business courses.

14. What is your perception of the composition and quality of the Operations and Supply Management faculty?

Faculty seems to understand – I think some of the legacy admin processes may hamper their ability to deliver.

15. What suggestions would you have to improve the Operations and Supply Management Program at FSU?

It takes time – more advertising through social media. More communication with alumni & employers. If there was a process or program on campus (registration, class changes, schedule changes, for example) that could be streamlined which would physically demonstrate to the student body how this works – that would be a big plus.

Thank you for your time and input.

Appendix L: OSM Faculty Curriculum Vitae

Dr. Lisa Eshbach

Ferris State University

COB - Management

(231) 591-3197

Email: LisaEshbach@ferris.edu

Education

PhD, Wayne State University, 2004.

Major: Industrial Engineering and Business Administration

Supporting Areas of Emphasis: Lean Manufacturing

Dissertation Title: APPLICATION OF LEAN MANUFACTURING IN A PROJECT
MANAGEMENT ENVIRONMENT

MS, Wayne State University, 2002.

Major: Industrial Engineering

MS, Central Michigan University, 1997.

Major: International Administration

Supporting Areas of Emphasis: International Business

Dissertation Title: Application of Business Process Reengineering

AAS, Michigan Technological University, 1993.

Major: Electrical Engineering

BS, Michigan Technological University, 1992.

Major: Business Administration

Supporting Areas of Emphasis: Industrial Engineering

Professional Positions

Academic - Post-Secondary

Associate Professor, Ferris State University. (August 23, 2013 - Present).

Assistant Professor, Ferris State University. (August 15, 2009 - August 22, 2013).

Adjunct Faculty, Baker College. (May 1, 1998 - May 1, 2010).

Adjunct Faculty, Lawrence Technological University. (September 1, 2004 - April 30, 2010).

Senior Lecturer, Wayne State University. (August 26, 2005 - May 5, 2009).

Professional

Senior Manufacturing Engineer, Visteon Corporation. (September 1, 2001 - July 15, 2006).

Senior Manufacturing Engineer, Visteon Corporation. (September 1, 1998 - September 1, 2001).

Project Manager, Ford Motor Company. (August 1, 1996 - September 1, 1998).

Materials Planning and Logistics Analyst, Ford Motor Company. (June 1, 1993 - August 1, 1996).

Licensures and Certifications

Quality Matters Certificate, Faculty Center Training and Learning. (March 2012).

Professional Memberships

VP of Communications, North American Case Research Association. (October 2015 - Present).

North American Case Research Association. (May 2009 - Present).

Lean Enterprise Institute. (August 2001 - Present).

Academy of Management. (August 2007 - August 2009).

Production Operations Management Society. (August 2007 - August 2008).

Society of Manufacturing Engineers. (May 2003 - May 2005).

Development Activities Attended

Conference Attendance, North American Case Research Association, Chicago, IL. (October 19, 2017 - October 21, 2017).

Conference Attendance, "2017 Lean Transformation Summit," Carlsbad, Ca. (March 7, 2017 - March 8, 2017).

Conference Attendance, North America Case Research Association, Las Vegas, Nevada, USA. (October 6, 2016 - October 8, 2016).

Conference Attendance, North American Case Research Association, Orlando, Florida, US. (October 8, 2015 - October 11, 2015).

Conference Attendance, North American Case Research Association, Austin, Texas, United States. (October 22, 2014 - October 25, 2014).

Conference Attendance, North American Case Research Association, Victoria, British Columbia, Canada. (October 17, 2013 - October 19, 2013).

Conference Attendance, Center for Scholastic Inquiry, Scottsdale, AZ, USA. (April 17, 2013 - April 18, 2013).

Workshop, "Online Courses Fair," Let's Get It Together - Language and Literature, Big Rapids, MI, USA. (February 20, 2013 - February 21, 2013).

Conference Attendance, North American Case Research Association, Boston, Massachusetts, USA. (October 25, 2012 - October 27, 2012).

Conference Attendance, North American Case Research Association, San Antonio, Texas, USA. (October 13, 2011 - October 15, 2011).

Workshop, "Quality Matters," Faculty Center for Training and Learning, Big Rapids, MI, USA. (July 2011 - September 2011).

Workshop, "Blackboard Learn 9.1," Faculty Center for Training and Learning, Big Rapids, MI, USA. (July 25, 2011 - July 27, 2011).

Workshop, "3R's Rubrics + Readability = Retention," Faculty Center for Training and Learning, Big Rapids, MI, USA. (February 2011 - May 2011).

Conference Attendance, North America Case Research Association, Gatlinburg, TN, USA. (October 28, 2010 - October 30, 2010).

Workshop, "Copyright, Fair Use and the Creative Commons," Faculty Center for Training and Learning, Big Rapids, MI, USA. (May 11, 2010).

Workshop, "Level 1 -4 Online Certification Training: Let's Get It Together," Faculty Center for Training and Learning, Big Rapids, MI, USA. (October 2009 - April 2010).

Faculty Orientation, "Faculty Orientation," Faculty Center of Training and Learning, Big Rapids, MI, U.S.A. (August 17, 2009 - April 21, 2010).

Workshop, "Rubrics Rock! Training," Faculty Center for Training and Learning, Big Rapids, MI, USA. (October 6, 2009 - November 24, 2009).

Workshop, "Grant and Research Education Series," Faculty Center for Training and Learning, Big Rapids, MI, USA. (October 6, 2009 - November 10, 2009).

Conference Attendance, "North American Case Research Association," North American Case Research Association, Santa Cruz, CA, USA. (October 29, 2009 - October 31, 2009).

TEACHING

Teaching Experience

Chapter 1

Chapter 2 Ferris State University

INTB 310, International Business Systems, 4 courses.

MGMT 301, Applied Management, 3 courses.

MGMT 302, Team Dynamics - Organizational Behavior, 3 courses.

MGMT 305, Managerial Leadership, 28 courses.

MGMT 350, Management Metrics and Decision Making, 4 courses.

MGMT 412, Lean Culture & Skills Dvlpmnt, 11 courses.

MGMT 432, Lean Logistics and Supply Mgmt, 8 courses.

MGMT 447, Business Ethics - Social Responsibility, 3 courses.

MGMT 488, Advanced Management Cases-Problems, 30 courses.

MGMT 490, Lean Service Enterprise Leadership, 2 courses.

MGMT 492, Lean Svc Enterprse & Leadershp, 20 courses.

MGMT 497, Lean Culture and Skills Development, 2 courses.

Directed Student Learning

Supervised Research, "Looking in the Rearview Mirror." (May 2014 - November 2015).

Advised: Alisa Deroo, Lukas Thompson, Mabel Acosta, Andrew Jared

Honors Option - MGMT 305 Managerial Leadership, "Mercedes W205 Middlefield Lamination Kaizen Event." (May 2015 - August 2015).
Advised: Logan England

Honors Option - MGMT 432 Lean Logistics & Supply Management, "Gentex - Case Overview." (January 2015 - May 2015).
Advised: Mabel Acosta

SCHOLARSHIP AND RESEARCH

Published Intellectual Contributions

Other

Eshbach, L. (2017). *Operations and Supply Management Curriculum Revisions*. Currently, the *Operations and Supply Management (OSM) program has 48 general education credits as part of the existing curriculum. After close review, we discovered that our college accreditation only requires 42 credits of general education. This proposal addresses the reallocation of the 9 general education credits (3 credits remaining with general education and 6 reallocated to the OSM program core), pre-requisite core course change, our stakeholders (advisory board, advisors, faculty and students) recommendations, and revising one program outcome..*

Eshbach, L. (2017). *Operations and Supply Management Program and Minor Revisions* The *Operations and Supply Management (OSM) program and OSM minor is reviewed throughout the academic year to ensure the courses are relevant to the industry needs. We accomplish this through annual advisory board and faculty meetings. The OSM program changes included 1) adding two courses to the required program area (PROJ 320 and ISYS 482, 2) Providing concentrations for students to select from instead of a list of classes, and 3) Removing ISYS 200, STQM 341, STQM 351 and MGMT 302 from the course concentration list..*

Eshbach, L., L. N. (2015). In J. Lawrence & D. Ettington (Eds.), *Ferris Valley Foods: Corporate Governance and Reentry* (4th ed., vol. 35).

Eshbach, L. (2015). *Lean Systems Certificate and Minor Modifications*. *Certificate Changes: The proposal changed the MGMT 422 (Cost Management for Lean Systems) from a class option list of six classes offered to a required certificate course. Now, students can either take the MGMT 402 (Six Sigma for Business Processes) or MGMT 422 courses (Cost Management for Lean Systems) as one of the required certificate courses. The second change to the certificate involved adding the MGMT 432 (Lean Logistics and Supply Management) as a course option for the students to choose from amongst a list of six courses for the remaining three credits. Minor changes: The change included increasing the required courses from four to five and decreasing the amount of elective courses from two to one. The MGMT 432 (Lean Logistics and Supply Management) course was being added as the fifth required course..*

Eshbach, L., Steenstra, D. (2015). *MBA Curriculum Revisions*. *Led a 12 person cross-functional faculty team. Each faculty member, including myself, developed at least one course (MGMT 736) for the revised MBA core. Additionally, I developed two new MBA concentrations (Lean Systems and Leadership AND Supply Chain Management and Logistics) and authored five new classes to support the concentrations (MGMT 752, MGMT 754, MGMT 755, MGMT 757, and MGMT 758). I co-wrote the supporting paperwork for the required curriculum*

- process. The result was 110 page proposal that was approved by the Senate and Provost..*
- Eshbach, L. (2014). Leadership and Project Management Minor Revisions. The main purpose of the proposal is to officially add the PROJ 351 – Project Communication - course and delete PROJ 420 – Managing Procurement - course from the Leadership and Project Management minor. Prior to this proposal, the minor was comprised of seven courses - the PROJ 351 was required for the PROJ 420 course, but was not officially identified as a course on the check sheet..*
- Eshbach, L. (2014). Leadership and Supervision Certificate Revisions. The purpose of the proposal is to add the MGMT 412 (Lean Culture and Skills Development) as a course option that students can take for the Leadership & Supervision Certificate. The course involves areas that most leaders and managers are concerned with: training and how to create a culture that sustains optimal performance. A variety of topics from developing a work standard (that can be used for future employee training), to developing employee training plans to how to productively handle interpersonal/employee issues/situations that can prevent work from being accomplished are included in the course..*
- Eshbach, L. (2014). MGMT 305, MGMT 422, and MGMT 492 Course Revisions. This proposal includes changes for the MGMT 305, MGMT 422, and MGMT 492 courses. The MGMT 305 changes include a revised course name, description and outcomes. The MGMT 422 revisions include a course title name change. The MGMT 492 course includes a name change and pre-requisite change..*
- Eshbach, L., Marion, D., Lyman, S. B. (2013). Operations and Supply Management Major Modifications. The Operations and Supply Management (OSM) program was reviewed during the 2012-13 APR cycle. Several suggestions from our advisory board and the APR committee were provided during the process. It was recommended that we review our program against the benchmark programs in the state, redesign where appropriate and look at ways to successfully promote our program. The revisions included a lean systems focused curriculum. The MGMT 432 (Lean Logistics and Supplier Development) new course was included in the proposal. The course will be offered during Spring 2014 semester.*
- Eshbach, L. (2013). Lean Systems Minor. The Lean Systems minor is designed to deliver a comprehensive education of how to apply lean concepts to various industries: e.g. banks, nonprofits, offices, hospitals, restaurants, manufacturing. The classes prepare individuals to lead, manage, and evaluate a continuous improvement system. Students will acquire the skills of applying the lean principles in a complex work environment. This cutting edge approach will provide graduates with highly sought-after capabilities to improve operational & financial performance and monitor growth within any type of organization. The new course, MGMT 422 (Lean Accounting), was developed as part of the proposal. This course will be offered during Spring 2014 semester..*
- Eshbach, L., Marion, D. (2012). Lean Systems Certificate. The Lean Systems certificate specifically integrates the Lean concepts (process efficiency), Six Sigma (process quality), and leadership techniques (employee centric) to assist the organization in achieving and sustaining optimal employee and organization/operational performance. Two new courses were developed as part of the proposal - MGMT 402 (Six Sigma Process Management) and MGMT 412 (Lean Culture and Skills Development). These courses were successfully offered during Spring 2013 semester..*
- Eshbach, L. (2011). Leadership and Supervision Certificate The Leadership & Supervision certificate proposal included three modifications: a certificate title change, catalog description*

change and the addition of four class options for students (MGMT 373 Human Resource Management MGMT 474 Cases Strategy Workforce Trend, MGMT 491 Management Internship, and MGMT 492 Lean Service Enterprise Leadership) . Primarily, a 'Leadership and Supervision' title would replace the existing 'Supervision' certificate. The title and catalog description change would better represent the content covered in the revised certificate..

Refereed Journal Articles

Eshbach, L., Gilley, A., Kouider, E., Gilley, J. W. (2013). Gender Differences in Leading Change. *Center for Scholastic Inquiry*, 1(1), 104-124. www.csiresearch.com

Presentations Given

Eshbach, L., Short, K., FSU Leadership Week, "Top 10 Leadership Skills," Center for Leadership and Academic Services, Big Rapids, MI. (November 15, 2017).

Eshbach, L., Marion, D., "Lean Tools and Applications for Information Technology," FSU Information Technology Department, Big Rapids, MI. (January 26, 2017).

Eshbach, L. (Author & Presenter), North America Case Research Association (NACRA), "Lean Leadership at Audition Assembly: Is it Possible?," NACRA, Las Vegas, Nevada. (October 7, 2016).

Eshbach, L. (Author & Presenter), Levenburg, N. (Author & Presenter), North America Case Research Association (NACRA), "Adam's Ribs: An Adventure in Food Cartology," NACRA, Orlando, Florida. (October 8, 2015).

Eshbach, L. (Author & Presenter), Levenburg, N. (Author & Presenter), North America Case Research Association (NACRA), "Who's Next? Succession Planning At Royal Beginnings Bridal Shop," NACRA, Austin, TX. (October 22, 2014).

Eshbach, L. (Author & Presenter), Levenburg, N. (Author & Presenter), North America Case Research Association (NACRA), "Royal Beginnings - Supply Chain Decision Making in the Bridal Business," NACRA, Victoria, British Columbia. (October 17, 2013).

Eshbach, L. (Author & Presenter), Gilley, A. (Author), Kouider, E. (Author), Center for Scholastic Inquiry, "Gender Differences and Leading Change," Center for Scholastic Inquiry, Scottsdale, AZ. (April 17, 2013).

Eshbach, L., "How to Be Effective and Successful in the Workplace," Women in Technology RSO, Big Rapids, MI. (March 6, 2013).

Eshbach, L. (Author & Presenter), Grand Valley State University, L. N. (Author & Presenter), North America Case Research Association (NACRA), "Project Management at Tiger Metalbenders Inc.," North America Case Research Association (NACRA), Boston, MA. (October 25, 2012).

Eshbach, L., "Lean Systems in Healthcare," Allied Health - Sandra Cook's CLLS 465 Class, Big Rapids, MI. (December 7, 2011).

Eshbach, L. (Author & Presenter), N. L. (Author & Presenter), North America Case Research Association (NACRA), "Ferris Valley Foods: Corporate Governance and Responsibility," NACRA, San Antonio, TX. (October 13, 2011).

Eshbach, L., MGT 661 - Operations Management, "Lean Systems in Manufacturing and Service," Grand Valley State University, Grand Valley State University. (June 2011).

Eshbach, L., Health Care Strategic Applications, "Lean Systems in Healthcare," FSU, Big Rapids, MI. (March 2011).

Eshbach, L. (Author & Presenter), North America Case Research Association (NACRA), "City of Grand Rapids: Lean Times Require Lean Measures," NACRA, Gatlinburg, TN. (October 29, 2010).

Eshbach, L. (Author & Presenter), North America Case Research Association (NACRA), "Application of Lean Principles at the Grand Rapids Public Library," NACRA, Santa Cruz, CA. (October 29, 2009).

Media Contributions

Internet

College of Business Website. (August 3, 2017).

College of Business Website. (April 21, 2015).

College of Business Website. (February 20, 2015).

Contracts, Grants and Sponsored Research

Grant

Eshbach, L. (Principal), "TIMME Grant," Sponsored by TIMME- Academic Affairs, Ferris State University, \$750.00. (April 2010 - December 2010).

Eshbach, L., "NSF CCLI Phase 2 grant (award number 0618669) – June 2008," Sponsored by National Science Foundation, Federal (Non NIH), \$5,000.00. (April 2009 - July 2009).

Awards and Honors

Sabbatical, FSU. Awarded a sabbatical for the Spring 2018 semester to prepare 3 written cases and instructor manuals for publication. (April 2017).

Best Case of 2015 NACRA Conference - Bronze Award, North American Case Research Association. (October 10, 2015).

Outstanding Case in Corporate Governance - Honorable Mention. Case is awarded to the best case in corporate governance (in any discipline) as submitted and presented to the annual NACRA meeting. It is funded by The Directors College (Canada) of McMaster University, but is administered by NACRA. The award includes a first prize of \$1,000 plus an honorarium of \$500 to cover travel expenses to McMaster University where the winner will also present the case at a forum of The Directors College. The award also includes two honorable mentions - each worth \$500. Decision focused cases must deal with issues faced by a company's board of directors, such as transparency in governance, governance structures, corporate investment and disclosure, shareholder and shareholder relations, accountability, privacy and security, executive and board compensation, roles and responsibilities of board committees,

director independence, effective board management relations, board recruitment, role of the board chair or lead director, proxy voting, and stock options, North American Case Research Association. (October 22, 2011).

Best Case Award in Production/Operations/Supply Chain Management Track. Nominated and selected for Best Case Award in Production/Operations/Supply Chain Management Track at the NACRA 2009 conference., North America Case Research Association. (October 29, 2009).

Research in Progress

"Adam's Ribs: An Adventure in Food Cartology" (Writing Results).

Case and Instructor's Manual: Tired of working 14 hours a day as a sous chef at Crosswater Club in Sunriver, Oregon, Adam is contemplating being his own boss and starting his own food truck business (either Tex-Mex or Indian cuisine) in Bend, Oregon. Adam's wife, Mary, works at Whispering Winds in Bend, Oregon, as an executive chef. They are a newly married couple and are very cost-conscious with respect to personal expenses and saving. As such, they have about \$20,000 in savings that could be put towards the purchase of a new (not equipped) or used (fully equipped) food truck.

Although the region encourages an "entrepreneur-friendly" environment, Adam faces intense competition within the food truck industry in Bend, OR. There are a multitude of "established" food trucks in the area that serve local customers – approximately 120 in Bend. Despite the rivalry, Adam is still encouraged because, based on his research, there is not a Tex-Mex food truck in the Bend, OR, area. And, if he focused on Indian cuisine, he would offer different types of foods from the existing food truck. He believes that if he could overcome the fierce competitive factors, comply with the licensing and regulations as well as obtain enough cash to start the business, he could be successful. This would lead Adam and Mary to ultimately enjoying a more personal enriching lifestyle and exploring the exciting opportunities that the Bend, OR area has to offer.

The case provides a general overview of the factors involved in starting a new food truck business – location, demographics, customer preference, licensing/regulations, product branding and other personal related considerations.

"City of Grand Rapids: Lean Times Require Lean Measures" (Writing Results).

Case and Instructor's Manual: The longitudinal case study evaluates the Grand Rapids city government's implementation of municipal lean. The case also outlines the quantitative benefits (resource and time savings) realized by the execution of this lean project. The setting of priority goals and the performance measurement in achieving those goals are analyzed. The performance improvement tools used in evaluating the program's impact are fully defined and examined

"Implementing Lean Administration in the Grand Rapids Public Library System" (Writing Results).

Case and Instructor's Manual The case examines the application of lean principles used by a large municipal public library system to achieve process and cost efficiencies. These tools (i.e. value stream mapping, kanban, standardized work processes, visual factory, poke yoke and 5-Why problem solving tools) were successfully used to achieve cost and process based improvements within the organization.

"Lean Leadership at Audition Assembly: Is it Possible?" (Writing Results).

Case and Instructor's manual: A general overview of the factors involved in implementing lean in a manufacturing setting using a traditional, top-down management approach. It

evaluates the various lean tools and metrics used to assess progress with the application of lean manufacturing. Miller (plant manager) is exploring options to sustain its modest achievements, through the continuous improvement efforts of his two area managers, but also is seeking input, from the rest of his eight person management team, on how Audition could provide the most effective management support with leading future lean initiatives

"Project Management at Tiger Metalbenders, Inc." (Writing Results).

Case and Instructor's Manual: Set in the metro Detroit area, the Launch Engineer at a large automotive stamping plant must address the issue of why the completion times for designing and constructing dies vary across 18 stamped parts for four different vehicles. To add complexity, two of the vehicles were designed in North America for the North American market, and two of the vehicles were designed abroad and modified for the domestic market. The former used more locally sourced dies and the latter used more globally sourced ones. The firm's largest customer – and for which the vehicles were produced – was one of the world's largest automakers.

The case provides an opportunity for students to apply project management methods/concepts and statistical tools to evaluate a firm's performance, and identify if (and how) it should adopt changes to ensure that future projects are completed on schedule.

"Royal Beginnings: Buying for a Boutique" (Writing Results).

Anna and Jack Oleson, the owners of a full-service bridal shop in one of Michigan's Upper Peninsula's small communities were preparing for their annual six-hour trip to Chicago for the National Bridal Market. They would be making merchandise buying decisions for the upcoming season. However, this year's trip would be very different because the Olesons would be reevaluating previous suppliers and potentially selecting new ones. In operation for 23 years, the shop prided itself on offering a full range of services, including alterations by a full-time seamstress. While vendors' corporate headquarters were located in the U.S., their gowns were often manufactured overseas, primarily in China. After repeated "miscommunications" regarding deliveries, delivery failures, and suppliers' inflexibility regarding minimum order quantities for samples (i.e., unwillingness to grant concessions to smaller shops), the owners needed to reconceive their buying criteria and sourcing strategies.

"Who's Next? Succession Planning at Royal Beginnings Bridal Shop" (Writing Results).

Case and Instructor's Manual: Royal Beginnings' 67-year-old owner is eyeing retirement, and is beginning to contemplate alternatives for continuance of the business. All of the owner's children (now married, and with families of their own) reside hundreds of miles from the store, and the oldest grandchild (a granddaughter) is 14 years old – not a likely successor if the owner would like to retire within the next year or two. An expert seamstress and the owner's "right-hand girl" (a long-time employee) has expressed no interest in acquiring the business. Nor have any local businesspeople.

The case provides a general overview of retail operations within a small apparel (bridal and formal wear) shop, as well as insights into its market and the supplier's behavior. It focuses on succession planning in a business where there are no viable family successors.

SERVICE

University Service

Committee Member, Operations and Supply Management Annual Program Review. (December 2017 - Present).

Committee Member, Kasey Short Tenure Committee. (September 2017 - Present).

Committee Member, Aaron Madziar Tenure Committee. (September 2015 - Present).

Committee Member, Emily Fransted Tenure Committee. (September 2013 - Present).

Program Organizer, Operations and Supply Management (OSM) Program. (May 2013 - Present).

Academic Advising, College of Business. (September 2010 - Present).

Attendee, Graduation, FSU Commencement. (May 2010 - Present).

Committee Member, Project Management Faculty Search Committee. (April 2017 - May 2017).

Committee Member, College Curriculum Committee. (August 2013 - May 2017).

Committee Member, TIMME Travel Grant Committee. (August 2013 - May 2015).

Student Org Advisor (Professional Org), Business Professionals of America. (November 2012 - August 2014).

Committee Member, Management Faculty Search Committee. (April 2014 - May 2014).

Committee Member, Annual Program Review Committee. (August 2010 - August 2013).

Committee Member, Law Faculty Search Committee. (April 2013 - May 2013).

Quality Matters Presenter, Online Teaching and Learning Committee. (February 20, 2013 - February 21, 2013).

Faculty Trainer and Mentor, Blackboard Learn 9.1 Implementation Team. (September 1, 2011 - August 20, 2012).

Committee Member, Operations and Supply Management (OSM) Program Review. (December 1, 2011 - August 13, 2012).

Committee Member, HealthCare Systems Administration Search Committee. (March 2012 - June 2012).

Presenter, DECA. (January 2011).

Co-Editor, Management Newsletter. (March 2010 - August 2010).

Judge for Student Posters, Michigan Energy Conference. (April 2010).

Presenter, DECA. (January 2010).

Participant, College of Business Celebration Fest. (September 2009).

Professional Service

Editorial Review Board Member, Case Research Journal. (August 3, 2016 - Present).

Newsletter Editor, North American Case Research Association (NACRA). (October 2015 - Present).

Vice President of Communications, North American Case Research Association (NACRA). (October 2015 - Present).

Session Chair, North American Case Research Association (NACRA) 2017 Conference, Chicago, IL. (October 20, 2017 - October 21, 2017).

Track Organizer, North American Case Research Association (NACRA) 2017 Conference, Chicago, IL. (October 19, 2017).

Reviewer, Conference Paper, North America Case Research Association (NACRA). (July 2017).

Reviewer, Conference Paper, North America Case Research Association (NACRA). (July 2017).

Reviewer, Conference Paper, North America Case Research Association (NACRA). (July 2017).

Reviewer, Conference Paper, North America Case Research Association (NACRA). (July 2017).

Reviewer, Journal Article, Case Research Journal. (December 2016).

Track Organizer, North American Case Research Association (NACRA) 2016 Conference, Las Vegas, Nevada. (October 6, 2016).

Reviewer, Journal Article, Case Research Journal. (July 2016).

Reviewer, Journal Article, Case Research Journal. (April 2016).

Reviewer, Journal Article, Case Research Journal. (March 2016).

Reviewer, Journal Article, Case Research Journal. (December 2015).

Reviewer, Journal Article, Case Research Journal. (June 2015).

Reviewer, Journal Article, Journal of Critical Incidents. (June 2015).

Reviewer, Conference Paper, North America Case Research Association (NACRA). (June 2015).

Reviewer, Journal Article, Case Research Journal. (December 2014).

Reviewer, Journal Article, Case Research Journal. (June 2014).

Reviewer, Conference Paper, North American Case Research Association (NACRA). (June 2014).

Reviewer, Journal Article, Case Research Journal. (August 2013).

Reviewer, Journal Article, Center for Scholastic Inquiry. (July 2013).

Judge, Family Enterprise Case Competition, Burlington, VT. (January 9, 2013 - January 12, 2013).

Reviewer, Journal Article, Case Research Journal. (November 2012).

Reviewer, Journal Article, Case Research Journal. (November 2012).

Session Chair, Midwest Decision Science Institute, Grand Rapids, MI. (April 12, 2012 - April 14, 2012).

Reviewer, Conference Paper, North American Case Research Association (NACRA). (July 2011 - August 2011).

Reviewer, Conference Paper, North America Case Research Association (NACRA). (June 2010 - July 2010).

Public Service

Middle and High School Career and College Advisor, Algoma Christian School, Kent City, MI. (September 2012 - May 2015).

Consulting

Academic, Taught an accelerated MGMT 305 - Managerial Leadership - to Spectrum Hospital (Big Rapids) full-time employees. The 15 weeks of course material was delivered during a 6 week timeframe. The students are seeking to complete a Lean Systems certificate., Corporate Professional Development Building. (January 9, 2017 - February 13, 2017).

Academic, FSU Corporate and Professional Development Taught one 3 hour sessions of the Lean Systems segment of the Mini-MBA to Grand Rapids community leaders (managers, engineers, etc)., Woodridge Ferris Building - Grand Rapids, MI. (October 18, 2016).

Academic, Traverse City Chamber of Commerce. Taught one 3 hour session of the Lean Systems segment of the Mini-MBA to community leaders (entrepreneurs, managers, physicians, etc)., Traverse City, MI. (February 4, 2014).

Academic, Gentex Corporation . Taught two 3 hour sessions of the Lean Systems segment of the Mini-MBA to engineers and supervisors., Zeeland, MI. (January 22, 2014).

Awards and Honors

Service, University

Academic Advising Award, College of Business - Management Department. (August 2014).

Sytsma Faculty Excellence Award., College of Business. (April 22, 2014).

Anita L. Fagerman
Ferris State University
COB - Management
(231) 591-3162
Email: AnitaFagerman@ferris.edu

Education

PhD, Capella University, 2006.
Major: Organization & Management
Supporting Areas of Emphasis: Leadership specialization
Dissertation Title: Land Patents and Condemnation: Developing a Measure based on Organizational Learning in the United States Land Management System

MS, Purdue University, 1992.
Major: Applied Statistics

BS, Ferris State University, 1990.
Major: Applied Mathematics

Professional Positions

Academic - Post-Secondary

Faculty, Ferris State University. (2004 - Present).

Temporary - Full Time Instructor, Ferris State University. (August 2001 - August 2004).

Government

Trustee, Charter Township of Haring. (January 1, 2006 - November 2016).

Professional

Member, Fagerman Family Farms.

Co-owner, Calm Actions, LLC. (2001 - Present).

Co-owner, Functions of Metrology and Design, LLC. (1996 - 2003).

Quality Manager, Traverse City Products, Inc. (1994 - 2001).

Statistician/Quality Engineer, MascoTech Stamping Technologies, Inc. (1992 - 1994).

Licensures and Certifications

Certified Manager of Quality/Organizational Excellence (ASQ), ASQ. (October 20, 2001 - Present).

Quality Management Systems Associate Auditor, RABQSA/Exemplar Global. (October 2001 - Present).

Certified Quality Engineer (ASQ), ASQ. (June 1, 1996 - Present).

Certified ISO/TS16949 Supplier Auditor, AIAG. (December 12, 2013 - December 12, 2016).

Kaplan & Norton Balanced Scorecard Certified, Palladium Group, Inc. (July 9, 2009 - 2009).

Professional Memberships

International Taekwon Do Federation.

Michigan Association of Planning.

Michigan Townships Association.

United States Taekwon Do Federation.

Senior Member, Society of Manufacturing Engineers. (December 1, 1992 - Present).

Senior Member, American Society of Quality. (March 24, 1992 - Present).

American Statistical Association. (April 1, 1991 - Present).

Development Activities Attended

Webinar, "Risk Management as part of the Quality Management System," ASQ. (December 14, 2017).

Seminar, "AIAG's Exemplar Global- Certified ISO 9001:2015 Lead Auditor Training with AIAG IATF 16949:2016 Supplier Auditor Certification training," Ferris State University, PD Committee. (December 4, 2017 - December 8, 2017).

Continuing Education Program, "Lean Six Sigma Black Belt - EngineRoom," MoreSteam University & ASQ. (January 31, 2016 - December 31, 2016).

Training, "Blackboard Collaborate Training," Faculty Center for Teaching and Learning. (December 5, 2016).

One-on-one Training, "McGraw Hill - Practice Operations," McGraw Hill. (October 27, 2016).

Workshop, "Advising with MyDegree: Worksheet & Planner." (October 24, 2016).

Seminar, "ISO 9001:2015 Transition Training," ASQ, Traverse City, Michigan, USA. (September 21, 2016).

On-line training, "Transition Training & Assessment to ISO9001:2015," Exemplar Global College. (December 29, 2015 - December 31, 2015).

One-on-one Training, "McGraw Hill - Connect," McGraw Hill. (September 22, 2015).

Workshop, "2015 Michigan Performance Excellence Examiner Training for Site Visit," Michigan Performance Excellence Program, Lansing. (September 2, 2015).

Continuing Education Program, "Lean Office Simulation," Michigan Manufacturing Technology Center at NMC. (April 23, 2015).

Continuing Education Program, "2015 Senior Examiner Training," Michigan Performance Excellence Program. (April 1, 2015).

Continuing Education Program, "2015 Examiner Training," Michigan Performance Excellence Program. (March 19, 2015).

Seminar, "Atomic Learning," Faculty Center for Teaching and Learning. (February 20, 2015).

Webinar, "Respondus 4.0. Instructor Training. Create & Manage Exam Content," Respondus Inc. & Faculty Center for Teaching and Learning. (February 12, 2015).

Webinar, "Instructor Training: LockDown Browser and Respondus Monitor," Respondus Inc. & Faculty Center for Teaching and Learning. (February 11, 2015).

Webinar, "ISO/DIS 9001:2015 – Pushing for Continuous Improvement," ASQ Northern Michigan Section 1014. (February 5, 2015).

Webinar, "Instructor Training: Using the Respondus Test Bank Network to Quickly Create Online Exams," Respondus Inc. & Faculty Center for Teaching and Learning. (January 29, 2015).

Webinar, "ADOBE CONNECT Webinar," Clarix Technologies, Inc. (January 22, 2015).

Webinar, "Running meetings & webinars on Lync," Microsoft Office. (December 20, 2014).

Webinar, "Up and Running with Lync Online with David Rivers," Lynda.com. (November 27, 2014 - December 20, 2014).

Webinar, "Value Stream Integration Fundamentals Webinar Series: How to Setup Value Streams," SME. (December 5, 2014).

Webinar, "Customer Ongoing Training for Adobe Connect," Clarix Technologies. (December 1, 2014).

Webinar, "Adobe Connect 9.3 - What's New?," Clarix Technologies. (November 21, 2014).

Continuing Education Program, "5S Workplace Organization Simulation," Michigan Manufacturing Technology Center at NMC. (October 15, 2014).

Continuing Education Program, "Lean Manufacturing Simulation," Michigan Manufacturing Technology Center at NMC, Traverse City, Michigan. (June 13, 2014).

Continuing Education Program, "2014 Michigan Quality Council Senior Examiner Training," Ann Arbor, Michigan, United States. (April 2, 2014).

Continuing Education Program, "2014 Michigan Quality Council Examiner Training," Michigan Quality Council, Howel, Michigan, United States. (March 2014).

Seminar, "RABQSA-Certified ISO 9001 Lead Auditor Training with AIAG ISO/TS 16949 Supplier Auditor Certification training," AIAG, Southfield, Michigan. (December 9, 2013 - December 13, 2013).

Workshop, "Using Policies to Manage Your Township," Michigan Township Association, Gaylord,

Michigan. (December 3, 2013).

Continuing Education Program, "Certificate for Online Adjunct Teaching," MarylandOnline, Inc. & Faculty Center for Teaching and Learning. (October 2012 - December 2012).

Continuing Education Program, "Quality Matters," Faculty Center for Teaching and Learning. (September 2012 - November 2012).

Continuing Education Program, "2012 Michigan Quality Council Examiner Training," Michigan Quality Council, Howel, MI. (March 7, 2012).

Workshop, "Balckboard Learn 9.1 Training - Phase II," Faculty Center for Teaching and Learning. (February 15, 2012).

Workshop, "Balckboard Learn 9.1 Training - Phase I," Faculty Center for Teaching and Learning. (February 7, 2012).

Seminar, "Financial Management for Executives: Driving Value," Michigan State University, Eli Broad Graduate School of Management, Lansing, MI, USA. (January 11, 2012 - January 12, 2012).

Workshop, "2011 Michigan Quality Council Examiner Training for Site Visit," Michigan Quality Council, Howell, MI. (September 26, 2011).

Workshop, "Clarifying and Aligning Strategy," Palladium, Orlando, Florida, USA. (March 16, 2011).

Seminar, "Kaplan-Norton Master Class," Palladium, Orlando, Florida, USA. (March 14, 2011 - March 15, 2011).

Continuing Education Program, "2011 Michigan Quality Council Examiner Training," Michigan Quality Council, Howel,, Michigan, USA. (March 2, 2011).

Workshop, "Introduction to Transportation Asset Management," Michigan Transportation Asset Management Council; Michigan Tech: Center for Technology & Training; Wexford County Road Commission; Osceola County Road Commission; Missaukee County Road Commission; Michigan's Local Technical Assistance Program, Cadillac, MI. (December 16, 2010).

Workshop, "MyDegree Training," Ferris State University. (October 11, 2010).

Workshop, "Open Meetings Act," Michigan State University Extension, Cadillac, MI, Wexford. (September 30, 2010).

Workshop, "GRANT RESEARCH & EDUCATION SERIES: A Learning Community on Writing Successful Proposals," Ferris State University. (October 2009 - November 2009).

Workshop, "WebEx Training," Faculty Center for Teaching and Learning, Big Rapids, MI, USA. (April 15, 2009).

Continuing Education Program, "2009 Michigan Quality Council Examiner Training," Michigan Quality Council, Howell, MI, USA. (March 11, 2009 - March 12, 2009).

Seminar, "2008 Certification Boot Camp, Kaplan & Norton Balanced Scorecard Certification Program," Palladium Group, Inc., Lincoln, MA, USA. (December 9, 2008 - December 12, 2008).

Continuing Education Program, "2008 MBNQA Examiner Training," ASQ, NIST, MBNQA Program, Gaithersburg, MD, USA. (April 30, 2008 - May 2, 2008).

Leadership Development Activity, "FSU Leadership Development Program," Ferris State University, Big Rapids, MI, US. (September 20, 2007 - April 17, 2008).

Continuing Education Program, "2008 Michigan Quality Council Examiner Training," Michigan Quality Council, Howell, MI, USA. (March 12, 2008).

Book Discussion, "Book Discussion on How People Learn: Brain, Mind, Experience, and School," Faculty Center for Teaching and Learning, Big Rapids, MI, USA. (October 2007 - February 2008).

Workshop, "Get Web-Ready with Macromedia FlashPaper," Faculty Center for Teaching and Learning, Big Rapids, MI, US. (September 18, 2007).

Continuing Education Program, "2007 MBNQA Examiner Training," ASQ, NIST, MBNQA Program, Gaithersburg, MD, USA. (May 2, 2007 - May 4, 2007).

Continuing Education Program, "2007 Michigan Quality Council Examiner Training," Michigan Quality Council, Ann Arbor, MI. (March 22, 2007).

Book Discussion, "Book Discussion on Harry Boyte's Everyday Politics," Faculty Center for Teaching and Learning, Big Rapids, MI, US. (2005).

Workshop, "Critical Thinking Faculty Learning Community," Faculty Center for Teaching and Learning, Big Rapids, MI, US. (2005).

Workshop, "Learner-Centered Teaching Faculty Learning Community," FCTL, Big Rapids, MI, US. (2005).

Continuing Education Program, "2005 MBNQA Examiner Training," ASQ, NIST, MBNQA Program, MD, USA. (May 2005).

Tutorial, "Institute Review Board & Human Research testing," University of Miami School of Medicine, Miami, FL, US. (2004).

Continuing Education Program, "2004 MBNQA Examiner Training," ASQ, NIST, MBNQA Program, MD, USA. (May 2004).

Continuing Education Program, "2003 Michigan Quality Council Examiner Training," Michigan Quality Council, MI, USA. (March 2003).

Book Discussion, "Palmer Parker's 'The Courage to Teach'," Faculty Center for Teaching and Learning, Big Rapids, MI, US. (2002).

Workshop, "How to Teach Through Writing," Crossroads Writing Project/National Writing Project, Traverse City, MI, US. (2002).

Workshop, "Learner Centered Teaching," Faculty Center for Teaching and Learning. (2002).

Continuing Education Program, "2002 Michigan Quality Council Examiner Training," Michigan Quality Council, MI, USA. (March 2002).

Workshop, "Transition Training to ISO9000:2000," Detroit, MI, US. (2001).

Workshop, "ISO9000:2000 Lead Auditor Training," Detroit, MI, US. (2000).

TEACHING

Teaching Experience

Ferris State University

MGMT 370, Quality-Operations Mgmt, 15 courses.

MGMT 736, Lean Enterprise Systems, 3 courses.

MMBA 501, Personal Skills Development, 3 courses.

MMBA 612, Intro Performance Metrics, 3 courses.

MMBA 615, Quality Improvement Principles-Appl, 2 courses.

MMBA 710, Strategic Planning Systems, 2 courses.

MMBA 730, Customer Systems, 5 courses.

MMBA 760, Process Management Systems, 2 courses.

MMBA 799, Integrated Business Experience, 4 courses.

Non-Credit Instruction

Workforce Training: DOE, Michigan Technical Education Center (MTEC), 4 participants.
(November 2009 - December 2009).

Workforce Training: Problem Solving & FMEA, Michigan Technical Education Center (MTEC).
(June 2004 - August 2004).

Workforce Training: ISO 9000:2000, Michigan Technical Education Center (MTEC). (February
2003 - June 2003).

Workforce Training: QS9000, Michigan Technical Education Center (MTEC). (August 2002 - May
2003).

Workforce Training: SPC, Michigan Technical Education Center (MTEC). (December 2002 -
January 2003).

Directed Student Learning

Dissertation Committee Member, "Continuous Improvement Model for University Finance
Departments." (May 2009).

Advised: Michael Carson

Awards and Honors

Certified Online Instructor, Level 5, Ferris State University. (December 2012).

Certified Online Instructor - Level 4, Ferris State University. (March 2008).

SCHOLARSHIP AND RESEARCH

Published Intellectual Contributions

Conference Proceedings

Tower, S., Fagerman, A. L., Grennier, R. (2007). *Why We Can't Kumbaya, Group Hug, and Share the Same Lean Manufacturing Straw: Using Motivation Theories to Clarify and Minimize the Barriers to Positive Supply Chain Relations* (vol. 7). International Conference on Industry, Engineering: 2007 International Conference on Industry, Engineering, and Management Systems.

Other

Fagerman, A. L. *Land Patents and Condemnation: Developing a Measure based on Organizational Learning in the United States Land Management System* (vol. 3229504). UMI.

Presentations Given

Fagerman, A. L., Crossroads Writing Project/National Writing Project, "Best Teaching Practice," Crossroads Writing Project/National Writing Project, Traverse City, MI. (2003).

Contracts, Grants and Sponsored Research

Grant

Fagerman, A. L., "AIAG's Exemplar Global- Certified ISO 9001:2015 Lead Auditor Training with AIAG IATF 16949:2016 Supplier Auditor Certification training," Ferris State University, \$3,740.00. (April 13, 2017 - March 1, 2018).

Fagerman, A. L., "Lean Six Sigma Black Belt online, on demand training," Sponsored by ASQ, Ferris State University, \$2,790.00. (December 22, 2014 - January 31, 2016).

Fagerman, A. L., "RABQSA-Certified ISO 9001 Lead Auditor Training with AIAG ISO/TS 16949 Supplier Auditor Certification training," Sponsored by AIAG, Ferris State University, \$3,100.00. (December 9, 2013 - December 13, 2013).

Fagerman, A. L. (Principal), "Palladium Group Master Class & Workshop," Sponsored by Palladium Group, Ferris State University, \$4,575.00. (March 31, 2011 - March 9, 2012).

SERVICE

University Service

Committee Member, Ferris Foundation Gifts and Grants Committee. (2007 - Present).

Committee Member, Academic Program Review Committee - Criminal Justice Administration Program. (August 2016 - August 2017).

Committee Member, COB Promotion/Merit Committee. (September 2015 - May 2017).

Committee Member, Academic Senate. (August 2014 - May 2016).

Committee Member, University Graduate and Professional Council. (August 2010 - May 2016).

Committee Member, Academic Program Review Committee. (August 2013 - May 2015).

Committee Member, COB Promotion/Merit Committee. (September 2013 - May 2014).

Faculty Advisor, MBA Advisory Board. (August 2006 - May 2014).

Ex-Officio Committee Member, COB Curriculum Committee. (August 2010 - May 2013).

Committee Member, University Curriculum Committee. (August 2010 - May 2013).

Committee Chair, MBA Program. (August 2008 - May 2013).

Special Institutional Assignment, 2013 Michigan Graduate Education Day. (February 19, 2013).

Committee Member, COB Promotion/Merit Committee. (September 2010 - May 2012).

Special Institutional Assignment, 2012 Michigan Graduate Education Day. (March 29, 2012).

Committee Member, Task Force on Graduate Education. (October 2010 - May 2011).

Faculty Advisor, MBA Program Champion. (October 2009 - May 2011).

Nominator, COB Student Excellence Award Nominator. (March 2011).

Committee Member, Faculty Advisory Group for the Faculty Center for Teaching & Learning. (2006 - 2010).

Attendee, Meeting, HLC Steering Committee Report Reviewer. (March 2010 - May 2010).

Committee Chair, University Graduate and Professional Council. (August 2009 - May 2010).

Committee Chair, COB Curriculum Committee. (August 2008 - May 2010).

Committee Member, Academic Policy and Standards Committee. (September 2007 - May 2010).

Special Institutional Assignment, 2010 Michigan Graduate Education Day. (April 13, 2010).

Committee Member, Academic Program Review. (May 2008 - December 2009).

Committee Member, University Graduate and Professional Council. (2004 - 2009).

Committee Member, COB Decision Making Ad Hoc Committee. (August 2008 - May 2009).

Committee Member, Hiring Committee (Management faculty). (January 2009 - March 2009).

Nominator, COB Student Excellence Award Nominator. (February 2009).

Committee Member, Hiring Committee (Distance Librarian faculty). (August 2008 - October 2008).

Nominator/Presenter, COB Student Excellence Award Nominator. (February 2008).

Committee Member, COB ACBSP Professional Development Team Member. (2006 - 2007).

Attendee, Meeting, COB Leap Forward Workshop. (2006 - 2007).

Attendee, Meeting, Support MSN Program Accreditation Process. (October 2007).

Committee Member, Collaborative Meeting - MBA Design Certificate. (May 31, 2007).

Nominator/Presenter, COB Student Excellence Award Nominator. (February 2007).

Committee Member, Collaborative Meeting. (December 12, 2006).

Nominator/Presenter, COB Student Excellence Award Nominator. (February 2006).

Coordinator and Booth attendant, Cadillac Business Expo. (2005).

Committee Member, COB Leadership and Strategic Planning Committee. (2004 - 2005).

Attendee, Meeting, Small Group Discussion with President Eisler. (September 2005).

Attendee, Meeting, President's Task Force on Communication. (November 2004).

Judge, College Of Technology pumpkin contest. (October 2004).

Professional Service

Reviewer, Book, ASQ Quality Press, Milwaukee, Wisconsin. (January 31, 2017 - February 14, 2017).

Examiner, Michigan Performance Excellence Program, Southeast Michigan. (August 3, 2015 - November 6, 2015).

Reviewer, Book, ASQ Quality Press. (April 2015 - May 2015).

Reviewer, Book, ASQ Quality Press. (February 2013 - March 2013).

Reviewer, Book, ASQ Quality Press, Milwaukee, WI. (January 13, 2012 - February 17, 2012).

Examiner, Michigan Quality Council, Southeast Michigan. (2011).

Reviewer (QMS Item Review Committee), RABQSA. (January 2011 - April 2011).

Reviewer, Book, ASQ Quality Press, Milwaukee, WI. (April 2010).

Examiner, Michigan Quality Council, Ann Arbor, MI. (2007 - 2009).

ASQ (CMQ/OE Question Bank), Milwaukee, Wisconsin. (2008).

Reviewer, Book, ASQ Quality Press, Milwaukee, WI. (2008).

Examiner, MBNQA Program - NIST, Gaithersburg, Maryland. (2008).

ASQ (CQE Question Bank), Milwaukee, Wisconsin. (2007).

Judge, ASQ, International Team Excellence Award, Deerfield, IL. (2007).

ASQ (Course Reviewer), Milwaukee, Wisconsin. (July 2007 - October 2007).

Reviewer, Book, ASQ Quality Press, Milwaukee, WI. (2006).

Officer, Vice President, Northern Michigan Section of ASQ, Cadillac/Traverse City, MI. (2005).

Examiner, MBNQA Program - NIST, Gaithersburg, Maryland. (2004 - 2005).

Reviewer, Manuscript, ASQ Quality Press, Milwaukee, WI. (2003 - 2004).

Examiner, Michigan Quality Council. (2002 - 2003).

Public Service

Committee Member, Haring Charter Township Policy Committee. (2013 - November 2016).

Board Member, Haring Charter Township Board of Trustees. (2006 - November 2016).

Committee Member, Haring Charter Township Planning Commission. (2009 - August 2013).

Officer, Secretary, Haring Charter Township Planning Commission. (2005 - 2008).

Discussant, MSU Focus Group. (2007).

Committee Member, Haring Charter Township Planning Commission. (2004 - 2005).

Juror, Federal Grand Jury, Western District of Michigan. (2002 - 2003).

First Aid Instructor, American Red Cross. (2001 - 2002).

Consulting

Leelanau Industries, Traverse City, MI. (2003 - Present).

Saber Tool, Cadillac, MI. (2002 - 2017).

Steve B. Lyman
Ferris State University
COB - Management
(231) 591-2469
Email: StevenLyman@ferris.edu

Education

PhD, Michigan State University, 1993.
Major: Production & Operations Management

MS, Michigan State University, 1985.
Major: Packaging

BS, Michigan State University, 1979.
Major: Engineering

Professional Positions

Academic - Post-Secondary

Full Professor, Ferris State University, Management Department. (May 2002 - Present).

Assistant Professor, Eastern Michigan University, Interdisciplinary Technology Department:
Industrial Distribution Program. (August 2000 - April 2002).

Assistant Professor, Middle Tennessee State University, Marketing Department, MBA program.
(January 1993 - August 1994).

Graduate Assistant & Instructor, Michigan State University. (May 1988 - December 1992).

Professional

Purchasing & Materials Manager, TRW Commercial Steering Division. (January 1998 - August 2002).

Buyer and Supplier Development Engineer, TRW Commercial Steering Division. (August 1994 - January 1998).

Material Handling Engineer, General Motors Corporation. (March 1982 - July 1988).

Assistant Plant Manager & Materials Controller, Chivas Products Limited. (March 1979 - March 1982).

Licensures and Certifications

Certified Purchasing Manager, NAPM/ISM. (1999 - Present).

Certified Production and Inventory Manager, APICS. (1998 - Present).

Certified Quality Auditor, ASQ. (1996 - Present).

Lead Auditor, ISO 9000. (1996 - Present).

Professional Memberships

American Society of Quality.

Michigan Ski Industry Association. (June 2009 - Present).

Institute Of Supply Management. (August 2003 - Present).

National Association of Purchasing Management. (January 1995 - Present).

Track Chair, Society for Case Research. (July 2001 - December 2015).

Midwest Ski Area Association. (May 2009 - March 2015).

Northern Michigan Director, American Production and Inventory Control Society. (January 1997 - July 2014).

Decision Sciences Institute. (May 1991 - April 2005).

Development Activities Attended

Conference Attendance, "Lilly Educators Conference," Traverse City, Michigan, United States. (October 19, 2018 - October 21, 2018).

Workshop, "Crystal Mountain Lift Operator Training," Crystal Mountain, Thomsonville, MI, US. (November 3, 2017).

Conference Attendance, "Lilly Conference," FSU & CMU, Traverse City, MI. (October 16, 2014 - October 19, 2014).

Conference Attendance, "Lilly Conference," FSU & CMU, Traverse City, MI. (October 17, 2013 - October 19, 2013).

Conference Attendance, "Lilly Conference," FSU & CMU, Traverse City, MI. (September 20, 2012 - September 23, 2013).

Workshop, "Ferrisconnect Learn 9.1," FSU FCLT, Big Rapids, MI. (October 21, 2011).

Workshop, "Presentation Zen," FSU FCLT, Big Rapids, MI. (September 15, 2011 - October 13, 2011).

Conference Attendance, "Lilly North," FSU & CMU, Traverse City, MI. (September 22, 2011 - September 25, 2011).

Conference Attendance, "MSAA (Midwest Ski Area Association)," Devils Head Resort, WI. (August 7, 2011 - August 10, 2011).

Conference Attendance, "Lilly North," FSU & CMU, Traverse City, MI. (September 17, 2010 - September 19, 2010).

Workshop, "MSIA (Michigan Ski Industry Association)," Shanty Creek Resort, Mancelona, MI. (August 10, 2010).

Conference Attendance, "MSAA (Midwest Ski Area Association)," Shanty Creek Resort, 1826 Schuss Mountain Dr, Mancelona, Mi. (August 8, 2010 - August 10, 2010).

Conference Attendance, "MSAA (Midwest Ski Area Association)," Devils Head Resort, WI. (August 2, 2009 - August 5, 2009).

Workshop, "MSIA (Michigan Ski Industry Association)," Apple Mountain Resort, Midland, MI. (June 16, 2009).

Seminar, "Six Sigma," Steelcase, Grand Rapids, MI, US. (September 2008 - November 2008).

Conference Attendance, "Lilly North," FSU & CMU, Traverse City, MI. (September 17, 2008 - September 20, 2008).

Conference Attendance, "4th Annual Midwest Supply Chain Management Conference," Steelcase University, Grand Rapids, MI, US. (March 26, 2008).

Workshop, "Ferrisconnect block 10," FSU FCLT, Big Rapids, MI. (November 26, 2007 - December 16, 2007).

Workshop, "Innovative used of Technology in the Classroom," FSU FCTL, Big Rapids, MI. (September 19, 2007 - November 20, 2007).

Seminar, "Bargaining with Vendors and Suppliers," Grand Rapids, MI, US. (November 13, 2007).

Workshop, "Ferrisconnect Training (Bus 499)," FSU FCTL, Big Rapids, MI. (October 16, 2007 - November 12, 2007).

Conference Attendance, "Lilly North," CMU & FSU, Traverse City, MI. (October 1, 2007 - October 4, 2007).

Conference Attendance, "4th Annual Midwest Supply Chain Management Conference," Steelcase University, Grand Rapids, MI, US. (March 21, 2007).

Seminar, "WebCT Vista," FSU, Big Rapids, MI, US. (2006).

Workshop, "Faculty Self-Serve Banner In-Service Training," College of Business, FSU, Big Rapids, MI, US. (2006).

Seminar, "The Key to Successful Online Instruction Universal Design," FSU FCLT, Big rapids, MI. (December 6, 2006).

Workshop, "Delivering Video and Audio with Flash," FSU FCTL, Big Rapids, MI. (December 6, 2006).

Workshop, "Podcasting with Windows Movie maker," FSU FCTL, Bog Rapids. (November 11, 2006).

Workshop, "Self Serve Banner Training," FSU COB, Big Rapids, MI. (November 1, 2006).

Workshop, "Respondus 3.5," FSU FLCT, Big Rapids, MI. (September 27, 2006).

Conference Attendance, "2006 National WebCT Conference," Chicago, IL, US. (July 15, 2006 - July 18, 2006).

Seminar, "WebCT Vista Migration Training," FSU, Big Rapids, MI. (June 21, 2006 - June 26, 2006).

Conference Attendance, "3rd Annual Midwest Supply Chain Management Conference," Steelcase University, Grand Rapids, MI, US. (March 22, 2006).

Seminar, "Academic Advising Training," FSU, Big Rapids, MI, US. (2005).

Seminar, "Governmental and Educational Institution Application of Reverse Auctions," FSU Purchasing Group - Online Webcast, Big Rapids, MI, US. (2005).

Seminar, "Inventory Methods and Cycle Counting," Grand Rapids, MI, US. (September 13, 2005).

Workshop, "WebctDesigning Courses for Mixed Delivery," FSU, Big Rapids, MI. (August 2, 2005).

Seminar, "WebCT Design & Development for Online Teaching," FSU, Big Rapids, MI, US. (June 19, 2005 - June 23, 2005).

Conference Attendance, "2nd Annual Midwest Supply Chain Management Conference," Steelcase, Grand Rapids, MI, US. (March 23, 2005).

Seminar, "Six Sigma," Ice Mountain Plant, Big Rapids, MI, US. (December 2004).

Conference Attendance, "APICS Chapter - Professional Development Meetings," APICS, Grand Rapids, MI, US. (2003 - 2004).

Workshop, "Value Stream Mapping Training," Detroit, MI, US. (September 28, 2004 - September 29, 2004).

Conference Attendance, "Lilly North," Traverse City, MI. (September 22, 2004 - September 24, 2004).

Conference Attendance, "1st Annual Midwest Supply Chain Management Conference," Steelcase, Grand Rapids, MI, US. (April 28, 2004).

Workshop, "Student Advising-Tools and Approaches," Ferris State University. (March 20, 2003).

Workshop, "New Faculty Training seminars," CTLFD, Big Rapids, MI, US. (2002).

Seminar, "WebCT Training," FSU, Big Rapids, MI, US. (July 2002 - August 2002).

Awards and Honors

Outstanding RSO Campus Advisor, American Production and Inventory Control Society (APICS). (2007).

Outstanding RSO Campus Advisor, American Production and Inventory Control Society (APICS). (2003).

TEACHING

Teaching Experience

Ferris State University

BUSN 499, Integrating Experience, 3 courses.
HOMT 302, Ski Operations Management, 3 courses.
MGMT 301, Applied Management, 5 courses.
MGMT 302, Organizational Management, 4 courses.
MGMT 370, Quality-Operations Mgmt, 112 courses.
MGMT 371, Production & Operations Management, 5 courses.
MGMT 420, Small Business Consulting, 3 courses.
MGMT 430, Inventory & Materials Management, 1 course.
MGMT 488, Adv Management Cases-Problems, 22 courses.
MKTG 466, Purchasing, 8 courses.
MKTG 472, Supply Chain Management, 4 courses.

Directed Student Learning

Dissertation Committee Member, "In process." (December 2017 - Present).
Advised: Bill Smith

SCHOLARSHIP AND RESEARCH

Published Intellectual Contributions

Journal Articles

- Lyman, S. B. (2003). Supplier Classification Systems. *Inside Supply Management*, 14(7), 10-11.
- Jackson, D. R., Lyman, S. B., Taylor, D. K. (2002). Making SMI a Cost-Effective Initiative. *Inside Supply Management*.
- Jackson, D. R., Lyman, S. B., Taylor, D. K. (2002). SMI for the Little Guy. *Inside Supply Management*.
- Lyman, S. B., Dajalos, R. (2001). The Stockout Monster. *Performance Improvement Quarterly*, 11(6), 25.
- Lyman, S. B. (2000). The Impact of Stochastic Tool Life on Shop Performance: A Simulation Study. *Simulation*, 74(4), 207-218.

Other

Eshbach, L., Marion, D., Lyman, S. B. (2013). *Operations and Supply Management Major Modifications. The Operations and Supply Management (OSM) program was reviewed during the 2012-13 APR cycle. Several suggestions from our advisory board and the APR committee were provided during the process. It was recommended that we review our program against the benchmark programs in the state, redesign where appropriate and look at ways to successfully promote our program. The revisions included a lean systems focused curriculum. The MGMT 432 (Lean Logistics and Supplier Development) new course was included in the proposal. The course will be offered during Spring 2014 semester..*

Lyman, S. B., Rewers, C. L. (2006). *ISO 9000 and Supplier Ethics*. MBAA Conference.

Lyman, S. B. (2002). *How the Distributor Fits Into Lean* (9th ed., vol. 12, pp. 20-22). Chicago, IL: APICS – The Performance Advantage.

Lyman, S. B. (2001). *Nothing Runs Like A Deere* (pp. 73-92). Tempe, AZ: National Assoc Of Purchasing Managers.

Refereed Journal Articles

Lyman, S. B. (2002). How the Distributor Fits into Lean. *Performance Improvement Quarterly*, 12(8), 20.

Lyman, S. B. (2002). Supply Chain Management : A Strategic Perspective. *International Journal of Operations & Production Management*, 24(5), 115-131.

Lyman, S. B., Dajalos, R. (2001). Slaying the Stockout Monster. *Performance Improvement Quarterly*, 11(7), 12.

Lyman, S. B. (1994). The Impact of Transfer Batching on Family Based Scheduling in a Job Shop Manufacturing Cell. *International Journal of Production Research*, 32(12), 2777-2794.

Presentations Given

Lyman, S. B. (Author & Presenter), BHAA, Business and Health Administration Association, "Restoring Consumer Confidence in the Global Supply Chain," MBAA, Chicago, IL. (March 2008).

Rewers, C. L. (Author & Presenter), Lyman, S. B. (Author & Presenter), MBAA 2006 Conference, "ISO 9000 and Supplier Ethics," MBAA, Chicago, IL. (March 2006).

Lyman, S. B. (Author & Presenter), Rewers, C. L. (Author & Presenter), BHAA, Business and Health Administration Association, "Moral and Ethical Considerations Associated with Safeguarding the Public's Interest in Medical error Cases," MBAA, Chicago, IL. (March 2006).

Tymes, Jr., N., Hettiarachchy, J., Bolling, C. J., Cooper, M. C., Lyman, S. B., Lilly Conference North, "Capstone Model: Learning Community for Continuous Improvement," Traverse City, MI. (September 2004).

Lyman, S. B., Taylor, D. (Author), Jackson, D. (Author), Society of Case Research Annual Workshop, "VMI at Airmaster," SCR, Rockhurst University, Kansas, MO. (July 2004).

Lyman, S. B. (Author & Presenter), Hatch, M. (Author & Presenter), 32th Annual Decision Sciences Institute Meeting, "Moving Beyond Flow Charting to Value Stream Mapping," Decision Sciences Institute, San Francisco, CA. (November 2002).

Lyman, S. B., NAPM/APICS Saginaw Chapters meeting, "The Theory and Reality of Supplier Development," NAPM/APICS, Saginaw, MI. (November 2002).

Lyman, S. B. (Author & Presenter), Hatch, M. (Author & Presenter), 31th Annual Western Decision Sciences Institute Meeting, "Learning to Use Simulation in a Manufacturing Plant: A Case Study," Western Decision Sciences Institute, Las Vegas, NV. (April 2002).

- Lyman, S. B. (Author & Presenter), Hatch, M. (Author & Presenter), 31th Western Annual Decision Sciences Institute Meeting, "Value Stream Mapping: A Technique for Process Mapping," Western Decision Sciences Institute, Las Vegas, NV. (April 2002).
- Lyman, S. B. (Author & Presenter), Hatch, M. (Author & Presenter), Yee, S., 26th Annual Midwest Decision Sciences Institute Meeting, "Using Simulation to Model Library Operations: A Case Study," Midwest Decision Sciences Institute, Dearborn, MI. (April 2001).
- Lyman, S. B. (Author & Presenter), Hatch, M. (Author & Presenter), 25th Annual Midwest Decision Sciences Institute Meeting, "Changing a Company's Environmental Conditions to Support Lean Manufacturing: A Case Study," Midwest Decision Sciences Institute, Chicago, IL. (April 2000).
- Lyman, S. B. (Author & Presenter), Council of Logistics Management, "Plastic Returnable/Reusable Containers in the Automotive Industry: A Case Study," Big Rapids, MI. (October 1998).
- Lyman, S. B. (Author & Presenter), Tan, K. (Author & Presenter), 39th Mountain Plains Management Conference, "The Analysis of Stochastic Tool Life Distributions on Dispatching Procedures," Grand Junction, CO. (1997).
- Lyman, S. B. (Author & Presenter), Kannan, V. (Author & Presenter), Decision Sciences Institute, "A Comparison of Scheduling Heuristics in a Dual Resource Constraint Job Shop with Stochastic Tool Life," Wilmington, North Carolina. (February 1995).
- Lyman, S. B. (Author & Presenter), Decision Sciences Institute, "An Analysis of a Dual Resource Constraint Job Shop with a Stochastic Tool Life Constraint," Honolulu, Hawaii. (November 1994).
- Lyman, S. B. (Author & Presenter), Melnyk, S. (Author & Presenter), American Production and Inventory Control Society, "Tool Management and Control: Developing an Integrated Top Down Control Process," American Production and Inventory Control Society, San Antonio, TX. (October 1993).
- Lyman, S. B. (Author & Presenter), Melnyk, S. (Author & Presenter), Decision Sciences Institute, "An Analysis of Finite Tool Life and Scheduling Heuristics in a Dual Resource Constraint Job Shop," Decision Sciences Institute, Lansing, MI. (April 1993).
- Lyman, S. B. (Author & Presenter), Decision Sciences Institute, "A Comparison of Family and Job Based Priority Schemes in Group Scheduling," Decision Sciences Institute, San Francisco, CA. (November 1992).
- Lyman, S. B. (Author & Presenter), Kannan, V. (Author & Presenter), Decision Sciences Institute, "An Analysis of the Effects of Lot Splitting in Group Scheduling," Decision Sciences Institute, Kansas City, MO. (November 1992).
- Lyman, S. B. (Author & Presenter), Melnyk, S., Decision Sciences Institute, "Analysis of Varying Labor Efficiency and Capability in a Dual-Constrained Job Shop: A Simulation Experiment," Decision Sciences Institute, Indianapolis, IN. (May 1991).
- Lyman, S. B., Council of Logistic Management Conference, "Plastic Returnable/Reuseable Containers in the Automotive Industry: A Case Study," Council of Logistic Management, Boston, MA. (October 1988).

Awards and Honors

Best Conference paper, MBAA (Midwest Business Association). (March 24, 2008).

Won best overall theme paper at BHAA Conference, MBAA (Midwest Business Association). (March 2006).

SERVICE

University Service

Committee Member, COB Core Committee. (September 2017 - Present).

Student Recruiter, College of Business-Management Department. (November 2010 - Present).

Student Recruiter, College of Business-Management Department. (February 2010 - Present).

Committee Member, Management Department Tenure Review Sub-Committee. (2015 - 2018).

Committee Member, Business Administration Academic Program Review. (September 2017 - November 2018).

Committee Member, Sabbatical Leave. (September 2015 - November 2015).

Committee Member, Sabbatical Review. (September 2012 - May 2015).

Committee Member, Sabbatical Leave. (September 2014 - November 2014).

Task Force Member, Operations & Supply Management Academic Program Review. (October 2012 - November 2013).

Committee Member, Promotion and Merit Applications. (January 2013 - February 2013).

Committee Member, Academic Program Review - Operations and Supply Management Program. (2011 - 2012).

Committee Member, CPC Comment Professional Component. (September 2009 - May 2012).

Committee Member, Promotion and Merit Applications. (January 2012 - February 2012).

Committee Chair, Management Department Tenure Review Sub-Committee. (2007 - 2010).

Committee Member, Business Core APR. (September 2009 - November 2010).

Committee Member, Management Department Tenure Review Sub-Committee. (2007 - 2009).

Faculty Advisor, Operations and Supply Management Program. (2002 - 2009).

Faculty Search Committee. (January 2009 - April 2009).

Committee Member, College of Business College Curriculum Committee. (2007 - 2008).

Faculty Advisor, FSU APICS - Registered Student Organization. (2007 - 2008).

Committee Member, Management Department Tenure Review Sub-Committee. (2007 - 2008).

Committee Chair, Academic Program Review - Operations and Supply Management Program. (2006 - 2007).

Faculty Advisor, FSU APICS - Registered Student Organization. (2006 - 2007).

Committee Member, MBA Search Committee. (2006 - 2007).

Committee Member, Operations Management Search Committee. (2006 - 2007).

Committee Member, Strategic Management Search Committee. (2006 - 2007).

Committee Member, WebCT Committee. (2006 - 2007).

Committee Member, Judicial Services. (2003 - 2007).

Student Placement, College of Business-Management Department. (September 2003 - May 2007).

Attendee, Meeting, APICS Professional Development Meetings. (2005 - 2006).

Attendee, Meeting, NAPM. (2005 - 2006).

Attendee, Meeting, NAPM. (2005 - 2006).

Organizer/Chair, Operations Management Advisory Board Meeting. (2005 - 2006).

OSM Internships. (2005 - 2006).

Attendee, Meeting, Region 14 Meetings in Chicago. (2005 - 2006).

Chairperson, Search Committee - Off Campus Faculty. (2005 - 2006).

APICS Tours. (2003 - 2006).

Committee Member, Business Administration Academic Program Review. (August 2006 - November 2006).

Committee Chair, Operations & Supply Management Academic Program Review. (September 2005 - November 2006).

Faculty Mentor, College of Business PBO (Prof. Business Organizations). (2005).

Attendee, Meeting, APICS Professional Development Meetings. (2004 - 2005).

Attendee, Meeting, NAPM. (2004 - 2005).

Attendee, Meeting, NAPM. (2004 - 2005).

Organizer/Chair, Operations Management Advisory Board Meeting. (2004 - 2005).

Attendee, Meeting, Region 14 Meetings in Chicago. (2004 - 2005).

Committee Member, College of Business Recruiting and Retention Team. (2003 - 2005).

Co-chair, Faculty Search Committee. (December 2004 - April 2005).

Attendee, Meeting, College of Business Dawg Days. (February 2005).

Chairperson, Judicial Services Review Board. (January 2005).

Team leader, Capstone Simulation. (2004).

Faculty Mentor, College of Business PBO (Prof. Business Organizations). (2004).

Attendee, Meeting, APICS Professional Development Meetings. (2003 - 2004).

Student Placement. (2003).

Faculty Advisor, FSU APICS - Registered Student Organization. (2002 - 2003).

Faculty Mentor, College of Business PBO (Prof. Business Organizations). (September 10, 2003).

Attendee, Meeting, College of Business Dawg Days. (April 19, 2003).

Professional Service

Member, Midwest Ski Area Association, MI. (August 2009 - Present).

Member, Institute of Supply Management (ISM), Grand Rapids, MI. (September 2004 - Present).

Member, Society for Case Research. (September 2003 - Present).

Director, American Production and Inventory Control Society, Grand Rapids, MI. (September 2003 - 2010).

Reviewer, Conference Paper, Decision Sciences Institute. (2007).

Reviewer, Ad Hoc Reviewer, Society for Case Research. (2007).

Director, American Production and Inventory Control Society, Grand Rapids, MI. (September 2006 - May 2007).

Public Service

Member, Big Rapids PTO, Big Rapids, MI. (November 2016 - Present).

Track Organizer, Boyne Mountain Student Tour. (February 2010).

Training, Bohning Archery. (January 2007 - May 2007).

Auditing of quality systems, Wolverine World Wide, Big Rapids and Rockford, MI. (September 2006 - May 2007).

Training, Tubelinte, Inc. (2003).

Consulting

Academic, McGraw Hill. (November 2015 - July 2017).

For Profit Organization, Crystal Mountain, Thompsonville, MI. (January 2016 - February 2017).

For Profit Organization, Barton Melloy, Grand Rapids. (August 2015).

For Profit Organization, Caberfae Peaks Ski & Golf Resort. (August 2011 - December 2011).

For Profit Organization, Bohning Archery. (January 2007 - May 2007).

For Profit Organization, Wolverine World Wide, Rockford, MI. (September 2006 - May 2007).

For Profit Organization, Hayworth, Big Rapids. (September 2005 - May 2006).

For Profit Organization, Tubelite, Inc., Reed City, MI, US. (September 2003 - December 2003).

Awards and Honors

Service, Professional

Ten year Service Award, American Association of Operations Management (APICS). (December 2007).

Dr. David Marion Ph.D.
Ferris State University
COB - Management
(231) 591-3164
Email: DavidMarion@ferris.edu

Education

Certificate, Kepner-Tregoe, 2017.
Major: Critical Thinking

Certificate, 2016.
Major: Train the Trainer

Certificate, PMI International, 2007.

PhD, University of Toledo, 2006.
Major: Manufacturing Management with Engineering
Dissertation Title: The Antecedents and Consequences of a Strategic Orientation Leading to Innovation, Organizational Structure and Competitive Advantage

MS, University of Toledo/Kettering, 2004.
Major: Manufacturing Management with Engineering

BME, University of Toledo, 2001.
Major: Mechanical Engineering

Professional Positions

Academic - Post-Secondary

Professor, Ferris State University. (August 2012 - Present).

Associate Professor, Ferris State University. (August 2009 - August 2012).

Assistant Professor, Ferris State University. (August 2006 - August 2009).

Professional

Maintenance Supervisor, General Motors Corporation. (May 2000 - August 2001).

Accessories Engineer (contract), Mazda Corporation. (March 1999 - January 2001).

Design Engineer (contract), Plastics Technologies. (March 1996 - January 1999).

Project Manager, Modern Tools, Inc. (August 1993 - February 1996).

Licensures and Certifications

Project Management Professional, PMI. (January 2013 - December 2013).

Project Management Professional, PMI. (January 2012 - December 2012).

Project Management Professional, PMI. (January 2011 - December 2011).

Project Management Professional, PMI. (January 2010 - December 2010).

Project Management Professional, PMI. (January 2009 - December 2009).

Project Management Professional, PMI. (January 2008 - December 2008).

Project Management Professional, PMI. (June 2007 - May 2008).

Professional Memberships

Academy of Management.

APICS.

Decision Sciences.

Member, Institute of Industrial Engineers. (August 2014 - Present).

WMPMI. (December 2007 - Present).

Member, Southern Management Association. (June 2009 - June 2010).

Development Activities Attended

Regular Meetings, "APICS," APICS, Grand Rapids, MI, USA. (January 2017 - December 2017).

Regular Meetings, "APICS," APICS, Grand Rapids, MI, USA. (January 2016 - December 2016).

Regular Meetings, "APICS," APICS, Grand Rapids, MI, USA. (January 2015 - December 2015).

Conference Attendance, "IIE Engineering Lean Six Sigma Conference 2015," IIE, Atlanta, Georgia, USA. (September 30, 2015 - October 2, 2015).

Regular Meetings, "APICS," APICS, Grand Rapids, MI, USA. (January 2014 - December 2014).

Regular Meetings, "APICS," APICS, Grand Rapids, MI, USA. (January 2013 - December 2013).

Conference, "Lean Accounting Summit," Lean Accounting Association, Orlando, Florida, USA. (October 17, 2013 - October 21, 2013).

Regular Meetings, "APICS," APICS, Grand Rapids, MI, USA. (January 2012 - December 2012).

Conference Attendance, "Meetings," Project Management Institute, Grand Rapids, MI, US. (January 2011 - December 2011).

Regular Meetings, "APICS," APICS, Grand Rapids, MI, USA. (January 2011 - December 2011).

Conference Attendance, "Meetings," Project Management Institute, Grand Rapids, MI, US. (January 2010 - December 2010).

Regular Meetings, "APICS," APICS, Grand Rapids, MI, USA. (January 2010 - December 2010).

Regular Meetings, "APICS," APICS, Grand Rapids, MI, USA. (January 2010 - December 2010).

Conference Attendance, "ACBSP Conference for accreditation," ACBSP, Los Angeles, California, USA. (June 24, 2010 - June 29, 2010).

Continuing Education Program, "Leadership Class," Michigan State University, Lansing, MI, USA. (May 6, 2010 - May 7, 2010).

Conference Attendance, "Midwest Decision Sciences," Decision Sciences, University of Toledo, Toledo, Ohio, USA. (April 22, 2010 - April 24, 2010).

Conference Attendance, "Meetings," Project Management Institute, Grand Rapids, MI, US. (January 2009 - December 2009).

Regular Meetings, "APICS," APICS, Grand Rapids, MI, USA. (January 2009 - December 2009).

Workshop, "Michigan Quality Council," Baldrige, Howell, MI, USA. (September 23, 2009).

Conference Attendance, "ACBSP Conference for accreditation," ACBSP, San Antonio, Texas, USA. (June 25, 2009 - June 29, 2009).

Continuing Education Program, "Innovation," Orion Group/Michigan State University, Lansing and Grand Rapids, MI, USA. (May 27, 2009 - May 28, 2009).

Continuing Education Program, "Process Mapping," Orion Group/Michigan State University, Lansing and Grand Rapids, MI, USA. (April 28, 2009 - April 29, 2009).

Conference Attendance, "NC State Undergraduate Assessment Symposium," NC State, Durham, North Carolina, USA. (April 23, 2009 - April 26, 2009).

Conference Attendance, "Midwest Decision Sciences," Decision Sciences, Miami University, Miami, Ohio, USA. (April 15, 2009 - April 18, 2009).

Workshop, "Michigan Quality Council," Baldrige, Howell, MI, USA. (March 11, 2009 - March 12, 2009).

Conference Attendance, "Meetings," Project Management Institute, Grand Rapids, MI, US. (January 2008 - December 2008).

Ongoing Meetings, "APICS," APICS, Grand Rapids, MI, USA. (January 2008 - December 2008).

Seminar, "Green Belt Training," SteelCase University, Grand Rapids, MI, USA. (September 29, 2008 - November 17, 2008).

Conference Attendance, "Lilly Conference," International Teaching and Learning Institute, Traverse City, MI, USA. (September 19, 2008 - September 21, 2008).

Conference Attendance, "NC State Undergraduate Assessment Symposium," NC State, Durham, North Carolina, USA. (April 25, 2008 - April 28, 2008).

Conference Attendance, "Midwest Decision Sciences," Decision Sciences, Penn State Erie, Erie, Pennsylvania, USA. (April 16, 2008 - April 19, 2008).

Workshop, "Class Trip to Burke Porter Machinery," Burke Porter Machinery/Skytron, Grand Rapids, MI, USA. (April 11, 2008).

Workshop, "Class Trip to Skytron," Ferris/Skytron, Grand Rapids, MI, USA. (March 28, 2008).

Conference Attendance, "Supply Chain Management," APICS/SteelCase University, Grand Rapids, MI, USA. (March 19, 2008).

Continuing Education Program, "Michigan Quality Council," Baldrige, Howell, MI, USA. (March 10, 2008 - March 12, 2008).

Workshop, "Class Trip to Johnson Controls," Ferris/Johnson Controls, Holland, MI, USA. (March 6, 2008).

Workshop, "Class Trip to Inwin Seating," Ferris/Inwin Seating, Grand Rapids, MI, USA. (February 28, 2008).

Conference Attendance, "APICS Student Case Competition," APICS, Chicago, Illinois, USA. (February 15, 2008 - February 16, 2008).

Workshop, "Class Trip to Gentex," Ferris/Gentex, Holland, MI, USA. (February 8, 2008).

Conference Attendance, "Meetings," APICS, Grand Rapids, MI, US. (2007).

Conference Attendance, "Meetings," Project Management Institute, Grand Rapids, MI, US. (2007).

Seminar, "Professional Development Day for Project Management Institute," Holland, MI, US. (2007).

Conference Attendance, "Decision Sciences," Decision Sciences, Pheonix, Arizona, USA. (November 16, 2007 - November 20, 2007).

Workshop, "Project Management Day," PMI Institute local chapter, Grand Rapids, MI, USA. (October 8, 2007).

Workshop, "MQC Site Visit," Baldrige/MQC, Detroit, MI, USA. (June 17, 2007 - June 22, 2007).

Workshop, "Class Trip to Johnson Controls," Ferris/Johnson Controls, Holland, MI, USA. (June 14, 2007).

Workshop, "Michigan Quality Council," Baldrige, Ann Arbor, MI, USA. (May 4, 2007).

Conference Attendance, "Midwest Decision Sciences," Decision Sciences, Northern Illinois University, Chicago, Illinios, USA. (April 12, 2007 - April 14, 2007).

Workshop, "Michigan Quality Council," Baldrige, Ann Arbor, MI, USA. (March 21, 2007 - March 22, 2007).

Continuing Education Program, "PMP Training Camp," Project Management Training Insitute,

Southfield, MI, USA. (December 17, 2006 - December 21, 2006).

TEACHING

Teaching Experience

Ferris State University

BUSN 499, Integrating Experience, 27 courses.
MGMT 370, Quality-Operations Mgmt, 3 courses.
MGMT 402, Six Sigma Process Management, 4 courses.
MGMT 422, Cost Mgmt. for Lean Systems, 4 courses.
MGMT 746, Business Strategy & Innovation, 3 courses.
MGMT 751, Lean Six Sigma, 1 course.
MGMT 753, Lean Cost Management, 1 course.

Non-Credit Instruction

Guest Lecture, FSU, 10 participants. (February 2015).

Guest Lecture, COB Management Department, 25 participants. (August 2010).

Directed Student Learning

Directed Individual/Independent Study. (January 2017 - May 2017).

Advised: Khalid Alshamrani, Megan Cameron, Leanne Leuthard, Austin Los, Monica VandenBerg

Directed Individual/Independent Study. (August 2015 - December 2015).

Advised: Joshua Baird, Joe Dockery, Dakota Dotson, Zackery Place, Benjamin Roels

Lean course, "Six Sigma." (August 31, 2015 - December 12, 2015).

Advised: Dakota Dotson

Directed Individual/Independent Study. (May 2015 - June 2015).

Advised: Mabel Acosta, Kelly Davis, Patrick Sheldon

Directed Individual/Independent Study. (August 2014 - December 2014).

Advised: Logan England, Andrea Kriz

Directed Individual/Independent Study, "Six Sigma for Operations." (June 2014 - July 2014).

Advised: Alisa Dyroo, Mona Adronski

Directed Individual/Independent Study. (May 2014 - June 2014).

Advised: Kollin Bergeron, Alisa Deroo, Taryn Laverdiere

Directed Individual/Independent Study. (January 2014 - May 2014).

Advised: Mona Alaskandrani

Directed Individual/Independent Study, "Project Management." (August 2012 - December 2012).

Advised: Katie O'Briant, Johnathan Wybo

SCHOLARSHIP AND RESEARCH

Published Intellectual Contributions

Other

Marion, D. (in press). Six Sigma. *MBA Program*.

Marion, D. (in press). Lean Cost Management. *MBA Program*.

Marion, D. (in press). Strategy and Innovation. *MBA Program*.

Marion, D. (in press). Lean Six Sigma. *Course in Lean Certificate*.

Marion, D. (in press). *Cost Management for Lean Systems*.

Eshbach, L., Marion, D., Lyman, S. B. (2013). *Operations and Supply Management Major Modifications. The Operations and Supply Management (OSM) program was reviewed during the 2012-13 APR cycle. Several suggestions from our advisory board and the APR committee were provided during the process. It was recommended that we review our program against the benchmark programs in the state, redesign where appropriate and look at ways to successfully promote our program. The revisions included a lean systems focused curriculum. The MGMT 432 (Lean Logistics and Supplier Development) new course was included in the proposal. The course will be offered during Spring 2014 semester.*

Marion, D. (in press). *Six Sigma Process Management*.

Eshbach, L., Marion, D. (2012). *Lean Systems Certificate. The Lean Systems certificate specifically integrates the Lean concepts (process efficiency), Six Sigma (process quality), and leadership techniques (employee centric) to assist the organization in achieving and sustaining optimal employee and organization/operational performance. Two new courses were developed as part of the proposal - MGMT 402 (Six Sigma Process Management) and MGMT 412 (Lean Culture and Skills Development). These courses were successfully offered during Spring 2013 semester.*

Presentations Given

Marion, D. M., Shanghai Delegate, "Lean Techniques," Ferris State University, Flite. (September 28, 2017).

Eshbach, L., Marion, D., "Lean Tools and Applications for Information Technology," FSU Information Technology Department, Big Rapids, MI. (January 26, 2017).

Marion, D. M., Faculty Presentation, "What effect does gasoline have on our economy?," Ferris State University, COB. (February 5, 2015).

Marion, D. (Author & Presenter), Alspach, S. (Author & Presenter), MacEachron, S. (Author & Presenter), Lilly Conference, "I Can See You and/but You Can't Hide": Differences and Challenges in Teaching the Same Course in both Face-to-Face and Fully Online Formats," Traverse City Michigan. (November 2012).

Marion, D. (Author & Presenter), ACBSP conference, "What is Assessment Doing for Us?,"

- ACBSP, Los Angeles, CA. (June 26, 2010).
- Marion, D. (Author & Presenter), Midwest Decision Sciences, "Factors Influencing the Adoption of Lean Techniques," Midwest Decision Sciences, Toledo, OH. (April 23, 2010).
- Marion, D. (Author), Academy of Management, "Evidence of Managerial Malpractice: An empirical Study," Academy of Management, Chicago, IL. (August 2009).
- Marion, D. (Author & Presenter), APICS Grand Rapids, "Innovation Management," APICS Grand Rapids, Grand Rapids, MI. (April 2009).
- Marion, D. (Author), Midwest Decision Sciences, "how Negotiation Strategies Effect Supplier Relations," Erie, PA. (April 16, 2008).
- Marion, D. (Presenter), Statistics Club, "Presentation for Statistics Club." (2007).
- Marion, D. (Author & Presenter), Midwest Decision Sciences, "Strategic Organization in Small Business that Leads to a Competitive Advantage.," Chicago, IL. (June 2007).
- Marion, D. (Author & Presenter), Lim, J. (Author & Presenter), Jeong, J. S. (Author & Presenter), DSI National Conference, "An Integrated Conceptual Model of B2B E-Commerce Adoption Intention," DSI, San Fransisco, CA, US. (November 2005).
- Marion, D. (Author & Presenter), DSI National Conference, "Manufacturing verseus Design Dominance in the New Product Development Process," DSI, San Fransisco, CA. (November 2005).
- Marion, D. (Presenter), Lim, J., Hawaii International Conference on Business, "A Study of the Relationship Between Market Orientation and Strategic Orientation," Wakiki, Hawaii. (April 2005).
- Marion, D. (Author & Presenter), Midwest Decision Sciences, "Computer Integrated Systems and Inter-Organizational Systems Effect on New Product Development," Toledo, OH. (April 2005).
- Marion, D. (Author & Presenter), Liao, K. (Author & Presenter), Lim, J. (Author & Presenter), Midwest Decision Sciences, "Degree of Outsourcing in Prototyping Function in Global Supply Chain Management," Toledo, OH. (April 2005).
- Marion, D. (Author & Presenter), DSI National Conference, "A Strategic Profile for Service Firms," DSI, Boston, MA, US. (November 2004).
- Marion, D. (Author & Presenter), DSI National Conference, "Virtual Teams: Allocentrism or Idiocentrism? Which Will Perform Better in a Computer-Mediated Environment?," DSI, Boston, MA, US. (November 2004).
- Marion, D. (Author & Presenter), Midwest Decision Sciences, "Will Vendor Selection Go the Way of E-Procurement?," Cleveland, OH. (April 2004).

Media Contributions

TV

- FSU TV. (April 2010).

Contracts, Grants and Sponsored Research

Contract

Marion, D., "Human Resource Survey," Sponsored by Whirlpool Corporation, Private. (April 2009 - August 2015).

Grant

Marion, D., "What Can LEAN Do For Us?," Ferris State University, \$2,500.00. (2007).

Research in Progress

"Lean Adoption" (On-Going).

This is ongoing from previous work as each year I survey the same group to build longitudinal data.

"Managerial Malpractice" (On-Going).

Continued from previous paper completed with the Gilleys. Paper was submitted and rejected with conditions, looking to rewrite.

"The Focus of Lean Adoption" (On-Going).

Research is developing from the work with Whirlpool Corporation into what promotes the adoption of Lean practices.

SERVICE

University Service

Committee Member, Standard and Policy Committee. (August 2017 - Present).

Committee Member, Faculty Senate. (April 2015 - Present).

Student Org Advisor (Professional Org), APICS. (February 2015 - Present).

Committee Chair, Tenure for COB MGMT. (August 2013 - Present).

Committee Member, UCC. (August 2013 - Present).

Committee Member, APR. (September 2016 - May 2017).

Committee Member, FFA Executive Board. (May 2012 - October 2016).

Sole operator of position, SMA. (September 2012 - July 2016).

Committee Member, College Curriculum Committee. (August 2015 - May 2016).

Committee Member, College Curriculum Committee. (August 2014 - May 2016).

Committee Member, VP of HR hiring committee. (February 2016 - March 2016).

Committee Chair, Hiring Committee. (September 2014 - June 2015).

Committee Chair, CCC. (August 2014 - May 2015).

Committee Member, Faculty Senate member. (August 2011 - May 2015).

Committee Member, University Senate. (August 2010 - May 2015).

Committee Chair, Hiring Committee. (January 2015 - April 2015).

Committee Member, Tenure/Promotion. (October 2014 - February 2015).

Committee Member, College Curriculum Committee. (August 2013 - May 2014).

Vice President, University Senate. (May 2013 - May 2014).

Committee Member, Executive Senate. (August 2011 - May 2013).

Committee Chair, COB Assessment Committee. (November 2008 - May 2013).

Committee Chair, APR. (March 2012 - September 2012).

Committee Chair, Standard and Policy Committee. (August 2011 - July 2012).

Committee Member, Executive Senate. (August 2010 - July 2011).

Committee Member, Faculty Senate member. (August 2010 - July 2011).

Committee Member, Standard and Policy Committee. (August 2010 - July 2011).

Aid faculty with assessment, COB Assessment Mentor. (September 2010 - May 2011).

Chairperson, Athletic Advisory Committee. (September 2007 - September 2010).

Committee Member, Energy Conference Steering Committee. (September 2009 - August 2010).

Committee Member, Faculty Senate member. (August 2009 - July 2010).

Committee Member, AAAC Committee. (September 2007 - May 2010).

Accreditation movement. (2007 - 2008).

Committee Member, College of Business Core Committee. (2006 - 2007).

Attendee, Meeting, Honors Dinner. (2006 - 2007).

Professional Service

Reviewer, Conference Paper, Southern Management Association. (2015).

Reviewer, Conference Paper, Academy of Management. (2014).

Reviewer, Conference Paper, Academy of Management. (2013).

Reviewer, Conference Paper, National DSI Conference. (2011).

Reviewer, Conference Paper, National DSI Conference. (2010).

Reviewer, Conference Paper, National DSI Conference. (2009).

Chairperson, Midwest DSI Conference. (April 2009).

Reviewer, Conference Paper, National DSI Conference. (2007).

Reviewer, Book, Project management text. (2007).

Public Service

Board Member, Rockford Community Swim Team, Rockford, Michigan. (March 2010 - May 2016).

Committee Member, Habitat for Humanity, Big Rapids, Michigan. (November 2012 - June 2014).

Chairperson, Rockford Parent Booster Organization, Rockford, Michigan. (August 2009 - August 2010).

Treasurer, Rockford Parents Swim Association, Rockford, Michigan. (March 2008 - March 2010).

Reader/Discussant, 4th Grade Classes. (2007).

Reader/Discussant, 4th Grade Classes. (2007).

Judge, Stanwood School Innovation Day, Stanwood, MI. (2007).

Consulting

Academic, Spectrum Health Big Rapids and Reed City, Big Rapids and Reed City. (May 2016 - Present).

For Profit Organization, Haworth Corporation, Big Rapids MI. (March 20, 2014 - Present).

For Profit Organization, WW Williams, Columbus, Ohio. (July 14, 2016 - September 8, 2016).

For Profit Organization, Whirlpool Corporation, All Physical Plants. (May 2015 - July 2015).

For Profit Organization, Whirlpool Corporation, All Physical Plants. (June 2014 - November 2014).

For Profit Organization, Whirlpool Corporation, All Physical Plants. (June 2013 - November 2013).

For Profit Organization, Whirlpool Corporation, All Physical Plants. (June 2012 - November 2012).

For Profit Organization, Whirlpool Corporation, All Physical Plants. (June 2011 - November 2011).

For Profit Organization, Whirlpool Corporation, All Physical Plants. (June 2010 - November 2010).

For Profit Organization, Whirlpool Corporation, Benton Harbor. (May 2009 - October 2009).

For Profit Organization, Dana Corporation. (2003).

Awards and Honors

Service, University

COB Award for faculty Engagement, COB. (April 26, 2016).

Dr. Carol L. Rewers Dr.
Ferris State University
COB - Management
(231) 591-2447
Email: CarolRewers@ferris.edu

Education

PhD, Capella University - College of Business, 2007.
Major: Organization and Management

MS, Michigan State University, 1992.
Major: Labor and Industrial Relations

MS, Western Michigan University, 1989.
Major: Public Health Administration

BS, Ferris State University, 1986.

AAS, Ferris State University, 1985.
Major: Nursing

Professional Positions

Academic - Post-Secondary

Associate Professor, Ferris State University. (August 2012 - August 2014).

Assistant Professor, Ferris State University. (August 25, 2008 - August 2012).

Assistant Professor, Davenport University. (August 2007 - August 2008).

Adjunct faculty and full-time temporary positions in the School of Allied Health and College of Business., Ferris State University. (August 2002 - May 2005).

Adjunct Faculty, Lansing Community College, Health Careers Department. (April 1989 - January 1991).

Professional

Assistant Vice President & Interim V.P., Patient Care Services Operations, Sparrow Health System. (March 1998 - August 2002).

Department Manager, Women's Pavilion, Sparrow Health System. (March 1995 - August 2002).

Clinical Director of Medical and Oncology Services/Patient Care Director, Middle Tennessee Medical Center. (March 1994 - March 1995).

Assistant Department Manager - Women's Pavilion, Sparrow Hospital. (September 1992 - February 1994).

Data Manager - Department of Medicine, Michigan State University. (September 1989 - June 1992).

Director of Professional Services, Upjohn Healthcare Services. (May 1988 - May 1989).

Staff Nurse - Medical Unit and Intensive Care Units, Ingham Medical Center. (June 1986 - 1988).

Other

Professor, Ferris State University. (August 2014 - Present).

Licensures and Certifications

CPR AED Certificate. (October 2015 - Present).

Professional Memberships

Society for Human Resource Management. (2009 - Present).

Academy of Management. (September 2008 - Present).

Institute for Supply Management. (September 2008 - Present).

Mecosta Osceola Human Resource Management Association. (2010 - 2016).

Society of Case Research. (2010 - 2013).

American College of Healthcare Executives. (2004 - 2010).

American Society of Public Administrators. (2002 - 2004).

American Organization of Nurse Executives. (2001 - 2002).

Michigan Organization of Nurse Executives. (1999 - 2002).

Development Activities Attended

Continuing Education Program, "CPR & AED Re-Certification," American Red Cross, Big Rapids, MI. (April 3, 2018).

Continuing Education Program, "First Aid Re-Certification," American Red Cross, Big Rapids, MI. (April 3, 2018).

Conference Attendance, "MIOSHA Record Keeping and Costs of Injury," State of Michigan, Midland, Michigan, US. (March 13, 2018).

Conference Attendance, "Supervisor's Role in Safety and Health Training," State of Michigan: MIOSHA, Lansing, Michigan, US. (February 27, 2018).

Conference Attendance, "MIOSHA- General Industry Training," State of Michigan, Cadillac, MI, US. (January 30, 2018 - February 1, 2018).

Seminar, "MIOSHA - When MIOSHA Enforcement Visits," State of Michigan, Traverse City, MI, US. (January 2018).

Workshop, "Open Educational Resources (OERs)," FCTL, Big Rapids, Michigan, U.S. (September 26, 2017 - December 14, 2017).

Seminar, "Active Shooter Safety Training," MIOSHA/Kent Country Club, Grand Rapids, Michigan. (May 9, 2017).

Conference Attendance, "Lilly Conference," Traverse City, Michigan. (October 2015).

Workshop, "Learning Community: Banner HR," FSU. (September 30, 2014).

Workshop, "West Michigan Total Internship Management Workshop," Grand Rapids, MI. (May 22, 2014 - May 2014).

Conference Attendance, "HR Day Professional Networking Conference," Michigan Society For Human Resource Management. (June 2013).

Conference Attendance, "MBAA International Conference," Chicago, IL, USA. (March 2012 - 2012).

Conference Attendance, "MiBug- A Collaborative Group For Michigan Blackboard Users." (April 2012 - 2012).

Conference Attendance, "Spring Learning Institute." (April 2012 - 2012).

Seminar, "Blackboard 9.1 Phase I & II Training." (August 2012 - 2012).

Quality Matters Training Course. (September 2012 - November 2012).

Conference Attendance, "Professional Career & Leadership Conference." (September 28, 2011 - 2011).

Workshop, "McGraw Hill Connect/FSU Training," McGraw Hill. (December 8, 2011 - 2011).

"American Red Cross CPR & AED Re-Certification." (November 2011).

"Blackboard- Learn Training -6 Hr. Training." (November 2011).

"McGraw Hill Connect Training." (September 2011).

"Spring Learning Institute." (April 2011).

"Society of Case Research - Summer Case Writing Workshop," Hanover, Indiana. (July 2010).

"Scholarship of Teaching and Learning Academy & SOTL Initiative.," FCTL, Ann Arbor, Michigan. (May 2010).

"Dr. Rochona Majumdar, India as an Emerging World Power.," FSU - Globalization Committee. (April 15, 2010).

"Kun Shik Cho – Former President & CEO – Hyundai Globalization Presentation.," FSU - Globalization Committee. (April 14, 2010).

"Globalization & Manufacturing Presentation," FSU - Globalization Committee. (January 14, 2010).

"Participated in Jossey-Bass OTL Conference," FSU- FCTL. (October 7, 2009).

"Digital Measures Workshop." (September 29, 2009).

"Course-Mapping Workshop, COB." (August 2009).

"New Faculty Advising Workshop," FSU, Big Rapids, MI, USA. (July 22, 2009).

New Faculty Transition Programs, "Multiple Programs 2008-2009," FSU, Big Rapids, MI, USA. (August 2008 - April 2009).

"New Advisor Training," FSU, Big Rapids, MI, 49307. (April 28, 2009).

"Spring Learning Institute." (March 2009).

Grant and Research Education Series, 2008-2009, "Multiple Sessions -Grant and Research Education Series, 2008-2009," FSU, Big Rapids, MI, USA. (September 2008 - March 2009).

"FerrisConnect Online Training," FSU, Big Rapids, MI, USA. (2008).

"Six Sigma Training," Ice Mountain, Stanwood, MI, US. (2005).

Conference Attendance, "Legal Mandates - HIPPA." (2003).

"Grant Writing Seminar." (2003).

Awards and Honors

Sparrow Nurse Manager of the Year, Sparrow Hospital. (2002).

Leadership Recognition, Gallup Survey. (2001).

Associate of the Month. (June 1997).

Nurse of the Year Nomination, Ingham Medical Center. (1988).

TEACHING

Teaching Experience

Ferris State University

MGMT 370, Quality-Operations Mgmt, 12 courses.

MGMT 373, Human Resource Management, 15 courses.

MGMT 385, Recruitment and Selection, 8 courses.

MGMT 491, Management Internship, 4 courses.

SCHOLARSHIP AND RESEARCH

Published Intellectual Contributions

Conference Proceedings

Rewers, C. L. (2013). *GEO Group, Inc. North Lake County Correctional Facility*. Chicago: Society

of Case Research.

Rewers, C. L., Brotherton, T. (2012). *Strike or No Strike? Negotiating a Faculty Labor Contract - From Management's Perspective During Tough Economic Times - a Management's perspective*. SCR Winter Conference proceedings.

Other

Lyman, S. B., Rewers, C. L. (2006). *ISO 9000 and Supplier Ethics*. MBAA Conference.

Refereed Journal Articles

Brotherton, T., Rewers, C. L. (2013). Strike or No Strike? Negotiating a University Labor Contract - During Tough Economic Times. *Journal of Critical Incidents*, 6.

Brotherton, T., Rewers, C. L. (2011). PlanetHospital.com - Medical Tourism Website at a Crossroad. *Annual Advances in Business Cases*.

Brotherton, T., Rewers, C. L. (2011). Strike or No Strike? Negotiating a Faculty Labor Contract - From Management's Perspective During Tough Economic Times. *SCR Winter Conference proceedings*.

Brotherton, T., Rewers, C. L. (2009). PlanetHospital.com - Medical Tourism Website at a Crossroad.

Presentations Given

Rewers, C. L. (Author & Presenter), Society for Case Research -Co-Author & Presentator, "Survey of SCR Membership Report & Future Data Collection," Chicago. (2012).

Rewers, C. L., Society for Case Research - Session Discussant, "The \$600 Billion Bailout; HTC Building Competitive Advantage in the Mobile Handset Business." (2012).

Rewers, C. L., Society for Case Research - Session Chair, "Am I Truly Self-Employed? Barry Minkow Insider Trading Fraud. Drinks to Die For," Chicago. (March 2012).

Rewers, C. L., Society of Case Research - Annual Conference, "GEO Group," Chicago. (March 2012).

Rewers, C. L., Society for Case Research - Discussant, "HIPPA Exposure; What kind of discipline and follow up training is appropriate for fire fighters; etc.," Chicago. (March 2012).

Rewers, C. L. (Presenter), Mecosta Osceola Human Resource Association, "Understanding Student Internships." (January 2012).

Rewers, C. L., MBAA, "Presentation - Reviewer," SCR, Chicago, IL. (March 24, 2011).

Rewers, C. L., Case Discussant- SCR, "Reviewer and Case Discussant," SCR, Hanover Indiana. (July 17, 2010).

Rewers, C. L., Society of Case Research - Summer Workshop, "PlanetHospital.com," SCR, Hanover Indiana. (July 16, 2010).

- Rewers, C. L., MBAA - Presenter, "Using Cases as Online Teaching Tools: Do's and Don'ts from the Trenches," SCR, Chicago, Ill. (March 26, 2010).
- Rewers, C. L., MBAA, "Society of Case Research Board Mtg. Developed and co-presented a 2012 Conference Proposal," SCR, Chicago, Ill. (March 24, 2010).
- Rewers, C. L., COB Colloquium, "Promoting the Integration of Theory and Practice: Classroom Exercises that Cultivate Student Learning.," COB, COB. (November 5, 2009).
- Rewers, C. L., Lilly North Conference, "Promoting creativity in the classroom - What does "Hot Wheels" have to do with business layout design strategies?," FCTL, Traverse City. (September 25, 2009).
- Rewers, C. L., Lilly North Conference, "Utilizing government resources to enhance the learning outcomes for Human Resource students that support effective business practices," FCTL, Traverse City. (September 25, 2009).
- Rewers, C. L. (Author & Presenter), Lyman, S. B. (Author & Presenter), MBAA 2006 Conference, "ISO 9000 and Supplier Ethics," MBAA, Chicago, IL. (March 2006).
- Lyman, S. B. (Author & Presenter), Rewers, C. L. (Author & Presenter), BHAA, Business and Health Administration Association, "Moral and Ethical Considerations Associated with Safeguarding the Public's Interest in Medical error Cases," MBAA, Chicago, IL. (March 2006).
- Rewers, C. L., Backpack to Briefcase Conference, "Motivational Speaker," FSU. (2002).

Contracts, Grants and Sponsored Research

Grant

- Rewers, C. L., "MIOSHA Training," Sponsored by Faculty Development Grant, Ferris State University, \$1,292.00. (January 10, 2018 - January 2019).
- Rewers, C. L., "Faculty Center for Teaching and Learning," Sponsored by Ferris State University, Ferris State University, \$800.00. (October 2015).
- Rewers, C. L. (Principal), "Academic Service Learning Project," Sponsored by Experiential Learning Grant, Ferris State University, \$200.00. (September 2014 - May 2015).
- Rewers, C. L. (Principal), Sponsored by Diversity mini grant, \$4,500.00. (April 2012 - May 2013).
- Rewers, C. L., "Timme Grant MBAA International Conference," Sponsored by Faculty Center for Teaching and Learning. (November 2011).

Other

- Rewers, C. L., "Society of Case Research Summer Workshop," Sponsored by Timme Travel. (July 15, 2010).
- Rewers, C. L., "Scholarship of Teaching and Learning Academy & SOTL Initiative," Sponsored by FCTL. (May 17, 2010).
- Rewers, C. L., "9th Annual Lilly Conference," Sponsored by FCTL. (September 24, 2009).

Awards and Honors

Best Case Study for 2010-2011, Journal of Annual Advances in Business Cases. (June 2011).

Best Paper Award- 2008, Business and Health Administration Association (BHAA). (April 2008).

Research in Progress

"GEO Group, Inc. North Lake Correctional Facility's" (Writing Results).

"Strike or No Strike: Management Perspective".

"Strike or No Strike: Negotiating a Faculty Labor Contract from a Management Perspective During Tough Economic Times".
Management perspective case study research

SERVICE

University Service

Committee Member, Business Administration APR Program Review.

Committee Member, General Business -APR.

General Business Advisory Board Member.

Committee Member, Human Resource APR Program Review.

Committee Member, Operations Advisory Board Member.

Committee Member, Operations Management APR Program Review.

Transfer Course Equivalency Reviewer, College of Business-Management Department. (2012 - Present).

Student Academic Advising, College of Business-Management Department. (2009 - Present).

Chairperson, Sabbatical Committee - College of Business. (September 2017 - September 2018).

Committee Member, Sabbatical Committee - University Wide. (September 2017 - September 2018).

Committee Member, HR Advisory Board Member. (2017).

Committee Member, Tenure Committee - David Brown. (September 2015 - 2017).

Committee Member, Tenure Committee - Ted Mattis. (September 2014 - 2017).

Chairperson, Human Resource -APR. (February 2017 - November 2017).

Committee Member, Sabbatical Committee. (September 2016 - August 2017).

Requested by PGM Dept to Serve as MGMT Faculty Participant, PGM - Site Visit Accreditation. (2016).

Resume Critiquing, Career Services "Coffee & Resume Critiquing". (2014 - 2015).

Faculty Advisor, Mgmt Faculty Internship. (June 2013 - 2015).

Adjunct Faculty Reviewer, COB-Management Department. (2009 - 2015).

Student Org Advisor (Professional Org), SHRM Student RSO. (2009 - 2015).

Committee Member, Scholarship Committee. (September 2014 - May 2015).

Committee Member, Diversity Committee. (August 2014 - May 2015).

E-Board Member, Ferris Faculty Association. (September 2013 - May 2015).

Committee Member, College Curriculum Committee. (August 2012 - 2014).

Volunteer, College of Business. (2009 - 2014).

Faculty Advisor, TORCH Committee. (2011 - 2013).

Faculty Mentor, International Center: Changsha Social Work College - (May 2013).

COB Graduation Commencement Ceremonies. (2012).

Committee Member, Academic Program Review - Business Administration. (2011 - 2012).

Committee Member, Academic Program Review - Operations Management. (2011 - 2012).

Student Org Advisor (Non-Professional Org), TORCH Program. (2011 - 2012).

Committee Member, University Curriculum Committee. (August 2011 - May 2012).

Prospective Student Visit - Faculty Host. (April 2012).

COB Graduation Commencement Ceremonies. (December 2011).

Taskforce -GE Wellness Rubrics. (2011).

Academic Program Review – Human Resource Management. (2010 - 2011).

Committee Member, General Business Advisory Board Member. (2010 - 2011).

Committee Member, John P. Nelson Memorial Scholarship Committee. (2010 - 2011).

Committee Member, Senate Health and Promotions/Substance Abuse Prevention Committee. (2010 - 2011).

Student Org Advisor (Professional Org), SHRM. (2010 - 2011).

First Impressions Volunteer. (August 2011).

Committee Member, Academic Senate, FSU. (August 2009 - August 2011).

HR Advisory Board Member. (May 2011).

Committee Member, HR Advisory Board Member. (May 2011).

Academic Program Review – General Business Associate Degree. (2010).

Committee Member, Innovative Breakthroughs Entrepreneurial Annual Scholarship Committee. (2010).

Committee Member, Management Department Newsletter. (2010).

Committee Member, Management Department Scholarship Committee Member. (2010).

Committee Member, Academic Program Review - Finance. (2009 - 2010).

Committee Member, Academic Program Review – Finance. (2009 - 2010).

Chairperson, Academic Senate Bylaw and Charter Review Committee. (2009 - 2010).

Committee Member, Douglas O. Froelich Memorial Endowment Fund Scholarship Committee. (2009 - 2010).

Committee Member, Faculty Research Committee. (2009 - 2010).

Committee Member, Finance APR Program Review. (2009 - 2010).

Committee Member, FSU's Tot's Place Development Center. (2009 - 2010).

COB Graduation Commencement Ceremonies. (May 2010).

Attendee, Meeting, Ms. Nontombi Naomi Tutu, breakfast reception and "South Africa: Healing the Wounds of Racism" lecture. (March 2, 2010).

District II DECA Conference Judge. (2009).

First Impressions Volunteer. (2009).

Attendee, Meeting, MISHRM. 21st Annual State Conference. (October 2009).

Committee Member, Alumni Relations Board of Directors, FSU. (2001 - 2005).

Professional Service

Reviewer, Conference Paper, Academy of Management - Reviewer & Emergency Reviewer. (2009 - Present).

Board of Advisors, Career Services - Advisory Board, Big Rapids, Michigan. (2015 - 2018).

Conference-Related, MSU - SHRM Conference, East Lansing, Michigan. (February 23, 2018).

Reviewer, Conference Paper, Academy of Management - Reviewer. (January 2018 - February 22, 2018).

Conference-Related, MIOSHA -General Industry Training, Cadillac, MI. (January 30, 2018 - February 1, 2018).

Conference-Related, MIOSHA - When MIOSHA Enforcement Visits, Traverse City, MI. (January 10, 2018).

Critical Incident Review -SCR. (March 25, 2010 - 2013).

Society of Case Research Summer Workshop Reviewer/Case Discussant. (July 17, 2010 - 2010).

Academy of Management - Reviewer and Emergency Reviewer. (2009 - 2010).

Timme/Faculty Center for Teaching and Learning Grant for 9th Annual Lilly Conference on College and University Teaching, Traverse City, Michigan. (September 24, 2009 - 2009).

Academy of Management - Reviewer and Emergency Reviewer. (2008 - 2009).

Guest Speaker, Labor Relations/Negotiations for College of Allied Health, Big Rapids, Mi. (April 2004).

Committee Member, Centerpoint Conference Planning Committee. (1997 - 2001).

Committee Member, Current and Future Concepts in Women's Health Planning Committee. (2000).

Committee Member, Oncology Conference Planning Committee. (1994).

Public Service

Helped HR with the onboarding of new summer staff., Interlochen Center for the Arts, Traverse City, Michigan. (June 12, 2017).

Student Chaperone, Big Rapids Public Schools - Soaring Eagle, Mt Pleasant, Michigan. (June 2, 2017).

Fundraising Event Volunteer - BRMS, Big Rapids Public Schools, Big Rapids, Michigan. (May 30, 2017).

Volunteer, Riverview Elementary. (September 2014 - June 2015).

BRMS State Band Performance -Volunteer Participant. (2012).

Mecosta Osceola Intermediate School District - Mock Interviews Evaluator. (February 14, 2012 - 2012).

Riverview Elementary, Volunteer. (2012).

Organized FSU's SHRM RSO to participate in local school district mock interview, MOISD - Mock

Interview - Evaluator. (2011).

Committee Member, Children's Miracle Network Planning Committee. (1999 - 2000).

Co-Chair, United Way, Planning Committee. (1998 - 2000).

Committee Member, United Way, Planning Committee. (1998 - 2000).

Consulting

Academic, Ferris Community Business Alliance, Big Rapids, MI. (October 2011 - Present).

Academic, MOHRA Meetings & Presentation, Big Rapids, MI. (September 2010 - Present).

Dr. Leslie Sukup
Ferris State University
COB - Management
(231) 591-2044
Email: LeslieSukup@ferris.edu

Education

DBA, Saint Leo University, 2017.
Major: Management

MBA, Saint Leo University, 2011.
Major: Business Administration

BS, Saint Leo University, 2008.
Major: Computer Information Systems

Professional Positions

Academic - Post-Secondary

Adjunct Professor, Lenoir-Rhyne University. (August 2016 - August 2017).

Teaching Assistant, Saint Leo University. (August 2015 - October 2015).

Military

Superintendent, Air Force Agency for Modeling and Simulation, United States Air Force. (October 2015 - August 2017).

Master Resilience Trainer, United States Air Force. (January 2014 - August 2017).

Instructor, United States Air Force. (January 1997 - August 2017).

Superintendent, Wing Executive Staff, United States Air Force. (August 2012 - October 2015).

Superintendent, Director's Action Group, United States Air Force. (September 2008 - August 2012).

Instructor - Action Officer Courses, United States Air Force. (May 2011 - July 2012).

Instructor - Air Force One Advance Agent Training,, United States Air Force. (May 2005 - November 2008).

Superintendent, Presidential Flight Support, United States Air Force. (May 2005 - October 2008).

Noncommissioned Officer in Charge, Wing Information Support, United States Air Force. (May 2003 - May 2005).

Noncommissioned Officer in Charge, Executive Support, United States Air Force. (February 2002 - May 2003).

Noncommissioned Officer in Charge, Information Management, United States Air Force. (September 2000 - February 2002).

Information Manager, Advanced Command, Control, Communication and Intelligence Systems Product Group, United States Air Force. (January 1997 - September 2000).

Operations, Information Management Specialist, United States Air Force. (October 1993 - January 1997).

Licensures and Certifications

Professional Manager Certification, Community College of the Air Force. (2012 - Present).

Certified Knowledge Manager (CKM), KMPPro Virginia Beach, VA. (2011 - Present).

CompTIA A+ce, CompTIA. (2015 - July 9, 2021).

CompTIA Sec+ ce, CompTIA. (2015 - July 9, 2021).

Professional Memberships

Production and Operations Management Society. (September 2017 - Present).

Online Learning Consortium. (February 2016 - Present).

American Veterans. (January 2014 - Present).

Air Force Sergeants Association. (March 1998 - Present).

National Association of Female Executives. (January 2015 - June 2015).

Secretary, Fraternal Order of Police Auxiliary. (June 2011 - December 2014).

Airlift/Tanker Association. (August 2012 - December 2013).

Military Intelligence Association. (January 2000 - December 2000).

Development Activities Attended

Faculty Fellowship, "Junior Faculty Fellows Program for 2018-2019," FCTL, Big Rapids, MI, USA. (August 27, 2018 - August 16, 2019).

Online Seminar, "An Integrated Approach to Student Exams," Magna Online Courses. (July 13, 2018).

Online Seminar, "How Can I Assess Critical Thinking with Objective Items," Magna Online Courses. (July 13, 2018).

Online Seminar, "How Can I Assess Critical Thinking with Student-Created Work?," Magna Online Courses. (July 13, 2018).

Online Seminar, "Building a Tougher Student: Applying the Research on Intellectual Development," Magna Online Courses. (July 12, 2018).

Online Seminar, "How Can Grading Policy Options Influence Student Learning?," Magna Online Courses. (July 12, 2018).

Online Seminar, "How Can I Encourage Students to Stay Connected with Course Content After Class?," Magna Online Courses. (July 12, 2018).

Online Seminar, "How Do I Design Effective Combinations of Gamified Elements to Encourage Deeper Learning?," Magna Online Courses. (July 12, 2018).

Online Seminar, "What Activities and Assignments Promote Critical Thinking," Magna Online Courses. (July 12, 2018).

Online Seminar, "What is the Best Way to Grade Participation?," Magna Online Courses. (July 12, 2018).

Online Seminar, "What Key Concepts Improve Student Learning and Memory?," Magna Online Courses. (July 12, 2018).

Online Seminar, "Aligning Student and Faculty Perceptions of Rigor," Magna Online Courses. (July 9, 2018).

Online Seminar, "Creating Critical Thinkers in the Information Age," Magna Online Courses. (July 9, 2018).

Online Seminar, "Wake Them Up! Engaging Students in the 21st Century Classroom," Magna Online Courses. (July 9, 2018).

Online Seminar, "What Brain-Based Techniques Can I Use to Engage Students During Class?," Magna Online Courses. (July 9, 2018).

Online Seminar, "How Can I Communicate to Engage Students and Encourage Learning?," Magna Online Courses. (July 2, 2018).

Online Seminar, "How Can I Effectively Use Class Preparation Assignments?," Magna Online Courses. (July 2, 2018).

Online Seminar, "Improve Participation in College Classrooms: How to Create a Discussion Strategy that Will Increase Student Learning and Engagement," Magna Online Courses. (July 2, 2018).

Online Seminar, "Strategies for Making Lectures More Active, Engaging, and Meaningful," Magna Online Courses. (July 2, 2018).

Online Seminar, "How Can I Inspire Creative Confidence in the Classroom?," Magna Online Courses. (June 26, 2018).

Online Seminar, "How Do I Create a Climate for Learning in My Classroom," Magna Online Courses. (June 26, 2018).

Online Seminar, "Four Common Teaching Traps and How to Avoid Them," Magna Online Courses. (June 25, 2018).

Online Seminar, "How Can I Effectively Teach Unprepared Students," Magna Online Courses. (June 25, 2018).

Online Seminar, "How to Create a Transformative Learning Experience for Students by Managing Hot Moments and Difficult Discussions in the Classroom," Magna Online Courses. (June 25, 2018).

Online Seminar, "Simple Strategies to Create an Inclusive Classroom for Gender Variant Students," Magna Online Courses. (June 25, 2018).

Online Seminar, "How Can I Bring Pop to My Classroom with Pop Culture?," Magna Online Courses. (June 22, 2018).

Online Seminar, "How Can the Three C's of Course Design Enhance Students' Online Performance?," Magna Online Courses. (June 22, 2018).

Online Seminar, "How Do I Design Critical Thinking into My Courses?," Magna Online Courses. (June 22, 2018).

Online Seminar, "How Do I Align Learning Objectives with Technology Using Backward Design?," Magna Online Courses. (June 20, 2018).

Online Seminar, "Learning Assessment Technique: How to Integrate New Activities that Gauge What and How Well Students Learn," Magna Online Courses. (June 20, 2018).

Online Seminar, "The Technology-Free Approach to Flipping the Classroom," Magna Online Courses. (June 20, 2018).

Webinar, "A Conversation with Susan Cain: Bringing out the Best in Quiet Students," Top Hat. (June 1, 2018).

Workshop, "The Scholarship of Teaching and Learning," FCTL, Big Rapids, MI, USA. (April 19, 2018).

Workshop, "The Teacher-Scholar Model: Funding for Research and Creative Works," FCTL, Big Rapids, MI, USA. (April 5, 2018).

Webinar, "Career Ready Learners: Preparing Students for a World Beyond Graduation," McGraw-Hill. (March 23, 2018).

Workshop, "Microaggressions in the College Classroom," FCTL, Big Rapids, MI, USA. (March 15, 2018).

Workshop, "Motivating Students," FCTL, Big Rapids, MI, USA. (February 15, 2018).

Workshop, "Retention and Student Success," FCTL, Big Rapids, MI, USA. (February 1, 2018).

Workshop, "Make It Stick: The Science of Successful Learning," FCTL, Big Rapids, MI, USA. (January 18, 2018).

Workshop, "Creating your Assessment Story," FCTL, Big Rapids, MI, USA. (December 7, 2017).

Workshop, "Active Learning: Small Changes, Big Impact," Big Rapids, MI, USA. (November 30, 2017).

Workshop, "Abraham Maslow in the 21st Century: The Changing Nature of Students' Needs,"

FCTL, Big Rapids, MI, USA. (November 16, 2017).

Workshop, "Reflection and Application," FCTL, Big Rapids, MI, USA. (November 2, 2017).

Workshop, "Game-Based Learning," FCTL, Big Rapids, MI, USA. (October 12, 2017).

Webinar, "Hear from a peer: Connect to improved student outcomes in Operations Management," McGraw Hill. (October 9, 2017).

Workshop, "Community-Engaged Learning," FCTL, Big Rapids, MI, USA. (September 28, 2017).

Workshop, "Concur Training," Staff Center for Training & Development, Big Rapids, MI, USA. (September 28, 2017).

Workshop, "Learner-Centered Teaching," FCTL, Big Rapids, MI, USA. (September 14, 2017).

Workshop, "New Faculty Orientation Week," FCTL, Big Rapids, MI, USA. (August 14, 2017 - August 18, 2017).

Awards and Honors

Meritorious Service Medal, Air Force. (May 12, 2017).

Senior Noncommissioned Officer of the Year, Air Force. (January 2017).

Senior Noncommissioned Officer of the Quarter, Air Force. (October 2016).

Meritorious Service Medal, Air Force. (October 2015).

Air Force Innovation Team Award, Air Force. (December 2014).

Federally Employed Women's Meritorious Service Award, Air Force. (December 2012).

Meritorious Service Medal, Air Force. (August 2012).

Senior Noncommissioned Officer of the Year. (January 2012).

Joint Service Commendation Medal, Special Operations Command Central. (May 2011).

Senior Noncommissioned Officer of the Quarter, Air Force. (April 2009).

Meritorious Service Medal, Air Force. (November 2008).

Air Force Achievement Medal, Air Force. (December 2007).

Air Force Commendation Medal, Air Force. (May 2005).

Initial Response Inspection Superior Performer, Air Force. (March 2005).

Noncommissioned Officer of the Quarter, Headquarter's Air Force. (March 2005).

Communications and Information Manager of the Year, Andersen Air Force Base. (January 2004).

Air Force Commendation Medal, Air Force. (May 2003).

Air Force Achievement Medal, Air Force. (November 2001).

Information Manager of the Year, Air Force's Air Mobility Command. (September 2001).

Air Force Commendation Medal, Air Force. (September 2000).

Airman of the Year, Air Force's Electronic Security System Directorate. (January 2000).

Air Force Organizational Excellence Award, Air Force. (January 31, 1999).

John Levitow Award, Air Force. (March 1998).

Air Force Commendation Medal, Air Force. (December 1996).

Quality Inspection Professional Performer, Air Force's Air Intelligence Agency. (1995).

Airman of the Quarter, Air Force's 25th Intelligence Squadron. (March 1995).

Secretary of the Year, Air Force's Hurlburt Field. (February 1994).

TEACHING

Teaching Experience

Ferris State University

MGMT 302, Team Dynamics - Org Behavior, 4 courses.

MGMT 305, Managerial Leadership, 2 courses.

MGMT 370, Quality-Operations Mgmt, 3 courses.

Awards and Honors

Senior Noncommissioned Officer of the Year, Air Force. (January 2017).

Senior Noncommissioned Officer of the Quarter, Air Force. (October 2016).

Federally Employed Women's Meritorious Service Award, Air Force. (December 2012).

Meritorious Service Medal, Air Force. (August 2012).

Senior Noncommissioned Officer of the Year. (January 2012).

Joint Service Commendation Medal, Special Operations Command Central. (May 2011).

Senior Noncommissioned Officer of the Quarter, Air Force. (April 2009).

Air Force Commendation Medal, Air Force. (May 2005).

Noncommissioned Officer of the Quarter, Headquarter's Air Force. (March 2005).

Communications and Information Manager of the Year, Andersen Air Force Base. (January

2004).

Information Manager of the Year, Air Force's Air Mobility Command. (September 2001).

Airman of the Quarter, Air Force's 25th Intelligence Squadron. (March 1995).

Secretary of the Year, Air Force's Hurlburt Field. (February 1994).

SCHOLARSHIP AND RESEARCH

Presentations Given

Sukup, L., Doctoral Colloquium Dinner, "Doctoral Success Journey," Saint Leo University, Saint Leo, Florida. (October 27, 2017).

Sukup, L. (Author & Presenter), Southeast Case Research Association (SECRA), "Listen Up....Do As I Say - A Case Study on Lack of Leadership," SECRA, Myrtle Beach, SC. (February 2016).

Sukup, L. (Author & Presenter), Southeast Case Research Association (SECRA), "Peter Smith: The Not so Emotionally Intelligent Executive," SECRA, Myrtle Beach, SC. (February 2015).

Contracts, Grants and Sponsored Research

Fellowship

Sukup, L., "Junior Faculty Fellows Program," Sponsored by FCTL, Ferris State University. (August 27, 2018 - August 16, 2019).

Research in Progress

"To what extent certain resources and capabilities promote or inhibit individual resilience" (Writing Results).

SERVICE

University Service

Attendee, Meeting, College of Business. (April 24, 2018).

Attendee, Meeting, Management Department. (April 17, 2018).

Attendee, Meeting, College of Business. (March 27, 2018).

Attendee, Meeting, Management Department. (March 20, 2018).

Attendee, Meeting, College of Business. (February 27, 2018).

Attendee, Meeting, Management Department. (February 20, 2018).

Attendee, Meeting, College of Business. (January 23, 2018).

Attendee, Meeting, Management Department. (January 16, 2018).

Attendee, Meeting, C4 Program. (December 13, 2017).

Attendee, Meeting, College of Business. (November 28, 2017).

Attendee, Meeting, Management Department. (November 21, 2017).

Attendee, Orientation, C4 Program. (November 20, 2017).

Guest Speaker, Saint Leo University. (October 27, 2017).

Attendee, Meeting, College of Business. (October 24, 2017).

Attendee, Meeting, Management Department. (October 17, 2017).

Attendee, Meeting, College of Business. (September 30, 2017).

Attendee, Meeting, College of Business. (September 25, 2017).

Attendee, Meeting, Management Department. (September 19, 2017).

Public Service

Committee Chair, Fraternal Order of Police Auxiliary, Newport News, VA. (June 2011 - December 2014).

Volunteer, United Services Organization, Newport News, VA. (January 2010 - August 2012).

Attendee, Meeting, Air Combat Command Top Three, Joint Base Langley-Eustis, VA. (November 2008 - August 2012).

Volunteer, Meals on Wheels, Newport News, VA. (November 2008 - August 2012).

Attendee, Meeting, Network 56, Andersen Air Force Base, Guam. (May 2003 - May 2005).

Chairperson, Federal Women's Program Education Group, Andersen Air Force Base, Guam. (January 2005 - February 2005).

Volunteer, Freedom Parade, Andersen Air Force Base, Guam. (July 2004).

Awards and Honors

Service, Community

Senior Noncommissioned Officer of the Year, Air Force. (January 2017).

Senior Noncommissioned Officer of the Quarter, Air Force. (October 2016).

Meritorious Service Medal, Air Force. (October 2015).

Federally Employed Women's Meritorious Service Award, Air Force. (December 2012).

Meritorious Service Medal, Air Force. (August 2012).

Senior Noncommissioned Officer of the Year. (January 2012).

Senior Noncommissioned Officer of the Quarter, Air Force. (April 2009).

Meritorious Service Medal, Air Force. (November 2008).

Noncommissioned Officer of the Quarter, Headquarter's Air Force. (March 2005).

Airman of the Year, Air Force's Electronic Security System Directorate. (January 2000).

John Levitow Award, Air Force. (March 1998).

Air Force Commendation Medal, Air Force. (December 1996).

Airman of the Quarter, Air Force's 25th Intelligence Squadron. (March 1995).

Secretary of the Year, Air Force's Hurlburt Field. (February 1994).

Service, Professional

Meritorious Service Medal, Air Force. (May 12, 2017).

Senior Noncommissioned Officer of the Year, Air Force. (January 2017).

Senior Noncommissioned Officer of the Quarter, Air Force. (October 2016).

Meritorious Service Medal, Air Force. (October 2015).

Federally Employed Women's Meritorious Service Award, Air Force. (December 2012).

Meritorious Service Medal, Air Force. (August 2012).

Senior Noncommissioned Officer of the Year. (January 2012).

Senior Noncommissioned Officer of the Quarter, Air Force. (April 2009).

Air Force Commendation Medal, Air Force. (May 2005).

Noncommissioned Officer of the Quarter, Headquarter's Air Force. (March 2005).

Communications and Information Manager of the Year, Andersen Air Force Base. (January 2004).

Information Manager of the Year, Air Force's Air Mobility Command. (September 2001).

Airman of the Year, Air Force's Electronic Security System Directorate. (January 2000).

John Levitow Award, Air Force. (March 1998).

Air Force Commendation Medal, Air Force. (December 1996).

Airman of the Quarter, Air Force's 25th Intelligence Squadron. (March 1995).

Secretary of the Year, Air Force's Hurlburt Field. (February 1994).

Service, University

Meritorious Service Medal, Air Force. (May 12, 2017).

Senior Noncommissioned Officer of the Year, Air Force. (January 2017).

Senior Noncommissioned Officer of the Quarter, Air Force. (October 2016).

Meritorious Service Medal, Air Force. (October 2015).

Air Force Innovation Team Award, Air Force. (December 2014).

Federally Employed Women's Meritorious Service Award, Air Force. (December 2012).

Meritorious Service Medal, Air Force. (August 2012).

Senior Noncommissioned Officer of the Year. (January 2012).

Joint Service Commendation Medal, Special Operations Command Central. (May 2011).

Senior Noncommissioned Officer of the Quarter, Air Force. (April 2009).

Meritorious Service Medal, Air Force. (November 2008).

Air Force Achievement Medal, Air Force. (December 2007).

Air Force Commendation Medal, Air Force. (May 2005).

Initial Response Inspection Superior Performer, Air Force. (March 2005).

Noncommissioned Officer of the Quarter, Headquarter's Air Force. (March 2005).

Air Force Commendation Medal, Air Force. (May 2003).

Air Force Achievement Medal, Air Force. (November 2001).

Information Manager of the Year, Air Force's Air Mobility Command. (September 2001).

Air Force Commendation Medal, Air Force. (September 2000).

Airman of the Year, Air Force's Electronic Security System Directorate. (January 2000).

Air Force Commendation Medal, Air Force. (December 1996).

Airman of the Quarter, Air Force's 25th Intelligence Squadron. (March 1995).

Secretary of the Year, Air Force's Hurlburt Field. (February 1994).

Mathias Schmitt
Ferris State University
COB - Management
Email: schmitm8@ferris.edu

Education

PhD, Virginia Polytechnic Institute and State University, 2012.
Major: Lean
Dissertation Title: leadership and Healthcare Performance

MBA, Radford University, 2011.

Professional Positions

Professional

Global & Regional Continuous Improvement Manager/Learning Leader, Yanfeng Global
Automotive Interiors. (2015 - Present).

Strategic Planning Manager/Regional Continuous Improvement Manager, Johnson Controls, Inc.
(2013 - 2015).

Management Consultant and Graduate Research Assistant, Virginia Polytechnic Institute and
Lean Management Institute. (2008 - 2013).

Management Consultant, proLean Consulting AG. (2006 - 2009).

TEACHING

Teaching Experience

Ferris State University

MGMT 492, Lean Svc Enterprise & Leadership, 1 course.

Thomas Pawloski
1800 Awixa, Walker, MI
(616) 890-5435 pawloski.thomas@gmail.com

Education

M.S. Engineering Management, 1991
Western Michigan University, Kalamazoo, MI

B.S. Industrial Engineering Technology, 1981
Lake Superior State University, Sault St. Marie, MI

Recent Work History

Ridgeview Industries - Grand Rapids, MI

Vice President of Operations 2012 - Present

Responsible for daily operation and long-term planning of 3 manufacturing sites, approximately 300 associates and 120MM in sales. Direct reports include Plant Managers (3), Quality Managers (2) and Production Planning Manager (1).

Director of Operations 2011 - 2012

Responsible for the daily operation and long-term planning of 3 manufacturing sites, approximately 250 associates and 100MM in sales. Direct reports included Plant Managers and Quality Manager.

Quality Manager 2005 - 2011

Responsible for management of shop floor quality systems, customer support and corrective action process at 3 manufacturing sites.

Quality Engineer 2001 - 2005

Facilitated corrective actions in response to customer concerns.

Teaching Experience

Adjunct Professor Quality Engineering IE 308 1992
Western Michigan University, Kalamazoo MI

Corrective and Preventative Actions 2005
Two-day workshop, Grand Rapids Community College

Corrective and Preventative Actions 2007
Two Day Seminar, Sunny Brook Farms

Certifications

Quality Engineer, American Society of Quality 2001 - Present
Six Sigma Black Belt, American Society of Quality 2003 - Present

Edward Terris

920 Evergreen Ave., East Lansing, MI 48823

Home: 517-324-9329; Cell: 517-290-9894

E-mail: ed_terris@hotmail.com

CAREER SUMMARY

A compassionate and accomplished senior-level executive with demonstrated success leading a comprehensive business recognized for operational excellence in manufacturing. Proven experience in strategic planning, budgeting, purchasing, contract review, supply chain, and engineering. Highly skilled at utilizing methodologies focused on business transformation to reduce cost and improve output through supported learning and workforce development. Excel in developing high performance teams that drive cross-functional initiatives to achieve transformational business objectives.

CAREER MILESTONES

Manufacturing Operations

- Currently in charge of the manufacturing operations of one of the largest non-profit, Department of Defense contractors in the United States.
- Specialize in the implementation of business transformation processes such as Lean, Six-sigma, Project Management, and asset visibility tools.
- At Peckham overall cycle times were reduced 20%, allowing the organization to increase revenue from \$58 million to \$166 million per year in less than three years.
 - Reduced operating costs \$750,000 annually through process improvements and labor and line balancing activities.
- Received Industry Weeks' Best Plant award in 2003, Michigan Manufacturer of the Year award in 2010, Business Excellence Award in 2015, and Defense Logistics Agency *Gold Standard* award in 2016.
- Orchestrated the on-shoring of \$8.5 million worth of manufactured goods annually to support parent companies' growth in the North American market.

Engineering Innovation

- Developed assistive technology that allows persons with disabilities to participate in apparel manufacturing, general assembly, and packaging processes.
- Led the design, build, and start-up of blow molded, foam-in-place automotive seating armrests, which generated over \$2 million of revenue annually.
- Led the design-for-manufacturability and process development of a fluid connector that resulted in the contract award of a fuel vapor assembly worth \$2.3 million in revenue annually.
- Received patents for both process and design contributions

PROFESSIONAL EXPERIENCE

Peckham Inc., Lansing, MI

2008 - present

Peckham, a community vocational rehabilitation organization, is a unique business and human services agency that provides employment opportunities and vocational rehabilitation to persons striving for independence and self-sufficiency.

Vice President of Manufacturing

In charge of manufacturing operations that produce military apparel, equipment, and automotive assemblies. Responsibilities include P&L, strategy, planning, workforce development, inventory, supply chain, maintenance, and safety.

Customers: Defense Logistics Agency, NAVAIR, Army, USMC, Patagonia, New Balance, General Motors

Key Achievements:

- Implemented Lean, Six-sigma, and Project Management methodologies
- Increased revenue in apparel from \$55 million to \$166 million per year in three years
- Improved productivity 25%
- Improved on-time delivery from 82% to 99.5%
- Improved first time quality from 74% to 95%
- Implemented asset visibility tools including MRP and product scanning
- Achieved ISO9001-2008 certification in 2011

Nyloncraft Inc., Jonesville, MI**2006 - 2008**

A tier 1 and tier 2 supplier of interior and exterior trim to the automotive and medical industries with \$30 million in annual sales.

Engineering Manager

Responsible for process and project engineering, maintenance, and tool room technicians totaling 22 personnel. Key duties; budgeting, equipment and machinery, and material reprocessing.

Customers: Honda, Denso, General Motors, Ford, Stryker, CNI, and Hi-Lex.

Key Achievements:

- Utilized industry contacts to help acquire \$6.5 million in business with a new customer
- Reduced Maintenance and Repair spending by 10% annually
- In-charge of plant-wide cost reduction program saving \$325,000 annually
- Reduced unscheduled equipment downtime 20% by revising the preventive maintenance system and implementing Total Productive Maintenance (TPM).
- Led Advanced Quality Planning (APQP) system and chaired meetings
- Completed Six-Sigma for Managers course
- Successfully completed TS-16949 and ISO-14001 surveillance audits

Operations Consultant**2004 - 2006**

Assisted cross-functional teams in manufacturing, assembly, and sequencing activities to support system integration into General Motors Lansing assembly plant.

Key Achievements:

- Reduced operating scrap costs by \$465,000 annually through kaizen events in wet-headliner manufacture, and door and console assembly.
- Reduced operating costs by \$675,000 through line and labor balancing activities in door and IP
- Improved on-time delivery 40% using process mapping and implementation of visual management tools
- Reduced formal customer complaints from an average of six per month to less than two per month
- Improved scrap and efficiency in injection molding by 10% and 12% respectively by focusing on appliqué molding and revamping the kanban system.
- Established training criteria for technicians and operators on for injection molding and assembly

Collins & Aikman Inc., Williamston, MI**1997 - 2004**

Supplier of automotive interior and exterior trim with annual sales exceeding \$2.5 billion 2004

Operations Manager

Responsible for manufacturing operations specializing in blow molding of flexible PVC skins coupled with RIM polyurethane process for making automotive soft-trim.

Key Achievements:

- Increased plant EBITDA 20% from 2001 to 2004.
- Reduced scrap 10% through process improvement and advanced manufacturing planning
- Plant achieved Industry Week's prestigious Top Ten Best Plant's award for 2003
- Implemented LEAN manufacturing practices in 2001 and 2002 including 5S and Total Productive Maintenance using Visual Management.
- Achieved ISO 14001 certification in 2002 and TS-16949 certification in 2003

Norma Products Inc., Farmington Hills, MI 1995 - 1997

Supplier of clamping and connecting solutions for multiple industries including automotive

Project Manager

Responsible for the manufacture and assembly of clamping and connecting products and processes developed in Europe for the North American market.

Pilot Industries Inc., Dexter, MI 1993 - 1995

Supplier automotive fluid handling assemblies such as fuel and brake line assemblies

Research & Development Engineer

Responsible for plastic product and process research and development for fluid handling applications

Ferris State University, Big Rapids, MI 2008 - present**Adjunct Faculty** - Instruct lecture and online courses for the College of Business**Central Michigan University, Mount Pleasant, MI 2015 - present****Adjunct Faculty** - Instruct lecture and online courses for Master of Science in Administration program**OTHER AFFILIATIONS****The Empowerment Plan - Detroit, MI 2017 - present****Board Member** - Support non-profit organization's mission to provide jobs and vocational services for homeless parents**Right Turn - Lansing, MI 2013 - present****Youth Mentor** - Support the empowerment of youths**Northwood University - Midland, MI 2012 - present****Advisory Board Member** - Fashion Marketing and Management Program**Beauwood Association - Burt Lake, MI 2005 - present****Board Member and past President****EDUCATION****MBA - Integrative Management**, Michigan State University, East Lansing, MI 2001**BS - Plastics Engineering Technology**, Ferris State University, Big Rapids, MI 1993**Additional Accomplishments**Defense Logistics Agency *Gold Standard* Award 2016 and 2017: Business Excellence Award 2015: Michigan Manufacturer of the Year 2010: Apex Design Award 2009: Industry Week's Best Plant's Award 2003

U.S. Patent 6,120,100: Composite Blow Molded Article for Automotive Headrests

U.S. Patent 6,447,069: Quick Connect / Disconnect for Automotive Seating Armrests