

Program Review and Action Plan 2014-2015

Master of Science in Operations Management
(MSOM)

Preparation plan for the 2016 accreditation visit from the Higher Learning Commission (HLC).



Program Review and Action Plan 2014-2015

Master of Science in Operations Management (MSOM)

Preparation Activities

Preparation activities include an analysis of previous program reviews and accreditation visits, a program review in December of 2014, organizational design review/organization chart, review of program goals and student learning outcomes, a plan of course objectives review and mapping, an analysis of student needs and demand, review and implementation of accountability processes including assessment techniques, graduation rates, continuous improvement initiatives, faculty qualifications and a timeline of update actions. The report describes timelines for accreditation preparation. The January 2013 report was validated during the December 2014 program review except for the notations and updates in this report. This report serves as both documentation of the program review for 2014-2015 and as the plan to prepare for the 2016 accreditation visit.

Previous Program Reviews and Accreditation Reports

Previous program reviews are included in Appendix 1. Previous accreditation reports and briefing items are included in Appendix 2. The report prepared in anticipation of the HLC visit to MSOM sites at Little Rock and Millington is included in this area as background.

Program overview

The MSOM program is the largest graduate program at the University of Arkansas. The program meets the definition of an online program by the HLC (more than 50% of program may be completed online). All courses are offered online each term; however, live and hybrid courses are offered at Fayetteville, Arkansas, Little Rock, Arkansas, Millington, Tennessee and Hulbert Field, Florida. The program includes a 10-course curriculum and a comprehensive exam.

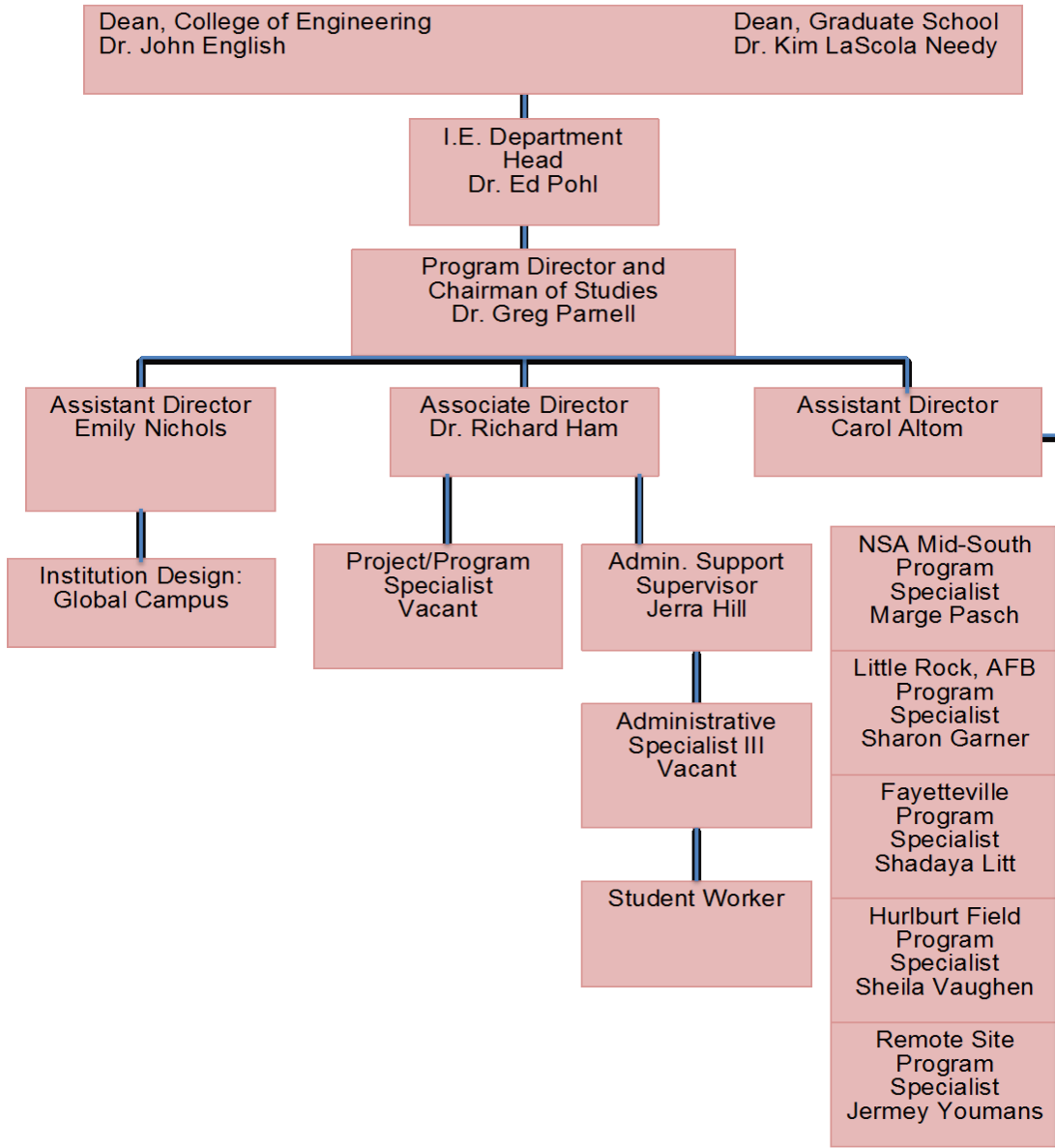
Faculty include adjunct and tenured faculty. A Director, Associate Director, two Assistant Directors, five site coordinators and three support staff administrate the program.



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Program Goals and Education Learning Objectives

As part of the first step of continuous improvement, the December 2014 program review evaluated and revised the program goals and outcomes to align with University nomenclature and clarify new program emphasis areas. The goals and outcomes have completed all steps except the faculty senate review. The new goals and outcomes are:

Goals

1. Provide internationally competitive and industry recognized operations management graduate education to meet emerging needs of operations management professionals.
2. Prepare operations management students to assume leadership roles in industry and government.

Education Learning Outcomes

1. Apply the skills and techniques required to lead and manage complex global operations involving processes, technology, and people.
2. Design plans and controls to create value through strategic, tactical, and operational change.
3. Design plans and controls to lead and manage multi-disciplinary projects.
4. Identify problems, analyze alternatives, and design solutions considering financial, environmental, and societal impact.
5. Use quantitative techniques and models to analyze data to support decision-making.
6. Assess legal, regulatory, professional, and ethical corporate and individual responsibilities.
7. Write and present appropriate documents to stakeholders and senior decision makers.

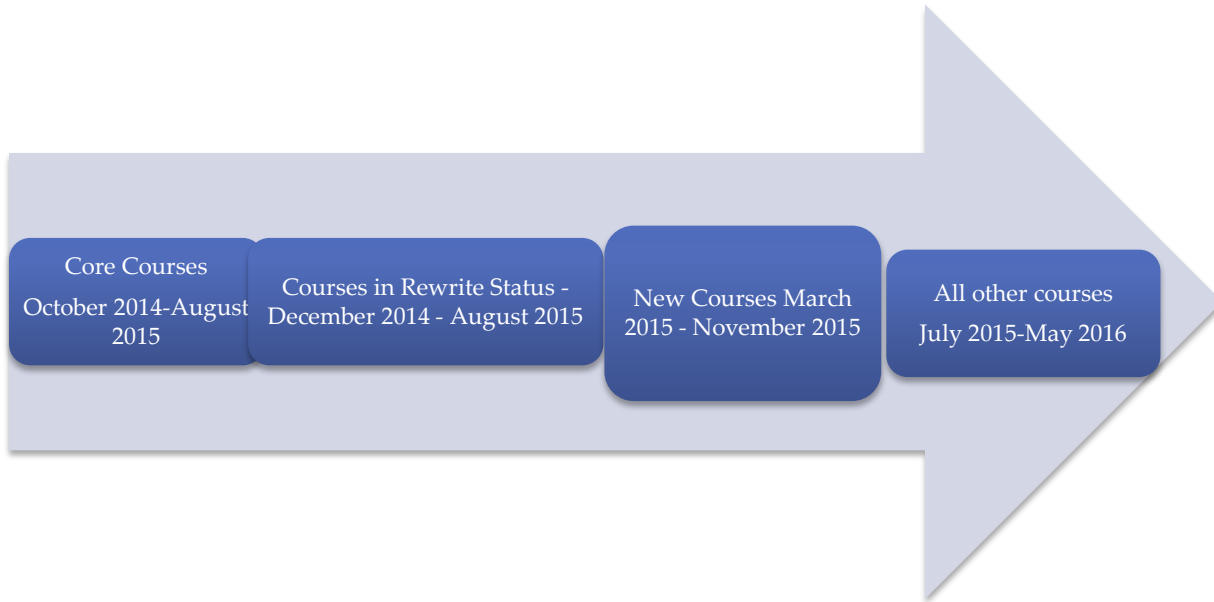


Course Objectives

Course objectives are included at Appendix 3. All course objectives are in process of reviewing and aligning to new program education learning outcomes starting October 2014 through March 2016. During the 2014 program review, a course objective rewrite review established the following priorities:

1. Core courses.
2. Course in re-write status including maintenance and reliability, leadership and ethics, project management.
3. New courses.
4. New certificates.

Each curriculum development and/or objective review includes at a minimum: the assistant director for distance education, two faculty subject matter experts and an instructional system designer from Global Campus. Each course objective is mapped to the appropriate corresponding program education learning outcomes and evaluated by the team using the Quality Matters checklist. A model syllabus and Blackboard template is created for each development. Additionally, the program review established a strategy to begin certificate development based on demand that support industry organization bodies of knowledge for certification. The course objective schedule is depicted below:



Core courses already in review as of May 2015: Project Management, Organization and Control. Strategic Management, Finance for Operations Managers and Economic Decision Making will occur during the annual MSO faculty meeting in July 2015.

Courses in rewrite status as of May 2016 include Maintenance Management and Leadership Principles.

New courses in development as of May 2016 include Advanced Project Management and Change Management.

Assessment Techniques

Program and course assessment involves three measurements: comprehensive exam data, student reported data, site data (which includes course delivery) and modality data (online, live, hybrid).

A rubric is used for each comprehensive examination, evaluation students' performance in each course and each learning outcome. Additionally, delivery includes online evaluation of each course using the Quality Matters Review and a Faculty Evaluation of live instructors. Faculty evaluations began in January of 2015 with a goal of evaluating all live faculty members at least once every two years.

Comprehensive exam performance is assessed for each instructor, site, mode and course, along with evaluation of descriptive statistics for course grading by instructor, site and mode.

Students complete an exit survey prior to comprehensive examination evaluating their perception of meeting each of the program goals and outcomes to establish trends or differences in sites or delivery method.



Program Education Learning Outcomes

Comprehensive Exam Data

During the initial 3 months, comprehensive exam data will be examined and used to validate this program review.

Student Reported Data

Previous surveys from students and emerging surveys on student perceptions will be documented and used to validate the program review in the initial 3 months.

Site Data

Comprehensive exam, student reported data and student graduation rates will be examined by site.

Modality Data

Online, hybrid and live courses will be compared in the first 6 months to validate each modality serves students equally.

Course Objectives

Comprehensive Exam Data

Student Reported Data

Site Data

Modality Data



Continuous Improvement Initiative Data

Program Updates

Program review established the following:

1. Pre-requisites assigned to specific courses as opposed to only the program;
2. Adding the statement to the admissions guidelines: OMGT 5003 is foundational to all courses and must be taken in the first term;
3. Level II requirements were mandatory in the graduate school until Fall 2014, but became recommended only. The program needs Level II language proficiency for the technical writing in coursework and has returned it to mandatory. Analytical writing returned to previous required 4.5 (from 4.0) based on faculty feedback of student performance. In addition, adding the statement: The MSOM English Language Proficiency Policy requires Level II non-native speakers of English to complete ELAC 4043 Research Writing in the STEM fields no later than the first semester of graduate level courses.
4. The focus areas of Business Management, Industrial Management, Human Resource Management, and Safety and Health Care Management are being deleted to pursue new areas of concentration this year. No focus area previously led to any certificate or transcript entry.

Program reviews and any open items from previous assessments were reviewed for progress. Each area is identified as Planning Phase, In Progress Phase or Sustainment Phase. The 2013 independent review included:

- As courses are transitioned from the classroom to on-line courses, care must be taken to ensure that appropriate contact hours are being maintained and documented to meet state requirements. *Review Comment: Addition of new Assistant Director focusing on faculty, new mentoring programs and use of Quality Matters reviews ensures this area is appropriately addressed. Status: Sustainment Phase*
- How can MSOM better utilize the development office to exploit opportunities with a large and satisfied alumni base? *Review Comment: Assistant Director Nichols began a campaign for a MSOM Alumni Charter and a series of 40th Anniversary Event. Two graduates have volunteered to establish the society. Status: In Progress Phase.*
- Some concerns about ProctorU and failed Internet connections during exams. This seems to happen fairly frequently and is a problem of significance. *Review Comment: After a series of*



meetings, ProcterU has committed to scheduling more staff. Students have been trained on Internet requirements and may take exams at one of the campuses. No significant or systemic problems have been noted over the last 90 days, but staff continues to monitor. Status: Sustainment Phase.

- Need strong controls on quality, especially during admissions, to ensure that program quality is perceived as being as strong as other degree programs within the IE department. *Review Comments: Admission requirements, including GPA, TOFEL, and GRE requirements were increased in 2014-2015. Gradable hours were increased to 60. Admission processes and transfer credit. Status: Sustainment Phase.*
- Need to recruit specifically for diversity in MSOM as well. Consider partnerships with HBCUs similar to existing programs in Chemical Engineering. *Review Comment: Initial discussions but no implementation of this program. Status: In Planning Phase.*
- Need to better integrate MSOM into the departmental strategic plan. *Review Comment: MSOM has been aligned with the department and college strategic plans. The MSOM Director is a key developer of both plans and ensures MSOM is integrated into the plan. Status: In Progress Phase.*
- Some concerns about waiving the GRE when the GPA is over a target value. *Review Comment: Current databases do not allow cross-referencing GRE scores to predict success; however, the graduation rate is typically 87-89%, indicating current admission processes generally predict success. The new Hobson's program promises the ability to evaluate predictors of success over time, providing data to make admission policy decisions. Status: In Progress Phase.*
- Some concern about the Business Law deficiency course. Given that few incoming students have had the course as an undergraduate, it effectively adds three hours to the degree program and it is not a required prerequisite for any subsequent course. *Review Comment: Several initiatives were developed during the program review around pre-requisites. All pre-requisites were mapped to objectives in course as opposed to the program overall. Additionally, proficiency exams were eliminated in favor of CLEP and DANTES course with verifiable reliability and validity data. Members of the team doing the program review determined Business Law was needed to meet objectives in Leadership and Human Resources courses. Status: Sustainment Phase.*
- Some concern about the consistency or rigor in the oral final exam. *Review Comments: The comprehensive exam is performed using a rubric and provides data to compare student performance in course objectives and program education learning outcomes. A new set of exam policies allows a pass or a need to answer further questions in a specific area with one oral opportunity. If the course is failed, then a written exam is administered. If it is not passed the second time, the student is dismissed from the program. Status: Sustainment Phase.*



- Consider adding additional coursework related to Systems Engineering concepts. *Review Comments: MSOM program leadership began a marketing research effort to determine demand for certificate programs. After evaluating the marketing data, leadership determined to pursue certificates in project management, healthcare management/logistics, lean and quality, homeland security and risk. Each of these certificates requires development of one course to complete the sequence. In addition, faculty with systems and risk credentials have been recruited in the last nine months. The course in development in homeland security focuses on systems thinking and design. Course development continues using industrial engineering and systems concepts. Status: In Progress Phase.*

Course Updates

As part of the December 2014 program review validated several administrative and curriculum. Administrative changes included change graduate level courses that were 4000-level courses to 5000-level courses. Additionally, pre-requisites were previously assigned to the program. The 2014 review assigned the pre-requisites to specific courses that required mastery of pre-requisite objectives. Additionally, placement examinations were eliminated for three pre-requisite courses in favor of CLEP and DANTEs test with standardized reliability and validity data.

A new procedure was established for updating courses along with the priority of course updates described in the course objective section. The following courses were developed or updated to support demand:

4783 Project Management

5253 Leadership Principles

5503 Maintenance Management

5XXX Advanced Project Management (new course)

5XXX Change Management (examining replacing 5873)

4313 Law and Ethics (objective updates)



All courses are scheduled for review following the process in the course objective section and on the schedule depicted on the timeline section.

Certificates

MSOM leadership initiated industry contacts and a marketing research contract and benchmarking to assess demand. The following certificates are in development in the order listed based on demand:

1. Project Management
2. Lean and Quality
3. Homeland Security Systems
4. Risk

Each certificate will align with industry-accepted certification body of knowledge and coursework. Project Management and Change Management courses are piloting Summer 2015.

Faculty CV and Transcripts

Faculty CVs and transcripts are in progress of collection with an anticipated completion of September 2015.





Timeline

