I. **Catalog Description:** This course is intended to provide students with an understanding of the principles of operations management. Topics covered include productivity, project management, forecasting, managing quality, location and layout planning, supply-chain, inventory management, optimization, queuing and simulation.

II. **Prerequisites:** QBA 260

III. **Learning objectives:** Upon completing the course, the successful student will be able to:

1. Identify and explain the factors contributing to productivity
2. Describe the major types of project management tools
3. Define, describe and apply the major forecasting techniques
4. Understand and utilize techniques for managing quality including statistical process control charts
5. Identify and apply various techniques used by managers to design operations, including location and layout planning
6. Model effective management of an operation by applying techniques of supply-chain management and inventory management
7. Identify and use appropriate decision analysis tools such as linear programming, transportation modeling, and queuing and simulation.
8. Communicate clearly the results acquired using the various operations management techniques taught in the course.

IV. **Course materials:** An operations management textbook with an online course tool for homework completion is used. In addition, problems using Microsoft Excel© applications are also utilized.

V. **Evaluation and grading:** Students complete tests that measure their individual abilities to apply operations management techniques and knowledge. Tests include the use of Microsoft Excel© spreadsheets.

VI. **Course Content:** This course is intended to provide students with an understanding of the principles of operations management. Topics covered include productivity, project management, forecasting,
managing quality, location and layout planning, supply-chain, inventory management, optimization, queuing and simulation.

VII. Support of Program Learning Objectives:

<table>
<thead>
<tr>
<th>Program Learning Objective</th>
<th>Course Learning Objective(s) Supporting</th>
<th>Targeted Course Performance Level*</th>
<th>Possible Contributions to Program Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 1. Comprehend the fundamental principles of business administration</td>
<td>1, 2, 4, 5</td>
<td>M</td>
<td>Course embedded evaluation: multiple choice questions and problems; pre-post tests</td>
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<tr>
<td>Objective 2A. Communicate clearly, logically, and persuasively in Writing</td>
<td>8</td>
<td>D</td>
<td>Course embedded evaluation: multiple choice questions and problems; pre-post tests</td>
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<tr>
<td>Objective 2B. Communicate clearly, logically, and persuasively orally</td>
<td></td>
<td></td>
<td>Course embedded evaluation: multiple choice questions and problems; pre-post tests</td>
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<tr>
<td>Objective 3. Evaluate and analyze source information, subsequently draw conclusions, and present an argument based upon that analysis</td>
<td>3, 6, 7</td>
<td>M</td>
<td>Course embedded evaluation: multiple choice questions and problems; pre-post tests</td>
</tr>
<tr>
<td>Objective 4. Identify, analyze, and decide on courses of action to resolve complex, unstructured problems, using appropriate tools and technology</td>
<td></td>
<td></td>
<td>Course embedded evaluation: multiple choice questions and problems; pre-post tests</td>
</tr>
</tbody>
</table>

* I = Introduced, D = Developed & Practiced with Feedback, M = Demonstrated at the Mastery, Blank=Not Treated in this Course

Definitions of Student Mastery Levels set performance levels that are somewhat parallel to Bloom’s Taxonomy.

I = the student can identify examples (and non-examples) of the desired outcome, name the elements involved, and answer “objective, multiple-choice, fill-in-the blank” type of test questions showing awareness. (Objective tests are not necessarily simple, but they are most likely to be used at this introductory level.)

D = the student can describe, demonstrate or construct an example of the desired outcome but with guidance about each step. In some cases, the steps to learn the outcome may be spread among more than one course or activity within a course. Also included here is evaluation of existing examples of the outcome (pro’s and con’s, etc.) Essay questions and short projects would be used as evidence.

M = the student can demonstrate the outcome given a problem statement and appropriate data and tools. The student would need to synthesize skills learned previously in isolation. The skill demonstration would be sufficiently rigorous that an outside stakeholder (future employer) would be satisfied with it for an entry level position after graduation. Term papers, senior projects and research papers, senior portfolios, and capstone coursework would be used as evidence.