THE UNIVERSITY OF NORTH CAROLINA AT ASHEVILLE FACULTY SENATE

Senate Document Number <u>5618S</u> Date of Senate Approval <u>04/05/18</u>

Statement of Faculty Senate Action:

APC Document 49 (MGMT):	Delete MGMT 362, 460, 464 and 465;
	Add new elective courses: MGMT 426, 427 and 428

Effective Date: Fall 2018

1. Delete: On pages 220 and 222, the entries for MGMT 362, 460, 464 and 465:

362 Advances in Quality Control (2)

Proactive rather than reactive principles of quality control. The course includes history of current quality control organizational practices, examines attribute and variable control charts, six sigma, six sigma lean, and short run control charts, explores experimental design using Taguchi Methods, and reflects on future methods and techniques. Prerequisite: STAT 185 or STAT 225 or PSYC 202. Fall.

460 **Production Management (2)**

Addresses the issues of producing, servicing, and delivering high-quality, low-cost goods and services in an increasingly competitive global economy. A total systems approach is used to balance the emphasis between managerial issues and analytical techniques to strengthen both critical thinking and problem-solving skills. Prerequisite: MGMT 380. Preor corequisite: ECON 306. See department chair.

464 **Project Management (2)**

Principles and concepts of project management as they relate to contemporary organizations from project inception to termination. Course integrates team leadership techniques, network design, scheduling, in-progress reviews, and project auditing into the quantitative skills of network analysis (PERT, CPM) and time versus cost tradeoff. This integration of qualitative and quantitative skills is accomplished through one or more class projects. Computer-aided as well as manual approaches to these topics are presented. Prerequisite: MGMT 380. See department chair.

465 **Operations Research (2)**

Introduction and application of operations research techniques and optimization theory as they are applied to problem solving. Methods covered include transportation and assignment models, the revised simplex method, queuing theory, network flow analysis, multiple criteria decision-making (MCDM), advanced inventory models, and Lagrange multipliers. Prerequisites: MGMT 380; STAT 185 or 225. Spring.

2. Add: On page 222, entries for new courses, MGMT 426, 427 and 428:

426 Strategic Decision Making (2)

Focuses on strategic decision-making in situations where individuals must interact with one another. These include both cooperative and competitive scenarios. Topics include bargaining, social dilemmas, resource division, and auctions. Prerequisites: Junior standing and one course from MGMT 380, ECON 102, STAT 185 or STAT 225. Typically even years Spring.

427 Systemic Decision Making (4)

Systems thinking is espoused by many as an essential skill in today's workplace and as a requirement of a globally engaged citizenry. But how does one think systemically? The course uses an interdisciplinary perspective in understanding and addressing complex situations in a holistic manner, and will help students think about, act on, and observe complex phenomena in an effort to make improved decisions in today's complex, interconnected, and global environment. Students from any major are encouraged to enroll in this course. Prerequisite: MGMT 380 or permission of instructor. Typically even years Fall.

428 Business Analytics (2)

Introduces students to quantitative methods for assessing large data sets in an effort to improve managerial decision making. Focus will be on the application of methods to real world case studies. Class will include laboratory time to explore methods in a computer-based environment. Topics will include clustering, regression, and forecasting. Prerequisite: STAT 225 or permission of instructor. Typically Spring.

Impact Statement: Faculty tasked with teaching MGMT 362, 460, 464 and 465 are proposing to replace them with a set of new electives of equal credit hours focused on skills needed for modern management science graduates. There is an equivalent number of new credit hours being proposed as are being proposed for removal. Faculty tasked with teaching these courses are proposing these courses as replacements for those suggested to be deleted above, in an effort to modernize the curricular offerings for management students. Students, including both majors and non-majors, will have a new set of electives focused on contemporary skills necessary for new graduates, including strategic decision analysis, systems thinking, and business analytics. Additional factors related to resources and impact are discussed below

1. Does the course fulfill a major requirement, LAC requirement, or requirement for another department? If the course fulfills a major requirement, will it be a required course, an additional choice for a course group, or an option for unspecified required hours in the major?

These courses are electives in the Management major and open to students across disciplines.

2. Information about the courses:

- Student Learning Objectives for MGMT 426, Strategic Decision Making:
 - 1. Identify current and historical examples of strategic decision making
 - 2. Apply appropriate bargaining strategies in strategic situations
 - 3. Gain an understanding of social dilemmas
 - 4. Utilize appropriate techniques to solve resource division problems
 - 5. Bid successfully in auction-based environments

- Student Learning Objectives for MGMT 427, Systemic Decision Making:
 - 1. Understand how to think systemically about a problem
 - 2. Understand how to frame a problem for systemic understanding
 - 3. Understand how to make decisions to improve problem understanding
 - 4. Implement the developed methodology on a problem of real-world complexity
- Student Learning Objectives for MGMT 428, Business Analytics:
 - 1. Understand methods for data clustering
 - 2. Utilize regression methods to assess large data sets
 - 3. Utilize forecasting methods to predict future behaviors
 - 4. Become proficient in the use of computer software to employ learned methods
- Anticipated class size for each:

18-20

- The amount of scheduled class time, e.g. 2.5 hrs/wk for each course: 3.3 hours per week (200 minutes)
- Instructional format (lecture, lab, seminar, independent, research, internship, studio, etc.) for each course:

lecture/seminar

• Any specialized space or material needs for each course: none

3. Information about the number of faculty in the department who will/can teach the proposed course.

Dr. Patrick Hester would be the primary faculty responsible for these electives given his qualifications and expertise (refer to the Course Coverage Matrix in Appendix G). We planned and anticipated these changes as part of our position allocation request that resulted in the opportunity to search and recruit a faculty member with the expertise in these content areas. This was an intentional effort to reimagine upper-level quantitative and decision-making course offerings.

4. Information about when and how often the course will be offered (This is of particular concern for new courses and those that are required for the major).

Per the attached Course Offerings model, we plan to offer these courses on a regular frequency. However, if enrollment demand shifts and there is need for fewer or additional elective offerings, then we may adjust accordingly.

5. For new courses or changes to offering patterns, information about how the addition or change affects the ability of the department to deliver its existing curriculum and meet its commitments to the LAC.

These are new courses to reimagine this area of our curriculum; previous courses in operations research, productions management, and decision making were low-enrolled. We anticipate that the new offerings will inspire students to enroll – both management students and those in MATH, ECON and STAT. The offering frequency would still afford us the opportunity to contribute to the LAC per the attached Course Offerings model.

Rationale: In terms of MGMT 362, 460, 464 and 465, these courses are recommended for removal from the catalog due to low historical enrollments. Additionally, much of the material covered in MGMT 464 and 465 has been incorporated into recent MGMT 380 revisions. Further, materials covered in MGMT 464, the highest enrolled of these four electives historically, lends itself to further depth than is possible to cover during a 2-credit course. As a result, for those students interested in exploring project management further, it is recommended that they pursue a consulting practicum via MGMT 488 focused on project management for

meaningful exposure to large scale project management efforts. Removal of these courses will allow for streamlined management science and decision science focused course content in MGMT 380, as well as additional electives relevant to today's management major.

The proposed new courses are a direct result of an effort by the Management and Accountancy department to modernize its offerings in the management science and decision science areas. These courses represent skills necessary for the modern graduate, and it is anticipated that their enrollments will be healthier than the previous courses, whose deletion is recommended primarily due to declining enrollment. Additionally, the proposed courses are expected to draw from students across disciplines within the university. Many AACSB-accredited curricula include courses on strategic decision making, systems thinking, and business analytics. Offering these courses to management students will lead to a competitive advantage for them in the workplace.