

Southeast Missouri State University

Department: Industrial and Engineering Technology

Course No.: IM600

Title of Course: Managing Technology Innovation

Revision: Fall 2012

I. Catalog Description and Credit Hours of Course:

This course focuses on management of technology, innovation, and new product development. It will cover concepts such as innovation management in the field of technology, identification of sources of innovation, and creating new products and services in the field of technology. (3 hours)

II. Prerequisites: Graduate standing

III. Purposes or Objective of the Course:

Upon completion of this course, the student should be able to:

1. Understand the role of innovation in technology.
2. Develop innovation strategies and use that as core business process in the field of technology.
3. Identify sources of innovation and use different tools to make decisions under uncertainty.
4. Understand the need for learning from innovation to improve future business decisions.

IV. Student Learning Outcomes:

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

1. Demonstrate the understanding of role of innovation in technology.
2. Identify sources of innovation and use different tools to make decisions under uncertainty.
3. Develop innovation strategies and use that as core business process in the field of technology.

V. Expectations of Students:

Students are expected to:

- A. Complete all assignments on time.
- B. Use professionalism when dealing with faculty, staff and students.
- C. Conduct necessary research to fulfill classroom assignments.
- D. Attend classes and participate in discussions.
- E. Take notes from textbook and lecture discussions.
- F. Pass tests, conduct research, and read assigned materials for discussion and application.

VI. Course Content or Outline:

| | Hours |
|--|--------------|
| 1. Introduction and importance of innovation in technology | 3 |
| 2. Types of and a process for managing innovation | 3 |
| 3. Creating an innovative organization | 4 |
| 4. Developing an innovation strategy | 5 |
| 5. Open innovation and networks | 7 |
| 6. Forecasting and the diffusion of innovations | 7 |
| 7. New product and service development | 10 |
| 8. Knowledge management and intellectual property | 3 |
| 9. Assessing and auditing technological innovation | 3 |
| Total | 45 |

VI. Textbook(s) and/or Other Required Materials or Equipment:

Required: “Strategic Management of Technological Innovation” by Melissa Schilling, 4th edition, Copyright 2012 (ISBN 978-0078029233, publisher: McGraw-Hill/Irwin).

VII. Basis for Student Evaluation:

| | |
|---------------------------------|-----|
| A. Homework and Quizzes | 30% |
| B. Written Projects/Assignments | 20% |
| C. Mid-Term Exam | 20% |
| D. Final Exam (comprehensive) | 30% |

The weight of the evaluation criteria may vary according to each instructor and will be communicated at the beginning of the course.

VIII. Grading Scale:

Graduate:

A = 100 – 90%

B = 89 – 80%

C = 79 – 70%

F = Below 70%

IX. Academic Policy Statement:

Students will be expected to abide by the University Policy for Academic Honesty regarding plagiarism and academic honesty. Academic honesty is defined as “Engaging or knowingly assisting in academic dishonesty; including plagiarism, cheating, and those acts which would deceive, cheat, or defraud so as to promote or enhance one’s scholastic record.” Refer to the following link for details: <http://www6.semo.edu/stuconduct/>

X. Student with Disabilities Statement:

If a student has a special need addressed by the Americans with Disabilities Act (ADA) and requires materials in an alternative format, please notify the instructor at the beginning of the course. Reasonable efforts will be made to accommodate special needs. Refer to the following for details: <http://www.semo.edu/ds/>.