MBA 717: TECHNOLOGY AND INNOVATION
SYLLABUS
Spring 2015

COURSE NUMBER: MBA 717-01 (Evening Section)

CLASS MEETING TIME AND LOCATION: TUESDAYS 6:30 TO 9:20 PM IN BRYAN 205

COURSE TITLE: Technology and Innovation

CREDITS: 3:3

PREREQUISITES/COREQUISITES: Pre-requisite course is the MBA 715 (Integrative Business) course.

FOR WHOM PLANNED: Graduate students in Bryan School programs, and dual degree students in MS Nursing/MBA and MS Gerontology/MBA programs.

INSTRUCTOR INFORMATION:
Dr. A. F. Salam  (Office Hours: Tuesdays 5:15 pm to 6:15 pm and by appointment)
Associate Professor of Information Systems
Department of Information Systems and Supply Chain Management
Room 427 Bryan Building
amsalam@uncg.edu  (Preferred Method of Contact)
(336) 334-5666

CATALOG DESCRIPTION:
The role of technology (including information technology, business intelligence and data analytics) in innovation. Students will develop a technology-based actionable plan for an organization.

STUDENT LEARNING OUTCOMES (SLOs):
Upon completing the course, the student should be able to:
1) Distinguish the different sources of innovations and distinguish between these sources.
2) Distinguish the relationship between research and development and innovation
3) Compare and contrast the appropriateness of internal and external sources of innovations.
4) Discuss the role of customers and suppliers in the innovation process.
5) Explain the role of innovation in a firm's competitive strategy
6) Define the role of technology/information systems and management in effective business processes
7) Analyze the organizational fit between strategy and technology.
8) Explain principles of data mining as a basic tool of Business Analytics
9) Apply suitable analytical methods to address organizational problems

TEACHING METHODS AND ASSIGNMENTS FOR ACHIEVING LEARNING OUTCOMES:
Lectures, videos, situation vignettes, guest speaker presentations/organizational visits will be used. The assignments and assessment mechanisms are described as follows:

In-Class Written (Mid-Term) Exam and Final Take Home Exam (SLOs 1, 2, 3, 4, 5, 6, and 8)
Each in-class written exam will include essay and/or short questions. The exam content will be drawn from the course readings, vignettes, videos, case analyses, visits to organizations, guest speaker presentations, and class discussions. Any in-class exam is closed-book, and closed-notes. Details will be provided in time. Final Exam may be take home at the sole discretion of the instructor.

Case Analysis and Presentation (SLO 5, 7, 9)
A team of students (consisting of 3 to 4 students in each team) is to submit a written analysis on a case. The students should take on the role of a top management team who has been assigned to review the strategic concerns and/or opportunities related to technology and innovation for the firm (as presented in the case). Many of the marks beyond a "passing score" depend on the team’s ability to go beyond the "average" solution/answer and provide innovative perspectives, approaches, or solutions including incorporation of materials read/discussed in assigned reading materials. If you need to make assumptions to accomplish this, feel free to do so and appropriately incorporate them in your written analysis. The student team will also make a professional presentation to the class. Both the content of the presentation and professional nature of the presentation will be evaluated by both the instructor and the students in the class. Effective analysis and coherent and professional presentation skills are hallmark of effective managers and successful professionals.

Business Plan Incorporating Technology and Innovation (SLO 9)
Each student team (consisting of 3 to 4 students) will be required to develop a detailed and elaborate actionable business plan for a new technology-based business or non-profit entity. This plan should give details of the proposed venture, along with expected needs and results. In the final report, the following sections are suggested, but others can be added or modified as necessary. In addition to written report, student teams will present their business plan to the class.

1. **Executive Summary**: This section must concisely communicate the basics of your entire business plan.
2. **Business Description**: In this section discuss your firm's product or service along with information about the industry. Describe how your product and the technology fit together or complement each other. Include your business model. It may be necessary to divide this section into sub-sections.
3. **Marketing Plan**: With the business described, next you must discuss your target market, identify competitors, describe product advertising, explain product pricing, and discuss delivery and payment mechanisms.
4. **Research & Development**: Address where the project is now, the R&D efforts that will be required to bring it to completion and a forecast of how much the project will cost.
5. **Operations & Manufacturing**: Include major aspects of the business, including daily operations, physical location, locations, and needed equipment, hardware, and software.
6. **Risks**: Define possible risks and strategies to overcome them.
7. **Financial**: Provide investment needs, budget, and projected revenues and profits.
8. **Timeline**: Provide timeline for important milestones.

Prior to the final report, several checkpoints will be established to engage the students in the development of a sound business plan. At a minimum, these include: an initial proposal and its approval, and two interim progress reports.
Class Participation and Contribution and Short Written Analysis of Reading Materials (SLOs 1, 2, 3, 4, 5, 6 and 8)
Each student should be prepared for an insightful discussion of all aspects of the material assigned for each class session, be it articles and/or supplementary material. Students should be prepared to answer questions and raise issues when called upon to do so in the class. Students will be evaluated at each session on the quality (not quantity) of their participation/contribution. Class contribution/participation points will be accumulated based on how perceptively a student analyzes the situation being studied, the usefulness of the observations and suggestions made by the student, the depth of a student's understanding, and the student's ability to put across ideas with clarity and conviction. Class attendance alone will not directly count towards the points to be accumulated through class participation/contribution. However, poor attendance will dramatically reflect in a student's participation/contribution grade. That is, a student cannot participate/contribute if absent from the class. As a further consideration, material obtained from class discussions could be used for answering question(s) on the in-class written exams. Class contribution will be assessed on how insightful and integrative the comments are.

EVALUATION AND GRADING:
The course grade is based on the following assessments:

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<th>Points</th>
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<tr>
<td>Class discussion, activities, preparedness, questions, including peer review</td>
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<tr>
<td>Case analysis (group work – 20 points presentation and 20 points written case analysis)*</td>
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<tr>
<td>Business Plan (group work – incorporating and applying materials learned in this course)*</td>
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<tr>
<td>Short Written Analysis of Selected Reading Materials (4 Write-Ups)</td>
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<td>Mid-term exam</td>
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<td>Final Exam</td>
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<td>TOTAL</td>
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*Group work will contain a group grade and an individual grade. The individual score will be based on a peer evaluation conducted at the completion of each assignment. It will be based on the average of peer assessment score X group score. Final individual score will be taken into account for total points earned for the course.

The grade scale is based upon percent of points earned, and is as follows:

- 95-100% = A
- 90-94% = A-
- 87-89% = B+
- 83-86% = B
- 80-82% = B-
- 77-79% = C+
- 73-76% = C
- Below 73% = F
REQUIRED TEXTBOOKS (3): (Textbook Details are also available on UNCG Bookstore site)

1. Title: Strategic Management of Technological Innovation (SMTI)
   Author: Melissa A. Schilling
   4th Edition
   Year: 2013
   Publisher: McGraw-Hill

2. Title: Diffusion of Innovations (DI)
   Author: Everett Rogers
   Edition: 5th
   Year: 2003
   Publisher: Free Press

3. Technology and Innovation Case Book (eBook) – Will be available in time
   Publisher: Pearson Education, Inc.
Course Schedule for Spring 2015
(Tentative and subject to change depending upon class pace
Note: Instructor reserves the right to add/delete/modify any content in the schedule.
Students will be notified in time of any changes to the schedule.)

All HBR and SMR articles will be made available through the Canvas eLearning System (with no cost to
the students).

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<thead>
<tr>
<th>WEEK #</th>
<th>TOPICS</th>
<th>READING ASSIGNMENTS</th>
<th>ASSIGNMENT/CASE DUE DATES</th>
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</thead>
</table>
| I) Jan 13 | Course Overview Introduction Technology and Innovation And Innovation Diffusion | SMTI: Chapter 1 and Chapter 2
DI: Chapter 1-Elements of Diffusion
Canvas Articles:
HBR Porter Five Forces
HBR Transient Advantage
SMR 5 Myths of Innovation | In-Class Activities and Discussion
A) Form 6 Teams with 5/6 Members per Team
Note: Same Team works on the Case Analysis and Team Business Plan |
| II) Jan 20 | Generation of Innovations And New Economy | DI: Chapter 4: Generation of Innovations
Canvas Articles:
SMR 4 Ways IT Revolutionizing Innovation
HBR The New Economy
SMR The Age of Consumer-Innovator
SMR Innovation Through Competition
Team Business Plan Overview and Discussion | In-Class Activities and Discussion |
| III) Jan 27 | Innovation Decision-Process | DI: Chapter 5: Innovation-Decision Process
SMR: How Innovative is Your Company Culture
Article: Creativity in Organizations (Long Article) | In-Class Activities and Discussion |
| IV) Feb 3 | Attributes of Innovations and Open Innovation | DI: Attributes of Innovations and Their Rate of Adoption
SMR: How to Identify New Business Models
SMR: Innovating with Analytics
SMR: Open Innovation and Ideas |
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| V) Feb 10 | Innovativeness and Adopter Categories | DI: Chapter 7: Innovativeness and Adopter Categories  
Case 1: Wii: Nintendo’s Video Game Revolution | Case 1: Group Case Presentation, Group Written Case Analysis |
| VI) Feb 17 | Innovation and Networks | DI: Chapter 8- Diffusion Networks  
Article: Perspectives on Innovation Processes (Long Article)  
Case 2: IdeaForge: Mechanical Charger | Case 2: Group Case Presentation, Group Written Case Analysis |
| VII) Feb 24 | Change Agent, Opinion Leaders and New Product Development | DI: Chapter 9- Change Agent  
SMTI: Chapter 11- Managing the New Product Development Process | Case 3: Group Case Presentation, Group Written Case Analysis  
Case 3: Corning: Opportunity Identification |
| VIII) Mar 3 | Innovations and Organizations  
March 6 Last Day to Withdraw Without Academic Penalty | DI: Chapter 10- Innovations in Organizations  
SMTI: Chapter 10- Organizing for Innovation | Case 4: Group Case Presentation, Group Written Case Analysis  
Case 4: Alliance Management at Forbes Marshal Review for Midterm Exam |
| IX) Mar 7 | Spring Break | | |
| X) Mar 16 | | MIDTERM EXAM (Details will be discussed in time) | |
| XI) Mar 25 | Types and Patterns of Innovations and Standards Battles | SMTI: Chapter 3 and Chapter 4 | Case 5: Group Case Presentation, Group Written Case Analysis  
Case 5: Ze-gen: Commercializing Clean Tech |
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<td>XII)</td>
<td>Entry Timing and Strategic Direction</td>
<td>SMTI: Chapter 5 and Chapter 6</td>
<td>Case 6: Group Case Presentation, Group Written Case Analysis</td>
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<td>Case 6: HTC Corporation</td>
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<td>XIII)</td>
<td>Collaboration and Protection of Innovations</td>
<td>SMTI: Chapter 8 and Chapter 9</td>
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<td>Article: Moving Beyond Schumpeter (Long Article)</td>
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<td>XIV)</td>
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<td>Team Business Plan Presentations (3 Teams)</td>
<td>Teams 1, 2, 3</td>
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<td>XV)</td>
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<td>Team Business Plan Presentations (3 Teams)</td>
<td>Teams 4, 5, 6</td>
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<td>Review for Final Exam</td>
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<td>Last Class before Final Exam/ Project</td>
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<td>XVI)</td>
<td>MBA 717 NO CLASS (UNCG follows Friday schedule)</td>
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<td>XVII)</td>
<td>May 6</td>
<td>Final Exam (Possibly Take Home)</td>
<td>Possibly Take Home Exam</td>
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**ACADEMIC INTEGRITY POLICY:** Each student is required to sign the Academic Integrity Policy on all major work submitted for the course. The Academic Integrity Policy can be found at: [http://sa.uncg.edu/handbook/academic-integrity-policy/](http://sa.uncg.edu/handbook/academic-integrity-policy/).

**FACULTY AND STUDENT GUIDELINES:** The faculty and students in the course are expected to adhere to the faculty student guidelines stated at the following web page: [http://www.uncg.edu/bae/faculty_student_guidelines.pdf](http://www.uncg.edu/bae/faculty_student_guidelines.pdf)

**ATTENDANCE POLICY:** All students are expected to attend each class session. If a student misses a specific class session, it is her/his responsibility to cover the topics so missed. Material covered in a previous class will not be repeated in a subsequent class. The schedule of sessions on the syllabus contains a listing of topics and assignments to be covered in the respective sessions. The syllabus is a general plan for the course; deviations may be necessary.

**FINAL EXAMINATION:** There will be a final examination.