COURSE SYLLABUS

COM690: Management of Emerging Technologies

Course Description

This course focuses on the practical application of innovation. It examines the innovation process, research and development, and product development. The management of high-tech marketing, service innovation, and biotechnology innovation are also addressed. There is an emphasis on the business and technological base of innovation.

General Course Information

Number of Units/Weeks/Sessions	5/5/10
#Hours Lecture/#Hours Laboratory/#Hours HWs*	50/0/100
Prerequisite(s)	None
Co-requisites (s)	None
Course Developer(s)	Mark A. Peterson, MS
Date Approved / Last Review	June 2012 / Aug. 2014

*Homework Projects

MSISM Program Learning Outcomes

- Analyze Business Information Technology Needs Strategically
- Construct a Human Resources Strategic Plan
- Diagnose a Firm's E-Commerce Capability

Learning Outcomes

- Assess how emerging technologies affect managerial functions, the economy, national systems, and markets
- Analyze innovation in research and development, product development, and strategy
- Evaluate technology, product, service and biotechnology systems
- Differentiate ethical considerations in the use of technology

Instructional Methods Employed in this Course

- Lecture and reading assignments
- Hands-on exercises and labs
- Research
- Student presentations
- Practical application of theory and skills in authentic design projects
- Build on prior knowledge and experience of students to enhance richness of class activities

Information Resources for this Course

- **Textbook**

  Betz, F. 2011, Managing Technological Innovation: Competitive Advantage from Change, 3rd Edition, Danvers, John Wiley & Sons, Inc. ISBN 978-0470547823

- **Other Materials**

  None

- **Web Site Readings** Future for All
  http://www.futureforall.org/
  (Retrieved June 13, 2012)

  Popular Science
  http://www.popsci.com/
  (Retrieved June 13, 2012)

Table/Topics & Assignments
Types of Assignments:
Lecture -
Considered Lecture Hours

Classroom Discussion -
Considered Lecture Hours

In Class Critique -
Considered Lecture Hours

Delivering Oral Presentations -
Considered Lecture Hours

In Class (IC) Exercise -
Considered Lecture Hours

Reading -
Considered Homework (HW), work done outside of class

WebClass lesson (non-online courses) -
Considered HW, work done outside of class

Lab Work -
Considered Lab Hours

Quiz, Midterm or Final -
Considered Lecture Hours

Session 1						
Type	**Topic/Description**	**LEC Time**	**LAB Time**	**HW Time**	**Point Value**	**Due**
LEC 1A	Technological Innovation	1	0	0	0	
LEC 1B	Innovation & Economy	1	0	0	0	
LEC 1C	Innovation & National Systems	1	0	0	0	
IC EX 1A	In-class Participation 1	2	0	0	20	Session 1
HW 1A	Betz Chapters 1-3	0	0	8	0	
HW 1B	Weekly Thesis Assignment 1	0	0	10	50	Session 3
HW 1C	Business Case Analysis Project	0	0	20	300	Session 8
HW 1D	Business Case Analysis Presentation	0	0	5	60	Session 9 & 10
HW 1E	Curricular Practical Training Activity	0	0	10	80	Session 8
Total Session 1		5	0	53	510	

Session 2						
Type	**Topic/Description**	**LEC Time**	**LAB Time**	**HW Time**	**Point Value**	**Due**
LEC 2A	Ethics & Technology	3	0	0	0	
IC EX 2A	In-class Participation 2	2	0	0	20	Session 2
HW 2A	Betz Chapter 15	0	0	2	0	
Total Session 2		5	0	2	20	

Session 3						
Type	**Topic/Description**	**LEC Time**	**LAB Time**	**HW Time**	**Point Value**	**Due**
LEC 3A	Innovation Research	1	0	0	0	
LEC 3B	Innovation & Corporate R&D	1	0	0	0	
LEC 3C	Innovation & Markets	1	0	0	0	
IC EX 3A	In-class Participation 3	2	0	0	20	Session 3
HW 3A	Betz Chapters 4-6	0	0	7	0	
HW 3B	Weekly Thesis Assignment 2	0	0	10	50	Session 5
Total Session 3		5	0	17	70	

Session 4

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 4A	Innovation & Product Development	1	0	0	0	
LEC4B	Innovation & Strategy	2	0	0	0	
IC EX 4A	In-class Participation 4	2	0	0	20	Session 4
HW 4A	Betz Chapters 7-8	0	0	4	0	
Total Session 4		5	0	4	20	

Session 5

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 5A	Integrating Technology & Business Strategy	1	0	0	0	
LEC 5B	Inventing Technology	1	0	0	0	
IC EX 5A	In-class Participation 5	2	0	0	20	Session 5
HW 5A	Betz Chapters 9-10	0	0	5	0	
HW 5B	Weekly Thesis Assignment 3	0	0	10	50	Session 7
EXAM 5A	Prepare for Mid-Term	1	0	0	0	
Total Session 5		5	0	15	70	

Session 6

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 6A	Technology Systems	2	0	0	0	
IC EX 6A	In-class Participation 6	2	0	0	20	Session 6
HW 6A	Betz Chapter 11	0	0	3	0	
EXAM 6A	Midterm	1	0	0	100	
Total Session 6		5	0	3	120	

Session 7

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 7A	Product Systems	2	0	0	0	
LEC 7B	Service Systems	1	0	0	0	
IC EX 7A	In-class Participation 7	2	0	0	20	Session 7
HW 7A	Betz Chapters 12-13	0	0	4	0	
HW 7B	Weekly Thesis Assignment 4	0	0	10	50	Session 9

HW 7C	Curricular Practical Training Activity	0	0	0	0	Session 8
Total Session 7		5	0	14	70	

Session 8

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 8A	Biotechnology Systems	3	0	0	0	
IC EX 8A	In-class Participation 8	2	0	0	20	Session 8
IC EX 8B	Business Case Analysis Project	0	0	0	0	Session 8
HW 8A	Betz Chapter 14	0	0	3	0	
Total Session 8		5	0	3	20	

Session 9

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 9A	Business Case Analysis Presentation	4	0	0	0	
EXAM 9A	Prepare for Final	1	0	0	0	
Total Session 9		5	0	0	0	

Session 10

Type	Topic/Description	LEC Time	LAB Time	HW Time	Point Value	Due
LEC 10A	Business Case Analysis Presentation	4	0	0	0	
Final 10A	Final Exam	1	0	0	100	
Total Session 10		5	0	0	100	

Course Hours Summary

Session	Topic	LEC Time	LAB Time	HW Time
1	Technological Innovation	5	0	53
2	Ethics & Technology	5	0	2
3	Innovation Research	5	0	17
4	Innovation & Product Development	5	0	4
5	Integrating Technology & Business Strategy	5	0	15
6	Technology Systems	5	0	3
7	Product Systems	5	0	14
8	Biotechnology Systems	5	0	3
9	Business Case Analysis Presentation	5	0	0
10	Business Case Analysis Presentation - Final	5	0	0
Total		50	0	111

Table/Point Breakdown

Session	Assignment	Possible Points	Percent of Grade
1,3,5,7	Weekly Thesis Assignments 1- 4	200	20%
1-8	Discussions 1-8	1602	16%
1	Business Case Analysis Project	300	30%
4	Business Case Analysis Presentation	60	6%
6	Mid-Term Exam	100	10%
10	Final Exam	100	10%
8	Curricular Practical Training Activities	80	8%
Total		1000	100%

Weekly Thesis Assignments

The primary purpose of the Weekly Thesis Assignments is to prepare each graduate student at Coleman University for the final Master's Thesis.

Each week, students will submit additional progress toward his or her chosen thesis topic. Progress toward the thesis will include a minimum of three (3) pages of new content toward the thesis and cite no fewer than three (3) scholarly sources.

Each weekly submission should include a highlighted section indicating the new content from the previous week. New content could either be completely new material, or revision to existing material based on feedback provided by your Thesis Mentor or Teaching Assistant.

At the end of Week 3, each student will provide an in-progress review submission to his or her Thesis Mentor via WebClass in the Thesis In Progress section. The Thesis Mentor will provide feedback regarding the framework and approach each student is taking and provide general guidance regarding completion. This in addition to the Weekly Thesis Assignment submission is graded by the course Teaching Assistant.

Your Grades for this Course

Your final grade for this course will be based on an assessment by the Instructor of your performance on a number of course activities, which may include objective tests, classroom exercises, laboratory demonstrations, project papers, or other types of activities. The chart below indicates in what activities you will engage, how many possible points can be earned for each activity, and the percentage of your final grade that will be accounted for by each activity.
Students in this course should be graded following Coleman University assessment practices and policies. A point system is used in the University to indicate student performance on various required activities or projects. For this course, it is recommended that points be distributed as follows:

Coleman University Grade Assignment Policy:

Percent	Letter Grade	Grade Points
94-100	A	4
90-93	A-	3.67
87-89	B+	3.33
84-86	B	3
80-83	B-	2.67
77-79	C+	2.33
74-76	C	2
70-73	C-	1.67
67-69	D+	1.33
64-66	D	1
60-63	D-	0.67
N/A	INC	0
N/A	W	0
60 or above	CR	0
59 or below	NC	0
N/A	I	0
N/A	W	0
N/A	AU	0
N/A	TR	0
N/A	WV	0

Legend	
CR = Credit	NC = No Credit
I = Incomplete	W = Course Withdrawal
AU = Audit	TR = Transfer Credit
WV = Waiver	

Academic Accommodation / Adjustment Policy:

In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA), Coleman University offers accommodations to students with documented physical, psychological, and/or cognitive disabilities. Coleman University will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to offer equal educational opportunities to qualified disabled individuals.

To qualify for an academic accommodation under ADA, the student must provide adequate documentation of a disability. Students seeking academic accommodations should contact the campus ADA Coordinator at 858-966-3953 or via email at ada@coleman.edu. The ADA Coordinator will review the documentation provided and verify ADA coverage. Students covered under ADA must meet with the ADA Coordinator at the beginning of every term to determine the appropriate academic accommodations. Failing to meet with the ADA Coordinator at the beginning of every term may impact the availability of accommodations.

After the academic accommodations have been determined, the students' instructors will be notified by the ADA Coordinator. If any problems or concerns regarding the provision of accommodations occur, the student must inform the ADA Coordinator. If the student feels accommodation is not being made appropriately, the student may follow the published Student Grievance Procedures.