



University of Management and Technology

School of Business and Economics

Course Title: Project Management
Course Code: SM650
Department: Operations and Supply Chain

SBE Vision

SBE envisions its success in the sustainable contribution that it will make to the industry, academia and research in public and private sector. SBE will lead by providing professionally competent and ethically conscious human resources engaged in the global and local context to foster socio-economic growth and sustainability for the society. SBE envisages having faculty with high research potential and a deep desire for cutting edge research including collaboration with national and international partners.

SBE Mission

Being a research-oriented and student-centric business school, we emphasize research publications in impact journals as well as state-of -the-art learning methodologies. We will prepare our students to become the future ethical business leaders and the guiding post for the society, while equipping them with the knowledge and skills required by world-class professionals. We will be the leading choice for organizations seeking highly talented human resource. SBE will foster internationalization with key stakeholders and actively work to exchange best practices with business schools across Pakistan through collaborations, workshops, conferences and other means.

Program Objectives

The Master of Science in Supply Chain Management MS(SCM) program is designed to develop the managerial and leadership abilities in an individual for role in managing modern day supply chains. The program not only exposes participants to the

fundamental knowledge of business management but also imparts cutting edge analytical and quantitative decision-making skills, preparing participants to take the challenges of effectively managing supply chains.

The MS(SCM) program also equips participants with necessary tools for conducting independent research, thus providing them with an opportunity to create state of the art knowledge in the area of Supply Chain Management. It also develops international management effectiveness in different cultural contexts. The global mix of participants, the international exchange and project opportunities, and the increasingly international curriculum, all help to achieve that aim

Course Objectives

Projects have been part of the human scene since civilization started, yet the practice of project management is quite recent. The concepts and tools required to plan, organize, implement, and evaluate a project are equally applicable to such diverse ventures as launching of a space shuttle, developing curriculum in primary education, or organizing a trekking trip to the K-2 base camp.

The purpose of this course is to expose students to the real-life issues in project management, and equip them with necessary tools to resolve these issues, and hence enable them to successfully manage global projects. Use of quantitative techniques for project planning and control is supplemented by softer skills of leadership and human resource management, while also highlighting the ethical dimensions of project management.

The course will focus on consideration of issues related to environmental and social sustainability while selecting and planning for both local and global projects.

Learning Objectives

Learning objectives of this course include:

1. Deep understanding of managerial issues in each phase of project life cycle
2. Necessary analytical skills to successfully select, design, implement, control, and terminate local and global projects of varying complexities
3. Appreciation of complex human issues in project management
4. Consideration of environmental and social sustainability of projects
5. Concern for ethical issues in managing projects

Learning Outcomes

After the completion of this course you should be able to:

1. Select environmentally and socially sustainable projects that are aligned with your organization's objectives
2. Plan, schedule, and monitor project activities effectively, resulting in projects getting completed within deadline, within budget and with desired specifications
3. Effectively form and lead project teams
4. Identify and resolve ethical issues in project management

Teaching Methodology

Following instructional tools and methodologies may be utilized during the course.

Interactive Class Discussions	In-class Skill Development Exercises	Case Studies
Computer Software Tools	Simulations / Business Games	Presentations

PROJECT MANAGEMENT (SM650) CLASS POLICY

1- STUDENTS ARE REQUIRED TO READ AND UNDERSTAND ALL ITEMS OUTLINED IN THE PARTICIPANT HANDBOOK

2- ATTENDANCE

A minimum of 80% attendance is required for a participant to be eligible to sit in the final examination. Being sick and going to weddings are absences and will not be counted as present.

3- MOBILE POLICY

TURN OFF YOUR MOBILE PHONE! It is unprofessional to be texting or otherwise. Your phone should not be visible or heard during the class sessions.

4- EMAIL

READ YOUR EMAILS! You are responsible if you miss a deadline because you did not read your email.

You should regularly check your university emails accounts and respond accordingly.

5- MOODLE

UMT-LMS (Moodle) is an Open Source Course Management System (CMS), also known as a learning Management System (LMS). Assignments in this course will be submitted on Moodle. You will need to follow the instructions related to assignment submissions and deadlines as communicated with the assignment.

6- HARASSMENT POLICY

Sexual or any other harassment is prohibited and is constituted as punishable offence. Sexual or any other harassment of any participant will not be tolerated. All actions categorized as sexual or any other harassment when done physically or verbally would also be considered as sexual harassment when done using electronic media such as computers, mobiles, internet, emails etc.

7- USE OF UNFAIR MEANS/HONESTY POLICY

Any participant found using unfair means or assisting another participant during a class test/quiz, assignments or examination would be liable to disciplinary action.

8- PLAGIARISM POLICY

All students are required to attach a "Turnitin" report for Term Paper / Final Project

9- COMMUNICATION OF RESULTS

The results of quizzes, midterms and assignments are communicated to the participants using UMT Portal

COURSE OUTLINE

SM650: PROJECT MANAGEMENT

Program	MS (SCM)
Credit Hours	3
Duration	15 Weeks (3hrs/week)

11- TEXT BOOK (Mandatory)

Project Management: The Managerial Process (5th Edition) by *Gray and Larson*

ADDITIONAL READINGS

Project Management: A Managerial Approach by *Meredith and Mantel*

Managing Business & Engineering Projects by *Nicholas*

INTERNET RESOURCES

Following websites contain useful information on Project Management. You are advised to visit them frequently and take full benefit:

www.pmi.org

www.pmforum.org

COMPUTER APPLICATIONS

Participants are required to extensively use Excel, PowerPoint, MSWord, and MS Project during this course. Additional workshops may be held to familiarize participants with these tools.

12- GRADE EVALUATION CRITERIA

Following is the criteria for the distribution of marks to evaluate final grade for this course:

INSTRUMENT	WEIGHTAGE
Weekly Assignments	5%
Quizzes	10%
Case Analysis	10%
Presentations	5%
Class Participation	10%
Research paper / Project	25%
Short Tests	35%

WEEKLY ASSIGNMENTS

1. A short assignment will be given every week and will be due at the START of the next session
2. Assignments should be in typed form, and need to be uploaded on Moodle before the deadline
3. Assignments should be submitted in a single file named as: A#(your name) e.g. A4(Muhammad Amjad Malik)
4. Serious errors in grammar, spellings, and formatting will result in loss of points. So please PROOF READ your work before submission
5. You are not allowed to share or show your assignment output to any member outside your team under any circumstances, even after the submission. Failure to comply will lead to disciplinary action
6. The weekly assignments will be graded on a three point scale

0 point	<i>Not submitted / Unsatisfactory</i>
1 point	<i>needs major improvement</i>
2 points	<i>Satisfactory</i>

QUIZZES

1. A total of 3- 4 quizzes will be conducted
2. Quizzes may be announced or be un-announced (surprise)
3. From a total of (n) quizzes, best (n -1) quizzes may be considered for the final grade
4. Make-up quizzes will not be allowed

PRESENTATIONS

Each participant will be required to make at least one presentation, either in a team or individually

CASE ANALYSIS

1. You will be required to work on 3 - 4 case studies, and submit your analysis in a report form for each case study
2. All the case analysis will be conducted in teams

3. The report should adhere to the standard norms of professional report writing. The grade of the case report will depend on the thoroughness and soundness of the analysis, as well as the presentation of analysis in the report
4. All team members are required to participate in preparing the case analysis. In case a member fails to participate, it is the responsibility of the remaining team members to exclude his/her name from the submitted assignment, and notify the resource person

PROJECT / RESEARCH PAPER

Details will be discussed in class

CLASS PARTICIPATION

You are required to attend the classes regularly and with punctuality

1. You should come fully prepared in each class, and participate actively in class activities

SHORT TESTS

1. Short Tests will be conducted during the regular class timings
2. Short Tests will be Open Book / Open Notes

COURSE SCHEDULE (SM650)

Week No.	Topics to be covered	Learning Objective of this topic	Expected Outcomes from Students	Teaching Methodology	Assessment Criteria	Deadlines
1.	Course Overview – Introduction to Project Management (PM)	<ul style="list-style-type: none"> • Comparison of projects with operations • Identification of successful projects • Triple constraints of projects 	<p>On successful completion of the topic, students will be able to:</p> <ul style="list-style-type: none"> • Differentiate projects from operations • Identify when a project is successful or a failure • Understand the complex interplay between cost, time, and performance of a project 	Case Study, Class discussion	Class participation, Assignment	Next week
2.	Project Screening and Selection	<ul style="list-style-type: none"> • Multi-criteria Strategic selection of projects • Economic, social, and environmental sustainability of projects • Selecting international projects 	<p>On successful completion of the topic, students will be able to:</p> <ul style="list-style-type: none"> • Use various analytical tools to select a project • Develop appreciation of issues related to social and environmental sustainability during project selection 	Class discussion, Business Game	Class participation, Assignment, Presentation	Next week
	Project organization	<ul style="list-style-type: none"> • Work Breakdown Structure (WBS), 	<p>On successful completion of the topic, students will be able to:</p>	Class	Class participation,	

3.		<ul style="list-style-type: none"> • Organization Breakdown Structure (OBS) • Linking WBS and OBS 	<ul style="list-style-type: none"> • Apply WBS to breakdown a project into smaller activities • Use Linear Responsibility Chart to link WBS with OBS 	discussion, Skill development exercise	Assignment, Case Analysis, Presentation	Next week
4.	Project Scheduling	<ul style="list-style-type: none"> • Time estimation of project activities • Deterministic vs. stochastic time estimates • Top-down vs. Bottom-up approaches of time estimation • Precedence relationships between activities 	<p>On successful completion of the topic, students will be able to:</p> <ul style="list-style-type: none"> • Effectively estimate durations of project activities • Understand precedence relationships between activities 	Class discussion, Skill development exercise	Class participation, Assignment, QUIZ	Next week
5.	Analytical tools for project scheduling	<ul style="list-style-type: none"> • Gantt charts • Network models • AON and AOA networks for project scheduling • Slack of activity • Identification of critical activities 	<p>On successful completion of the topic, students will be able to:</p> <ul style="list-style-type: none"> • Draw and interpret Gantt chart • Develop AON and AOA networks 	Class discussion, Skill development exercise	Class participation, Assignment, Case Analysis	Next week
6.	Critical Path Method (CPM),	<ul style="list-style-type: none"> • Application of CPM for developing project schedule 	<p>On successful completion of the topic, students will be able to:</p>	Class	Class	Next week

		<ul style="list-style-type: none"> • Determining slacks of activities • Linear programming (LP) models for CPM 	<ul style="list-style-type: none"> • Apply CPM to develop project schedule • Identify critical and non-critical activities in a project • Formulate, solve, and interpret LP model for CPM 	discussion, Skill development exercise	participation, Assignment, QUIZ	
7.	Resource Management	<ul style="list-style-type: none"> • Classification of project resources • Environmental sustainability of project resources • Using global resources • Resource levelling • Resource shortage management 	<p>On successful completion of the topic, students will be able to:</p> <ul style="list-style-type: none"> • Classify project resources using various schemes • Appreciate issues of environmental sustainability of resources • Apply various methods for managing shortage of resources in projects 	Class discussion, Skill development exercise	Class participation, Assignment, Case Analysis	Next week
8.	Reducing project completion time	<ul style="list-style-type: none"> • Budgeting Cost-Time Trade offs • Fast-tracking projects, • Project Crashing • Linear Programming models for Optimizing Project Crashing Plans 	<p>On successful completion of the topic, students will be able to:</p> <ul style="list-style-type: none"> • Fast track a project by using precedence relationships between project activities • Apply analytical tools for effective activity crashing • Formulate and solve LP 	Class discussion, Skill development exercise	Class participation, Assignment, QUIZ	Next week

			models used in developing crashing plans			
9.	Risk Management	<ul style="list-style-type: none"> Defining project risks Identification of risks using teamwork Risks to environmental and social sustainability of projects Risk criticality frameworks Mitigating project risks Using contracts for managing project risks 	<p>On successful completion of the topic, students will be able to:</p> <ul style="list-style-type: none"> Understand nature of project risks Identify project risks using team thinking approaches Develop risk criticality frameworks Develop effective contingency plans to mitigate project risks 	Class discussion, Skill development exercise	Class participation, Assignment, Case Analysis	Next week
10.	Managing Changes in Project Scope	<ul style="list-style-type: none"> Project scope creep Prototyping Configuration Management Project Change Control Board 	<p>On successful completion of the topic, students will be able to:</p> <ul style="list-style-type: none"> Identify reasons for changes in project scope Apply Configuration Management to control changes in project scope 	Class discussion, Case studies	Class participation, Assignment, Case Analysis	Next week
	Program Evaluation	<ul style="list-style-type: none"> Fundamentals of PERT Stochastic nature of 	<p>On successful completion of the topic, students will be able to:</p>	Class	Class	

11.	and Review Technique (PERT)	<ul style="list-style-type: none"> • projects • Beta distribution for estimating activity duration • Conducting PERT analysis • Using PERT for effective project management 	<ul style="list-style-type: none"> • Perform PERT analysis on a project plan • Interpret results of PERT • Apply PERT to manage time related risk of projects 	discussion, Skill development exercise	participation, Assignment,	Next week
12.	Project Leadership, Role of Project Manager (GUEST SPEAKER)	<ul style="list-style-type: none"> • Guest speaker session • Personal experiences of managing projects • Specific issues of project management arising in local context • Ethical dimensions of managing real life projects 	<p>On successful completion of the topic, students will be able to:</p> <ul style="list-style-type: none"> • Develop insight on practical issues of managing projects in local context • Understand ethical issues related to managing projects • Get a better picture of careers in project management 	Lecture by Guest speaker, Class discussion,	Class participation,	
13.	Project Monitoring and Control	<ul style="list-style-type: none"> • Problems with traditional accounting approaches of monitoring project progress • Earned Value (EV) Approach • Using CPM/PERT for 	<p>On successful completion of the topic, students will be able to:</p> <ul style="list-style-type: none"> • Apply Earned Value method for monitoring progress of projects • Link CPM/PERT with project 	Class discussion, Skill development	Class participation, Assignment, Case	Next week

		controlling projects <ul style="list-style-type: none"> Revising budget estimates using EV projects Ethical issues in project monitoring and control 	control <ul style="list-style-type: none"> Understand ethical issues in project monitoring and control 	exercise	Analysis	
14.	Project Termination	<ul style="list-style-type: none"> When and how to terminate projects Project Audit vs. Financial Audit Managing teams during project termination Project closure report Consideration of environmental and social sustainability in project termination Ethical issues in project termination 	On successful completion of the topic, students will be able to: <ul style="list-style-type: none"> Understand when and how to terminate a project Develop effective project closure report Manage project teams during project termination Understand ethical issues in project termination Develop appreciation of issues related to social and environmental sustainability at project termination 	Class discussion, Skill development exercise	Class participation, Assignment, Case Analysis	Next week
15.	Final Project Presentations				Class participation, Presentation	