Standard Course Outline -

I. General Information
   ♦ Course number: Mgmt 430
   ♦ Title: Project Management
   ♦ Units: 3
   ♦ Prerequisites: Mgmt 300 & IS 301
   ♦ Course Coordinator: Sal Kukalis
   ♦ SCO Prepared by: Dr. Sal Kukulis
   ♦ SCO Reviewed by: Management/Human Resources Mgmt Department
   ♦ Date prepared/revised: April 27, 2012
   ♦ Updated: February 23, 2015

II. Catalog Description
   Selection of project ideas and implementation of projects. Roles of team member and project manager. Project planning and organization. Budgeting, scheduling, monitoring and controlling, including computerized network models and project management software packages. Final project analysis and termination.

Letter grade only (A-F).

Curriculum Justification(s)

It has been determined that in any industry there exist first level managers (e.g, head of purchasing department or head of marketing department) whose career progression is necessarily limited by virtue of their lack of knowledge of broad business operations. One area that directly impacts these first level managers is Project Management. Knowledge of the principles and practices of Project Management will enable such managers to more fully participate in managing a project from inception to completion encompassing all business operations which opens opportunity for career advancement to higher level management.

Project Management Learning Goals:

General Goals
   ♦ Critical Thinking. Students will be able to demonstrate conceptual learning, critical thinking, and problem-solving skills integrated into the Project Management discipline.
   ♦ Team & Interpersonal Skills. Students will be able to demonstrate interpersonal skills for working in a team-oriented environment by participating in team project development exercises.
   ♦ Communication Skills. Students will be able to demonstrate effective oral and written communication skills in English.

Specific Goals
   ♦ Business Functions. Students will be able to demonstrate understanding of Project Management analytical functions, practices and tools and be able to integrate this functional knowledge in order to address project issues.
   ♦ Quantitative & Technical Skills. Students will possess quantitative and technological skills required to operate common Project Management software that will enable them to analyze and interpret project data and to improve project performance.
III. Course Objectives, Measurable Student Learning Outcomes, Evaluation Instruments, and Instructional Strategies for Skill Development

Specifically, this course emphasizes the following:

A. Application of good practices in project management in practical settings, including definition of objectives and deliverables in a project environment, proposal writing, planning methods, and importance of developing alternate plans and emergency procedures, graphical methods for presenting project schedules and plans, developing preliminary budgets and project controls, basic understanding of team dynamics and responsibilities and factors that influence project success and the introduction of risk will be emphasized.

B. Use of contemporary techniques and technology for project management in diverse environments.

C. Understand the genesis of project management and its importance to improving the success of projects in a practical setting.

D. Demonstrate knowledge of project management terms and techniques as it is implemented in diverse environments.

E. Understand the project management planning, implementation in relation to the life cycle of a project.

F. Practicing use of tools and techniques of project management such as:
   - Project selection methods
   - Work breakdown structures
   - Charting tasks and identifying the critical path
   - Cost estimates
   - Analysis and management of risk mitigation
   - Analysis of value

G. Use state-of-the-art software to help plan and manage projects and,

H. Appreciate the importance of good project management in diverse environments.

MEASURABLE STUDENT LEARNING OUTCOME(S).

A. EVALUATION INSTRUMENTS. During the conduct of this course, instructors will administer examinations consisting of true-false, essay, multiple-choice, and application-oriented questions that will test the student’s understanding of presented material. Instructors will also administer homework and team projects that will be evaluated to determine the student’s grasp of Project Management ability to apply what they have learned.

B. INSTRUCTIONAL STRATEGIES FOR SKILL DEVELOPMENT. The instructor will assign students to a project teams that will simulate a cross-functional project team. These teams will be provided with methods and objectives to be used and met incrementally during the course. The instructor will explain the purpose and learning objective of each of these assignments. The instructor will also provide instruction in the use of the Project Management software to be used in the conduct of these assignments.

C. COURSE LEVEL ASSESSMENT.

OBJECTIVE: This course is designed with the perspective that students are being trained to be project managers or project team members and/or contributing members of technical staffs. Upon completion of this course the students will be able to demonstrate a familiarization with
the basic tools of Project Management that would commonly be used in their areas of operations.

**MEASURABLE OUTCOME:** Students will be able to demonstrate a basic understanding of the principles and practices of Project Management through successful completion of team projects, homework, quizzes, and class discussions.

**STUDENT ACHIEVEMENT:** Specific assignments will vary by instructor, but typical assignments include quizzes, examinations, team projects, written homework and feedback during class discussions.

**INSTRUCTIONAL STRATEGIES:** Instructors will provide students with a rubric that will explain the objectives and evaluative methods and criteria for each assignment.

IV. Outline of Subject Matter (below is a model course outline):

<table>
<thead>
<tr>
<th>DATE</th>
<th>TOPIC</th>
<th>Assigned Case</th>
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<tbody>
<tr>
<td>Week 1 - Introduction to Project Management and the Project Manager (PM): Roles and Responsibilities</td>
<td></td>
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<tr>
<td>Overview of Project Management</td>
<td><em>United Screen Printers</em> (Chapter 1)</td>
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**Topics To Be Discussed Include:**

- **What is a Project?** - The Three Goals of a project, The Life Cycles of Projects

- **The Project Manager’s Roles** – At the top level the PM will recruit the team and keep it functioning effectively until the job is done. While you are an expert in your field you recognize that others will do the work and focus is on results not how they are done. Your primary role during the project will be to make decisions.

- **The PM’s Responsibilities to the Project** – You will work with functional organizations to staff your team and work with them to resolve personnel issues. You will keep in touch with the people on project through formal reviews, informal contacts or “walking the halls.” You will be the primary interface with the customer (whether external or internal). You will check your progress against the your plan every week and share that information with your supervisor on a regular basis.

- **Interface between a Project and the Parent Organization (Organization Issues)** – Projects have finite life and single purpose. A project team is focused on providing a deliverable to a customer. If it is an external customer, they may impose their own set conditions in the contract that your project may have to conform. However, your company has its own set of accounting, management, technical, etc. processes and procedures that will also have to be addressed and incorporated within the project plan and operation.

- **The Project Team and Creation of Multidisciplinary Teams** – Project teams have numerous dimensions. There is the basic skill mix that you need to do the job which will change during the course of the project, the personalities of the people you will manage and the functional organizations who provide the people for your project team. Coordinating along those dimensions requires the right balance of control and understanding to optimize your team.
The Management of Risk Cost, schedule and technical risk tracking and mitigation overview – When a project is bid, there will be a number of assumptions that drive your cost, schedule and technical performance. Each of those assumptions have a level of risk against cost, schedule and technical performance. Tracking those risks, establishing risk mitigation strategies and measuring how the risk is “bought down,” is a critical function of project management.

Additional Readings for Extra Credit for Week 1:


Week 2: Project Management Tools – The Basics

1. What steps

Topics To Be Discussed Include:

- The Contents of a Project plan – Plan the plan, write the plan, and then work the plan. The plan will have what is to done, by whom, when and for how much. The project plan will show how your team is organized, the breakdown of the work matched to budgets and cost collection levels, the schedule with milestones and critical path, personnel assignments and customer requirements for reporting and communication.

- The Planning Process: overview of the nuts and bolts of a project plan. This section provides an overview of the total project planning process and includes defining project goals, project deliverables, the project schedule, and any supporting plans.

- The project action plan divides the project in to sub-segments of common activities. These project cornerstones will lay out a sequence of action steps, with both people and time-lines designated, and these will become the assignments for delegation. plan

- Work Breakdown Structure – Consider the work breakdown structure as checklist of what has to be done. It will be broken down into tiered levels of packages of work that allows tracking progress since budgets will be associated with each level.

- Project Scheduling – How schedules get developed, including
  o Developing a critical path schedule – A critical path is simply those tasks within the project schedule which have no slack meaning that slippage of one will cause the slippage of the succeeding tasks. As a manager, tracking those tasks is critical to maintaining the project on cost and schedule.
  o Identifying a Milestone List – Milestones are completion events for a portion or all of a given task. Milestones provide the manager with tangible evidence that task is
completed. Each task should have at least one milestone which will support the project control function discussed

- Tracking progress –
- Overview of MS Project’s capabilities and tools

Team Homework Assignment: Create a plan statement of work (SOW) for a family vacation.

Additional Readings for Extra Credit for Week 2:

Week 3: Planning the project

(Chapter 3) 

St. Dismas Assisted Living Facility-1

Topics To Be Discussed Include:
- Resource allocation and baseline budgets – Using your WBS, you will allocate costs to the activities. Once you have done the initial planning you will freeze the budget/schedule/deliverables into a baseline which is what you will use to measure progress throughout the life of the project. Changing the “baseline” is not done without significant planning and generally requires customer approval.
- The Linear Responsibility Chart and Derivatives - Describe the participation by various roles in completing tasks or deliverables for a project. Clarify the roles and responsibilities in cross-functional/departmental projects
- Identification of key individuals and their assignments – Getting the right people to staff your project is critical to ensure successful completion of the work. This will require you to step into another dimension of project management, coordination with the functional organizations to get their commitment to provide people to work your project.
- Customer and/or higher management communication plan – The communication plan will be part of the project plan. It is your opportunity to share with the customer, whether internal or external, the status and issues associated with the project. Good communication can make the customer part of the solution; poor communication leads to reduced levels of trust or even mistrust.
- Project Reviews - content and review schedule
- Integration management - Ensure that the elements making up a project are properly coordinated so that project goals are achieved.
- Concurrent engineering – Many projects go through a design phase where the detailed design of the end product is worked out. Because something designed without input from the production team could possibly be difficult to build or impact cost/schedule, projects involve engineers from the production teams to participate in the design effort at low levels. Having them there, can forestall implementation issues on the manufacturing floor, field study, etc. which lead to cost and schedule growth due to poor designs.
- Interface management – Ensure the systematic control of all communications that support a project. In more complex projects, packages of work may provide a critical component to another element. Making sure that the interface between those components is well defined so that everything that needs to work together will.

Team Homework Assignment: Using MS Project, Develop a Linear Responsibility Chart and Derivatives list for each member of the family. Identify the key family members and their assignments.
Develop a communication plan for the family. Establish a list of Project Reviews and their timetables.
Develop a WBS.

Additional Readings for Extra Credit:

Week 4 - Budgeting the Project

(Chapter 4) St. Dismas Assisted Living-2

Topics To Be Discussed Include:
- Methods of Budgeting
- Project Cost Estimation
- Work Element Costing
- Methods for Improving Cost Estimates
- The Impact of Budget Cuts
- Budget Uncertainty and Risk Management
- Management reserve: how to get it

Team Homework Assignment: Using MS Project Prepare a baseline budget for the family vacation. Include risk elements and estimates of probability. Determine the potential for budget variance.

Additional Readings for Extra Credit:

Week 5 Mid-Term Exam (chapters 1-4)

Week 6 - Scheduling the Project

(Chapter 5) St. Dismas Assisted Living Facility-3

Scheduling the tasks to complete a project is the most important activity in developing your project plan. The schedule is not just a series of bars with a variable length. What is needed is an integrated network of those tasks to show how work will flow together producing an end product. What you will find as you build this network, is that some tasks that feed another task take too long or are completed way too early. Managing the slack time between related tasks will lead to the shortest time possible to accomplish something and keep your project team from wasting time waiting for items to be delivered. Ultimately, as you develop the integrated network of tasks, you will find a path where there is no slack (slip in one is a slip in all that follow) between a series of tasks. This is the “critical path” and will be identify those tasks that you, as the project manager, want to watch closely as they can make or break your project cost and schedule.
Topics To Be Discussed Include:
- The PERT and CPM Networks
- Building the Network
- Finding the Critical Path and Critical Time
- Calculating Activity Slack
- Using Microsoft Project for PERT & CPM Networks
- Project Uncertainty and Risk Management
- Calculating Probabilistic Activity Times
- Understanding the Probabilistic Network
- The Gantt Chart

Team Homework Assignment: Using MS Project, develop the PERT/CPM diagram for the family vacation. Demonstrate critical path relationships.

Additional Readings for Extra Credit:

Week 7 - “Allocating Resources to the Project”

(Chapter 6) St. Dismas Assisted Living-4

In the real world, you will not have all the time, budget and people to do the job. In many cases you were in a competitive competition to win the opportunity to do the work. The project manager has to find ways of improving the project efficiency to deal any the shortfall by juggling human, equipment or budget resources. The following topics address common issues of working within a scarce resource involvement and doing it successfully.

Topics To Be Discussed Include:
- Expediting a Project
- Fast Tracking a Project
- Resource Loading of a Project
- Resource Leveling of a Project
- Allocating Scare Resources to Projects
- Allocating Scare Resources to Several Projects
- Project baseline
- Resource Allocation and the Project Life Cycle

Team Homework Assignment: Using MS Project, demonstrate how the family vacation can be expedited to accomplish all that needs to be done if one or more events (work packages) take longer than expected. Demonstrate how resources will be allocated throughout the project (rate of gas consumption, meals, etc.).

Additional Readings for Extra Credit:
Week 8 - “Monitoring & Controlling the Project

(Chapter 7) St. Dismas Assisted Living-5

Topics To Be Discussed Include:
The Plan- Monitor-Control Cycle
Designing the Monitoring System
Measuring progress – Using the earned value-approach to measure overall project cost and schedule progress.
Project Control
• Designing the Control System
• Tools for Control
• Data Collection and Reporting
Management and customer reporting
• Change Control – formal process to change the baseline schedule/costs.
Scope Creep – When you start a program you have a fixed scope that you used to create the activities necessary to complete the project for a contractual amount of budget and time. As the project goes on the customer may see something that is missing or could have been improved. As a project manager you must balance a legitimate “in scope” change (you did not capture that activity/deliverable/cost when you should have) and those that are outside of scope of the contracted effort.

Team Homework Assignment: Using MS Project, determine which family vacation events may turn into side trips and other peripheral activities that will affect the completion of the vacation plan. Describe the control measures to be used to manage unscheduled activities.

1. “The Creeping Scope, Incomplete documents and scope creep - how accurate can project documentation be?” By Oliver F. Lehmann, PMP
   http://www.visionarytools.com/decision-making/incomplete-contracts-scope-creep.htm

2. “Cutting Your Losses: Extracting Your Organization When a Big Project Goes Awry.”

Week 9 - “Evaluating & Terminating the Project

(Chapter 8) St. Dismas Assisted Living-6

Team Project Report Is Due

Topics To Be Discussed Include:
• Evaluation and Measurement Criteria
• Project Auditing
• The Auditing Process
• The Audit Report
• Project Termination
• Types of Project Termination
• The Termination Process
• The Final Report
Additional Readings for Extra Credit:

Week 10 - Final Exam (Comprehensive).

This is a broad outline of topics to be covered. Subject matter and sequence of topics may vary by instructor.

V. Methods of Instruction

The course syllabus will serve as a kind of contract between instructor and students. Each student need to follow the syllabus like a map, on how to get started and proceed in this class. All efforts will be made to present all information presented in the classroom, on Beachboard.

Methods of instruction will include the following:
- Class lectures/examples/discussion
- Individual and team case analysis
- Written assignments including research projects
- Individual and team projects
- Simulation Models (e.g., Microsoft Project Software-MSP)

VI. Extent and Nature of Technology Use

The use of technology is essential to the successful completion of this course. Project management software and internet sites and electronic format instructional reading will be used throughout this course.

VII. Compliance with University Policy for Graduate Courses

a) Instructors should use appropriate readings and cases that are consistent with the graduate level of instruction and the course description stated in Section II, and serve the course objectives listed in Section III of this SCO. Given the diverse nature of the material covered, a custom course pack may be appropriate.

b) Instructors in planning the exams, and other grading procedures, should adhere to the relevant University Policy on “Grades, Grading Procedures, and Final Assessments, Final Course.” Examinations must be essay-type and/or problem solving questions and avoid, when feasible, the use of multiple-choice questions.
Textbooks


VII. Instructional Policies Requirements

The students are expected to comply with the universally accepted norms of considerate and courteous behavior, and with all University rules and policies found in the current University Catalog, including the Withdrawal Policy and Policy on Cheating and Plagiarism. It will be assumed that the students will adhere to the tenets of academic integrity as articulated in the University policy on Academic Integrity throughout this course. Instructors may specify their own policies with regard to plagiarism, withdrawal, absences, etc. as long as these policies are consistent with the above mentioned University policies.

It is expected that all students to attend classes regularly and to be responsible for all materials covered in class, regardless of their attendance. Make-up exams are strongly discouraged and will only be given with documented proof of an excused absence from classes. Acceptability of the excuse will be determined based on the appropriateness of the documents. It is important that the student provides all documentation without special prompting from the instructor. The student should give earliest possible notification of an anticipated excused absence. The students refer to the specific university policy on these issues.

Occasionally adjustments in the course assignments become necessary. The students should be notified about changes, if any, and, whenever possible, they should be consulted in advance about any changes.

Students with Disabilities: Students with disabilities are responsible for notifying their instructor as early as possible of their needs for an accommodation of a verified disability. A student with a disability is urged to consult with Disabled Student Services as soon as possible in order to identify possible accommodations to enhance academic success.

Grading:

The exact set of course assignments will vary depending on the instructor. University policy requires that no single evaluation of student achievement may count for more than one-third of final grade. The assignments may include:

- Mid-Term Exam I 20%
- Homework 10%
- Group Project 25%
- Class Participation 20%
- Final Exam 25%

VIII. Bibliography (Optional)

This is a highly selective bibliography to provide instructors with a primary set of resource materials. For brevity, important works may be missed from this list. The list is intended to show the range of materials available to our students. Relevant course materials may also be found in periodicals, both in print and electronic form.

“Mapping the Dimensions of Project Success” by Shenhar et al. (Project management Journal June 1997).

“Lessons for an Accidental Profession by J.K. Pinto et al. (Business Horizon, March-April 1995)


“How Microsoft Makes Large Teams Work Like Small Teams” (Sloan Management Review, Fall 1997), By M.A. Cusumano.


“Statement of Work Handbook” NHB5600.2, National Aeronautics and Space Administration, February 1975


IX. Additional Resources for Development of Syllabi

The course coordinator will review the SCO and offer advice and/or materials to each faculty member new to teaching the course. All future syllabi will conform to the SCO. The course coordinator may offer or require regular review of instructors’ course materials as well as anonymous samples of student work.

Instructors of this course are referred to the following CSLULB web sites on designing course syllabi.

The Syllabus Policy that has been approved by the Academic Senate: http://www.csulb.edu/divisions/aa/grad_undergrad/senate/documents/policy/2004/05/index.html

The syllabus template to guide faculty in designing their syllabi: http://www.csulb.edu/divisions/aa/personnel/fcpd/documents/SyllabusTemplate.doc

A sample syllabus: http://www.csulb.edu/divisions/aa/personnel/fcpd/documents/SampleSyllabus.rtf