Spring 1-2003

IS 476.01: Project Management

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Course Objectives and Approach
IS 476 is an introduction to the principles and practices of designing and efficiently managing projects. In the real-world, managers use the project management techniques to achieve unique objectives with limited resources, usually under critical time constraints. Project managers and their teams need hard knowledge and skills to work successfully within a project environment. This course teaches students how to become productive team members; it also imparts them with the potential to assume the responsibilities and face the challenges of a project manager.

The course addresses project management from a managerial perspective. It elaborates on the following details:

1. Organizing and managing teams, to include negotiating, resolving conflicts, and interacting with the parent organization
2. Using the network management techniques (PERT and CPM) to plan, schedule, monitor, and control projects
3. Estimating and allocating resources, to include budgeting and cost estimating
4. Dealing with and controlling change
5. Evaluating, auditing and terminating projects
6. Preparing interim and final reports

The course material covers information systems (IS) projects, as well as regular business projects. Students who aspire to be Systems Analysts will find the text particularly insightful. It describes how to conduct IS projects according to the Systems Development Life Cycle. Thus, the course expands on the material taught in Systems Analysis and Design.

Performance, cost, and schedule are the project's most compelling constraints. Microsoft Project, the course's software package, is a powerful tool for balancing the organization’s scarce resources. Project managers rely on such tools to accomplish their performance objectives within budget and on time.

Required Material

Optional Material

Grading
Letter grades for the course will be based on performance in the following areas:

- Individual Class Participation: 20%
- Two Group Case Study Reports and Presentations (10% each): 20%
- Three Tests (10% each): 30%
- Take Home Final Exam: 30%
Group Reports and Presentations

The class will be divided into six groups of three to five students each. The groups will be formed on the first day of class and remain together for the entire course. Although it is sometimes inconvenient to work in groups, the benefits outweigh the costs. Group work is an excellent way for students to learn the material, practice communicating, negotiate differences, and develop project management skills.

The class will analyze six case studies. Each group will prepare two of the cases listed on the syllabus. Each preparation will include a written report and an oral presentation. The presentations will usually, but not always, take place on a Thursday. Students not assigned to a particular case will read it and prepare to participate in the subsequent class discussion. After the groups are formed, the instructor will assign cases to groups.

Students will restrict the written reports to no more than three (3) typewritten, double-spaced pages, exclusive of any appendices. The first half of a report will consist of a brief introduction, description of the project, and recommended course of action. The second half of the report will address the case's questions.

In a project environment, oral communications are critical to a project manager's success... but how does an aspiring manager develop these skills? PRACTICE... FEEDBACK... PRACTICE! Oral presentations followed by class discussions provide students with practice and feedback. Groups will restrict their presentations to 15 - 20 minutes. Since class discussion follows each presentation, student attendance is mandatory. Contributions to class discussions will be graded as "class participation." Therefore, students who must miss presentations should explain their reasons to the instructor.

Tests

The tests will be conducted during the class period indicated and will be approximately 80 minutes in length. They may contain problems, short essays, and/or multiple-choice questions.

Take Home Final Exam

The exam is a team effort. Teams will use Microsoft Project to manage a real-world project. They will determine the project's precedence relationships, prepare a budget, and report on such important aspects of the business as schedule feasibility, budget constraints, and competitive priorities. The project itself requires a written managerial report, complete with Microsoft appendices. Restrict the report to no more than four (4) typewritten, single-spaced pages. Write the report according to the attached format and guidelines. The Microsoft software has already been loaded on the School's lab computers. Teams will be graded on thoroughness, format, grammar, and spelling, as well as technical details and recommendations.

Rescheduling A Test

Students who need to reschedule a test must present the instructor with a satisfactory reason at least one week prior to the test date. The test must be made up within one week after the test date.
## SYLLABUS -- SPRING 2003 (Tentative)

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FORMAT AND GUIDELINES FOR THE FINAL EXAMINATION

The Assignment
Prepare an action-oriented advisory report, which presents concisely your analysis and recommendations. Restrict the main body of the report to no more than four (4) typewritten pages (exclusive of the executive summary and appropriate appendices), single-spaced, and formatted in report form.

The Report Format
A. Executive Summary (1/2 page, single-spaced)
   Report--main body (4 page maximum, double-spaced)

   Label each of the four parts of your report with the subheading indicated below:
   I. Statement of the Problem
   II. Recommendations
   III. Discussion and Analysis of Recommendations
   IV. Limitations and General Comments

B. Appendices, tables and exhibits as appropriate (4 page maximum, single- or double-spaced, 1” margins)

Instructions for Writing the Report
A. Executive Summary
   Write the executive summary in memo form. It is from you to the manager to whom you report. It provides an overview of the report to follow. The memo should consist of four paragraphs, each of which concisely summarizes the corresponding section in your report. Memo form is as follows:

   TO:
   FROM:
   DATE:
   SUBJECT:

   Do NOT sign the memo.

B. Main Body of the Report
   I. Statement of the Problem
      Concisely specify the question to be resolved in your report. Include the sub-parts of the problem and all its requirements, which have been established for a satisfactory solution. Indicate also any critical restrictions, which have been a priori placed on an acceptable solution, such as limitations on monetary expenditures, time, disruptions in an activity, personnel. State the problem in terms of the possible action to be taken, e.g., ? how to improve ... so as to achieve ... without an undue expenditure of ... ??
      Be sure you have the problem, not symptoms of it. Unless your diagnosis of the problem is correct, all subsequent decision making will be futile, no matter how efficient it is.

      In the second paragraph, indicate the significance or importance of the problem by reference to its magnitude, urgency, difficulty of solution, and/or possible consequences of delay or a do-nothing decision.

   II. Recommendations
      Spell out your recommended program of action, that is, the alternative solution which you recommend (seek authority) to implement. Your recommendation should be an outgrowth of imaginative and thorough identification of all the alternatives or possibilities which might reasonably overcome the obstacles involved in the problem. Base your choice upon a critical evaluation of the crucial differences between these alternatives, but give only your preferred alternative here. Leave the conclusions reached as a result of your analysis (and thus the substantiation for your choice) for Part III.
Do not include them here.

Be specific. Take a stand for action. Do not merely suggest more study or call in a consultant. Direct your recommendations to eliminating the underlying causes, not merely minimizing or eliminating the apparent, surface symptoms (that is, solve the problem stated in Part I).

Be sure to include necessary follow through. (Remember that the ultimate success of your major recommendation will often be dependent upon secondary steps.) Make clear the sequence in which the various steps are to be taken. Strive to provide the coordinated steps for accomplishing a thorough solution to the problem (what, by whom and when action should be taken). Because of the limited length imposed on your report, though, treat your recommendations as summary in nature, including only the more important, less detailed actions.

III. Discussion and Analysis of Recommendations? Specify your conclusions regarding the problem so as to defend your position, i.e., why you recommend your overall program of action. Include mention of the most significant and relevant facts, assumptions, or principles, which led you to decide upon your recommended solution. Do not attempt to justify each step; concentrate on supporting the total program. (Acceptance of your supplemental steps will be carried along automatically when you succeed in selling your major solution.)

Support your recommendation also by indicating the results (benefits and relief from difficulties), which you expect will be forthcoming. Anticipate these results on the basis of known factors; do not engage in blue sky thinking.

An extensive, long statement of facts is not desirable. It makes their reading laborious and possibly confuses and even weakens your case. It is much more preferable to present only the major points you believe to be essential to the support of your decision.

IV. Limitations and General Comments? State here the disadvantages and factors, which you recognize will be limiting to the efficiency of your own recommendation. These are things about which you have either chosen not to do anything or cannot do anything to prevent or minimize their impact. Every action recommendation -- no matter how thorough -- generally has limitations about which management can do (or desires to do) nothing. Identification of these limitations increases the likelihood of acceptance of your report. You thereby show additional realism and urge caution or at least reasonableness in others' expectations regarding the implementation of recommendations.

List next the other alternative courses of action, which you seriously considered but rejected. Their inclusion here reassures your reader that you were thorough in your analysis, that you had considered these alternatives. They are not suggested for possible implementation in place of your recommendation (either now or later) at the discretion of your reader. They should be considered further only as a second choice? fraught with much greater danger than the action that you recommend. (The reasoning for all of this should be found in Part III, however, not here.)

C. Appendices: Do not include the data or detailed quantitative work in the body of the report; include this in appendices. In the body, if appropriate, make extensive use of summary tables and figures, which support your conclusions. Remember, too, it is not only what you say but how you say it that will be graded. Therefore, write a concise, direct, and convincing report.