

North Dakota State University, Department of Industrial and Manufacturing Engineering
Syllabus for
PROGRAM AND PROJECT MANAGEMENT

Please Note: All the text materials that are italicized and shown in blue are hyperlinked to their relevant web sites.

COURSE DESCRIPTION

Capstone experience. Integration of technical, business, and operational specialties in a project consulting firm. Work with multi-disciplinary teams that design, plan, and present for a variety of industrial clients.

COURSE OBJECTIVES

To help the students with enhancing their project management skills and teamwork through participation in group projects collaborating to accomplish work activities for business, industry, and governmental clients.

The course also provides the students with various opportunities to apply knowledge and skills acquired in their earlier course work.

Note: The Industrial and Manufacturing Engineering students enrolled in this course are required to concurrently enroll in IME485, Industrial and Manufacturing Facility Design or IME489, Manufacturing Capstone. Concurrent enrollment in pair courses offer the students with the opportunity to learn project management skills while participating in Industrial and Manufacturing Engineering program-related projects working with industry clients.

STUDENT LEARNING OUTCOMES

At the successful completion of this course, the students should be able to:

1. Understand project management concepts including project attributes, constraints, life, process, and project management benefits.
2. Become familiar with project needs identification, project selection, and process of developing requests for proposals.
3. Be able to perform needs assessment and develop a statement of work addressing client and project requirements.
4. Use their knowledge to develop proposals for designing or improving a system, component, or process to meet desired needs.
5. Develop and manage project plans by clearly defining project objective, developing work breakdown structure, and developing network diagram.
6. Understand project cost planning and project performance measurement.
7. Understand the development of effective project managers and teams.
8. Develop professional project documentations.
9. Use commercially available software to plan and manage projects.
10. Enhance their ability to deal with others, emphasizing functional and project teams, motivation, leadership, integrity, ethics, diversity, and personal growth.

TEXTBOOK

Successful Project Management, Jack Gido and James P. Clements, Fourth Edition, Thomson South-Western Publishing.

SUPPLEMENTARY READINGS

Students are encouraged to supplement the recommended text with readings from a variety of resources. Students are required to perform independent study and research to help with conducting client projects.

INSTRUCTOR

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OFFICE HOURS

A class schedule and office hour for students' visits is posted by my office and also can be viewed following this [link](#). If requested, other visiting hours may be arranged.

PROGRAM AND PROJECT MANAGEMENT / CAPSTONE

Explanation of Work Wanted and Classroom Policies

A project is an endeavor to accomplish a specific objective through a unique set of interrelated tasks and the effective utilization of resources. The project management process means planning the work and then working the plan. A baseline plan must be established that provides a roadmap for how the project scope will be accomplished on time and within budget.

This course provides various learning opportunities in the topics related to project management. The topics covered in this course are of great importance to many organizations. Enhanced learning is provided through involvement in group projects collaborating to accomplish work activities for business, industry, and governmental clients. Such collaboration in groups is used to simulate the context of work in a range of professions. The course participants are required to handle together widely diverse knowledge, thinking and activities. What you learn in this course can greatly contribute to your professional growth and increased employment opportunities.

To get the most out of this class, please complete all reading assignments prior to coming to class. Your active and constructive participation is expected and appreciated. I ask for your best efforts.

ATTENDANCE: Regular and punctual attendance is **MANDATORY**. Students will be responsible for all lectures and other materials covered, regardless if an absence was excused or not. For every unexcused class period or project team meeting absence, your final percentage will be dropped by 1%.

COURSE OUTLINE: Detailed outline for this course and related activities will be posted on the BlackBoard on a continuous basis. Visit the “Course Information” section of the course BlackBoard very often and check the “Activities List” folder.

GRADING: The following table shows the categories of effort to earn points toward final grade.

TENTATIVE Method(S) of Evaluation and Grading Procedures:

Individual Efforts <ul style="list-style-type: none">• Chapter Quizzes - 190 points• Schedule of Availability Form Documentation -10 points• Team Members Appraisal Form Documentation - 20 points	220
Team Efforts - Business/Industry Project Documentations and Final Presentation ⁽¹⁾ <ul style="list-style-type: none">• The Main Project Document - 100 points• Final Presentation Booklet, PowerPoint Visuals, and Annotated Narrative - 50 points• In class and Rehearsal Presentation - 120 points• Meeting Deadlines - 100 points	370
Total Points <i>Earned points convert to %: 90, 80, 70, 60 to A, B, C, D, and F ranges</i>	590

(1) Team Members Performance Appraisal will be used to adjust the final points earned %

Chapter Quizzes: There will be one quiz for each chapter covered. Quizzes will be made of multiple-choice and/or true-false questions. They will cover material from the class lecture and handouts, textbook, supplementary readings, and in-class activities. There is no comprehensive exam. Immediately after each quiz, the answers to the quiz will be available for your viewing.

Quiz Make-up Policy: Students will be allowed to make up quizzes. In order to qualify for the make-up quiz, the student **must** notify the instructor **before** the date of the quiz, and have the instructor approve the make-up quiz. If the student fails to take a make-up quiz as scheduled, he or she will receive a score of zero for that quiz.

BUSINESS/INDUSTRY PROJECT: Every effort will be made to provide the students with opportunities to participate in business/industry projects. When possible, the projects will be selected and assigned in conjunction with the INDUSTRIAL AND MANUFACTURING FACILITY DESIGN and MANUFACTURING CAPSTONE courses.

By design, the business/industry projects in this course require teamwork. Teamwork can greatly contribute to your learning. This will be possible only if you have put real effort into preparation and come to meetings with the intention of helping the team members. Remember, you have a responsibility to the team, the class, and to yourself. “Team Members Performance Appraisal” will be used to assess the performance of team members. Emphasis includes demonstration of collaborative skills, acceptance and sharing of responsibility, participation and interpersonal abilities as seen by peers in their work group. *The “Team Members Performance Appraisal” form is available through the course BlackBoard.*

A STATEMENT ABOUT BUSINESS/INDUSTRY PROJECT TIME COMMITMENT

You are expected to commit a minimum of 130 hours of productive work toward the completion of the Business/Industry Projects, also referred to as Capstone Project.

Additional Requirements for Graduate Credits: Students registered for the course at the graduate level will be required to participate in additional activities which can include, but are not limited to, identifying current topics related to the course, performing literature review, documenting their findings in a format similar to published papers, and making presentation to the class.

Getting Help: If you are having difficulty in the course (or even think you are), feel free to consult your instructor. A class schedule and office hour for students’ visits is posted by the instructor’s office. If you are unable to visit during posted hours, other visiting hours may be arranged if requested.

Grade Corrections: After getting your tests or homework back, if you believe you have been given insufficient credit, please meet with the instructor in his office. You must request a grade correction within a week after you have received your graded test or assignment. No test or homework will be re-graded after the deadline.

Class Attendance and Participation: There are many topics discussed in the class that are not in the textbook. When a class is missed, the student has missed the material covered in that class period. Since class participation is an important aspect of the course, all students are also expected to participate in both the class discussion and team discussions.

Students with Disability: If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please inform the instructor at the beginning of the semester. Efforts will be made to accommodate students with disabilities.

Veterans and student soldiers with special circumstances or who are activated are encouraged to notify the instructor in advance.

Late Penalties: There is a 25% penalty per day for each assignment not handed in on time. On time means the first minute of the class session in which the homework is due. Late penalties apply immediately after the homework has been collected.

Academic Honesty Statement: All work in this course must be completed in a manner consistent with the NDSU University Senate Policy, Section 335: Code of Academic Responsibility and Conduct and the College of Engineering and Architecture Honor System (http://www.ndsu.edu/cea/honor_code/).

Note: The instructor reserves the right to change the grading policy and course outline as needed.