
**Course Description:** Treatment of the principles, models and techniques for the planning, analysis, and design of integrated production control systems. Course topics include forecasting, inventory management, production planning, project scheduling, and materials requirement planning problems with an emphasis on analytical modeling approaches and optimization methods used to obtain their solutions.

**Course Objective:** Developing a better understanding of production and operations management problems, and providing foundations for mathematical modeling/programming methods needed to solve these problems.

**Prerequisites:** INEN 220, STAT 211, and MATH 304 or INEN 420.

**Topics:**
- Strategy and Competition (Chapter 1)
- Nonlinear Optimization (Lecture notes)
- Forecasting (Chapter 2)
- Aggregate Planning (Chapter 3)
- Linear Programming (Lecture notes)
- Inventory Control: Known Demand (Chapter 4)
- Nonlinear Programming (Lecture notes)
- Probability (Review)
- Inventory Control: Uncertain Demand (Chapter 5)
- Supply Chain Management (Chapter 6)
- Push and Pull Production Control Systems (Chapter 7)

**Office Hours:** My official office hours are 10:00–11:30 TR. However, you can stop by anytime when I am in the office. Alternatively, if you want to make sure that I am in the office, then you can make an appointment by phone or e-mail. I encourage each one of you to ask any questions you might have on the material during the lecture or right after the class. It is very much to your benefit to get these points cleared as soon as they occur. You are also strongly encouraged to come and see me in the office whenever you have problems.
Grading: Two midterm exams (85 points each) and a final exam (90 points), quizzes and homework (40 points), so the total is 300 points. The following grading scheme will be used:

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\begin{array}{|c|c|c|c|}
\hline
D & C & B & A \\
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180-209 & 210-239 & 240-269 & 270-300 \\
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You will write an exam approximately every four weeks. You might be given a quiz or an in-class assignment (without warning) based on your homework problems or reading assignment. If a test is missed you must have a written authorized excuse.

**Tentative Exam Dates:**

1st test October 2 (Thursday)
2nd test October 30 (Thursday)
3rd test December 4 (Thursday)

**Due-dates:** Homework assignments must be handed in at the start of class on the day they are due. Late assignments will not be accepted. If a test is missed you must have a written authorized excuse.

**Scholastic Dishonesty:** The *Texas A&M University Regulations* define several categories of Scholastic Dishonesty: (1) Acquiring or attempting to acquire information; (2) Providing information on homework, quizzes or exams; (3) Plagiarism; (4) Conspiracy to commit any of the above; (5) Fabrication of Information; and (6) Violation of Departmental or College policies. The University definition of Scholastic Dishonesty will be strictly adhered to.

**Students with Disabilities:** If you feel you are entitled to special accommodations because of a disability, please see the professor within the first two weeks of classes.