

**IMEN 5315**  
**Constraint Management and Mistake Proofing**  
**Summer 2009**

Instructor: Farzin Heidari  
Office: IT Building-105  
Phone: 593-4056  
Class Meets: MTWR 6:00 – 8:30  
Office Hours: MTWR 3:00 – 5:00

**Course Description:**

The intent of this course is to provide educational experience in the study of constraints management. Efficient distribution of resources such as machine, labor and material will be discussed. Many techniques related to the theory of constraint will be presented.

**Course Objective:**

1. Develop a basic understanding of constraints management.
2. Understand the fundamental of constraints management from the production perspective.
3. Solve problems associated with the constraints management and distribution of resources.
4. Identify terms and definitions related to constraints management.
5. Display a satisfactory level of competence in the process of creating solutions for different case studies using the theory of constraints.

**Text:**

Cox, J.F., 1998. The Constraint Management Handbook. Boca Raton, FL: St. Luice Company. (optional)

[www.dbrmfg.co.nz/](http://www.dbrmfg.co.nz/)

**Student Assignments:**

Each student is expected to maintain a class/lab notebook which will include notes assignments and handouts. In the event of absences or tardies the student will be expected to contact a class member for the assignment. **IT WILL BE YOUR RESPONSIBILITY TO MAKE UP AND TURN IN ALL COURSE ASSIGNMENTS.** Course assignments will become due on the date specified. Late assignment will receive a late grade.

### **Counseling and Special Assistance:**

Instructor will be available prior to and after each class session as time permits and during the posted office hours. Every effort will be made to assist students in the successful completion of the course. However, the responsibility for completion rest with the student. Time organization and study habits should be developed and maintained throughout the course.

### **Class Attendance:**

The course grade will be effected by the student's full time attendance. Tardies are annoying and disruptive and will be kept to a minimum. Each class meeting will begin promptly and each student is expected to exercise courtesy and discretion in the event of unavoidable tardies and absence. The course grade will be effected after two unexcused absents. Three tardies will equal to an unexcused absent. Maximum grade reduction due to tardies and absence would not exceed a letter grade.

### **Grading and Examinations:**

Presentations and papers and class discussions will be graded using the following reference criteria: content organizations, accuracy and neatness. Quizzes will be graded on a percentage basis as follows: 90-100% = A 80-89% = B 70-79% = C 60-69% = D and 59% or below = F. The semester grade will include a composite of papers, presentations, quizzes, class participation and attendance.

### **Course Outline:**

June 8	Introduction.		
June 9	What is constraint management?		
June 10	The production planning and control frame work.		
June 11	The five step focusing process.		
June 15	Project.		
June 16	The Drum-Buffer-Rope scheduling method.		
June 17	Test.		
June 18	The V-A-T logical structure analysis.		
June 22	Case and analysis.	June 29	Test.
July 23	Measurements.	June 30	Project.
June 24	Project.	July 1	Presentations.
June 25	Constraint thinking process	July 2	Presentations.
		July 3	Final Examination.

