IHE 7010 – Understanding and Aiding Human Decision Making

Course Description
Methods, concepts, theories and practice of decision analysis and its role in providing decision-making assistance to human decision makers. Applications-oriented issues are emphasized.

Offered both face-to-face and online
Graduate level – 3 credit hours

Course Learning Objectives
Students enrolled in this course will learn to:
- Comprehend the importance of systematic approaches to complex decision making
- Understand the components of decision problems
- Apply appropriate decision analysis concepts and methods to analyze decision problems

Course Learning Outcomes
Upon successful completion of this course, students can:
- Comprehend the importance of systematic approaches to complex decision making
- Understand the components of decision problems
- Apply appropriate decision analysis concepts and methods to analyze decision problems

Tentative Weekly Schedule
Week 1  Introduction, Overview of Decision Making, Elements of Decision Making
Week 2  Structuring Decisions – and decision trees
Week 3  Decision Trees
Week 4  Multiple Choices
Week 5  Probability
Week 5  Influence diagrams
Week 5  Multi-Attribute Utility Theory
Week 6  Value of Information
Week 6  Exam 1 – review
Week 7  Value of Information
Week 7  Mid-Term Exam - 1 – Take Home, No class
Week 8  Naturalistic Decision making – 1 & 2
Week 8  Paper Discussion - 1
Week 9  Organizational decision making
Week 9  Paper Discussion - 2
Week 10  Decision Tree Software Review
Week 11  Decision making in HealthCare
Week 11  Paper Discussion - 3
Week 12  Creativity
Week 13  Mid Term Exam – 2, Take Home, No Class
Graduate Student Presentation
Week 14  Ethics in decision making
Week 15  Finals Week No Class - Final Report Due