University of Wisconsin - Madison  
College of Engineering [EGR]  
Last Offered: 2015-2016 Fall [1162]  
Direct Link to this Syllabus:  

1. I SY E 549, Human Factors Engineering  
2. Credits : 3  Contact Hours : 2.5  
3. Textbook and Materials :  
   An Introduction to Human Factors Engineering by C.D. Wickens, J.D. Lee, Y. Liu and S.E.Gordon Becker. Additional readings will also be assigned on the course web site.  
   a. Other Supplemental Materials : None  

• Specific Course Information :  
    a. Brief description of the content of the course (Course Catalog Description) : Analysis and design of man-machine systems using human performance models and data. Emphasis on systems involving communication and control. Projects using digital and analog computer simulation techniques for system design.  
    b. Pre-requisites or Co-requisites : IE 349 or equiv  
    c. This is a Elective course.  

• Specific Goals for the Course :  
    a. Course Outcomes :  
    b. ABET Student Learning Outcomes :  

• Brief List of Topics to be Covered : Visual and auditory sensory systems; Information processing; Situation awareness & crew resource management; Decision making;
SRK (Skill-Rule-Knowledge) model;
Workload and vigilance;
Human error;
Automation;
HFE methods: task analysis, usability