EIN 3101C: Introduction to Industrial and Systems Engineering

1. **Catalog Description**: An introduction to and overview of the profession, including career planning, professionalism and communication, ethics, teamwork, industry site visits, industrial speakers, and selected solution methods for problems in coordination and planning (2 credits)
2. **Pre-requisites and Co-requisites**: Students should either have an AA degree from an accredited junior college, or have taken or currently registered for ENC 2210 Technical Writing and Business Communication or equivalent (e.g., ENC 3254 Professional Writing for the discipline)
3. **Course Objectives**:
   a. To help students with career planning
   b. To give students an overview of ISE as a profession and as a department
   c. To show students that ISE is interesting in practice
   d. To give students some background in professionalism: including interviewing, business etiquette, ethics, teamwork, resumes
   e. To introduce students to methods of coordination and planning
   f. To provide students EXCEL skills useful in industrial and systems engineering
   g. To hone writing and presentation skills, and suggest remediation if needed.
4. **Contribution of course to meeting the professional component**: The course will help students to function on multidisciplinary teams, identify and formulate engineering problems, understand professional and ethical responsibilities, communicate effectively, understand the impact of engineering solutions in a global and societal context, and understand contemporary engineering issues.
5. **Relationship of course to program outcomes**: The course will help students prepare for professional careers in ISE. After completing the course, students should understand their professional and ethical responsibilities, be aware of contemporary engineering issues, and recognize the need for life-long learning.

6. **Instructors**
   a. Dr. Siriphong (Toi) Lawphongpanich, 303 Weil Hall, 392-1464x2015, Lawphong@ise.ufl.edu
   b. Dr. Keith Stanfill, 378 Weil Hall, 392-1464x2021, Stanfill@ufl.edu.
   c. Dr. Joe Hartman, 303 Weil Hall, 392-1464x2002, Hartman@ise.ufl.ed.
7. **Teaching Assistants:** n/a
8. **Class/laboratory schedule**: The course meets twice a week: one 50-minute period on Monday and two 50-minute periods on Wednesday.
9. **Meeting Times and Locations**:
   Monday, Period 7 (1:55 – 2:45), MAEB 211
   Wednesday, Periods 7 – 8 (1:55 – 3:50), MAEB 211
10. **Material and Supply Fees**: None
11. **Textbooks**

    a. *Hold Paramount: The Engineer's Responsibility to Society* by P. Aarne Vesilind and Alastair S. Gunn, 2nd Edition, Cengage Learning, ISBN 0-495-29586-8.
    b. *The Goal* by Goldratt and Cox, 3rd Edition (an earlier edition is also acceptable), North River Press 2004, ISBN 0-88427-178-1
12. **Recommended Reading**: None

13. Course Outline

   a. Introduction to ISE, & department overview: presentations from Chair, selected faculty (e.g., IPPD, EPPD, Senior Project)

   b. Introduction to student organizations; interning & co-oping: presentations from IIE, APM officers

   c. Course planning, FAQs on advising: instructor or undergraduate coordinator

   d. Local plant visits, including CRC and Career Showcase

   e. Speakers from industry, career opportunities

   f. Resumes and interviewing: invited speakers

   g. EXCEL

   h. Report writing & presentation skills

   i. Ethics & professionalism: expectations of working professionals

   j. In-class "origami" team production simulation

14. Attendance and Expectations

   a. Respect for others

     i. <u>No cell phone</u> during all classes.

     ii. <u>No laptop computer</u> during Monday classes.

     iii. When requested, no laptop computers during Wednesday classes.

     iv. Unless invited to participate, no talking during classes.

   b. Professionalism

     i. Be on time to lectures and team meetings

     ii. Be well prepared for classes and team meetings

     iii. Actively participate in team meetings and classes when requested

     iv. Keep commitments to others

     v. Complete all work on time

     vi. Be courteous and cooperative, especially to other team members

     vii. Uphold UF's Honor Code

   c. Attendance is required.

     i. Signing attendance sheets for absent and tardy students violates UF's Honor Code.

     ii. Leaving before the end of class violates UF's Honor Code.

   d. Students missing classes should obtain the information from other students in order to write their memoranda. <u>Missing classes do not excuse students from submitting their weekly memoranda.</u>

   e. All outside of class communication <u>will</u> be sent to the student's GatorLink e-mail account per University of Florida Policy.[1]

15. Grading:

   a. Professionalism (class participation, attendance, being prepared classes, support of UF's honor code, showing respect to others): **10%**

     i. Any late class arrival counts as an absence.

     ii. Each unexcused absence reduces this grade by 1%.
To be excused, send an e-mail asking for permission from your instructor at least 24 hours prior to the class meeting. Provide a reason for your absence in the e-mail. If the reason is medical in nature, provide your instructor with a note from your doctor afterward. Otherwise, provide other forms of verifiable evidence, e.g., contact phone numbers, etc.

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[1] See http://www.reg.ufl.edu/gatorlink-email.html

b. Assignments (i.e., memoranda and others) and quizzes: **35%**
   i. For each written assignment, content and English/grammar count 75% and 25%, respectively
  ii. Assignments are late if not submitted by 1 PM on the due date. If there is a legitimate reason for submitting a late assignment, send an e-mail informing your instructor at least 24 hours prior to the due date. As above, provide reasons for the delay.
  iii. Penalties for late assignments without a prior approval are as follows:
    (0, 24 hrs] = 10 points deduction or 10% of the total assignment grade.
    (24, 48 hrs] = 25 points deduction or 25% of the total assignment grade.
    (48, 72 hrs] = 45 points deduction or 45% of the total assignment grade.
    (72, 96 hrs] = 70 points deduction or 70% of the total assignment grade.
    (96, 120 hrs] = 100 points deduction or 100% of the total assignment grade.
    (<u>Note</u>**:** Weekends and holidays are not included in the number of hours late.)

c. In-class (or Ethics) presentations: **10%**

d. Resume:**10%**

e. Origami competition and report: **35%**

16. **Grading Scale:** A: 96 – 100; A-: 92 – 95, B+: 89 – 91; B: 86 – 88; B-: 82 – 85, C+: 79 – 81; C: 72 – 78, C-: 69 – 71, D+: 65 – 68 etc.

"A C- will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: a C- average is equivalent to a GPA of 1.67, and therefore, it does not satisfy this graduation requirement. For more information on grades and grading policies, please visit:
https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

17. **Make-up Exam Policy**: Except for extenuating circumstances, there is no make-up exam.

18. **Honesty Policy** – All students admitted to the University of Florida have signed a statement of academic honesty committing themselves to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action. This statement is a reminder to uphold your obligation as a UF student and to be honest in all work submitted and exams taken in this course and all others.

19. **Accommodation for Students with Disabilities** – Students Requesting classroom accommodation must first register with the Dean of Students Office. That office will provide the student with documentation that he/she must provide to the course instructor when requesting accommodation.

20. **UF Counseling Services** –Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:
  · UF Counseling & Wellness Center, 3190 Radio Rd, 392-1575, psychological and psychiatric services.
  · Career Resource Center, Reitz Union, 392-1601, career and job search services.

21. **Software Use** – All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do

so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.