**Introduction to Industrial and Systems Engineering**

EIN 2002

***Class Periods:*** F 5th period

***Location:*** Weil 238

***Academic Term:*** Fall 2023

***Instructor:***

Katie Basinger, [katie.basinger@ise.ufl.edu](mailto:katie.basinger@ise.ufl.edu)

Office Hours:

***Instructor:***

Serdar Kirli, [kirli@ise.ufl.edu](mailto:kirli@ise.ufl.edu)

Office Hours: Mon and Wed 3rd period through Zoom

***Course Description***

Introduction to the field of industrial and systems engineering. Provides an overview of methodological and application areas as well as career paths (1 credit).

***Course Pre-Requisites / Co-Requisites***

None.

***Course Objectives***

At the end of this course, students will

1. Know about contemporary ISE research directions and be able to identify research opportunities available for undergraduate students in the department,
2. Understand ISE measurement, modeling and methodological activities/applications in industry,
3. Have extensive knowledge on curriculum and education choices including graduate school,
4. Be informed about various curricular and extra-curricular activities within the ISE department,

***Required Textbooks and Software***

No textbook required.

***Relation to Program Outcomes (ABET):***

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| **Outcome** | **Coverage\*** |
| 1. Identify, formulate, and solve engineering problems | Low |
| 2. Apply engineering design … consideration of public health, safety, and welfare as well as global, cultural, social, environmental, and economic factors |  |
| 3. Communicate effectively with a range of audiences | Low |
| 4. Recognize ethical and professional responsibilities … impact of engineering solutions in global, economic, environmental, and societal contexts | Low |
| 5. Function effectively on a team … provide leadership, create a collaborative and inclusive environment … |  |
| 6. Develop and conduct appropriate experimentation, analyze, and interpret data … |  |
| 7. Ability to acquire and apply new knowledge as needed … | Low |

***Course Schedule***

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| **Week** | **Topic** |
| 1 | Introduction and Overview of ISE discipline |
| 2 | Lego Activity - Intro to Optimization |
| 3 | ISE Research Highlight |
| 4 | Student organizations and leadership opportunities  ISE Curriculum, minors and certificates, combined degree program |
| 5 | ISE Research Highlight |
| 6 | Time Study Activity |
| 7 | *Homecoming Holiday* |
| 8 | ISE Research Highlight |
| 9 | Experiential learning (Internships/Co-ops and Study Abroad programs) |
| 10 | ISE Research Highlight on Human Factors (Guest: Dr. Motamedi) |
| 11 | Activity – Intro to Simulation |
| 12 | *Veteran’s Day* |
| 13 | Meet the advisors, curriculum planning and registration |
| 14 | *Thanksgiving* |
| 15 | Attend Senior Design Poster Session |

***Attendance Policy, Class Expectations and Make-Up Policy***

Attendance is required. You may have one unexcused absence without penalty. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>

***Evaluation of Grades***

Your grade will be based on quizzes, homeworks and a final assignment.

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| **Assignment** | **Percentage** |
| Quizzes/In-Class Assignments | 30% |
| Homeworks | 40% |
| Final Assignment | 30% |
|  |  |

Throughout the semester, you will be given four quizzes, the lowest of which will be dropped automatically. In each quiz, you will be asked questions from topics discussed in the previous class meeting(s). The quizzes will be short in duration (5-10 min), taking up only a small part of the class period. In addition, you will be given four homework assignments to be turned in via E-learning. For your final assignment, you are required to go to the senior design poster session at the end of the semester and write a paper about one project that you liked. The paper will include the following:

1. Project goals and objectives,
2. Methodologies used,
3. Challenges encountered,
4. Project Outcomes,
5. How the project relates to ISE,
6. What interested you about the project.

You may have one unexcused absence without penalty. Each additional unexcused absence will result in a 5% drop of your overall grade.

Also, keep in mind that **this is a required course for ISE students. This means that you must earn, at a minimum, a C in order to satisfy the requirement.**

***Grading Policy***

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| --- | --- |
| **Percent** | **Grade** |
| 93 - 100 | A |
| 90 – 92.9 | A- |
| 87 – 89.9 | B+ |
| 83 – 86.9 | B |
| 80 – 82.9 | B- |
| 77 – 79.9 | C+ |
| 73 – 76.9 | C |
| 70 – 72.9 | C- |
| 67 – 69.9 | D+ |
| 63 – 66.9 | D |
| 60 – 62.9 | D- |
| 0 – 59.9 | E |

More information on UF grading policy may be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

***Students Requiring Accommodations***

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, [www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

***Course Evaluation***

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

**In-Class Recording**

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

***University Honesty Policy***

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code ([https://sccr.dso.ufl.edu/process/student-conduct-code/)](https://sccr.dso.ufl.edu/process/student-conduct-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

***Commitment to a Safe and Inclusive Learning Environment***

The Herbert Wertheim College of Engineering values broad diversity within our community and is committed to individual and group empowerment, inclusion, and the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture.

If you feel like your performance in class is being impacted by discrimination or harassment of any kind, please contact your instructor or any of the following:

• Your academic advisor or Graduate Program Coordinator

• Jennifer Nappo, Director of Human Resources, 352-392-0904, [jpennacc@ufl.edu](mailto:jpennacc@ufl.edu)

• Curtis Taylor, Associate Dean of Student Affairs, 352-392-2177, [taylor@eng.ufl.edu](mailto:taylor@eng.ufl.edu)

• Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, [nishida@eng.ufl.edu](mailto:nishida@eng.ufl.edu)

***Software Use***

All faculty, staff, and students 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.

***Student Privacy***

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <https://registrar.ufl.edu/ferpa.html>

***Campus Resources:***

*Health and Wellness*

**U Matter, We Care:**

Your well-being is important to the University of Florida.  The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need.  If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) so that the U Matter, We Care Team can reach out to the student in distress.  A nighttime and weekend crisis counselor is available by phone at 352-392-1575.  The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center.  Please remember that asking for help is a sign of strength.  In case of emergency, call 9-1-1.

**Counseling and Wellness Center:** [https://counseling.ufl.edu](https://counseling.ufl.edu/), and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

**Sexual Discrimination, Harassment, Assault, or Violence**

If you or a friend has been subjected to sexual discrimination, sexual harassment, sexual assault, or violence contact the [**Office of Title IX Compliance**](https://titleix.ufl.edu/), located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, [title-ix@ufl.edu](mailto:title-ix@ufl.edu)

**Sexual Assault Recovery Services (SARS)**

Student Health Care Center, 392-1161.

**University Police Department**at392-1111 (or 9-1-1 for emergencies), or <http://www.police.ufl.edu/>.

*Academic Resources*

**E-learning technical suppor***t*, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. <https://lss.at.ufl.edu/help.shtml>.

**Career Connections Center**, Reitz Union, 392-1601. Career assistance and counseling; [https://career.ufl.edu](https://career.ufl.edu/).

**Library Support**, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

**Teaching Center**, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. <https://teachingcenter.ufl.edu/>.

**Writing Studio, 302 Tigert Hall***,* 846-1138. Help brainstorming, formatting, and writing papers. <https://writing.ufl.edu/writing-studio/>.

**Student Complaints Campus***:* <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>;[https://care.dso.ufl.edu](https://care.dso.ufl.edu/).

**On-Line Students Complaints***:* [*https://distance.ufl.edu/state-authorization-status/#student-complaint*](https://distance.ufl.edu/state-authorization-status/#student-complaint).