

ISYE 1801 Syllabus

Course Prefix: ISYE

Course Number: 1801

Course Name: ISyE Discovery Seminar

Credit Hours: 1

Semester: Fall

Academic Year: 2026-2027

Sections: ISYE 1801 – IE (Fridays, 9:30–10:20 AM); ISYE 1801 – IE 2 (Fridays, 11:00–11:50 AM)

Location: George Tower|Scheller Tower, Room 0270

Instructor Information

Instructors: Dr. Dima Nazzal, Dr. Jon Lowe, Dr. Chen Zhou

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Office Hours: By appointment via Canvas

General Course Information

Course Description:

This seminar course is designed for incoming students in the H. Milton Stewart School of Industrial and Systems Engineering. The course introduces students to industrial and systems engineering as a field and to the paths students might take within it. Through faculty guest lectures, hands-on activities, alumni panels, a Senior Design showcase, and a team project, students will explore what ISyE offers, build their academic plans, and connect with the peers, faculty, and resources that will shape their years at Georgia Tech. This is a highly interactive course that requires active student participation and working collaboratively in small groups supported by Peer Leaders — upper-level ISyE students who mentor first-year students throughout the semester.

Course Format:

A one-hour session is held each week, typically featuring guest speakers, faculty panels, or hands-on activities, with structured small-group work supported by your Peer Leaders. Following most sessions, you will submit a short reflection due by 11:30 PM the Thursday before the next class. Two class sessions are dedicated to team project work, and the semester concludes with project presentations and a poster session.

Course Learning Outcomes:

Upon successful completion of this course, students will:

- Discover the field of Industrial and Systems Engineering with its major areas, the problems IE graduates solve, and the vocabulary that defines the discipline.
- Explore ISyE's academic paths and begin seeing where your interests might take you.
- Build a long-term, high-level understanding of the ISyE curriculum and professional development opportunities to make preliminary decisions regarding course of study and co-curriculars.

- Connect with ISyE peers, alumni, upper-class students, and faculty through structured activities, hands-on experiences, and real ISyE problems.
- Ignite a passion for Industrial and Systems Engineering, and for the scale and variety of impact it empowers you to have.

Required Course Materials:

None. All course materials, assignments, and announcements will be posted on Canvas. Students will need access to their Georgia Tech email, DegreeWorks, CareerBuzz, and LinkedIn.

Grading Policy:

Grading for the course will be broken down as follows:

Participation and Attendance	20%
Team Project	20%
Assignments	60%
Total	100%

Grade Scale

A	100%-90%
B	89%-80%
C	79%-70%
D	69%-60%
F	<60%

Description of Graded Components:

Participation and Attendance (20%): This class is designed for students to become active, engaged participants. Points are earned for attendance and active participation in each of the class sessions.

Team Project (20%): Working in small teams within your Peer Leader group, you will complete one of two project types: (1) an observational case study — study a campus system, describe how it works, identify a need for improvement, and identify what you would need to know to improve it; or (2) a design challenge — propose a design solution to a given prompt (e.g., library, dining, housing, or athletics). Milestones include a one-page proposal, a short report, and a final presentation at the end-of-semester.

Assignments (60%): Assignments span three areas across the semester: (1) short reflections following guest panels, spotlight sessions, and major activities; (2) an academic and co-curricular plan built with DegreeWorks, the BSIE scheduling tool, and ISyE advising resources, timed to support your Spring registration and including plans for co-op, internships, or study abroad; and (3) career readiness deliverables including an initial resume, CareerBuzz activation, and a LinkedIn profile, supported by a recruiter panel and sessions on professional and technical communication.

Reflections are due by 11:30 PM the Thursday before the next class session. The two lowest reflection grades will be dropped. If you miss submitting a reflection for any reason, it will receive a grade of "0" and may count toward your dropped grades.

Reflection Rubric

Reflections are graded out of 10 points:

- **6 pts on Content:** thoughtful, specific engagement with the session — what you learned, what surprised you, and how it connects to your own interests or plans. Generic summaries earn partial credit.
- **2 pts on Completeness:** addresses all prompt questions within the stated length.
- **2 pts on Professionalism:** correct spelling of speaker names, clear writing, proofread.

Team Project Rubric

The team project is graded on:

- **40% IE thinking:** correct use of IE vocabulary and concepts in describing and diagnosing the system or design prompt.
- **25% Analysis quality:** clear description of the system, a well-identified improvement need or design rationale, and what you would need to know to act on it.
- **20% Presentation:** clear, organized final presentation.
- **15% Milestones:** on-time, complete one-page proposal and short report.

Regrade Requests

If you believe an error occurred in grading, submit a written explanation of the specific items to reevaluate, along with the original assignment, within one week of the grade being returned. Requests after the deadline will not be considered.

Course Policies

Attendance Policy:

This class is designed for students to become active participants, so it's vital that all students attend each class session and are fully engaged in all class activities. This means that you'll need to do more than just show up at the appointed time and place; you'll also need to come to class prepared to participate.

Please attend every scheduled meeting on time. That said, if you are exhibiting any symptoms of illness (fever over 100.4 F, coughing, nausea, etc.), please stay home to rest, seek medical attention if appropriate, and contact us as soon as possible. Excessive lateness and absences (3 or more per semester) can negatively impact your final grade outcome. If you have extenuating circumstances, we will try and work with you to address those challenges. Please communicate early and often if you are struggling with issues that may call for accommodations.

Extensions and Late Assignments:

All assignments are due the night before class at 11:30 PM unless otherwise noted in Canvas. Assignments can be turned in up to one week after the due date; however, late assignments will earn a 20% grade deduction per day unless an extension has been arranged in advance. If you would like to request an extension, please do so at least a day before the assignment deadline.

Criteria for Successful Completion and Acceptable Student Conduct:

Creating an engaging and productive class experience is the responsibility of both the instructors and the students involved. To ensure you are getting the most out of our class and contributing positively to our learning environment, please be mindful of the following:

- Please create a habit of checking your GT e-mail and Canvas daily. Important class announcements and information will be posted to Canvas, and you want to make sure you're fully equipped for success.
- Grades will be posted to Canvas throughout the semester. It is your responsibility to keep track of your submitted assignments and grade progress throughout the semester. If something seems missing or off to you, please reach out to us to discuss.
- ISYE 1801 is designed to be informative, helpful, and fun! However, the class is graded and does carry one credit towards your degree. For that reason, it is important that all assignments you submit be high quality. Please double check your work for spelling, capitalization, and grammatical errors. This practice is also good for creating a habit of professionalism.
- You can expect that as your instructors, we will come to class each day ready to engage you in learning about ISyE and learning how to be successful academically and professionally. Each session will be structured to encourage your active participation, so please come prepared to participate and contribute to the class.
- To ensure everyone feels safe, heard, and able to learn in our class, please demonstrate appropriate classroom behavior at all times. This means that you should speak and act in a respectful manner towards your classmates, your Peer Leaders, and your instructors. To review the Student Code of Conduct, please visit <https://policylibrary.gatech.edu/student-life/student-code-conduct>.

Academic Integrity Statement:

ISYE 1801 is a class based in your own discovery, exploration, and reflection of what you want your time at Tech and professional life to be. Unpacking your thought processes based on information you acquire through campus resources is a major component of the assignments.

You may use generative AI tools (e.g., ChatGPT, Copilot, Gemini, Claude) as a thought partner for brainstorming and drafting. However, the reflections, plans, and career materials you submit must be authentically yours because AI should not replace your intelligence and write your story for you. If you use AI assistance on any assignment, you must: (1) state which tool was used and for what purpose, (2) describe its role in your process, and (3) retain and be prepared to share the main dialogue with the tool. You are responsible for the accuracy and quality of everything you submit. Per the Georgia Tech Honor Code, no work produced via AI should be submitted as your own. If you have questions about what constitutes acceptable use, please see the instructors.

The Georgia Tech Academic Honor Code applies to all work submitted in this course. To review the Honor Code, please visit <https://policylibrary.gatech.edu/student-life/academic-honor-code>.

Accommodations for Students with Disabilities:

If there are aspects of the instruction or design of this course that result in barriers to your inclusion or accurate assessment of achievement, please notify us as soon as possible so we can resolve the issue. Students with disabilities should also contact the Office of Disability Services (ODS), whose purpose is to collaborate with students, faculty, and staff to create a campus environment that ensures all students have an equal opportunity to access the Georgia Tech community. ODS can be reached at 404.894.2563, dsinfo@gatech.edu, or disabilityservices.gatech.edu

Please contact us ahead of time to discuss any issues related to disabilities. We are happy to work with you.

Tentative Course Schedule

Note: The instructors reserve the right to modify the schedule and topic sequence during the semester. Changes will be announced on Canvas.

Wk	Date	Topic	Assignment	Campus Events	Speakers
1	8/28	Welcome and course overview; introductions of instructors, Peer Leaders, and students; why this major	Prepare initial resume		<i>Instructors, PLs</i>
2	9/4	Professional portfolio development and recruiter panel	CareerBuzz activation; LinkedIn profile		<i>Recruiter panel</i>
3	9/11	Activity: Penville; an introduction to IE thinking	Group reflection on Penville and IE	Supply Chain Day (9/9)	<i>Instructors, PLs</i>
4	9/18	Alumni Panel 1: Consulting	Reflection	All-Majors Career Fair (9/14)	<i>Alumni</i>

Wk	Date	Topic	Assignment	Campus Events	Speakers
5	9/25	ISyE Spotlight: Health, Supply Chain, Manufacturing, Energy, Quality	Reflection	IISE Career Fair (9/24)	<i>Faculty panel</i>
6	10/2	ISyE Spotlight: AI, Analytics, and Operations Research	Reflection		<i>Faculty panel</i>
7	10/9	Project assignment and work day 1	Initial one-page project submission	Fall Break (Mon–Tue)	<i>Instructors</i>
8	10/16	Alumni Panel 2: Industry paths	Reflection		<i>Alumni</i>
9	10/23	Planning co-curricular experiences: co-op, internships, study abroad	Co-curricular plan	Spring schedule published (10/19)	<i>Speakers from C2D2, OIE</i>
10	10/30	Academic planning and advising	Academic plan; scheduling tool		<i>ISyE Advisors</i>
11	11/6	Professional and technical communication	Reflection	Spring '27 Phase I Registration begins (11/2)	<i>Dr. Brandy Blake</i>
12	11/13	Senior Design Showcase	Reflection		<i>Senior Design teams</i>
13	11/20	Project work day 2	Short project report		<i>Instructors, PLs</i>
-	11/27	No class — Thanksgiving Break			
14	12/4	Project presentations, poster session, and celebration	Presentation submission		<i>All</i>