**TO:** The Faculty of the College of Engineering

**FROM:** Elmore Family School of Electrical and Computer Engineering

**RE:** New Graduate Course, ECE 60001 Ideas to Innovation I

The faculty of the School of Electrical and Computer Engineering has approved the following new course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

**ECE 60001 Ideas to Innovation I**
Sem. 1 & 2, Lecture 2 Recitation 1, Cr. 3.
Prerequisite: Master student standing

**Description:**
This course is part of the Ideas to Innovation (I2I) Project course sequence, which forms the core of the ECE Project Track MS program. In this sequence of courses, student transform ideas and concepts into innovations, including improved components, systems or processes. Building from topics suggested by faculty, companies, prior I2I teams and inventions helps focus the projects on current and relevant problems. Students analyze the competitive landscape and define required performance for their designs, which allows them to identify the novel. The I2I team project is comparable in scope and rigor to a 6-credit MS thesis but is focused on design rather than research. In addition to building technical depth in current technology areas, the project definition, design and reporting phases serve as the vehicles for developing communication, project management and other professional skills.

Ideas to Innovation Project-I focuses on definition and preliminary design of a team-based design project. Starting from topics suggested by faculty, companies, previous teams or inventors, students work individually to define the context and challenges associated with the topic. Teams then define a specific focuses for the design projects, including specific goals, deliverables and approach, and complete preliminary designs. Course staff and technical mentors guide the teams through these project definition and execution stages. The course helps develop essential professional skills necessary to complete the project successfully, including communication and project definition/management.

**Reason:** This course is part of the professional development component for our professional masters program. It is part one of a two course series that students need in order to complete our project-track course requirements.

**Course History:** Fall 2019 – 2, Fall 2020 – 25, Fall 2021 – 20, Fall 2022 – 62, Fall 2023 – 55, Fall 2024 – 56

Mithuna Thottethodi,
Associate Head for Teaching and Learning
Elmore Family School of Electrical and Computer Engineering

# ECE 60001 IDEAS TO INNOVATION MS PROJECT -- PART I
## Fall 2023 MW 09:30am – 10:20am GRIS 103

CRN: 21707 CREDIT HOURS: 3
INSTRUCTIONAL MODALITY: Live (in person/WebEx) plus recorded lecture


INSTRUCTORS: Prof. David Janes Email: janes@purdue.edu
Prof. Tillmann Kubis Email: tbubis@purdue.edu
Prof. Santokh Badesha Email: sbadesha@purdue.edu
Visiting Prof. Arnold Chen Email: chen2503@purdue.edu
Visiting Prof. Babak Ziaie Email: bziaie@purdue.edu


OFFICE HOURS: By appointment, via telephone or WebEx/Zoom.
Offline technical/logistical questions can often be handled via email.


OTHER SENIOR PERSONNEL
Ms. Bev Mentzer Email: bmentzer@purdue.edu ChE Prof. MS Program
Faculty Mentors and Subject-Matter Experts (TBD)

TEACHING ASSISTANTS:
Qiming Cao Email: cao393@purdue.edu
Nicholas Morrissey Email: nmorriss@purdue.edu
Manas Pratap Email: mpratap@purdue.edu


Recitation schedules and office hours for the TAs will be posted on Brightspace.

LECTURE/RECITATION FORMAT:
The weekly lecture will be on Monday and Wednesday. In general, lecture will be accessible both "in person" and via WebEx simulcast. Regular attendance is encouraged.

Topics for lectures and recitations are included in the schedule at the end of this document. Exceptions to this schedule and changes to the posted lecture/recitation topics will be announced, with advance notice if circumstances permit.

Each student will participate in one recitation section.

Initially, the grouping of students in a given recitation session will be random. As indicated in the syllabus, the recitation sessions will provide a forum for smaller group discussions/feedback on draft assignments.

Once design teams are formed, recitation assignments will be rearranged so that all members from a given team are in the same recitation section. You will be expected to provide a full list of the times during the week at which you are available. Note that this may require re-scheduling of some recitation sections in order to accommodate schedule conflicts. The focus of the recitation periods will shift to topic- and project-specific discussions, presentation of assignments, etc.

PRE-REQUISITES BY TOPIC:

Graduate standing in ECE and enrollment in ECE project-track MSECE program.

COURSE DESCRIPTION (from Purdue Catalog):
This course is the first semester of a year-long Ideas to Innovation MS project course. In Ideas to Innovation I, II, and III, students will i) conduct a multi-semester team project, focused on a design or an advanced modeling/simulation effort, ii) learn professional skills required for effective project definition, management and communication and iii) start learning business and corporate skills relevant for entrepreneurship and intrapreneurship. In contrast to senior-level ECE design courses, the MS project will incorporate emerging technologies and will be motivated by a systems-level focus. Throughout the sequence, the project definition, design and report phases will serve as the vehicles for developing communication, project management and other professional skills. Each project team will be advised by one or more faculty mentors during the ideation, project definition and design stages. Ideas to Innovation-I will focus on project definition and essential professional skills necessary to complete the project successfully, including written communication, working in a diverse team, and ethics.

LEARNING RESOURCES, TECHNOLOGY & TEXTS:

- **Brightspace** is the official course page and will be used for:
  - posting of course materials (lecture material/recordings, assignments, announcements, etc.)
  - submission of assignments listed in the "grading" section
  - Posting of grade sheets (with feedback) and recording of grades
  - Login with your PU account.
- **Basecamp** is the required collaboration platform and will be used for:
  - "to-do" lists, including assigned/completed tasks – indicating individual responsible, scheduled completion date, status, and documentation of task.
  - sharing/archiving documents
  - archiving discussions related to recitation sessions
  - providing feedback (peer/TA/instructor) on proposed themes/approaches/analysis (which is intended to assist you in formulating your ideas, identifying appropriate topics/technical approaches and addressing course-specific requirements)

  In order to allow the instructors and TAs to provide timely and meaningful feedback, it is essential that you use Basecamp according to guidelines provided for this course. Your use of Basecamp will serve as a component in your overall course score. The instructors will set up a Basecamp "project" page for each recitation session (and for each team, once teams are formed).
- **Course Text:** Handouts and other reference material; additional reading on innovation ecosystems will be assigned.
- **Group Contact:** A course email distribution list will be created through Brightspace. Please check your registered email address regularly for time-critical information . The "Announcements" folder on Brightspace will also be used for course announcements and other important information.

COURSE OVERVIEW

This course is the first semester of a year-long Ideas to Innovation MS project course. In this sequence of courses (Parts 1-3), students will i) conduct a multi-semester team project, focused on a design or an advanced modeling/simulation effort, ii) learn professional skills required for effective project definition, management and communication and iii) start learning business and corporate skills relevant for entrepreneurship and intrapreneurship. In contrast to senior-level ECE design courses, the MS project will incorporate emerging technologies and will be motivated by a systems-level focus. Throughout the sequence, the project definition, design and report phases will serve as the vehicles for developing communication, project management and other professional skills.

Each project team will be advised by one or more faculty mentors during the project defintion and design stages.

Part 1 (Fall) will focus on project definition, preliminary design and essential professional skills necessary to complete the project successfully, including written communication, working in a diverse team and ethics.

The course sequence will integrate components toward three learning outcomes:

**Outcome 1: Project definition and design/demonstration to address specific goals**

> This track starts with refining a general topic (faculty-suggested, company-suggested or follow-on (defined by teams in prior cohort)) into a specific focus for the I2I design project. The process includes a Context/Challenges/Approach/Results (CCAR) process, in which students will i) define the context, ii) identify key challenges, iii) identify and evaluate potential approaches and iv) define expected results and complete preliminary design. Once the specific requirements and metrics has been identified, teams will develop a set of design goals and deliverables. In the following semester (spring), the teams will turn these design goals into detailed designs and build prototypes for final demonstrations.

**Outcome 2: Professional skills development**

> This track focuses on essential professional skills. This includes effective interviewing/ resume skills and writing/presentation skills. In addition, aspects of effective teamwork, leadership, professional ethics, and diversity/inclusion will be addressed. In addition to course assignments/activities in the I2I course sequence, Project Track students also complete the 1-credit "Communication for Engineering Leaders" course.

**Outcome 3: Business and corporate skills**

> This track will incorporate various aspects of entrepreneurship/intrapreneurship relevant to engineering teams, including intellectual property, customer discovery, the management/business side of innovation, finance and market evaluation.

I2I-1 FOCUS

The starting points for project definition will include faculty- or company-suggested topics, follow-on topics (defined by students from last year's cohort) and Purdue patents requiring

additional technology validation. Working individually and then as teams, students are expected to refine these general topics into specific focuses for a design project which will run through the Spring semester (in I2I-2). Each team will be expected to define a technical focus, along with specific goals/deliverables, and to manage their project to realize these goals.

Teams will form within the first 3 weeks of the Fall semester, then work together for the remainder of the Fall and Spring semesters. The Fall semester will involve a series of steps based on a CCAR (Context/Challenges/Approach/Results) analysis. Student teams, in consultation with their technical mentors and guided by course staff, will be expected to:

1. Context: Define the context

2. Challenges: Identify key challenges

3. Approach: Identify and evaluate potential approaches

4. Results: Define expected results and complete preliminary design

More details on the focus/outcomes of each phase will be presented in lecture and associated reference material.

ASSIGNMENTS (INDIVIDUAL AND TEAM)

During the initial stages of this course, assignments and associated recitation presentations will generally be individual exercises. Once teams are formed, the assignments will generally be team exercises, and each team will submit a single (joint) document for a given assignment. The projects, which will be defined in this course and continued in subsequent courses, will generally be team projects, in which each member of the team is expected to contribute in a significant fashion.

For each assignment, a more detailed set of guidelines will be posted on Brightspace in advance. Due dates and submission instructions will be provided in guidelines for each assignment. Note that the submission/presentation dates indicated in the syllabus are subject to change; deadlines provided in assignment guidelines and lecture/Brightspace announcements will supersede information in the syllabus.

GRADING

| | |
|---|---|
| Context I – Problem/Significance | 10% |
| Context II – Competitive Landscape | 10% |
| Context III – Required Functionality | 10% |
| Challenges I – Technology: Base/Emerging | 10% |
| Challenges II – Innovations/Key Functionalities/Metrics | 10% |
| Design Review – Approach | 18% |
| Design Review – Preliminary Design | 18% |
| Guest Lectures -- Assignments | 2% |
| Recitation/Tech Meeting Participation | 6% |
| Basecamp Participation (consistent and up-to-date use of to-do list, schedule/status and documentation of completed steps) | 6% |

Grades for assignments will be posted on Brightspace. Class averages for assignments will generally be posted on Brightspace; these are intended to allow students to evaluate their relative performance in class. Final grades will be assigned based on total points in course, including instructional staff assessment of Basecamp Participation. Course grading will utilize +/- grade scale (i.e. A/A-/B+/B/B-…). Grading will generally use a "curve", rather than a 90/80/70… scale.

COURSE POLICIES

- **Join lectures/recitation sessions on time.**
- **Use of devices** (e.g. cell phones, laptops) **during lecture/recitation should be focused on course material.**
- **Absence for medical issue, family emergency or extracurricular activity:** In the event that you need to be absent from class due to a medical issue, family emergency or extracurricular activity, please communicate with the instructor as far in advance as possible. This will allow a discussion regarding the nature/duration of the absence and how the learning outcomes associated with any missed class activities may be addressed. As per university policy: "ultimately students are responsible for all required coursework and bear full responsibility for any academic consequences that may result due to absence." See later sections for guidelines for quarantine/isolation.
- **Only in well-documented emergency situations** will students be allowed to submit assignments or make presentations at time other than the officially announced date.
- You cannot do extra work after the semester is over to change your grade. **All grades are FINAL once submitted.**
- An **incomplete grade** is only for students who do most of the required work (at least 75%) and at the end of the semester cannot finish the course due to a **well-documented emergency or other circumstances beyond the student's control**.
- If you have any issue or difficulty with the course you need to **contact the instructor during the semester and seek help in advance.**
- In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester

calendar or other circumstances beyond the instructor's control. Here are ways to get information about changes in this course.

- Course webpage on Purdue Brightspace
- Instructor's email
- Instructor's phone

CODE OF CONDUCT

In addition to issues covered under Purdue's academic integrity statement, students and staff affiliated with this course are expected to adhere to the following Code of Conduct:

As a student or staff member affiliated with the course, I will support an environment of mutual respect, fairness, accountability, collaboration, partnership, honesty and integrity.

- I will be honest, fair, respectful and courteous in my dealings with students, staff members and other individuals whom I encounter in the activities of the course. This applies both in formal activities such as lecture and informal activities such as team meetings and collaboration sessions.
- I will work within a team to achieve a successful project outcome as well as to advance the professional skills of all members of the team. I understand that members of my team will bring a diverse set of ideas, technical skills and academic/professional experience.
- In peer-review exercises and staff-reviewed assignments, I will provide and/or receive constructive criticism in a respectful manner.

PURDUE UNIVERSITY ACADEMIC INTEGRITY STATEMENT

Academic integrity is one of the highest values that Purdue University holds. Individuals are encouraged to alert university officials to potential breaches of this value by either emailing integrity@purdue.edu or by calling 765-494-8778. While information may be submitted anonymously, the more information that is submitted provides the greatest opportunity for the university to investigate the concern.

PURDUE HONORS PLEDGE

As a boilermaker pursuing academic excellence, I pledge to be honest and true in all that I do. Accountable together - we are Purdue. (composed by students)

ACADEMIC DISHONESTY POLICIES

Every member of the Purdue community is expected to practice honorable and ethical behavior both inside and outside the classroom. Any actions that might unfairly improve a student's score on homework, quizzes, or examinations will be considered cheating and will not be tolerated. Examples of cheating include (but are not limited to):

- Sharing results or other information during an examination.
- Bringing forbidden material or devices to an examination.
- Working on an exam before or after the official time allowed.
- Requesting a re-grade of answers or work that has been altered.

- Submitting homework that is not your own work or engaging in forbidden homework collaborations.
- Let others use your clicker and pretend to be you in class

At the instructor's discretion, cheating on an assignment or examination will result in a reduced score, a zero score, or a failing grade for the course. All occurrences of academic dishonesty will be reported to the Assistant Dean of Students and copied to the ECE Associate Head of Education. If there is any question as to whether a given action might be considered as cheating, please see the instructor or the teaching assistant before you engage in any such action.

USE OF ARTIFICIAL INTELLIGENCE (AI) / LARGE LANGUAGE MODULES (LLM):
Use of AI resources such as ChatGBT to generate significant components of assignments is discouraged. If you choose to use AI resources to assist you in preparing assignments, you will be responsible for verifying the accuracy of claims, references and other materials generated by the AI resource (ChatGBT or comparable). Submitting an assignment with fictitious or materially incorrect references/quotes/statements (whether generated by AI or not) is considered fabrication and/or falsification, which both are considered academic dishonesty.

ACCESSIBILITY:
Purdue University strives to make learning experiences accessible to all participants. If you anticipate or experience physical or academic barriers based on disability, you are welcome to let me know so that we can discuss options. You are also encouraged to contact the Disability Resource Center at: drc@purdue.edu or by phone at 765-494-1247.

ATTENDANCE POLICY:

This course follows Purdue's academic regulations regarding attendance, which states that students are expected to be present for every meeting of the classes in which they are enrolled. Attendance will be taken at the beginning of each class and lateness will be noted. When conflicts or absences can be anticipated, such as for many University-sponsored activities and religious observations, the student should inform the instructor of the situation as far in advance as possible. For unanticipated or emergency absences when advance notification to the instructor is not possible, the student should contact the instructor as soon as possible by email or phone. When the student is unable to make direct contact with the instructor and is unable to leave word with the instructor's department because of circumstances beyond the student's control, and in cases falling under excused absence regulations, the student or the student's representative should contact or go to the Office of the Dean of Students (ODOS) website to complete appropriate forms for instructor notification. Under academic regulations, excused absences may be granted by ODOS for cases of grief/bereavement, military service, jury duty, parenting leave, or emergent or urgent care medical care.

Being "present" also means participating remotely and completing work assigned for days when we do not meet face-to-face. This work is required to help you meet the course learning outcomes. These times count toward the course contact hours and your course grade.

NONDISCRIMINATION STATEMENT:
Purdue University is committed to maintaining a community that recognizes and values the inherent worth and dignity of every person; fosters tolerance, sensitivity, understanding, and

mutual respect among its members; and encourages each individual to strive to reach his or her potential. In pursuit of its goal of academic excellence, the University seeks to develop and nurture diversity. The University believes that diversity among its many members strengthens the institution, stimulates creativity, promotes the exchange of ideas, and enriches campus life. A hyperlink to Purdue's full Nondiscrimination Policy Statement is included in our course Brightspace under University Policies.

BASIC NEEDS SECURITY:
Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. There is no appointment needed and Student Support Services is available to serve students 8 a.m.-5 p.m. Monday through Friday. Considering the significant disruptions caused by the current global crisis as it relates to COVID-19, students may submit requests for emergency assistance from the Critical Need Fund.

MENTAL HEALTH/WELLNESS STATEMENT

- **If you find yourself beginning to feel some stress, anxiety and/or feeling slightly overwhelmed, try WellTrack, https://purdue.welltrack.com/.** Sign in and find information and tools at your fingertips, available to you at any time.
- **If you need support and information about options and resources**, please see the Office of the Dean of Students, http://www.purdue.edu/odos, (or call 765-494-1747) for drop-in hours (M-F, 8 am- 5 pm).
- If you find yourself struggling to find a healthy balance between academics, social life, stress, etc., sign up for free one-on-one virtual or in-person sessions with a Purdue Wellness Coach at RecWell. Student coaches can help you navigate through barriers and challenges toward your goals throughout the semester. Sign up is free and can be done on BoilerConnect.
- **If you're struggling and need mental health services**: Purdue University is committed to advancing the mental health and well-being of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of mental health support, services are available. For help, such individuals should contact Counseling and Psychological Services (CAPS) at 765-494-6995 during and after hours, on weekends and holidays, or by going to the CAPS office on the second floor of the Purdue University Student Health Center (PUSH) during business hours. The CAPS website http://www.purdue.edu/caps/ also offers resources specific to situations such as COVID-19.

CLASSROOM GUIDANCE REGARDING PROTECT PURDUE

The Protect Purdue Plan, which includes the Protect Purdue Pledge, is campus policy and as such all members of the Purdue community must comply with the required health and safety guidelines. Required behaviors in this class include: staying home and contacting the Protect Purdue Health Center (496-INFO) if you feel ill or know you have been exposed to the virus, properly wearing a mask in classrooms and campus building, at all times (e.g., mask covers nose and mouth, no eating/drinking in the classroom), disinfecting desk/workspace prior to and after use, maintaining appropriate social distancing with peers and instructors (including when entering/exiting classrooms), refraining from moving furniture, avoiding shared use of personal

items, maintaining robust hygiene (e.g., handwashing, disposal of tissues) prior to, during and after class, and following all safety directions from the instructor.

Students who are not engaging in these behaviors (e.g., wearing a mask) will be offered the opportunity to comply. If non-compliance continues, possible results include instructors asking the student to leave class and instructors dismissing the whole class. Students who do not comply with the required health behaviors are violating the University Code of Conduct and will be reported to the Dean of Students Office with sanctions ranging from educational requirements to dismissal from the university.

Any student who has substantial reason to believe that another person in a campus room (e.g., classroom) is threatening the safety of others by not complying (e.g., not wearing a mask) may leave the room without consequence. The student is encouraged to report the behavior to and discuss next steps with their instructor. Students also have the option of reporting the behavior to the Office of the Student Rights and Responsibilities. See also Purdue University Bill of Student Rights.

*Related Considerations:*

1. *A listing of recommended safe practices for the specific class or laboratory setting (other PPE or safety behavior) can be found at the links below.*
    - Overarching SOP for Classrooms, Instructional Laboratories, and Experiential Courses
2. *References Supporting Protect Purdue Compliance:*
    - Office of the Dean of Students Protect Purdue Compliance Plan: Ask, Offer, Leave, Report
    - Office of the Dean of Students Managing Classroom Behavior and Expectations

ACADEMIC GUIDANCE IN THE EVENT A STUDENT IS QUARANTINED/ISOLATED

If you become quarantined or isolated at any point in time during the semester, in addition to support from the Protect Purdue Health Center, you will also have access to an Academic Case Manager who can provide you academic support during this time. Your Academic Case Manager can be reached at acmq@purdue.edu and will provide you with general guidelines/resources around communicating with your instructors, be available for academic support, and offer suggestions for how to be successful when learning remotely. Importantly, if you find yourself too sick to progress in the course, notify your academic case manager and notify me via email or Brightspace. We will make arrangements based on your particular situation. The Office of the Dean of Students (odos@purdue.edu) is also available to support you should this situation occur.

ATTENDENCE POLICY DURING COVID-19

Students should stay home and contact the Protect Purdue Health Center (496-INFO) if they feel ill, have any symptoms associated with COVID-19, or suspect they have been exposed to the virus. In the current context of COVID-19, in-person attendance will not be a factor in the final grades, but the student still needs to inform the instructor of any conflict that can be anticipated and will affect the submission of an assignment or the ability to take an exam. Only the instructor can excuse a student from a course requirement or responsibility. When conflicts can be anticipated, such as for many University-sponsored activities and religious observations, the student should inform the instructor of the situation as far in advance as possible. For

unanticipated or emergency conflict, when advance notification to an instructor is not possible, the student should contact the instructor as soon as possible by email, through Brightspace, or by phone. When the student is unable to make direct contact with the instructor and is unable to leave word with the instructor's department because of circumstances beyond the student's control, and in cases of bereavement, quarantine, or isolation, the student or the student's representative should contact the Office of the Dean of Students via email or phone at 765-494-1747. Our course Brightspace page includes a link on Attendance and Grief Absence policies under the University Policies menu.

EMERGENCY PREPAREDNESS

Purdue University is actively preparing for natural disasters or human-caused incidents with the ultimate goal of maintaining a safe and secure campus. Please review information (and sign up for emergency alerts) at: https://www.purdue.edu/ehps/emergency_preparedness/ .

General procedures:

- For any emergency call 911 (from a Purdue "land line", 911 operator will know the phone's location; from a cell phone, you will need to tell the operator your location)
- There are nearly 300 Emergency Telephone Systems throughout campus that connect directly to the Purdue Police Department (PUPD). If you feel threatened or need help, push the button and you will be connected to the PUPD.
- **Fire alarm:** In the event of a fire alarm, we will immediately stop lecture, evacuate the building and proceed to the location stated below.
    - Do not use the elevator.
    - Notify others on your way out
    - If possible, help those needing assistance

  The Emergency Assembly Area for Industrial Engineering personnel is the East end of the Main Aisle of Stewart Center on the First Floor (Near the doors that go to Purdue Memorial Union).

- The chart below indicates the recommended options/considerations for various types of **Shelter in Place** requirements. If we are notified of a **Shelter in Place** requirement, we will immediately stop lecture and move to the recommended location.

| Emergency | Shelter in Place Options/Considerations |
|---|---|
| Weather-Related - Tornado Warning | Basement corridors, basement offices, basement restrooms Or the lowest level of the building (stay away from windows and doors) |
| Hazardous Materials (HAZMAT) Release | Remain or find an unaffected office or work area and close windows and doors. |
| Active threat, such as a shooting | Seek a safe location, preferable a room without windows that can be locked or secured by barriers. |

# ECE 69500 Fall 2023 –

| Week | Date | Topic | Notes |
|---|---|---|---|
| 1 | 08/21 | Introduction to Course and I2I Sequence: Syllabus, CCAR Process, Overview of "Context" Assignments | |
| | 08/23 | Presentations of Faculty- and Company-suggested Topics – Part I | |
| | | Recitation: Organizational session; ground rules and individual statements of interest/ one topic | |
| 2 | 08/28 | Presentations of Faculty- and Company-suggested Topics – Part II | |
| | | Distinguished Guest Lectures | Marcus Weldon |
| | 08/30 | Presentations of Faculty- and Company-suggested Topics – Part III | |
| | | Recitation: Presentations/Discussion of Draft Assignment (Context I-Problem) | |
| 3 | 09/04 | No class (Labor Day) | No lecture, no recitations on 9/4. |
| | 09/06 | Team Formation Process and Deriving required functionality from Product/ System Concept, User Needs/Resources/Constraints | Problem Assignment Due |
| | | Recitation: Presentations/Discussion of Draft Assignment (Context II- Competitive Landscape) | |
| 4 | 09/11 | Team Formation Update and Overview of "Challenge" assignments | Competitive Landscape Assignment Due |
| | 09/13 | | |
| | | Recitation: First session with Team. Presentations/Discussion of Draft Assignment (Context III - Functionalities) | |
| 5 | 09/18 | Product Management Overview | Functionalities Assignment Due |
| | 09/20 | Basecamp Tutorial and requirements for use in I2I courses | T. Kubis |
| | | Recitation: Organizing as team; preparing pitch presentation | |
| 6 | 09/25 | Pitch Presentations to Dr. Marcus Weldon, et al (MSEE 180 9:30-11:20, followed by coffee/refreshments) | |
| | | Distinguished Guest Lecture (9/26) | Marcus Weldon |
| | 09/27 | Product/Project Plan/Exercise | A. Chen |
| | | Recitation: Presentations/Discussion of Draft Assignment: Challenge I – Technology: Base/Emerging | |
| 7 | 10/02 | Team Charter/Alignment to Deliver Goals | Technology |

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|---|---|---|---|
| | | (Distinguished Guest Lecture, B. Mentzer) | Base/Emerging Assignment Due |
| | 10/04 | Effective Team Strategies | T. Kubis |
| | | Recitation: Presentations/Discussion of Draft Assignment: Challenge II –Key Functionalities/Metrics | |
| 8 | 10/9 | No class | Break (Oct. 9-10) |
| | 10/11 | Defining approach: matching to requirements and evaluating/down-selecting alternative | Key Functionalities /Metrics Assignment Due |
| | | Recitation: Role/responsibilities for "Approach" phase. | |
| 9 | 10/16 | Deriving requirements/metrics from functional description, user needs/resources, Part II; form following function and required resources/connectivity | |
| | 10/18 | TBD | |
| | | Recitation: Report-in on analysis for "Approach" phase | |
| 10 | 10/23 | TBD | |
| | 10/25 | TBD | |
| | | Recitation: Approach – Results/Status/Open Issues | |
| 11 | 10/30 | TBD | |
| | 11/01 | TBD | |
| | | Recitation: Design Review – Results from "Approach" Phase and Key Issues for Preliminary Design | Approach – Design Review |
| 12 | 11/06 | Approach De-brief; Preliminary Design Kick-Off | |
| | 11/08 | TBD | |
| | | Recitation: Technical and Project Plans for Preliminary Design (including Milestones/Timeline) | |
| 13 | 11/13 | TBD | |
| | 11/15 | TBD | |
| | | Recitation: Preliminary design results/status update | |
| 14 | 11/20 | TBD | |
| | 11/22 | No Class | Thanksgiving Break |
| | | No recitations 11/22-11/24 | Thanksgiving Break |
| 15 | 11/27 | TBD | |
| | 11/29 | TBD | |
| | | Recitation: Preliminary design results/status update | |
| 16 | 12/04 | TBD | |

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|---|---|---|---|
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| | 12/06 | TBD | |
| | | Recitation: Design Review (Preliminary Design Results) | Design Review – Preliminary Design Results |
| | 12/11-12/16 | Finals Week | |
| | | | |

Note: For Weeks 9-16, the recitation topics and design review dates are listed. Detailed lecture schedule for Weeks 8-16 will be distributed on or before Oct. 1.

Modifications to this schedule announced in lecture and/or on Brightspace will supersede this version of the schedule. Changes made be made based on progress toward course outcomes, logistical/scheduling issues or other circumstances.