



INFO 6215 Business Analysis & Information Engineering [FALL 2024]

Course Information

Course Title: Business Analysis & Information Engineering
Course Number: INFO 6215
Term and Year: FALL 2024
Credit Hour: 4
Course Format: On-Ground

Instructor Information

Full Name: Molly Sun
Email Address: mo.sun@northeastern.edu
Office Hours: Wed 3-4pm, Fri 3-4pm

Instructor Biography

Molly Yingnan Sun is a seasoned tech product leader with over 10 years of industry experience and a strong background in education. She specializes in product innovation, SaaS, PaaS, and Data product management and development. Molly holds an MS in Business focusing on Enterprise Risk Management from Columbia University and a BS in Management Information Systems from Northeastern University.

Course Description

This course will develop the skills necessary for the analysis, planning, communication, and execution of business and change strategy in today's evolving world. Students will learn the software development life cycle and how product management, design, engineering, and data teams collaborate to solve problems and build software products. The course will also incorporate product management methodologies and entrepreneurship topics, providing a comprehensive understanding of business strategy and innovation.

Course Learning Outcomes

- Understand the fundamentals of the SDLC.
- Explore the roles and collaboration of product management, design, engineering, and data teams.
- Learn product management methodologies and entrepreneurship concepts.
- Apply theoretical knowledge to practical, real-world scenarios.

Course Schedule/Topics Covered

Date	In Class Topic	Assignment Due
<p>Week 1 Introduction to Business Analysis and Information Engineering</p> <p>Date: Sep 9</p>	<p>Topics: Course Overview Introduction to business analysis SDLC basics Phases of SDLC (Planning, Analysis, Design, Implementation, Testing, Deployment, Maintenance). How each phase contributes to successful software products.</p>	<p>Assignment: Identify a problem and propose a product idea to solve it.</p>
<p>Week 2: Idea Generation and Validation</p> <p>Date: Sep 16</p>	<p>Topics: Discussion: Techniques for idea generation, market research, and validating business ideas.</p>	<p>Group Project: Form groups and select a product idea for development. Validate your product idea.</p>
<p>Week 3: Building a Business Model</p> <p>Date: Sep 23</p>	<p>Topics: Business Model Canvas, value proposition, customer segments, revenue streams.</p>	<p>Research Study: Analysis of business models of successful companies. Group Project: Develop the Business Model Canvas for the group project. Keep validating product ideas if needed</p>
<p>Week 4: Product Design and User Experience (UX)</p> <p>Date: Oct 7</p>	<p>Topics: Principles of product design, UX/UI basics, prototyping tools.</p>	<p>Research Study: Good and bad examples of design and UX design. Group Project: Create wireframes for the group project.</p>
<p>Week 5: Agile Methodology and Scrum</p> <p>Date: Oct 21</p>	<p>Topics: Introduction to Agile, Scrum framework, roles (Product Owner, Scrum Master, Development Team). Discussion: Benefits of Agile methodology in product development.</p>	<p>Research Study: Interview at least two individuals working in the software industry to gain insight into their roles, work, and collaboration with colleagues or clients. Group Project: Iterate on the flows and use cases of your product.</p>
<p>Week 6: Market Analysis and Competitive Landscape</p> <p>Date: Oct 28</p>	<p>Topics: Techniques for market analysis, understanding the competitive landscape.</p>	<p>Case Study: Competitive analysis of a tech company. Group Project: Conduct market analysis for the group project</p>

<p>Week 7: Product Roadmap and Strategy</p> <p>Date: Nov 4</p>	<p>Topics: Creating a product roadmap, strategic planning, and prioritizing features.</p>	<p>Research Study: Examination of product roadmaps from industry leaders.</p> <p>Group Project: Develop a product roadmap for the group project.</p>
<p>Week 8: Go-to-Market Strategy</p> <p>Date: Nov 18</p>	<p>Topics: Developing a go-to-market strategy, marketing channels, and sales tactics.</p> <p>Discussion: Launching a product successfully.</p>	<p>Research Study: Analysis of successful product launches.</p> <p>Group Project: Develop a go-to-market strategy for the group project.</p>
<p>Week 9: Metrics and Analytics</p> <p>Date: Nov 25</p>	<p>Topics: Using data to drive decisions, and key performance indicators (KPIs).</p>	<p>Research Study: How data analytics influenced a product's success.</p> <p>Group Project: Define KPIs for the group project and explain how might you track them</p>
<p>Week 10: Final Project Presentations and Peer Reviews</p> <p>Date: Dec 2</p>	<p>Topics: Presentation of final projects, peer reviews, and feedback sessions.</p>	<p>Group Project: Present group projects and conduct peer reviews.</p>

Assignment Grading

- Class attendance and participation – 20%
- Research and case studies – 40%
- Group project report & presentation – 25%
- Peer review – 15%

Grading Scale

	87-89.9% B+	77-79.9% C+	
95-100% A	84-86.9% B	74-76.9% C	
90-94.9% A-	80-83.9%B-	70-73.9% C-	69.9% or below F

Attendance/Late Work Policy

Attendance Policy

Students registered in MGEN courses (INFO, CSYE, and DAMG) are allowed **a maximum of 2 absences per course, with 3 or more absences resulting in an automatic 'F' for that course.** Students are expected to inform their instructors of any absences in advance of the class; if a student is sick long-term or experiences a medical issue that prevents class attendance, it is strongly encouraged that they speak with their Academic Advisor (coe-mgen-gradadvising@northeastern.edu) to learn more about the Medical Leave of Absence. Should a student anticipate being unable to attend 3 or more classes, they should discuss their situation with their Academic Advisor to explore other types of leave in accordance with the University's academic and global entry expectations. International students should review the Office of Global Services webpage to understand their visa compliance requirements.

Teaching Assistants (TAs) or Instructional Assistants (IAs) will be present at each class to collect student attendance.

Late Work Policy

Students must submit assignments by the deadline in the time zone noted in the syllabus. Students must communicate with the faculty prior to the deadline if they anticipate work will be submitted late. Work submitted late without prior communication with faculty will not be graded.

End-of-Course Evaluation Surveys

Your feedback regarding your educational experience in this class is particularly important to the College of Engineering. Your comments will make a difference in the future planning and presentation of our curriculum.

At the end of this course, please take the time to complete the evaluation survey at <https://neu.evaluationkit.com>. Your survey responses are **completely anonymous and confidential**. For courses 6 weeks in length or shorter, surveys will be open one week prior to the end of the courses; for courses greater than 6 weeks in length, surveys will be open for two weeks. An email will be sent to your Northeastern University Mail account notifying you when surveys are available.

Academic Integrity

A commitment to the principles of academic integrity is essential to the mission of Northeastern University. The promotion of independent and original scholarship ensures that students derive the most from their educational experience and their pursuit of knowledge. Academic dishonesty violates the most fundamental values of an intellectual community and undermines the achievements of the entire University.

As members of the academic community, students must become familiar with their rights and responsibilities. In each course, they are responsible for knowing the requirements and restrictions regarding research and writing, examinations of whatever kind, collaborative work, the use of study aids, the appropriateness of assistance, and other issues. Students are responsible for learning the conventions of documentation and acknowledgment of sources in their fields. Northeastern University expects students to complete all examinations, tests, papers, creative projects, and assignments of any kind according to the highest ethical standards, as set forth either explicitly or implicitly in this Code or by the direction of instructors.

Go to <http://www.northeastern.edu/osccr/academic-integrity-policy/> to access the full academic integrity policy.

MGEN Student Feedback

Students who would like to provide the MGEN unit with anonymous feedback on this particular course, Teaching Assistants, Instructional Assistants, professors, or to provide general feedback regarding their program, may do so using this survey: https://neu.co1.qualtrics.com/jfe/form/SV_cTIAbH7ZRaaW0Ki

University Health and Counseling Services

As a student enrolled in this course, you are fully responsible for assignments, work, and course materials as outlined in this syllabus and in the classroom. Over the course of the semester if you experience any health issues, please contact UHCS.

For more information, visit <https://www.northeastern.edu/uHCS>.

Student Accommodations

Northeastern University and the Disability Resource Center (DRC) are committed to providing disability services that enable students who qualify under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act Amendments Act (ADAAA) to participate fully in the activities of the university. To receive accommodations through the DRC, students must provide appropriate documentation that demonstrates a current substantially limiting disability.

For more information, visit <https://drc.sites.northeastern.edu>.

Library Services

The Northeastern University Library is at the hub of campus intellectual life. Resources include over 900,000 print volumes, 206,500 e-books, and 70,225 electronic journals.

For more information and for education specific resources, visit <https://library.northeastern.edu>
Network Campus Library Services: [Northeastern University Library Global Campus Portals](#)

24/7 Canvas Technical Help

For immediate technical support for Canvas, call 617-373-4357 or email help@northeastern.edu

Canvas Student Resources: <https://canvas.northeastern.edu/student-resources/>

For assistance with my Northeastern e-mail, and basic technical support:

Visit ITS at <https://its.northeastern.edu>

Email: help@northeastern.edu

ITS Customer Service Desk: 617-373-4357

Diversity and Inclusion

Northeastern University is committed to equal opportunity, affirmative action, diversity, and social justice while building a climate of inclusion on and beyond campus. In the classroom, members of the University community work to cultivate an inclusive environment that denounces discrimination through innovation, collaboration, and an awareness of global perspectives on social justice.

Please visit <http://www.northeastern.edu/oidi/> for complete information on Diversity and Inclusion

Title IX

Title IX of the Education Amendments of 1972 protects individuals from sex or gender-based discrimination, including discrimination based on gender-identity, in educational programs and activities that receive federal financial assistance.

Northeastern's Title IX Policy prohibits Prohibited Offenses, which are defined as sexual harassment, sexual assault, relationship or domestic violence, and stalking. The Title IX Policy applies to the entire community, including male, female, transgender students, faculty, and staff.

In case of an emergency, please call 911.

Please visit <https://www.northeastern.edu/ouec> for a complete list of reporting options and resources both on- and off-campus.