



## **INFO 6215 Business Analysis and Informative Engineering**

### **Course Information**

Course Title: Business Analysis and Information Engineering

Course Number: INFO 6215

Credit Hour: 4

Course Format: On-Ground



### **Course Description**

This course will work to develop the skills necessary in the analysis, planning, communication and execution of business and change strategy in today's evolving world. We will take a "learn by doing" approach with an overall theme of business strategy, communication and the future of work. We will use real life cases and methodologies to focus on translating complex business needs into practical, flexible and sustainable business solutions that create a positive and effective end user experience. Using a variety of resources and tools we will explore trends relating to the future of work and how best to pivot and adjust as needed striving for optimal ROI.

### **Standard Learning Outcomes**

*Learning outcomes common to all College of Engineering Graduate programs:*

1. *An ability to identify, formulate, and solve complex engineering problems.*
2. *An ability to explain and apply engineering design principles, as appropriate to the program's educational objectives.*
3. *An ability to produce solutions that meet specified end-user needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.*

*The Information Systems Program accepts students of different engineering backgrounds with minimum programming skills and produces first class Information Systems engineers that operate at the intersection of real-world complexity, software development, and IT management. Graduating students will be able to construct end-to-end advanced software applications that meet business needs.*

*Specific Learning Outcomes for the Information Systems program:*

1. *Create a strong technical foundation through diverse, high-level courses*
2. *Built crucial interpersonal skills needed to succeed in any industry*

### 3. Foster a deep level of applied learning through project based case studies

## Course Objectives

This course aims to provide a competitive advantage for students interested in the synergy of business and technical engineering strategies and program management. Students who successfully complete this course will gain skills in the following subjects, acquiring a solid business foundation as well as effective consultative approach:

- Principles of business analysis and strategy through identification of evolving stakeholder needs, with a focus on approaches for thoughtful and customized execution as well as how to maintain the best interests internally and externally while building professional credibility and relationships.
- An introduction to business communication with an emphasis on skills necessary to translate and explain technical concepts to non-technical stakeholders, including information exchange and how to optimize delivery of concepts to diverse audiences.
- Innovation and design-thinking skills using context management, with a focus on outcome orientation and strength to pivot and flex (bring to action/understand the context); this will aim to strengthen students' abilities to pilot and test through analysis of various concepts and subsequent application of these ideas to non-technical oriented functions.
- Concepts in problem-solving, including how to foster the ability to anticipate issues and opportunities, adopt holistic and unbiased opinions in evaluations and assessments, formulate appropriate questions, and gain an ability to switch comfortably between focused and helicopter views.

## Technical/course materials requirements

### Required

*Lean Change Management* – Innovative Practices for Managing Organizational Change

Jason Little

This book combine ideas from Agile, Lean Startup, change management, organizational development and psychology to set a framework and foundation for thinking about change.

## Course Evaluation

Class attendance and participation – 20%

Two case write ups – 20%

1 case presentation – 10%

Mid-semester interview – 25%

Team Project Report & Presentation – 25%

## Cases

We will use a mix of videos, articles, guest speaker personal accounts and course reading to analyze the various paths organizations have taken related to business strategy and change implementation.

Case assignments will be posted at least 2 weeks in advance of the due date and students will be asked to conduct 2 case analyses throughout the semester, presenting 1 of the 2 to the class. These will be short reflections and learnings from the case; 1-2 pages max. per case.

### **Mid-semester project:**

Each student will be asked to interview someone from an external organization who has actively participated in a systems implementation focusing on a retrospective approach of 1) what worked, 2) what could have been improved and 3) what were lessons learned. Framework and more details to follow.

### **End of semester group project:**

Students will be assigned randomly to a group in which they will research, analyze, propose and prepare a 1) business case and 1) project plan for the implementation of a new system focusing on the future of work. You can be as creative as possible with tool selection.

The objectives will be to:

1. Understand stakeholder needs and create a reflective and compelling business case
2. Select an appropriate vendor/tool to match the needs of the stakeholder and share the approach taken to make the selection
3. Create a project plan and timeline; articulate considerations made in the process

### **End-of-Course Evaluation Surveys**

Your feedback regarding your educational experience in this class is very important to the College of Professional Studies. 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 HuskyMail 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.

### **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 <http://www.northeastern.edu/drc/getting-started-with-the-drc/>.

### **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 <http://subjectguides.lib.neu.edu/edresearch>.

### **24/7 Blackboard Technical Help**

For immediate technical support for Blackboard, call 617-373-4357 or email [help@northeastern.edu](mailto:help@northeastern.edu)

Within Blackboard, open a support case via the red support button on the right side of the screen, click Create Case

myNortheastern, e-mail, and basic technical support

Visit the [Information Technology Services \(ITS\) Support Portal](#)

Email: [help@northeastern.edu](mailto: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, member 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 [www.northeastern.edu/titleix](http://www.northeastern.edu/titleix) for a complete list of reporting options and resources both on- and off-campus.***