Stevens Institute of Technology
WebCampus.Stevens
Syllabus

Course Number: SYS 684 – Systems Thinking

Professor Name: Mo Mansouri **Office address: Babbio Center, Room 505** **Office phone number: 201-216-8644** **E-mail address: mo.mansouri@stevens.edu**	Office Hours: By Appointment only Course Web Address: SYS684WS

Overview

Systems Thinking is an introductory course to a systemic philosophy of thinking. It is designed to educate you on a modern paradigm and a new approach to problem solving. The course accompanies lots of practical assignments and requires a final project.

Prerequisites

The course is designed for master and doctoral students. There are no prerequisites for this course.

Cross-listed with.

Learning Goals

After taking this course, the student will be able to:

- Understanding the concept of systemic phenomena
- Learning the constructing blocks of systems thinking as a paradigm and philosophy
- Practicing systemic tools in formulating complex problems

Pedagogy

The course will employ recorded lectures, online Q&A and discussions, individual assignments, and individual final projects. Students will make several presentations during the class covering their problem formulation using systemic tools and systems thinking approach. In the final project, students apply systems thinking methods and approaches to present and formulate a complex system to their peers. In addition to submission of assignments in written format, each student will present highlights of their assignment/project to the class.

Recommended Text(s)

1. Systems Thinking: Managing Chaos and Complexity, By: Jamshid Gharajedaghi
2. Systems Thinking: Coping with 21st Century Problems, By: John Boardman and Brian Sauser

Required Readings

Readings will be assigned for each week. These will be found on the course website.

Assignments

The course will emphasize developing an understanding of systems thinking and systemic tools:

1. Class Participation - To enhance the learning experience, all students are expected to participate in class discussion board by responding to the posting by the professor and/or the postings by other students.

2. Assignments – must be completed by the required date and submitted on Canvas

3. Individual assignment presentation - Each student will choose a topic and then prepare Power Point slides regarding each assignment and presented online in allocated dates.

4. Final Project – The final presentation will be the application of all you have learned throughout the class to a particular case, which will be submitted in written (presentation) format and will be presented to the class individually.

The assignments and their weights are as shown below:

1. Class Participation	20%
2. Assignments	30%
3. Final Project	50%
TOTAL	**100%**

Please note that assignments in this class may be submitted to www.turnitin.com, a web-based anti-plagiarism system, for an evaluation of their originality.