INTRODUCTION TO NETWORK ANALYSIS

COURSE DESCRIPTION

This course, designed for managers in organizations that have or plan to have their own social networks, teaches a mix of quantitative and qualitative methods to describe, measure, and analyze a social network environment. Students learn how to identify influential individuals, track the spread of information through networks, and how to use these techniques on real problems.

COURSE TOPICS

- Network analysis basics
- The social network
- Analytics
- Applications

COURSE OBJECTIVES

After completing this course, you should be able to:

CO 1 Visualize networks of connections among entities or people.

CO 2 Measure attributes of networks.

CO 3 Measure attributes of users and ties among them.

CO 4 Analyze samples from networks that would be too large for analysis taken as a whole.

CO 5 Generate and study hypotheses about networks.

CO 6 Analyze propagation of things through networks.

COURSE MATERIALS

You will need the following materials to complete your coursework. Some course materials may be free, open source, or available from other providers. You can access free or open-source materials by clicking

the links provided below or in the module details documents. To purchase course materials, please visit the [University's textbook supplier](#).

Required Textbook

- Golbeck, J. (2013). *Analyzing the social web*. Elsevier.
  ISBN-13: 978-0124055315

COURSE STRUCTURE

Introduction to Network Analysis is a three-credit, online course consisting of **six** modules. Modules include an overview, topics, learning objectives, study materials, and activities. Module titles are listed below.

- **Module 1: Getting Started**

- **Module 2: Network Analysis Basics**

- **Module 3: The Social Network**

- **Module 4: Analytics**

- **Module 5: Applications**

- **Module 6: Final Project**

ASSESSMENT METHODS

For your formal work in the course, you are required to participate in online discussion forums, complete written assignments, and complete a final project. See below for details.

Consult the Course Calendar for due dates.

Promoting Originality

One or more of your course activities may utilize a tool designed to promote original work and evaluate your submissions for plagiarism. More information about this tool is available in [this document](#).

💬 *Discussion Forums*

In addition to an ungraded Introductions Forum, you are required to participate in **four** graded online class

discussions.

Communication with your mentor and among fellow students is a critical component of online learning. Participation in online class discussions involves two distinct activities: an initial response to a discussion question and at least two subsequent comments on classmates' responses.

All of these responses must be substantial. Meaningful participation is relevant to the content, adds value, and advances the discussion. Comments such as "I agree" and "ditto" are not considered value-adding participation. Therefore, when you agree or disagree with a classmate or your mentor, state and support your position.

You will be evaluated on the quality and quantity of your participation, including your use of relevant course information to support your point of view, and your awareness of and responses to the postings of your classmates. Remember, these are discussions: responses and comments should be properly proofread and edited, mature, and respectful.

📋 Written Assignments

You are required to complete **four** written assignments. The written assignments are on a variety of topics associated with the course modules.

📋 Final Project

You are required to complete a final project that incorporates concepts and skills from throughout the course. There will be several weeks leading up to the submission of the final project where you are expected to work on the project and receive feedback from your mentor.

Part 1: Assemble Data and Strategy

Assemble the data needed to work on the project, formulate a strategy for completing the project, make sure you understand the questions, and address questions to your mentor. The last point is essential—even if you think you understand exactly how you are to proceed, you need to outline your strategy with your mentor.

Part 2: Initial Draft

Prepare an initial submission with your analysis that is substantially complete. You may raise additional questions with your mentor at this point to seek guidance. You must in any case share your work with your mentor.

Part 3: Final Submission

Incorporate guidance and complete final submission. Taking the guidance from your mentor into account, prepare and submit your final submission.

GRADING AND EVALUATION

Your grade in the course will be determined as follows:

- **Discussion forums (4)**—10%
- **Assignments (4)**—40%
- **Final project**—50%
    - Part 1: Assemble Data and Strategy—10%
    - Part 2: Initial Draft—10%
    - Part 3: Final Submission—30%

All activities will receive a numerical grade of 0–100. You will receive a score of 0 for any work not submitted. Your final grade in the course will be a letter grade. Letter grade equivalents for numerical grades are as follows:

A	= 93–100	B	= 83–87
A–	= 90–92	C	= 73–82
B+	= 88–89	F	= Below 73

To receive credit for the course, you must earn a letter grade of C or higher on the weighted average of all assigned course work (e.g., assignments, discussion postings, projects). Graduate students must maintain a B average overall to remain in good academic standing.

STRATEGIES FOR SUCCESS

First Steps to Success

To succeed in this course, take the following first steps:

- Read carefully the entire Syllabus, making sure that all aspects of the course are clear to you and that you have all the materials required for the course.

- Take time to read the entire Online Student Handbook. The Handbook answers many questions about how to proceed through the course and how to get the most from your educational experience at Thomas Edison State University.

- Familiarize yourself with the learning management systems environment—how to navigate it and what the various course areas contain. If you know what to expect as you navigate the course, you can better pace yourself and complete the work on time.

- If you are not familiar with web-based learning, be sure to review the processes for posting responses online and submitting assignments before class begins.

Study Tips

Consider the following study tips for success:

- To stay on track throughout the course, begin each week by consulting the Course Calendar. The Course Calendar provides an overview of the course and indicates due dates for submitting assignments, posting discussions, and submitting the final project.

- Check Announcements regularly for new course information.

COMMITMENT TO DIVERSITY, EQUITY, AND INCLUSION

Thomas Edison State University recognizes, values, and relies upon the diversity of our community. We strive to provide equitable, inclusive learning experiences that embrace our students' backgrounds, identities, experiences, abilities, and expertise.

ACCESSIBILITY AND ACCOMMODATIONS

Thomas Edison State University recognizes disability as a facet of diversity and seeks to advance access to its educational offerings. Students with disabilities may seek accommodations by contacting the Office of Student Accessibility Services via email at ada@tesu.edu or phone at (609) 984-1141, ext. 3415. Individuals who are deaf or hard of hearing may call the TTY line at (609) 341-3109.

ACADEMIC POLICIES

To ensure success in all your academic endeavors and coursework at Thomas Edison State University, familiarize yourself with all administrative and academic policies including those related to academic integrity, course late submissions, course extensions, and grading policies.

For more, see:

- University-wide policies
- Undergraduate course policies and regulations
- Graduate academic policies
- Nursing student policies
- Academic code of conduct