Syllabus for IAS-5510

FOUNDATIONS OF INFORMATION ASSURANCE

COURSE DESCRIPTION

Information assurance (IA) is concerned with protecting the reliability of information and managing risks related to the use, processing, storage, and transmission of information or data. It includes securing the systems and processes that house and manipulate the data as well. IA includes protection of the integrity, availability, authenticity, nonrepudiation, and confidentiality of organizational data. IA practitioners use physical, technical, and administrative controls to accomplish these tasks. These protections apply to data in transit, both physical and electronic forms as well as data at rest in various types of physical and electronic storage facilities. Information assurance as a field has grown from the practice of information security. As opposed to information security and cybersecurity, IA relates more to the business value and strategic risk management of information and related organizational systems, rather than focusing on the creation and application of security controls. In this course students will learn to defend against malicious attacks while considering corporate governance issues such as privacy, regulatory and standards compliance, auditing, business continuity, and disaster recovery as they relate to an organization's information assets.

COURSE TOPICS

- Why information security is important
- Adapting best practice: tailoring a solution that fits
- Defining the company's functional security roles
- Essential Body of Knowledge (EBK) model
- Company executive roles
- Personnel security
- Physical security

COURSE OBJECTIVES

After completing this course, you should be able to:

CO1 Evaluate key cybersecurity issues.

CO2 Assess enterprise and management information assurance solutions.

CO3 Evaluate systems security risk.

CO4 Appraise information assurance models and/or plans.

CO5 Formulate recommendations to mitigate risk.

CO6 Assess the importance of legal and regulatory compliance in information assurance.

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

- Shoemaker, D., & Conklin, W. A. (2012). *Cybersecurity: The essential body of knowledge*. Boston, MA: Course Technology: Cengage Learning.
  ISBN-13: 978-1435481695

COURSE STRUCTURE

Foundations of Information Assurance (IAS-5510) is a three-credit, online course consisting of **eight** modules and a final project. Modules include an overview, topics, learning objectives, study materials, and activities. Module titles are listed below.

- **Module 1: Information Security Is Important**
  Course objectives covered in this module: CO1, CO3, CO4

- **Module 2: A Global Roadmap for Security**
  Course objectives covered in this module: CO2, CO3

- **Module 3: Defining the Company's Functional Security Roles**
  Course objectives covered in this module: CO1, CO3

- **Module 4: Data Security Competency**
  Course objectives covered in this module: CO1, CO3

- **Module 5: IT Security Training and Awareness**
  Course objectives covered in this module: CO1, CO3

- **Module 6: Legal and Regulatory Compliance**
  Course objectives covered in this module: CO6

- **Module 7: Personnel Security**
  Course objectives covered in this module: CO1, CO4

- **Module 8: Physical Security**
  Course objectives covered in this module: CO1, CO3, CO5

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

This course requires you to participate in **12** graded discussion forums. There is an ungraded but required Introductions Forum in Module 1.

Written Assignments

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

Final Project

Students will write a research paper on a topic of their choice. The topic must be related to course material and be approved by the course mentor. In the paper, students will identify a cybersecurity organizational problem related to information assurance, design a research-based solution to fix the problem, provide a method for assessing the effectiveness of the solution, and recommend a plan for

implementing the solution. Parts of the project will be submitted in separate submissions with different due dates.

GRADING AND EVALUATION

Your grade in the course will be determined as follows:

- **Discussion forums (12)**—25 percent
- **Written assignments (9)**—45 percent
- **Final project**—30 percent
    - Selected problem approval (1 percent)—graded as Approved/Needs Revision; must be approved to receive credit. Resubmission until approved will be required.
    - Preliminary reference list (2 percent)
    - Preliminary intervention description (2 percent)—graded as Complete/Incomplete
    - Final paper (25 percent)

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 written assignments and posting discussions.

- Check Announcements regularly for new course information.

Using AI Ethically: A Guide for TESU Students

TESU's Academic Code of Conduct permits student AI use in support of their writing and research process--not as a replacement for original writing. Document AI use with an acknowledgment statement at the end of each assignment, noting the tools and prompts used. Cite any AI-generated content on the References page. Please review Using AI Ethically: A Guide for TESU Students for more detailed 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 adheres to the Americans with Disabilities Act (ADA, 1990; ADAAA, 2008) and Section 504 of the Rehabilitation Act of 1973. The Office of Student Accessibility Services (OSAS) oversees requests for academic accommodations related to disabilities; a student who is pregnant, postpartum, or a student parenting a newborn who is not the birth parent [as covered under NJSA18A]; and students requesting academic accommodation for a short-term/temporary illness and/or injury. Information can be found on the Office of Student Accessibility Services webpage and questions can be sent to ADA@tesu.edu.

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 academic policies
- Undergraduate course policies
- Graduate academic policies
- Graduate course policies
- Nursing student policies
- Nursing graduate student policies
- International student policies
- Academic code of conduct