

Information Security Management

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Class Description

Course Objectives

After completing the course, students will be able to:

- o Conduct an information security risk assessment.
- o Perform asset identification and classification
- o Perform threat identification
- o Perform vulnerability identification
- o Perform control analysis
- o Perform likelihood determination
- o Conduct impact analysis
- o Conduct risk determination
- o Identify control recommendations
- o Document results
- o Identify pertinent standards and regulations and their relevance to information security management.
- o Describe legal and public relations implications of security and privacy issues.
- o Present a disaster recovery plan for recovery of information assets after an incident.

Course Approach

This is a service learning course. You will spend the first 7 weeks of the class learning through more traditional methods, i.e., lecture and reading. However, for the next 7 weeks of the class, you will be assigned to a team that is then assigned to a client to perform an information security risk assessment. All clients in this course will be K12 school corporations in the west central area of Indiana.

A service learning course intends to provide an education experience:

- o Whereby students learn and develop through active participation in thoughtfully organized service experiences that meet actual community needs, that are integrated into the students' academic curriculum or provide structured time for reflection, and that enhance what is taught in school by extending student learning beyond the classroom and into the community.
- o That increases the civic responsibility and citizenship of students in the course; this occurs by exposing students to societal inadequacies where they can use the community service experience as a foundation for learning 1) about oneself, 2) the academic discipline, 3) real world skills and techniques, and 4) how the discipline, skills and techniques intersect with the social world around us.
- o That joins theory and practice, i.e., students experience the relevance of the subject to the real world. Students in service learning courses are empowered to make a difference with the skills they are learning in an environment where there is a need; furthermore, the learning experience and student learning outcomes are usually richer when there is a distinct and known need for the service.

Risk Assessment Process

NIST 800-30 Risk Management Guide for IT Systems

- Step 1 - System Characterization
- Step 2 - Threat Identification
- Step 3 - Vulnerability Analysis
- Step 4 - Control Analysis
- Step 5 - Likelihood Determination
- Step 6 - Impact Analysis
- Step 7 - Risk Determination
- Step 8 - Control Recommendations
- Step 9 - Results Documentation

Status

Where we are:

- o Risk Assessment and Education of 6 North Central Indiana school corporations
- o Foundation for Future Risk Assessment and Educational opportunities

Where we want to be:

- o More Assessment and Educational opportunities
- o Give a man to fish, you feed him for a day. Teach a man to fish, feed him for a lifetime.

Future Involvement

Academia:

- o Partnerships for continued education
- o Expand program to other universities

Industry:

- o Partnerships for continued education
- o Subsidies
- o Product and/or Service donations

Practicum Locations

