Information Assurance COSC 6375  
School of Science and Engineering  
Fall 2018

A. COURSE INFORMATION

Course number/section: COSC 6375-001  
Class meeting time: MW 11.00 – 11.50; F Online  
Class location: OCNR-255  
Course Website: http://sci.tamucc.edu/~garciam

B. INSTRUCTOR INFORMATION

Instructor: Mario A Garcia  
Office location: CI 370  
Office hours: M T TH F 2.45 – 4.00 PM;  
Telephone: 825 2898  
e-mail: mario.garcia@tamucc.edu  
Appointments: By email

C. COURSE DESCRIPTION

This course provides the foundation for understanding the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, and designing a consistent, reasonable information security system, with appropriate intrusion detection and reporting features. The purpose of the course is to provide the student with an overview of the field of information security and assurance. Students will be exposed to the spectrum of security activities, methods, methodologies, and procedures. Coverage will include inspection and protection of information assets, detection of and reaction to threats to information assets, and examination of pre- and post-incident procedures, technical and managerial responses, and an overview of the information security planning and staffing functions.

Course relevance. It is expected that the knowledge and practice acquired by the students will help them to find a job as cybersecurity experts.

D. PREREQUISITES AND COREQUISITES

None

Corequisites

None

E. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES

Optional Textbook(s) or Other References
None

Supplies
None

F. STUDENT LEARNING OUTCOMES AND ASSESSMENT

Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

By the end of this course, students should be able to:

1. Demonstrate an understanding of the various laws dealing with Cybersecurity;
2. Demonstrate a working knowledge of basic information assurance applications and tools
3. Apply the fundamentals and basic principles of information assurance
4. Comprehension of recent and relevant information assurance topics

G. INSTRUCTIONAL METHODS AND ACTIVITIES

This class is a hybrid class: it has a face-to-face and online component. The class is composed of lectures, quizzes, hands-on labs, and homework. There will be an online quiz for each chapter. Formative assessment will consist of feedback provided by students after each lecture (summarizing the most important concepts learned in each class and stating what concepts were not understood or were difficult). Summative evaluation will consist of a midterm and final exam.

H. MAJOR COURSE REQUIREMENTS AND GRADING

The class will have formative and summative assessment.

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
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<tbody>
<tr>
<td>Midterm Exam</td>
<td>20</td>
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<tr>
<td>Final Exam</td>
<td>30</td>
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<tr>
<td>Homework</td>
<td>10</td>
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<tr>
<td>Quizzes</td>
<td>10</td>
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<tr>
<td>Team Research Paper</td>
<td>20</td>
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<td>Team Research Poster</td>
<td>10</td>
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### I. COURSE CONTENT/SCHEDULE

<table>
<thead>
<tr>
<th>DATE (BY DAY OR WEEK)</th>
<th>TOPIC</th>
<th>CHAPTER(S)</th>
<th>ASSIGNMENTS</th>
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</thead>
<tbody>
<tr>
<td>Week 1 08/27</td>
<td>Introduction</td>
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<tr>
<td>Week 2 09/03 Labor day 09/04-07</td>
<td>Introduction to Information Security The Need for Security</td>
<td>Chapter 1, 2</td>
<td>Quiz Ch 1 Quiz Ch 2</td>
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<tr>
<td>Week 3 09/10-14</td>
<td>Legal, Ethical, and Professional Issues in Information Security</td>
<td>Chapter 3</td>
<td>Quiz Ch 3 Team paper summary 1</td>
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<tr>
<td>Week 4 09/17-21</td>
<td>Planning for Security</td>
<td>Chapters 4</td>
<td>Quiz Ch 4 Team paper summary 2</td>
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<td>Week 5 09/24-28</td>
<td>Risk Management</td>
<td>Chapter 5</td>
<td>Quiz Ch 5 Team paper summary 3</td>
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<tr>
<td>Week 6 10/1-5</td>
<td>Security Technology: Access Controls, Firewalls, and VPNs</td>
<td>Chapter 6</td>
<td>Quiz Ch 6 Team paper summary 4</td>
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<tr>
<td>Week 7 10/8-12</td>
<td>Security Technology: Intrusion Detection and Prevention Systems and Other Security Tools</td>
<td>Chapters 7</td>
<td>Quiz Ch 7 Team paper summary 5</td>
</tr>
<tr>
<td>Week 8 10/14 Last day to drop a class 10/15-19</td>
<td>Midterm Exam 10/17</td>
<td>Chapters 1-7</td>
<td>Quiz Ch 8 Team paper summary 6</td>
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<tr>
<td>Week 9 10/22-26</td>
<td>Cryptography</td>
<td>Chapter 8</td>
<td>Quiz Ch 9 Team paper summary 7</td>
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<tr>
<td>Week 10 10/29-11/2</td>
<td>Physical Security</td>
<td>Chapter 9</td>
<td>Quiz Ch 10 Team paper summary 8</td>
</tr>
<tr>
<td>Week 11 11/5-9</td>
<td>Implementing Information Security</td>
<td>Chapter 10</td>
<td>Quiz Ch 11 Team paper summary 9</td>
</tr>
<tr>
<td>Week 12 11/12-16</td>
<td>Security and Personnel</td>
<td>Chapter 11</td>
<td></td>
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</table>
Week 13
11/21 Reading Day
11/19
Information Security Maintenance
Chapter 12
Quiz Ch 12
Team paper summary 10

Week 14
11/26-30
Research Paper Presentation

Week 15
12/4 Last day to withdraw from the university
Research Paper Presentation

Final Exam December 7
11.00 – 1.30
TeamPoster due date

Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

J. COURSE POLICIES

Attendance/Tardiness
Class attendance is important to succeed in this course.

Late Work and Make-up Exams
Assigned readings are assumed to be completed as scheduled. Homework, exams and Labs will be submitted using Blackboard. Once the deadline is reached, the submission link in Blackboard will close resulting in a grade of “0”. Submissions by email to the instructor will not be considered and will not be graded.

Extra Credit
None

Cell Phone Use
Must turn them off.

Laptop Use
Not allowed

Food in Class
Not allowed

Missed Exam
Makeup exams will be considered if the instructor is informed ahead of time or in cases of extreme circumstances

Participation
Class participation is essential in this course. Collaborative learning needs the participation of everybody in the class.

Others

Courtesy Expectations. Mutual respect is expected. This is the most important rule: I respect students and I expect respect from the students. The instructor expects full attention from the students when he is lecturing.

K. COLLEGE AND UNIVERSITY POLICIES

- Academic Integrity (University)
  University students are expected to conduct themselves in accordance with the highest standards of academic honesty. Academic misconduct for which a student is subject to penalty includes all forms of cheating, such as illicit possession of examinations or examination materials, falsification, forgery, complicity or plagiarism. (Plagiarism is the presentation of the work of another as one’s own work.) In this class, academic misconduct or complicity in an act of academic misconduct on an assignment or test will result in a failing grade.

- Classroom/Professional Behavior
  Texas A&M University-Corpus Christi, as an academic community, requires that each individual respect the needs of others to study and learn in a peaceful atmosphere. Under Article III of the Student Code of Conduct, classroom behavior that interferes with either (a) the instructor’s ability to conduct the class or (b) the ability of other students to profit from the instructional program may be considered a breach of the peace and is subject to disciplinary sanction outlined in article VII of the Student Code of Conduct. Students engaging in unacceptable behavior may be instructed to leave the classroom. This prohibition applies to all instructional forums, including classrooms, electronic classrooms, labs, discussion groups, field trips, etc.

- Statement of Civility
  Texas A&M University-Corpus Christi has a diverse student population that represents the population of the state. Our goal is to provide you with a high quality educational experience that is free from repression. You are responsible for following the rules of the University, city, state and federal government. We expect that you will behave in a manner that is dignified, respectful and courteous to all people, regardless of sex, ethnic/racial origin, religious background, sexual orientation or disability. Behaviors that infringe on the rights of another individual will not be tolerated.

Deadline for Dropping a Course with a Grade of W (University)

I hope that you never find it necessary to drop this or any other class. However, events can sometimes occur that make dropping a course necessary or wise. Please consult with your academic advisor, the Financial Aid Office, and me, before you decide to drop this course. Should dropping the course be the best course of action, you must
initiate the process to drop the course by going to the Student Services Center and filling out a course drop form. Just stopping attendance and participation WILL NOT automatically result in your being dropped from the class. Please consult the Academic Calendar (http://www.tamucc.edu/academics/calendar/) for the last day to drop a course.

• Grade Appeals (College of Science and Engineering)
As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

• Disability Services
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please call (361) 825-5816 or visit Disability Services in Corpus Christi Hall 116.

If you are a returning veteran and are experiencing cognitive and/or physical access issues in the classroom or on campus, please contact the Disability Services office for assistance at (361) 825-5816.

http://disabilityservices.tamucc.edu/

• Statement of Academic Continuity
In the event of an unforeseen adverse event, such as a major hurricane and classes could not be held on the campus of Texas A&M University–Corpus Christi; this course would continue through the use of Blackboard and/or email. In addition, the syllabus and class activities may be modified to allow continuation of the course. Ideally, University facilities (i.e., emails, web sites, and Blackboard) will be operational within two days of the closing of the physical campus. However, students
need to make certain that the course instructor has a primary and a secondary means of contacting each student.

L. OTHER INFORMATION

• Academic Advising
  The College of Science & Engineering requires that students meet with an Academic Advisor as soon as they are ready to declare a major. The Academic Advisor will set up a degree plan, which must be signed by the student, a faculty mentor, and the department chair. Meetings are by appointment only; advisors do not take walk-ins. Please call or stop by the Advising Center to check availability and schedule an appointment. The College’s Academic Advising Center is located in Center for Instruction 350 or can be reached at (361) 825-3928.

GENERAL DISCLAIMER

I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.