SECURITY CAPSTONE II-Spring 2023
CSCE 4927-002

Course Instructor: Dr. Pradhumna Shrestha

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- Include CSCE 4927.002 in subject line
- Always use your official UNT email address

Class Location/Time: NTDP F260, MoWe 4:00 PM - 5:20 PM

Office Hours (In-Person/Zoom): MoWe 3:00 PM-4:00 PM @F265 or via appointment

Office Hours Zoom Link: https://unt.zoom.us/j/3251832551

COURSE DESCRIPTION

Second of a two-course sequence in which students apply cybersecurity principles and techniques to develop a complex information system starting from customer requirements and progressing through the entire analysis, design, implementation and delivery lifecycle. Students work in teams to develop a project plan, complete the technical components of the project, prepare a variety of deliverable documents and finally, deliver the finished product to the customer. The second course focuses on the implementation, testing and delivery of the secure system.

COURSE OUTCOMES

1. Gather and refine user functional requirements and other functional and non-functional requirements and constraints for a large-scale secure information system and create a system requirements specification document.
2. Perform system analysis and design tasks using recognized cybersecurity principles and practices to create a preliminary design specification for a secure system based on a requirements specification.
3. Utilize project management principles, skills, and tools in creating the requirements and preliminary design specifications.
4. Create a project management plan, including a schedule and budget for a large-scale secure information systems project.
5. Utilize configuration management, project management, and design tools in the course of the project.
6. Analyze and maintain appropriate project artifacts to reflect inclusive security design and societal impact for the project sponsors, users, and other stakeholders.

TEXTBOOK

N/A

PRE-REQUISITES: CSCE 4907 with a grade of C or better. CSCE 4927 must be completed in the long term/semester immediately following the completion of CSCE 4907.

COREQUISITE(S): CSCE 4565 with a grade of C or better

SCHEDULE AND GRADING

Attendance: 5%
Individual Project Deliverables: 0%
Team Project Deliverables: 30%
Team Presentation: 10%
Demonstrations: 55%

Notes:
ATTENDANCE POLICY

Class attendance is regarded as an obligation as well as a privilege. All students are therefore expected to attend each class meeting. *A student who misses class is still responsible to find out what was discussed and to learn the material that was covered and obtain the homework that was assigned on the missed day.* The instructor is not responsible for re-teaching material missed by a student who did not attend class. Therefore, each student is accountable for and will be evaluated on *all* material covered in this course, regardless of attendance.

Attendance/Participation grades will be based on attendance, contribution to in-class discussions, and assessment of any in-class work. Disruptive behavior and unexcused absences deemed excessive will result in a lower attendance/participation grade.

DELIVERABLES

There will be few individual deliverables and few team deliverables. Every deliverable will have sample template document which is required to be used by the team and the members to turn in the deliverables.

DEMONSTRATION

It is expected that you complete all your project requirements towards the end of the semester. At the end of the semester, each team member will demonstrate their self-assigned project requirements. All self-assigned project requirements must be completed and demonstrated to earn the complete 60% towards the demonstration. A partial completion of the requirements or demonstration does not earn any points (zero credit) towards demonstration. It is your responsibility to discuss with the instructor to make sure that you have completed all the requirements before the final demonstration.

ABSTRACTS

Teams must submit abstract by 03/10. Sample of abstracts will be provided.

SHOWCASE

Teams must showcase their project or product on the Senior Design Day (tentatively 04/28). Showcase includes the demonstration of their project or product to potential employers or visitors or guests. Showcase will also include a poster and a presentation that describes your project. Attendance is required for all team members. Failing to take part in the showcase will automatically result in a failing grade for the class.

TEAM PRESENTATION

There will be a 15-minute presentation by each team. Attendance is required.

• **Team Presentation: Wednesday, May 10, 2023 1:30 PM – 3:30 PM.**

GRADING POLICY

Grades will be posted on Canvas throughout the semester to provide an ongoing assessment of student progress, though final assessment will be measured using the weighted average above.

Also, once a grade is assigned on Canvas, students have two weeks to dispute the grade.

The proper channel for grade disputes is to first go to the original grader (such as the TA or IA) in an attempt to resolve the issue. If, however, a resolution cannot be reached between the student and the grader, the student shall then go to the instructor who will have the final say on the grade.

STUDENT RESPONSIBILITY

Students are responsible for submitting the *correct* assignments (i.e., uploading the proper files) for each applicable assignment submission on Canvas. When an incorrect assignment is submitted to Canvas, students wanting to resubmit with the correct file(s) *after the due date has passed* will have their assignment assessed a 30% reduction penalty. Proof must be given (i.e., timestamp for the file on the CSE machines) that the assignment was completed on time. If you have any questions or concerns about your submission, please work with your instructor or TA/IA for this course to ensure the correct file(s) is/are submitted.

ADA STATEMENT

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information, see the Office of Disability Accommodation website at http://disability.unt.edu. You may also contact them by phone at (940) 565-4323.

ACCEPTABLE STUDENT BEHAVIOR

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom

and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at http://deanofstudents.unt.edu.

ACADEMIC DISHONESTY

This course follows the Department of Computer Science and Engineering *Cheating Policy*. Specifically, students caught cheating or plagiarizing will receive a "0" for that particular assignment or exam for the first offense. Additionally, the incident may be reported to the Dean of Students, who may impose a further penalty. A second instance of cheating in this class will result in a grade of F in the class, and referral to the Department Chairperson and Dean of Engineering, whereby a dismissal hearing may be initiated by the Dean of Engineering.

Students are responsible for being familiar with the university standard for academic integrity. In the case that the above description or any in-class discussion of appropriate and inappropriate collaboration do not answer all of your questions, please meet with your instructor and look at the university Student Rights and Responsibilities web page.

SYLLABUS REVISIONS

This syllabus may be modified as the course progresses should the instructor deem it necessary. Notice of changes to the syllabus shall be made through Canvas and/or class announcement.

TENTATIVE SCHEDULE

Week	Lecture	Deliverables
01/16-01/20	Continue Development	
01/23-01/27	Continue Development	
01/30-02/03	Continue Development	
02/06-02/10	Continue Development	
02/13-02/17	Continue Development	Status Report (2%)
02/20-02/24	Continue Development	
02/27-03/03	Continue Development	
03/06-03/10	Continue Development	Status Report (2%)

03/13-03/17	Spring Break	
03/20-03/24	Continue Development	
03/27-03/31	Continue Development	
04/03-04/07	Continue Development	Status Report (2%)
04/10-04/14	Continue Development	Abstract (4%)
04/17-04/21	Continue Development	
04/24-04/28	Demonstrations	Demonstrations (55%)
05/01-05/05		Final Project Report (20%)
05/10	Finals Week	Team Presentation (10%)