**SECURE E-COMMERCE**
**CSCE 5560.002**

**Course Instructor:** Dr. Pradhumna Shrestha

**E-mail Address:** pradhumna.shrestha@unt.edu

- Include CSCE 5560.002 in subject line
- Always use your official UNT email address

**Class Location/Time:** NTDP E264, TuTh 1:00 PM - 2:50 PM

**Office Hours:** Mo 12:00 PM-1:00 PM @ F265

**Teaching Assistant:** Kritagya Upadhyay

**Email:** kritagyaupadhyay@my.unt.edu

**Office Hours:** 11:30 AM to 12:30 PM @ Section B, TA Help Lab, E Wing

**Zoom link:**
https://unt.zoom.us/j/6365675030?pwd=ckRMVGVbJbJKcZUCt4U2JNR3dNdz09

Meeting ID: 636 567 5030
Passcode: 262372

**COURSE DESCRIPTION**

This course covers electronic commerce technology, models and issues, with emphasis on security. Supporting technology such as cryptography, digital signatures, certificates and public key infrastructure (PKI) are security-conscious programming for web-based applications are explored. Exposure is also given to interaction between technical issues and business, legal and ethical issues.

**COURSE OUTCOMES**

1. Knowledge of an experience with secure web development, with exposure to at least three current technologies (such as XML, Perl, PHP, ASP, JSP, JavaScript, etc.).
2. Knowledge of how cryptography can be used to support confidentiality and integrity of electronic transmissions and transactions.
3. Knowledge of electronic transaction and payment systems.
4. Knowledge of Public Key Infrastructure (PKI) settings and trust models, with specific systems such as X.509 certificates and PGP’s decentralized web of trust.
5. Familiarity with basic network and system security, and the ability to set up a typical electronic commerce setting of networks and hosts.
6. Familiarity with business, legal, and ethical issues related to electronic commerce, and the interaction of these issues with technical issues.
REFERENCE TEXTBOOK

GRADING
Attendance/Class Participation: 5%
Homework: 15%
Laboratory Exercises: 15%
MidTerm Exam: 30%
Final Project: 20%
Final Exam: 15%

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. I will provide a quiz question in every class, and it will be used to grade your attendance. You must answer the question correctly to get the point, just attending the class is not sufficient.

HOMEWORK
Homework will be assigned based on material from the lectures. These assignments are meant for you to become familiar with the course material and this practice will aid you in mastering the concepts in the labs and exams.

LABORATORY EXERCISES
Students will complete several in-depth hands-on laboratory projects during the semester intended to give a more thorough view of electronic commerce and security.
MIDTERM EXAM
There will be a midterm examination given in this course. The tentative date of this exam will be 06/30. The confirmed date and the details of the test will be announced in class at least one week prior to the date of the exam.

FINAL PROJECT
There will be a final project due in this course. Your team will also be required to make a live demonstration of the project, highlighting how each area (such as security) was addressed. More details about this project will be made available at a later date.

LATE SUBMISSION POLICY
Late submissions will not be accepted. If you miss the deadline by a few minutes, email me. I may allow you to submit with a penalty depending on the circumstances.

FINAL EXAM
There will be a final exam given on 07/26. The details of the test will be announced in class at least one week prior to the date of the exam. All students are expected to take the final exam during the scheduled time period.

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.
# TENTATIVE SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>Material Covered</th>
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<tbody>
<tr>
<td>05/22 – 05/26</td>
<td>Introduction, Infrastructure, Databases</td>
</tr>
<tr>
<td>05/29 – 06/02*</td>
<td>Security Landscape, Vulnerability, Threats &amp; Vulnerabilities</td>
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<tr>
<td>06/05 – 06/09</td>
<td>Common Threats, Design Principles</td>
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<tr>
<td>06/12 – 06/16</td>
<td>Software Security, Security Technologies</td>
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<tr>
<td>06/19 – 06/23**</td>
<td>Security Technologies</td>
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<td>06/26 – 06/30</td>
<td>Review, Midterm Exam</td>
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<tr>
<td>07/03 – 07/07***</td>
<td>Design &amp; Deployment, Payment Systems</td>
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<tr>
<td>07/10 – 07/14</td>
<td>State Information, Shopping Cart</td>
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<tr>
<td>07/17 – 07/21</td>
<td>Project Presentations</td>
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<tr>
<td>07/24-07/28</td>
<td>Review, Final Exam</td>
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*Memorial Day- No Classes- University Closed May 29, 2023
**Juneteenth Observance-No Classes June 19, 2023
***Independence Day- No Classes- University Closed July 4, 2023