

# CMPS 5363: Web Application Security

### Fall 2021

Instructor	Saikat Das	
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Hours:	Class: TR 3:30 – 4:50 PM Office: MW 3:30 – 4:30PM, TR 2:30 – 3:30 PM, M 1:00-2:00PM, or by appointment	

**Description:** Study of techniques used to protect the development of web applications from common hacker attacks. Includes an introduction to common web application development languages, such as HTML and PHP, and a brief overview of database access. It also includes basic aspects of cryptography and ethical problems related to web security.

### **Recommended Texts:**

• The Web Application Hacker's Handbook, 2nd ed., by Dafydd Stuttard and Marcus Pinto

## **Course Content:**

Students are responsible for all material, regardless of attendance.

- Readings from the textbook
- Lectures, slides
- Paper presentation and rebuttal
- HomeWorks
- Projects
- Exams

**Exams and Assignments:** There will be one midterm exams and one comprehensive final exam. Exams cover material from the text as well as programming activities. The lectures may not cover all material in the textbook and required readings. Programming projects will be expected to be complete and robust, including good documentation, user interfaces, and the ability to handle improper input.

#### **Course Evaluation:**

Paper Presentations	15%
Presentation of 3 papers and rebuttal of 12 papers	
HomeWorks	25%
5 homeworks	
Project	20%
Proposal (5%), Midterm demo (5%),	
Final demo + code submission (5%), Report submission (5%)	
Exams	40%
Midterm (20%), Final (20%)	

Final Exam: December 7th Tuesday at 3:30 – 5:30 PM as per MSU website

**Grading scale breakdown:** Grades may be determined according to this scale (approximate):  $\mathbf{A:}\ 90 - 100, \ \mathbf{B:}\ 80 - 89, \ \mathbf{C:}\ 70 - 79, \ \mathbf{D:}\ 60 - 69, \ \mathbf{F:}\ < 60$ 

**Attendance:** Attending class is one of the primary keys to doing well in this class. Students with excessive absences may be reported to the dean of students and may receive a grade of F in the class. There is no distinction made between excused and unexcused. Make-up exams will be given only if the student has a reasonable excuse and if the instructor is contacted within 24 hours of the exam and arrangements are made for the make-up prior to the next class meeting. Students are expected to be in the classroom when class begins and to stay the entire period. <u>Missed paper presentation may not be made up.</u>

Late Policy and Excuses: Programs will be accepted late up to one week after the due date with a penalty of 5 points per day. Late programs will not be accepted for a grade after seven days from the due date. Technical difficulty will not be considered a valid reason for an extension on submitting online materials. Computers are available on campus in various areas, as well as the Academic Success Center. Contact your instructor immediately upon having computer trouble. There is also a student help desk available to you. If you have technical difficulties in the course, there is also a student helpdesk available to you. The college cannot work directly on student computers due to both liability and resource limitations however they are able to help you get connected to our online services. For help log into D2L.

**Academic Honesty:** The Department of Computer Science had adopted the following policy related to cheating (academic misconduct). The policy will be applied to all instances of cheating on assignments and exams as determined by the instructor of the course. (See below for link to MSU definitions.)

- 1<sup>st</sup> instance of cheating in a course: The student will be assigned a non-replaceable grade of zero for the assignment, project or exam. In addition, the student will receive a one letter grade reduction in course.
- 2<sup>nd</sup> instance of cheating in a course: The student will receive a grade of F in course & immediately be removed from course.

• All instances of cheating will be reported to the Department Chair and, in the case of graduate students, to the Department Graduate Coordinator.

See the MSU Student Handbook for more information on the academic misconduct policy.

**Behavior in the Classroom:** Students are to assist in maintaining a classroom environment that is conducive to learning. Electronic devices should be silenced, and there should not be off-topic conversation while the instructor is lecturing. Disruptive students may be asked to leave the room.

**Electronic Devices:** The use of electronic devices is encouraged during the in-class assignments in class, but not during other times. Electronic device use should not disrupt other students from learning.

Research and Creative Opportunities at MSU: Enhancing Undergraduate Research and Creative Activities (EURECA) is a program that provides opportunities for undergraduate students to engage in high-quality research and creative activities with faculty. EURECA provides incentives and funding through a system that supports faculty and students in a cooperative research process. For more information contact the Office of Undergraduate Research, (940) 397-6275 or eureca@mwsu.edu. Information and resources are available at www.mwsu.edu/eureca.

**Counseling Center:** MSU offers personal, group, career, and academic counseling. Students are encouraged to take advantage of these *free* services by contacting the Counseling Center: Corner of Hampstead and Louis J. Rodriguez Drive, 397-4618, <u>counseling@mwsu.edu</u>.

Concealed Handguns on Campus: Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, refer to the university's webpage at MSU Campus Carry Policy. For questions or concerns, contact MSU Chief of Police Patrick Coggins.

**Policy on Testing Process:** No electronics of any kind, including ear buds and smart watches, are allowed on the student, unless the instructor has approved a calculator. Nothing is allowed on the desk but pen/pencil/eraser and test papers. A student who leaves the room during an exam must turn in the test and will not be allowed to return.

**COVID-19 Policy:** Masks are not required but are recommended. The instructor will wear a mask when not social distancing.

Any student (vaccinated or not) that tests positive for COVID-19 MUST self-report here.

Services for Students with Disabilities: In accordance with Section 504 of the Federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Midwestern State University endeavors to make reasonable accommodations to ensure equal opportunity for qualified persons with disabilities to participate in all educational, social, and recreational programs and activities. After notification of acceptance, students requiring accommodations should make application for such assistance through Disability Support Services, located in the Clark Student Center, Room 168, (940) 397-4140. Current documentation of a disability will be required in order

to provide appropriate services, and each request will be individually reviewed. For more details, please go to <u>Disability Support Services</u>.

**Recording of Class Lectures:** Permission must be requested in writing and obtained from the instructor before recording of class lectures. If permission is granted, the recording may only be used by the student making the recording. Recordings (or any class materials) may NOT be posted on any internet source without written permission of the instructor. Failure to adhere to the policy may result in removal from the course with a grade of F, or other appropriate punishment.

**Desire-to-Learn (D2L):** Extensive use of the MSU D2L program is a part of this course. Each student is expected to be familiar with this program as it provides a primary source of communication regarding assignments, examination materials, and general course information. You can log into D2L through the MSU Homepage. If you experience difficulties, please contact the technicians listed for the program or contact your instructor.

**Midterm Progress Report:** In order to help students keep track of their progress toward course objectives, the instructor will provide a Midterm Progress Report for all students through WebWorld. Midterm grades will not be reported on the transcript, nor will they affect GPA. They simply give students an idea of where they stand at the midpoint of the semester. Students earning below a C at the midway point should schedule a meeting with the instructor and seek out tutoring.

**Grade Appeal Process:** Update as needed. Students who wish to appeal a grade should consult the Midwestern State University <u>Undergraduate Catalog</u>

**Notice:** Changes in the course syllabus, procedure, assignments, and schedule may be made at the discretion of the instructor.

Important Dates: MSU Registrar's Important Dates