Semester

SP/SS/FS XXXX

Instructor Details

Name: *Put name*
Office Hours: *Put hours, 1.5 hrs/wk per course for FT faculty, 3 hours a week for adjunct*
Office Location: *Put location, can be in office, in class, online, etc.*

Submission and Communication

Your specific policies and procedures regarding submissions, late submissions, communication means, etc.

Scoring

List any additions/changes you want to make to the course details below, such as using quizzes, attendance requirements, etc. Keep in mind you cannot change the course details, you can only work within what it says. So if you want to add quizzes and they are not listed, scoring for quizzes has to be added to homework, tests, or another part. If the course detail gives ranges for grading, you have to provide specific values within these ranges.

Incremental Grading

Provide information if used.

Schedule

If the course detail does not state detailed timing or sections/topics, you may put them here. Keep in mind you cannot remove topics and if the course is coordinated you may have to follow topic allocations.

Course Details

General Policies

Lecture recordings, audio or video, are not permitted unless the instructor explicitly allows that.

We follow the university policies regarding excused EX and EX-F drops.

Students are given and are expected to sustain positive learning environment in class. This means positive conduct in class, no late walk-ins or early walk outs without a good explanation or a prior arrangement, and if on-line access is available in class - not using it for anything not class related. Students not meeting these standards may be asked to leave the classroom.

All in and out of class work for grade should be done independently (except for group projects). Homework can be discussed with others, but the final work (code, answer, etc.) should be independent. Programs may be discussed up to design, but no code is allowed to be shared except for what is presented in class. Help can always be sought and received. However, help to assignments should be generic on the subject matter or very narrowly focused on specific problem not being the central point in the assignment.

Course Description

Discuss common software vulnerabilities that come up during software development. Cover the ramifications of these vulnerabilities in production code, such as how attackers could exploit them. Introduce methods and tools to find and remove these errors in code.

Text and Other Materials

Required texts: *24 Deadly Sins of Software Security: Program Flaws and How to Fix them* Mcgraw-Hill

Tentative topics to be covered:

- Buffer overruns
- Format string issues
- Integer overflows
- Insecure exception handling
- Information leakage
- Failure to handle all error conditions
- Common C++ catastrophes
- Weak random numbers
- Bad cryptography
- Race conditions
- Executing code with too much privilege
- Cross-Site scripting
- Command and SQL injection
- GDB, Valgrind and other memory debuggers

Course Schedule

Course Objectives and Learning Outcome

Course Grading

Tests:
There will be one midterm test. This test will be on the 9th week of the semester and will be closed book/closed notes, but will allow two single-sided notesheets.

Final Exam:

The mandatory FINAL EXAM, worth 120 points, will be given as scheduled. Details will be announced later. There will be practice exam questions with solutions provided prior to the final exam.

Projects:

There will be at least 3 projects of moderate complexity.

Your course grade **will be based on**

	Points
Midterm	20%
Homeworks	35%
Projects	25%
Final Exam	20%

90 – 100	A
80 – 89.99	B
70-79.99	C
60 – 69.99	D
Below 60	F

University Policies and Information

You may insert the notes or leave the link. The page gets updated as needed.

http://www.umsl.edu/~webdev/mathematics/files/pdfs/cs_umsl_syllabus_university.pdf