Al Imam Mohammad ibn Saud Islamic University
College of Computer and Information Sciences

CCIS

Computer Science Department
Course Syllabus
CS466 - Operating System Security

Catalog Description: This course deals with security concepts and procedures applied in operating systems. Students will examine security concepts that are uniquely implemented into operating systems. Also, this course will enable practical hands-on approach when testing operating system security techniques.

In this course, we teach students to protect computer operating systems by demonstrating server support skills and designing and implementing OS security systems, identify security threats, vulnerabilities, and monitor network security implementations. Such a course should give skills to the students to implement industry standard secure servers side managed operations as well as clients.

Credit Hours: **3 Credit hours:**   **3** Lectures per week   **0** Labs. per week   **0** Recitation per week

Prerequisites: CS322

Course Learning Outcomes:
1. Gaining factual knowledge (terminology, classifications, methods, trends) about OS Security.
2. Learning fundamental principles, generalizations, or theories the govern security in different Operating Systems.
3. Developing specific skills, competencies, and points of view needed by professionals in the field most closely related to this course.

Major Topics:
- Introduction to Operating System and Network Security
- Access Control
- Confidentiality
- Integrity
- Availability
- Viruses, Worms, and Malicious Software
- Security Policies (Including Practical Unix OS)
- Security Models
- Special Topics: Malicious Logic
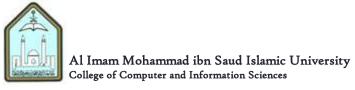- Special Topics: Vulnerability Analysis
- Special Topics: Auditing

Text Books:
1. Computer Security: Art and Science, Matt Bishop, Addison-Wesley, 2002

2. Guide to Operating Systems Security, Michael Palmer, THOMPSON/Course Technology. ISBN: 0-619-16040-3 © 2004

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Grading:

◎ The grading scale for this course is:

. 95 - 100	A+	Passing
. 90 - 94	A	Passing
. 85 - 89	B+	Passing
. 80 - 84	B	Passing
. 75 - 79	C+	Passing
. 70 - 74	C	Passing
. 65 - 69	D+	Passing
. 60 - 64	D	Passing
. 0 - 59	F	Failing

◎ Final grades will be determined based on the following components:
. 60% Semester Work
. 40% Final Exam

◎ Students may not do any additional work for extra credit nor resubmit any graded activity to raise a final grade.

◎ Late submissions will not be accepted for any graded activity for any reason.

◎ Studentshave one week to request the re-grading of any semester work.
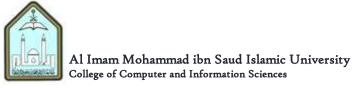
Attendance Policy:

Students should attend 80% of the overall course hours taught in the semester as per the University regulations.

If a student fails to achieve this portion, he/she shall not be allowed to appear in the final exam and shall be awarded "DN" grade and repeat the course.

Cheating and Plagiarism Policy:

The instructor will use several manual and automated means to detect cheating and/or plagiarism in any work submitted by students for this course.

When a student is suspected of cheating or plagiarism, the instructor raises the issue to the disciplinary committee.

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Communications:	Registered students will be given access to a section of the Blackboard Learning System for this course. Bb will used as the primary mechanism to disseminate course information, including announcements, lecture slides, assignments, and grades.
	Communication with the instructor on issues relating to the individual student should be conducted using CIS email, via telephone, or in person.