Syllabus(2024-1st semester)

Course	Digital Forensics	Department	Cyber Security	Office Hours	
Course No. and Class	38497-01	Hours	3.0	Academic Credit	3.0
Professor	Jongkil Kim			Office	Jinseonmi-gwan 225
Telephone	4253			E-MAIL	
Value of competence	Pursuit of Knowledge(80), Creative Convergence(20)			Keyword	Digital Evidence, Forensic science, Cyber crime

1. Course Description

This subject is designed to introduce the fundamentals of digital forensics and incident response processes. The content of the subject will include various technical and operational cybersecurity topics related to digital forensics and incident response.

2. Prerequisites

There are no prerequisites for this subject. However, students may need some basic knowledge of cybersecurity.

3. Course Format

Lecture	Discussion/Presentation	Experiment/Practicum	Field Study	Other
80%	0%	20%	0%	0%

- explanation of course format :

The subject will include hands-on practice (about 20%) together with theoretical lectures (about 80%).

4. Course Objectives

By successfully completing this subject, the students can get solid understanding of digital forensics and incident response processes. Those processes will be based on both technical and operational practices such as collecting evidence, analyzing it, and writing incident response reports to prevent further attacks. Therefore, this subject will help students comprehend the roles of digital forensic professionals and enable them to discuss cybersecurity topics with other cybersecurity professionals.

5. Evaluation System

* Absolute evaluation

Midterm Exam	Final Exam	Quizzes	Presentation	Projects	Assignments	Participation	Other
30%	40%	0%	0%	0%	20%	10%	0%

* Evaluation of group projects may include peer evaluations.

- explanation of evaluation system

Grades will be given based on the performances of the exams, assignments, and participation.

6. Required Materials

Digital Forensics and Incident Response: Incident response techniques and procedures to respond to modern cyber threats, 2nd Edition
by Gerard Johansen

7. Supplementary Materials

Cybersecurity – Attack and Defense Strategies - Second Edition

By Yuri Diogenes , Dr. Erdal Ozkaya

8. Optional Additional Readings

9. Course contents

Week	Date	Topics, Materials, Assignments
Week 1	2024/03/05(TUE)	Introduction of the subject
	2024/03/07(THU)	Understanding Incident Response
Week 2	2024/03/12(TUE)	Understanding Incident Response
	2024/03/14(THU)	Managing Cyber Incidents
Week 3	2024/03/19(TUE)	Managing Cyber Incidents
	2024/03/21(THU)	Fundamentals of Digital Forensics
Week 4	2024/03/26(TUE)	Fundamentals of Digital Forensics
	2024/03/28(THU)	Collecting Network Evidence
Week 5	2024/04/02(TUE)	Collecting Network Evidence
	2024/04/04(THU)	Acquiring Host-Based Evidence
Week 6	2024/04/09(TUE)	Acquiring Host-Based Evidence
	2024/04/11(THU)	Forensic Imaging
Week 7	2024/04/16(TUE)	Forensic Imaging
	2024/04/18(THU)	Analyzing Network Evidence
Week 8	2024/04/23(TUE)	Analyzing Network Evidence
	2024/04/25(THU)	Midterm Exam
Week 9	2024/04/30(TUE)	Analyzing System Memory
	2024/05/02(THU)	Analyzing System Memory
Week 10	2024/05/07(TUE)	Analyzing System Storage
	2024/05/09(THU)	Leveraging Threat Intelligence
Week 11	2024/05/14(TUE)	Analyzing System Storage
	2024/05/16(THU)	Analyzing Log Files
Week 12	2024/05/21(TUE)	Analyzing Log Files
	2024/05/23(THU)	Writing the Incident Report
Week 13	2024/05/28(TUE)	Writing the Incident Report
	2024/05/30(THU)	Malware Analysis for Incident Response
Week 14	2024/06/04(TUE)	Malware Analysis for Incident Response
	2024/06/06(THU)	현충일
Week 15	2024/06/11(TUE)	Hunting for Threats
	2024/06/13(THU)	Final Exam
Makeup Classes 1	2024/06/06(THU)	Hunting for Threats (Online lecture will be provided via Cybercampus)

10. Course Policies

* For laboratory courses, all students are required to complete lab safety training.

11. Special Accommodations

* According to the University regulation #57, students with disabilities can request special accommodation related to attendance, lectures, assignments, and/or tests by contacting the course professor at the beginning of semester. Based on the nature of the students' requests, students can receive support for such accommodations from the course professor and/or from the Support Center for Students with Disabilities (SCSD).

* The contents of this syllabus are not final—they may be updated.