

## Syllabus(2023-1st 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 the various technical and operational cybersecurity topics from the digital forensics and incident response perspectives.

### 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
90%	10%	0%	0%	0%

- explanation of course format :

The students in this class may need to present their study outcomes in the class.

### 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 discuss cybersecurity topics with the 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

## 8. Optional Additional Readings

## 9. Course contents

Week	Date	Topics, Materials, Assignments
Week 1	2023/03/03(FRI)	Introduction of the subject
	2023/03/07(TUE)	Understanding Incident Response
Week 2	2023/03/10(FRI)	Understanding Incident Response
	2023/03/14(TUE)	Managing Cyber Incidents
Week 3	2023/03/17(FRI)	Managing Cyber Incidents
	2023/03/21(TUE)	Fundamentals of Digital Forensics
Week 4	2023/03/24(FRI)	Fundamentals of Digital Forensics
	2023/03/28(TUE)	Collecting Network Evidence
Week 5	2023/03/31(FRI)	Collecting Network Evidence
	2023/04/04(TUE)	Acquiring Host-Based Evidence
Week 6	2023/04/07(FRI)	Acquiring Host-Based Evidence
	2023/04/11(TUE)	Forensic Imaging
Week 7	2023/04/14(FRI)	Forensic Imaging
	2023/04/18(TUE)	Analyzing Network Evidence
Week 8	2023/04/21(FRI)	Analyzing Network Evidence
	2023/04/25(TUE)	Midterm Exam
Week 9	2023/04/28(FRI)	Analyzing System Memory
	2023/05/02(TUE)	Analyzing System Memory
Week 10	2023/05/05(FRI)	어린이날
	2023/05/09(TUE)	Analyzing System Storage
Week 11	2023/05/12(FRI)	Analyzing System Storage
	2023/05/16(TUE)	Analyzing Log Files
Week 12	2023/05/19(FRI)	Analyzing Log Files
	2023/05/23(TUE)	Writing the Incident Report
Week 13	2023/05/26(FRI)	Writing the Incident Report
	2023/05/30(TUE)	Malware Analysis for Incident Response
Week 14	2023/06/02(FRI)	Malware Analysis for Incident Response
	2023/06/06(TUE)	현충일
Week 15	2023/06/09(FRI)	Summary and the exam information
	2023/06/13(TUE)	Final Exma
Makeup Classes 1	2023/05/09(TUE)	Leveraging Threat Intelligence
Makeup Classes 2	2023/06/02(FRI)	Hunting for Threats

## 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.