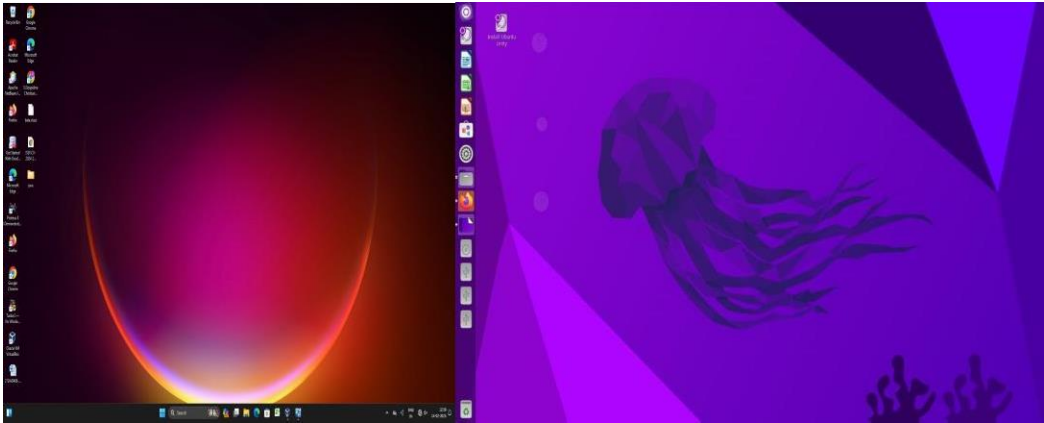**2024 - 2025 ODD SEMESTER**

Innovative Teaching Methodology- Z-A Technique(Z-A)

Name of the Course : R21USY304-Operating System and Security

Name of the Course Instructor(s) : Mrs R.Rajashri

Class : II CSE (CYBER SECURITY)

Batch : 2023-2027

Topic	Operating System Design and implementation
Innovative-Teaching Methodology	Z-A Technique
Goal	To enable the students to acquire knowledge of different types of operating System looks alike . The basic operations of various OS(WINDOWS,UBUNTU(UNIX) and its applications.
Learning Outcomes	The Students will be able to differentiate two different OS such WINDOWS 11 AND UNIX(open source) and their design.
Total Lesson Time	1 Period
Type of Activity	Individual
In Class Activity	
Description of the Activity	The students individually work at laboratory and acquire knowledge about two different operating systems . Students learn about the OS different looks and style and applications using this session. The Students are asked to write down the answers for the questions 1. What are the different design aspects of WINDOWS and UNIX?

Course Instructor

R.Rajashri (AP/AIML)

HOD-In-Charge / CSE (Cyber Security)

B.Guruprakash (ASP/AIML)

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Department of CSE(Cyber Security)

2024 - 2025 ODD SEMESTER

Innovative Teaching Methodology- Mind Mapping(MM)

Name of the Course : R21USY304- Operating System and Security

Name of the Course Instructor(s) : Mrs R.Rajashri

Class : II CSE (CYBER SECURITY)

Batch : 2023-2027

Topic	Scheduling Process
Innovative-Teaching Methodologies	Mind Mapping(MM)
URL of the Video	https://www.allbca.com/2020/04/cpu-process-scheduling-algorithms-in-os.html#google_vignette https://data-flair.training/blogs/scheduling-algorithms-in-operating-system
Goal	Facilitate the Students to acquire the knowledge about different scheduling process and types , using this Mind Mapping technique students would acquire clarity and wide perception.
Learning Outcomes	The students will be able to understand in detail about scheduling process and they will be able to differentiate various scheduling processes such as First come First out, Shortest path first, Priority scheduling, Round robin scheduling and Multi- level scheduling algorithms.
Total Lesson Time	1 Period
Type of Activity	Individual
In Class Activity	

	The URL related to scheduling process are shared to the students The course instructor briefly explains the concepts. The Students are asked to answer the following Questions:
Description of the Activity	1. Compare and contrast different scheduling processes..
	2. Sums related to each scheduling algorithm.

Course Instructor   **HOD-In-Charge / CSE (Cyber Security)**
R.Rajashri (AP/AIML)   **B.Guruprakash (ASP/AIML)**

2024 - 2025 ODD SEMESTER

Innovative Teaching Methodology- Think – Pair - Share

Name of the Course   : R21USY304- Operating System and Security

Name of the Course Instructor(s) : Mrs R.Rajashri

Class   : II CSE (CYBER SECURITY)

Batch   : 2023-2027

Topic	HARD DISK SCHEDULING
Innovative Teaching Methodology	Think – Pair – Share
URL of the material	https://www.youtube.com/watch?v=oRgX6ixIipU https://www.youtube.com/watch?v=yrO5fvXlESE
Goal	To enable the students to gain the conceptual facts relating the basic operations of Hard disk scheduling and its different way of implementation and exercise them in an effective manner.
Learning Outcome	The Students will be able apply the Hard disk scheduling to derive the solutions for various problems
Total Lesson Time	1 Period
Type of Activity	Individual & Group
In Class Activity	**'Think' phase question:** The course instructor Explains the various basic terminologies of various types of Hard disk scheduling concepts . The Students are asked to practice various disk scheduling problems..
	'Pair' phase question: Students are formed into groups of 2.The students are asked to discuss and write down the answers for the following question: 1. List down the various types of Hard disk scheduling . 2. Solving problems in FCFS,SJF,SCAN,LOOK,C-LOOK.
	Share Phase: Ask random student group to share their solutions with the class. Highlight important points of each answer.
Description of the Activity	The Course Instructor Teaches the methods for solving problems in HDD scheduling. The Students are asked to form a group of 2 members and they are asked to discuss the answers for the given questions. The answers from the randomly selected group were discussed in the Classroom.

Course Instructor   **HOD-In-Charge / CSE (Cyber Security)**

R.Rajashri (AP/AIML)   **B.Guruprakash (ASP/AIML)**

2024 - 2025 ODD SEMESTER

Innovative Teaching Methodology- Think - Pair - Share

Name of the Course   : R21USY304- Operating System and Security

Name of the Course Instructor(s)   : Mrs R.Rajashri

Class   : II CSE (CYBER SECURITY)

Batch   : 2023-2027

Topic	Bell Lapadula Model, Integrity Models
Innovative Teaching Methodology	Think – Pair – Share
URL of the material	https://www.youtube.com/watch?v=G1FWTfJsK6k https://www.youtube.com/watch?v=9Co0OwXopyM https://www.youtube.com/watch?v=NdsP0yM1yTo
Goal	To enable the students to familiarize the various concepts of integrity models.
Learning Outcome	The Students will be able to understand about the basic concepts of various integrity models such as bell lapadula and biba integrity model.
Total Lesson Time	1 Period
Type of Activity	Individual & Group
In Class Activity	**'Think' phase question:** The course instructor Explains the algorithms such as bell lapadula and biba integrity models. The Students are asked to discuss about the integrity models.
	'Pair' phase question: Students are formed into groups of 2.The students are asked to discuss and write down the answers for the following question: 1. Write down the concepts of bell lapadula and biba integrity models. 2.List out the differences between the bell lapdula and biba integrity models.
	Share Phase: Ask random student's group to share their ideas with the class. Highlight important points of each answer.

Description of the Activity	The Course Instructor Teaches the concepts and algorithms such as bell lapadula and biba integrity models concepts. The Students are asked to form a group of 2 members and they are asked to discuss the answers for the given questions. The answers from the randomly selected group were discussed in the Classroom.

Course Instructor   **HOD-In-Charge / CSE (Cyber Security)**

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2024 - 2025 ODD SEMESTER

Innovative Teaching Methodology- Flipped Class Room

Name of the Course   : R21USY304- Operating System and Security

Name of the Course Instructor(s)   : Mrs R.Rajashri

Class   : II CSE (CYBER SECURITY)

Batch   : 2023-2027

Topic	Unix vulnerabilities, Windows vulnerabilities
Innovative Teaching Methodology	Flipped Class Room
URL of the Material	https://infyspringboard.onwingspan.com/web/en/app/toc/lex_auth_013817287742586880118/overview https://infyspringboard.onwingspan.com/web/en/login?ref=%2Fapp%2Ftoc%2Flex_auth_01265419704839372873_shared%2Foverview
Goal	To facilitate the students to learn, and acquire knowledge about the operations vulnerabilities of Unix and Windows operating system. applications in an effective manner.
Learning Outcome	The students will be able to gain knowledge about the vulnerabilities that occur in both Unix and Windows platform and the various security issues and its applications in an effective manner.
Total Lesson Time	1 Period
Type of Activity	Individual
Out Class Activity	The students are asked to write and discuss about what they have learnt from video lecturers for the following question at home: 1. Write about the various vulnerabilities in Unix. 2. Write about the various vulnerabilities in Windows.

In Class Activity	GPS Map Camera Pulloor, Tamil Nadu, India Civil Engineering Department, Pulloor, Tamil Nadu 626115, India Lat 9.705024° Long 78.09385° GPS Map Camera Pulloor, Tamil Nadu, India Civil Engineering Department, Pulloor, Tamil Nadu 626115, India Lat 9.705015° Long 78.093838° A student is chosen randomly and asked to explain about the vulnerabilities on unix and Windows on the board. He/ She should justify his/her answer. black The course instructor explains those concepts once again.

Description of the Activity	The Students are asked to listen to the video and acquire knowledge about the given topics at home. In the Class room, the students are randomly selected to write about the concepts in the board with proper explanation. The course instructor explains the concepts again to impart the clear understanding.

Course Instructor   **HOD-In-Charge / CSE (Cyber Security)**

R.Rajashri (AP/AIML)   **B.Guruprakash (ASP/AIML)**
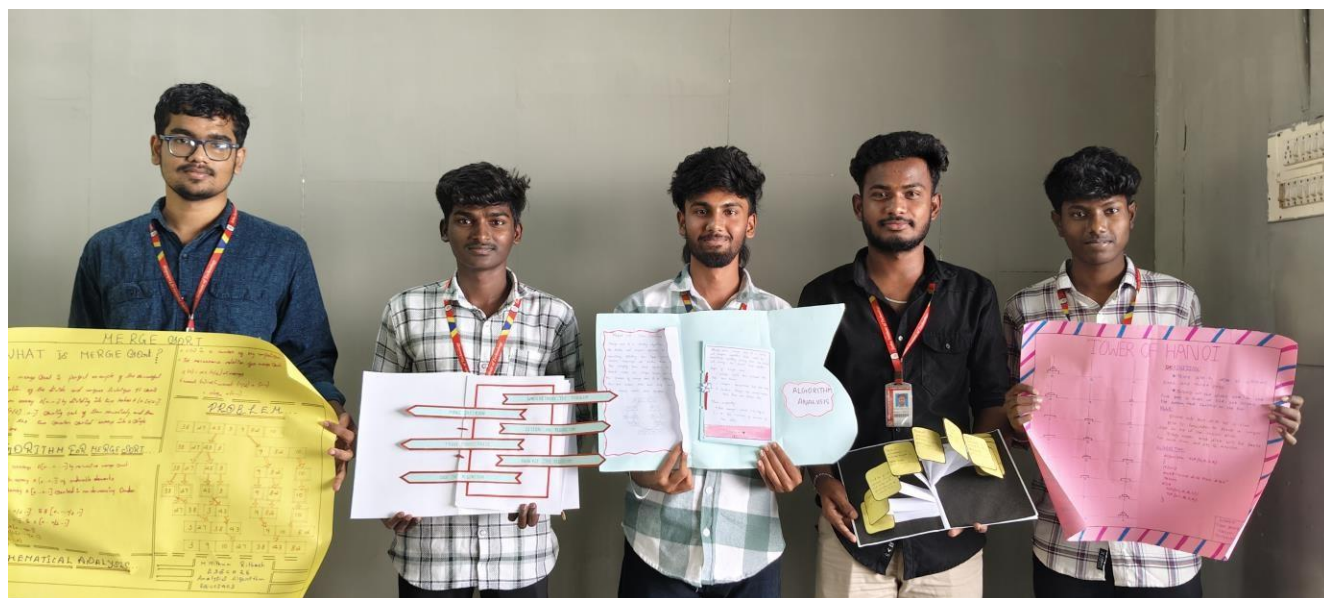
2024 - 2025 EVEN SEMESTER

Innovative Teaching Methodology- Model Presentation

Name of the Course   : R21UCS403/Algorithm Analysis

Name of the Course Instructor(s) : Mrs P. Kalai Selvi

Class   : II CSE (CYBER SECURITY)

Batch   : 2023-2027

Name of the Activity   : Model Presentation on Algorithm Analysis

Model Presentation done by the students

Course Instructor   **HOD-In-Charge / CSE (Cyber Security)**
P. Kalai Selvi (AP/CSE)   **B.Guruprakash (ASP/AIML)**