

SSN COLLEGE OF ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
COURSE ASSESSMENT PLAN

| | | |
|--------------------------------|----------|--|
| SUBJECT NAME | : | OPERATING SYSTEMS |
| SUBJECT CODE | : | CS6401 |
| DEGREE / YEAR/ SECTIONS | : | B.E. CSE/ II YEAR/ A & B |
| BATCH | : | 2016-2020 |
| SEMESTER | : | IV (2017-18: EVEN) |
| NAME OF THE STAFF | : | S.RAJALAKSHMI & S.LAKSHMI PRIYA |

OBJECTIVES:

1. Study the basic concepts and functions of operating systems.
2. Understand the structure and functions of OS.
3. Learn about Processes, Threads and Scheduling algorithms.
4. Understand the principles of concurrency and Deadlocks.
5. Learn various memory management schemes.
6. Study I/O management and File systems.
7. Learn the basics of Linux system and perform administrative tasks on Linux Servers

Blooms Taxonomy

| | | | | | |
|-----------------|-------------------|--------------|----------------|-----------------|---------------|
| Remember | Understand | Apply | Analyze | Evaluate | Create |
| K1 | K2 | K3 | K4 | K5 | K6 |

COURSE OUTCOMES

1. Understand the computer organization and functionalities of operating systems (K2).
2. Analyze various scheduling algorithms and apply the principles of concurrency (K4).
3. Examine the various deadlock prevention, avoidance, detection and recovery algorithms (K4).
4. Compare and contrast various memory management schemes and understand I/O systems (K4).
5. Understand the prototype file systems and perform administrative tasks on Linux Servers (K2)

Program Outcomes (PO)

1. Engineering knowledge: Our graduates will have the knowledge of mathematics, logic, probability and statistics, computer science and engineering, and the skill to apply them in the fields of computer software and hardware. (K3)
2. Problem analysis: Our graduates will have the knowledge and skill to identify, formulate, and solve hardware and software problems using sound computer science principles. (K3, K4)

3. Experimentation: Our graduates will have the skill to design and conduct experiments, organize, analyze, and interpret data. **(K3, K4, K5)**
4. Design and development: Our graduates will have the skill to design and construct hardware and software systems, components, or processes as per needs and specifications. **(K4)**
5. Team work: Our graduates will have the interpersonal and communication skills to function as team players on multidisciplinary teams. -
6. Modern tools usage: Our graduates will be able to use the techniques, skills, and modern hardware and software tools necessary for computer engineering practice. **(K2, K3)**
7. Social and environmental responsibility: Our graduates will demonstrate knowledge related to social, ethical, legal, economical, health and safety, sustainability and environmental dimensions.
8. Communication skills: Our graduates will be able to effectively communicate technical information in speech, presentation, and in writing.
9. Contemporariness: Our graduates will have knowledge of contemporary issues in the practice of their profession.
10. Self-learning: Our graduates will develop confidence for self learning and ability for life-long learning.
11. Competitive exam preparedness: Our graduates will participate and succeed in competitive examinations such as GATE, IES, GRE.
12. Leadership: Our graduates are trained to enhance their managerial skills, leadership quality and entrepreneurial spirit.

Course Outcomes Mapped To Programme Outcomes

| | | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| | | K3 | K4 | K5 | K4 | - | K3 | - | - | - | - | - | - |
| CO1 | K2 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 |
| CO2 | K4 | 3 | 3 | 2 | 3 | 0 | 3 | 0 | 0 | 1 | 1 | 2 | 0 |
| CO3 | K4 | 3 | 3 | 2 | 3 | 0 | 3 | 0 | 0 | 1 | 1 | 2 | 0 |
| CO4 | K4 | 3 | 3 | 2 | 3 | 0 | 3 | 0 | 0 | 1 | 1 | 2 | 0 |
| CO5 | K2 | 2 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 2 | 2 | 2 | 0 |

Description of Assessment Tools

Exams: Three Unit Assessment Tests during the term, assignments, seminars and final University exams.

Course Assessment Matrix

| Assessment Tools | Course Outcomes | | | | |
|------------------|-----------------|-----|-----|-----|-----|
| | CO1 | CO2 | CO3 | CO4 | CO5 |
| Assessment1 | X | X | | | |
| Assessment2 | | X | X | X | |
| Assessment3 | | | | X | X |

Justification of CO- PO mapping

| CO / PO | | Knowledge level | Remarks |
|----------------|--|------------------------|---|
| CO1 | Understand the computer organization and functionalities of operating systems. | K2 | To understand the basic concepts and functions of operating systems |
| CO2 | Analyze various scheduling algorithms and apply the principles of concurrency. | K4 | To study about the Processes, Threads and communication and analyze the various scheduling algorithms |
| CO3 | Examine the various deadlock prevention, avoidance, detection and recovery algorithms. | K4 | To understand and analyze deadlock algorithms. |
| CO4 | Compare and contrast various memory management schemes and understand I/O systems. | K4 | To study and compare about the memory management schemes and I/O systems |
| CO5 | Understand the prototype file systems and perform administrative tasks on Linux Servers. | K2 | To learn the file systems and the basics of Linux system and its administrative tasks |
| PO9 | Contemporariness | | Students will have a reasonable knowledge in solving issues related to Operating system concepts. |
| PO10 | Self-learning | | Students will acquire the knowledge on basic concepts of OS and can learn any modern OS with ease. |
| PO11 | Competitive exam preparedness | | Students can solve the OS related questions in exams like GATE, IES, Bank exams etc., |

Prepared By
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