**DEPARTMENT \_Software Engineering\_\_\_\_\_\_\_\_\_**

Course Code: \_SE-303\_ Course Title: Operating Systems Teacher Name: Dr. Sh. M. Wahabuddin Usmani

Semester: ~~Spring~~/Fall Academic Session: 2020 Class: ~~1~~~~st~~~~/2~~~~nd~~/3rd/~~4~~~~th~~ ~~(Final)/5~~~~th~~ ~~(Final)~~ Year

No. of sections: \_02\_\_\_\_\_ No of contact hours per week per section: \_\_\_03\_\_\_\_

**TEACHING TOOLS**

|  |  |  |
| --- | --- | --- |
| 🞏 Problem-based learning | 🞏 Mini-project | 🞏 Case studies |
| 🞏 Innovative solution | 🞏 Group activity | 🞏 Entrepreneurial activities |
| 🞏 Industrial visit | 🞏 Student presentation | 🞏 Other \_Quiz, Assignment, Test\_ |

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| --- | --- | --- |
| **WEEK No.** | **TOPICS** | **NO. OF PERIODS** |
|  | Introduction | 3 |
|  | Terminologies & Fundamentals | 3 |
|  | Operating System Structure | 3 |
|  | Operating System Structure | 3 |
|  | OS Components | 3 |
|  | OS Components & Architecture | 3 |
|  | Process Management | 3 |
|  | Process Management & Scheduling | 3 |
|  | Midterm | 3 |
|  | CPU Scheduling | 3 |
|  | CPU Scheduling | 3 |
|  | Deadlock | 3 |
|  | Deadlock | 3 |
|  | VM | 3 |
|  | VM & File System | 3 |
|  | File System & Example of OS | 3 |
|  | **Total per Semester:** | **48** |

**SESSIONAL CRITERIA**

|  |  |  |
| --- | --- | --- |
| **Assessment Type** | **Marks** | **Schedule (Week No.)** |
| Quizzes / Assignments | 15 | Every 3rd/4th week |
| Mid Term | 20 | In 9th week |
| Class Participation | 05 | Continuous |
| Final Examination | 60 | End of semester |
| **Total Sessional Marks** |  |  |

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| Prepared by: | Dr. Sh. M. Wahabuddin Usmani |  | Reviewed & Approved by: | Prof. Dr. Najmi Ghani Haider |
| Date |  |  | Date |  |

**TEXTBOOKS (Book Name, Authors, edition, Publisher, Year):**

1. *“Operating Systems Concepts”*, Abraham Silberschatz, Peter B. Galvin and Greg Gagne, John Wiley & Sons, 8th Edition, 2008.
2. *“Operating Systems: Internals and Design principles”*, William Stallings, Prentice Hall, 6th Edition, 2008.
3. *“Modern Operating Systems”*, Andrew S. Tanenbaum, Prentice Hall, 3rd Edition, 2007.