

**Prince Sattam bin Abdulaziz University**

**College of Engineering at Wadi Aldawaser**

**Electrical Engineering Department**

**Course Assessment Report**

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| **Course Code** | EE2020 |
| **Course Title** | Electric Circuit Analysis- II |
| **Level** | 5 |
| **Instructor Name** | Dr. Mukesh Kumar |
| **Academic Year** | 2015-16 |
| **Semester** | 2 |

1. **Coverage of planned Program**

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| --- | --- | --- | --- |
| **Topics covered** | **Planned contact hours** | **Actual Contact hours** | **Reason for Variations if there is a difference of more than 25% of the hours planned** |
| Introduction and review of required fundamentals; (Chapter 1) | 2 | 2 |  |
| Inductance, Capacitors (Chapter 6) | 8 | 8 |  |
| Natural response and Step response of first order RL and RC circuits, Sequential switching and Unbound response; (Chapter 7) | 8 | 8 |  |
| Transient analysis of Parallel and Series RLC circuits (NR & SR); (Chapter 8) | 12 | 12 |  |
| Sinusoidal steady –state analysis; (Chapter 9) | 4 | 4 |  |
| Power calculations of RLC circuits; (Chapter 10) | 8 | 8 |  |
| Resonance; Introduction to Filters, LP and HP; (Chapter 14) | 10 | 10 |  |
| Balanced Three-Phase Circuits; (Chapter11) | 4 | 4 |  |
| Total | 56 | 56 |  |

1. **Distributions of Grades**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **A+** | **A** | **B+** | **B** | **C+** | **C** | **D+** | **D** | **F** | **Total** |
| **No. of Students** | 0 | 0 | 1 | 1 | 2 | 5 | 5 | 6 | 8 | 28 |
| **% of students** | 0 | 0 | 3.5 | 3.5 | 7.1 | 17.8 | 17.8 | 21 | 28.5 | 100 |
| **Cum. % of students** | 0 | 0 | 3.5 | 7 | 14.1 | 31.9 | 50.3 | 71.3 | 100 |  |
| 2.3 | | | | | | | | | | |

1. **Course Outcomes (CO) and Student Outcomes (SO) Assessment Results**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Instructor** | | MUKESH KUMAR | | | | | | | | | **Semester** | | | | II 2015/ 2016 | | | | |
| **Course Code** | | | EE2020 | | | **Course Title** | | | | ELECTRIC CIRCUIT ANALYSIS - 2 | | | | | | | | | |
| **Course Outcomes** | | | | | **Student Outcomes** | | | | | | | | | | | | | | | |
| CO | Attainment (Y/N) | | | % of students attaining the CO |
| a | | b | c | d | | | e | f | g | | h | i | j | k | |
| CO1 | **Y** | | | **52** | **52** | |  |  |  | | | **52** |  |  | |  |  |  |  | |
| CO2 | **N** | | | **26** | **26** | |  |  |  | | | **26** |  |  | |  |  |  |  | |
| CO3 | **Y** | | | **89** | **89** | |  |  |  | | | **89** |  |  | |  |  |  |  | |
| CO4 | **Y** | | | **59** | **59** | |  | **59** |  | | | **59** |  |  | |  |  |  |  | |
| CO5 | **N** | | | **48** | **48** | |  | **48** |  | | | **48** |  |  | |  |  |  |  | |
| CO6 | **Y** | | | **89** | **89** | |  | **89** |  | | | **89** |  |  | |  |  |  | 89 | |
| **Student Outcome Assessment** | | | | | **60.5** | |  | **65.3** |  | | | **60.5** |  |  | |  |  |  | **89** | |
| **Bar Chart of % of students showing Satisfactory Level for CLOs** | | | | | | | | | **Bar Chart of % of students showing Satisfactory Level for SO** | | | | | | | | | | | |
| **(i)** | **Which of the CO did not meet minimum requirement?** | | | | | | | | | | | | | | | | | | | |
| CO2 and CO5 did not meet the minimum requirement | | | | | | | | | | | | | | | | | | | | |
| **(ii)** | **State the reasons CO did not meet?** | | | | | | | | | | | | | | | | | | | |
| * Student understanding of first order circuit and Filter design seems not good. * The number of problems solved in the tutorial from CO5 were less. | | | | | | | | | | | | | | | | | | | | |
| **(iii)** | **State actions to be done to recover?** | | | | | | | | | | | | | | | | | | | |
| * More assignments and quizzes from CO2 and CO5 need to be conducted * More examples from these outcomes will be solved in the tutorial class. | | | | | | | | | | | | | | | | | | | | |

1. **Any Changes implemented in the course based on suggestions (if any) in the previous semester course report**

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| --- | --- |
| **a** | **Assessment Mechanism / Method** |
| * Minor Project based on PSPICE Simulation of Electric Circuits introduced.   *Students were asked to analyze specific problems using PSPICE and explain it to whole class through demonstration and power-point presentation.* | |
| **b.** | **Teaching & Learning Methods** |
| The performance of following circuits was demonstrated using PSPICE Simulation tool.   * Concept of over-damping, under-damping in series and parallel RLC Circuits. * Frequency Selective Circuits (Filters) | |
| **c.** | **Course Content** |
| * Circuit Simulation Tool (PSPICE) introduced. | |

1. **Any other Suggestions for improvement**

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| Submitted by |  | Signature |  |
| Program Coordinator |  | Signature |  |