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**MUTAH UNIVERSITY**

**Faculty of Engineering**

 **Department of Electrical Engineering**

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| Course Code | Course Name | Credits | Contact Hours |
|  |  | 1 | 3  |

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| INSTRUCTOR/COORDINATOR |
| Name |  |
| Email |  |
| Office Hours |  |

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| --- |
| TEXTBOOK |
| Title |  |
| Author/Year/Edition |  |
| Other Supplemental Materials |
| Title |  |
| Author/Year/Edition |  |

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| SPECIFIC COURSE INFORMATION |
| A. Brief Description of the Content of the Course (Catalog Description) |
| .  |
| B. Pre-requisites (P) or Co-requisites (C) |
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| C. Course Type (Required or Elective) |
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| SPECIFIC GOALS |
| A. Course Learning Outcomes (CLOs) |
| By the end of this course, the student should be able to:CLO 1. Please write here the course learning outcome and link /map it with student learning outcome at the end of this template [2 or 1 or 3 or 4 or 5 or 6 or 7].CLO 2. Please type here and map it inside the bracket with the appropriate SLO number [2].CLO 3. Please type here [2].CLO 4. [6]. |
| B. Student Learning Outcomes (SLOs) Addressed by the Course |
| 1 | **2** | **3** | **4** | **5** | **6** | **7** |
|  | ✓ |  |  | ✓ | ✓ |  |

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| BRIEF LIST OF TOPICS TO BE COVERED |
| List of Topics | **No. of Weeks** | **Contact Hours** |
| Introduction | 1 | 3 |
| The Signal Source | 1 | 3 |
| Tuned Circuit ( Pt. 1) | 1 | 3 |
| Tuned Circuit ( Pt. 2) | 1 | 3 |
| The Amplifier | 1 | 3 |
| Filters  | 1 | 3 |
| The Balanced Modulator | 1 | 3 |
| *Mid Exam* | 1 | 3 |
| Signal Amplitude Modulator | 1 | 3 |
| Detection and Demodulation | 1 | 3 |
| Frequency Modulation | 1 | 3 |
| FM Detection | 1 | 3 |
| Revision | 1 | 3 |
| *Final Exam* | 1 | 3 |
| *Total* | *14* | *42* |

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| EVALUATION |
| Assessment Tool | **Due Date** | **Weight (%)** |
| Mid Exam | According to the university calendar | 20 |
| Course Work (written technical report for each experiment) | One week after being assigned | 40 |
| Final Exam | According to the university calendar | 40 |

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| ABET’s Students Learning Outcomes (Criterion # 3) |
| 1. an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
3. an ability to communicate effectively with a range of audiences.
4. an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.
5. an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
7. an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
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