



29. Course Specification of Electronic Circuits

| I. Course Identification and General Information: | | | | | | |
|---|--|------------------------------------|------------|----|---------------------|-----|
| 1. | Course Title: | Electronic Circuits. | | | | |
| 2. | Course Code & Number: | PME117 | | | | |
| 3. | Credit Hours: | C.H | | | TOTAL CR. HRS | |
| | | Th. | Seminar/Tu | Pr | | Tr. |
| | | 2 | - | 2 | | - |
| 4. | Study level/ semester at which this course is offered: | Second Level - Second Semester | | | | |
| 5. | Pre –requisite (if any): | Electrical Circuits | | | | |
| 6. | Co –requisite (if any): | None. | | | | |
| 7. | Program (s) in which the course is offered: | Mechanical Engineering Program. | | | | |
| 8. | Language of teaching the course: | English Language. | | | | |
| 9. | Location of teaching the course: | Mechanical Engineering Department. | | | | |
| 10. | Prepared By: | Dr. Adel Ahmed Al-Shogairy | | | | |
| 11. | Date of Approval: | | | | | |

| II. Course Description: |
|---|
| <p>This course considers the mathematical modeling of active solid-state devices and the analysis and design of single state circuits incorporating them. Small signal amplifiers are analyzed and designed and the circuits are implemented in the laboratory. Topics covered include the study of device characteristics and applications of p-n-junction diodes, bipolar junction transistors, and field effect transistors.</p> |

| III. Alignments of the Course Intended learning outcomes (CILOs) | | Referenced PILOs |
|--|--|------------------|
| a1 | Explain the operation of semiconductor devices. | A1, A3 |
| a2 | Understand principles of design including elements, processes and/or systems related to electronic circuits. | A2 |

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|-----------|---|----|
| b1 | Analyze the performance of diode and transistor circuits and simple transistor amplifiers | B1 |
| b2 | Identify Physics of semiconductor material and structure and operation of the p-n junction. | B2 |
| b3 | Explore I-V characteristics, Modeling, Device operation and application of electronic circuit elements. | B3 |
| c1 | Conduct experiments related to electronic circuits | C1 |
| c2 | Apply systematic methods to the analysis of electric circuits | C3 |
| d1 | Safely use test and measurement instruments commonly found in industry. | D2 |
| d2 | Search for information about the course materials. | D4 |

(A) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies:

| Course Intended Learning Outcomes | Teaching strategies | Assessment Strategies |
|---|--|---|
| a1- Explain the operation of semiconductor devices. | <ul style="list-style-type: none"> - Lectures - Laboratories - Class Discussion | <ul style="list-style-type: none"> - Quizzes - Homework - Written Exams - Laboratory Reports |
| a2- Understand principles of design including elements, processes and/or systems related to electronic circuits. | <ul style="list-style-type: none"> - Lectures - Laboratory - Class Discussion | <ul style="list-style-type: none"> - Quizzes - Homework - Written Exams - Laboratory Reports |

(B) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:

| Course Intended Learning Outcomes | Teaching strategies | Assessment Strategies |
|--|--|---|
| b1- Analyze the performance of diode and transistor circuits and simple transistor amplifiers | <ul style="list-style-type: none"> - Lectures - Laboratory - Class Discussion | <ul style="list-style-type: none"> - Quizzes - Homework - Written Exams - Laboratory Reports |
| b2- Identify Physics of semiconductor material and structure and operation of the p-n junction. | <ul style="list-style-type: none"> - Lectures - Laboratory - Class Discussion | <ul style="list-style-type: none"> - Quizzes - Homework - Written Exams - Laboratory Reports |

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|--|--|---|
| b3- Explore I-V characteristics, Modeling, device operation and application of electronic circuit elements. | <ul style="list-style-type: none"> - Lectures - Laboratories - Class Discussion | <ul style="list-style-type: none"> - Quizzes - Homework - Written Exams - Laboratory Reports |
|--|--|---|

© Alignment Course Intended Learning Outcomes of Professional and Practical Skills to Teaching Strategies and Assessment Strategies:

| Course Intended Learning Outcomes | Teaching strategies | Assessment Strategies |
|--|--|---|
| c1- Conduct experiments related to electronic circuits | <ul style="list-style-type: none"> - Lectures - Laboratory - Class Discussion | <ul style="list-style-type: none"> - Quizzes - Homework - Written Exams - Laboratory Reports |
| c2- Apply systematic methods to the analysis of electric circuits | <ul style="list-style-type: none"> - Lectures - Laboratory - Class Discussion | <ul style="list-style-type: none"> - Quizzes - Homework Written Exams - Laboratory Reports |

(D) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:

| Course Intended Learning Outcomes | Teaching strategies | Assessment Strategies |
|--|--|---|
| d1- Safely use test and measurement instruments commonly found in industry. | <ul style="list-style-type: none"> - Lectures - Laboratory - Class Discussion | <ul style="list-style-type: none"> - Quizzes - Homework - Written Exams - Laboratory Reports |
| d2- Search for information about the course materials. | <ul style="list-style-type: none"> - Lectures - Laboratory - Class Discussion | <ul style="list-style-type: none"> - Quizzes - Homework - Written Exams - Laboratory Reports |

IV. Course Content:

A – Theoretical Aspect:

| Order | Units/Topics List | Learning Outcomes | Sub Topics List | Number of Weeks | Contact Hours |
|-------|-------------------|-------------------|-----------------|-----------------|---------------|
|-------|-------------------|-------------------|-----------------|-----------------|---------------|

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| | | | | | |
|----|-----------------------------------|--------------------|--|---|---|
| 1. | Introduction to Electronics | a1, a2, b2, b3 | The Atom | 1 | 2 |
| | | | Materials used in Electronics | | |
| | | | Current in Semiconductors | | |
| | | | N-Type and P-Type Semiconductors | | |
| | | | P-N Junction | | |
| 2. | Diodes and Applications | a1, a2, b2, b3, d1 | Diode Operation | 1 | 2 |
| | | | Half-Wave Rectifiers | | |
| | | | Full-Wave and Bridge Rectifiers | | |
| | | | Power Supply Filters and Regulators | | |
| | | | Diode Limiters and Clampers | | |
| | | | Voltage Multipliers | | |
| 3. | Special Purpose Diodes | a1, a2, b2, b3, d1 | Zener Diode and its Applications | 1 | 2 |
| | | | Varactor Diode | | |
| | | | Optical Diodes | | |
| | | | Other Type of Diodes | | |
| 4. | Mid-Term Exam. | a1, a2, b2, b3, d1 | The First 3 Chapters | 1 | 2 |
| 5. | Bipolar Junction Transistor (BJT) | a1, a2, b2, b3, d1 | Bipolar Junction Transistor (BJT) Structure and Operation | 1 | 2 |
| | | | BJT Characteristics and Parameters | | |
| | | | BJT Applications | | |
| 6. | Field Effect Transistors (FETS) | a1, a2, b2, b3, d1 | JFETS Characteristics and Parameters | 1 | 2 |
| | | | JFET Biasing and Ohmic Region | | |
| | | | Metal Oxide Semiconductor FET (MOSFETS) Characteristics And Parameters | | |
| | | | MOSFETS Biasing | | |

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| | | | | | |
|--|-------------|--|-------------------|-----------|-----------|
| 7. | Final Exam. | a1, a2, b1, b2, b3, c1, c2, d1, d2 | All the Chapters. | 1 | 2 |
| Number of Weeks /and Units Per Semester | | | | 16 | 32 |

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| B - Practical Aspect: | | | | |
|--|---|-----------------|----------------------|------------------------------------|
| Order | Tasks/ Experiments | Week Due | Contact hours | Learning Outcomes |
| 1 | Lab1: Measuring Instruments and Tools. | 2 | 4 | a1, a2, b1, b2, b3, c1, c2, d1, d2 |
| 2 | Lab2: Forward Biasing of the P-N Junction Diode, Verification of I-V Characteristics Of P-N Junction Diodes. | 1 | 2 | a1, a2, b1, b2, b3, c1, c2, d1, d2 |
| 3 | Lab3: Errors of Measurement. Types of Errors. Mathematical Expression of Errors | 1 | 2 | a1, a2, b1, b2, b3, c1, c2, d1, d2 |
| 4 | Lab4: Half- Wave and Full-Wave Rectifiers, Output Waveforms and Filtration. | 1 | 2 | a1, a2, b1, b2, b3, c1, c2, d1, d2 |
| 5 | Lab5: Measurement of Zener Diode Characteristics. | 1 | 2 | a1, a2, b1, b2, b3, c1, c2, d1, d2 |
| 6 | Lab6: Measurement the Output Waveform of Clamper Circuit. | 1 | 2 | a1, a2, b1, b2, b3, c1, c2, d1, d2 |
| 7 | Lab7: Determination of the Q-Point of The Collector Characteristics. | 1 | 2 | a1, a2, b1, b2, b3, c1, c2, d1, d2 |
| 8 | Lab8: Verification of DC Parameters and Variables of Bjts and Fetes in Different Configurations. | 1 | 2 | a1, a2, b1, b2, b3, c1, c2, d1, d2 |
| 9 | Lab9: BJT as an Electronic Switch. | 1 | 2 | a1, a2, b1, b2, b3, c1, c2, d1, d2 |
| 10 | Lab10: Verification of AC Parameters and Variables of Bits and Fetes in Different Configurations. | 1 | 2 | a1, a2, b1, b2, b3, c1, c2, d1, d2 |
| 11 | Lab11: Output Characteristics Of BJT. | 1 | 2 | a1, a2, b1, b2, b3, c1, c2, d1, d2 |
| 12 | Lab12: Transfer Characteristics of Fetes. | 1 | 2 | a1, a2, b1, b2, b3, c1, c2, d1, d2 |
| 13 | Submission of the Lab. File. | 1 | 2 | a1, a2, b1, b2, b3, c1, c2, d1, d. |
| Number of Weeks /and Units Per Semester | | 14 | 28 | |

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| V. Teaching Strategies of the Course: | |
|--|-------------------|
| - | Lectures. |
| - | Laboratory. |
| - | Class Discussion. |

| VI. Assignments: | | | | |
|-------------------------|--|-------------------------------|--------------------------------------|-----------|
| No | Assignments | Aligned CILOs(symbols) | Week Due | Mark |
| 1 | Homework 1: P-N Junction Diode | a1, a2, a3 | 2 nd &3 rd | 1 |
| 2 | Homework 2: Zener Diode | a1, a2, a3, b1, c2, d1,d2 | 4 th | 1 |
| 3 | Homework 3: Half-Waves and Full-Waves Rectifiers | a1, a2, b1, b2, c2, d1,d2 | 4 th | 2 |
| 4 | Homework 4: Bjt Transistor | a1, a2, a3, b1, b2, c2, d1,d2 | 6 th to 9 th | 3 |
| 5 | Homework 5: Fet Transistors | a1, a2, b1, b2, c2, d1,d2 | 10 th to 13 th | 3 |
| Total | | | | 10 |

| VII. Schedule of Assessment Tasks for Students During the Semester: | | | | | |
|--|-----------------------------------|-------------------------------------|------|--------------------------------|----------------------------------|
| No. | Assessment Method | Week Due | Mark | Proportion of Final Assessment | Aligned Course Learning Outcomes |
| 1 | Homework. | 2 nd to 13 th | 10 | 10% | a1, a2, b1, b2, c2, d1 |
| 2 | Quizzes. | 5 th , 10 th | 5 | | |
| 3 | Lab Work and Experiments Reports. | 2 nd to 13 th | 15 | 10% | a1,b1,b2,c1, c2, d1, d2 |

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|--|--|-------------------------------------|------------|-------------|--------------------------|
| 4 | Practical Term-Project and Presentation. | 3 rd to 14 th | 15 | 10% | a1,a2,b1, b2, c1, c2, d1 |
| 5 | Mid-Term Exam (Theoretically). | 8 th | 15 | 10% | a1, a2, b1, b2, c2 |
| 6 | Final-Term Exam (Practically). | 14 th | 15 | 10% | a1, b1, b2, c1, c2, d1 |
| 7 | Final-Term Exam (Theoretically). | 16 th | 75 | 50% | a1, a2, b1, b2, c2,d1 |
| Total Assessments Mark/Percentage | | | 150 | 100% | |

VIII.Learning Resources:

- Written in the following order: (Author - Year of publication – Title – Edition – Place of publication – Publisher).

1- Required Textbook(s) (maximum two).

- 1- Thomas L. Floyd-2012- Electronic Devices - Prentice Hall.
- 2- Robert Boylestad & Louis Nashelsky – 2002 - “Electronic Devices and Circuit Theory”, Prentice Hall.

2- Essential References.

- 1- Robert L. Boylested, Louis Nashelsky, and Franz J. Manssen- 2002 – Electronics Devices and Circuit Theory: Laboratory Manual
- 2- A. Sedra & K. Smith – 1998 - “Microelectronic Circuits”, Holt, Rinehart and Winston.

3- Electronic Materials and Web Sites etc.

1. <http://www.ocw.mit.edu/courses>.
2. Faculty Electronic Library.

I. Course Policies:

| | |
|---|---|
| 1 | <p>Class Attendance:</p> <p>- The student should be attending not less than 75% of total contact hours of the subject, otherwise he will not able to take exam and be considered as an exam failure. If the student is absent due to illness, he/she should bring an approved statement from university Clinic.</p> |
| 2 | <p>Tardy:</p> <p>- For lateness in attending the class, the student will be initially notified. If he repeats late in attending class he will be considered absent.</p> |

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|---|---|
| 3 | <p>Exam Attendance/Punctuality:</p> <p>- The student should attend the exam on time. He is permitted to attend the exam half one hour from exam beginning, after that he/she will not be permitted to take exam and he/she is considered absent in the exam.</p> |
| 4 | <p>Assignments & Projects:</p> <p>- In general one assignment is given after each chapter of a course. The student should submit the assignment on time, mostly one week after giving the assignment</p> |
| 5 | <p>Cheating:</p> <p>- For cheating in exam, the student is considered as failure. In case the cheating is repeated three times during study the student will be disengaged from the Faculty</p> |
| 6 | <p>Plagiarism:</p> <p>Plagiarism is the attending of the student the exam of a course instead of other student. If the examination committee proved a plagiarism of a student, he will be disengaged from the Faculty. The final disengagement of the student from the Faculty should be confirmed from the Student Affair Council of the university.</p> |
| 7 | <p>Other policies:</p> <ul style="list-style-type: none"> - The mobile phone is not allowable to be used during class lecture. It must be switched off, otherwise the student will be ordered to leave the lecture room. - The mobile phone is not allowed to be taken during the examination time. - Lecture notes and assignments may be given directly to students using soft or hard copy. |

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| Reviewed By | <p><u>Vice Dean for Academic Affairs and Post Graduate Studies: Asst. Prof. Dr. Tarek A. Barakat</u></p> <p><u>President of Quality Assurance Unit: Assoc. Prof. Dr. Mohammed Algorafi</u></p> <p><u>Name of Reviewer from the Department: Asst. Prof. Dr. Eng. Hamoud A. Al-Nahari</u></p> |
| | <p><u>Deputy Rector for Academic Affairs Asst. Prof. Dr. Ibrahim AlMutaa</u></p> <p><u>Assoc. Prof. Dr. Ahmed Mujahed</u></p> <p><u>Asst. Prof. Dr. Munasar Alsubri</u></p> |

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29. Course Plan of Electronic Circuits

| I. Information about Faculty Member Responsible for the Course: | | | | | | | |
|---|--|---------------------|------------|------------|------------|------------|------------|
| Name of Faculty Member | Asst. Prof. Dr. Adel Al-Shogairy | Office Hours | | | | | |
| Location & Telephone No. | Electrical Eng. Dep. 772771672, 715624495 | SAT | SUN | MON | TUE | WED | THU |
| E-mail | Ashakiri62@gmail.com | 8-12 | | | 8-12 | | |

| II. Course Identification and General Information: | | | | | | |
|--|---|---------------------------------|-------------|-----|-----|----------------|
| 1. | Course Title: | Electronic Circuits. | | | | |
| 2. | Course Number & Code: | PME117 | | | | |
| 3. | Credit Hours: | C.H | | | | Total Cr. Hrs. |
| | | Th. | Seminar/Tu. | Pr. | Tr. | |
| | | 2 | - | 2 | - | |
| 4. | Study level/year at which this course is offered: | Second Year -Second Semester. | | | | |
| 5. | Pre –requisite (if any): | Electrical Circuits | | | | |
| 6. | Co –requisite (if any): | None. | | | | |
| 7. | Program (s) in which the course is offered | Mechanical Engineering Program. | | | | |
| 8. | Language of teaching the course: | English Language. | | | | |

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|-----|----------------------------------|------------------------------------|
| 9. | System of Study: | Semesters. |
| 10. | Mode of delivery: | Lectures and Lab. |
| 11. | Location of teaching the course: | Mechanical Engineering Department. |

III. Course Description:

This course considers the mathematical modeling of active solid-state devices and the analysis and design of single state circuits incorporating them. Small signal amplifiers are analyzed and designed and the circuits are implemented in the laboratory. Topics covered include the study of device characteristics and applications of p-n-junction diodes, bipolar junction transistors, and field effect transistors.

IV. Intended learning outcomes (ILOs) of the course:

| | |
|----|--|
| 1. | Explain the operation of semiconductor devices. |
| 2. | Understand principles of design including elements, processes and/or systems related to electronic circuits. |
| 3. | Analyze the performance of diode and transistor circuits and simple transistor amplifiers |
| 4. | Identify Physics of semiconductor material and structure and operation of the p-n junction. |
| 5. | Explore I-V characteristics, Modeling, Device operation and application of electronic circuit elements. |
| 6. | Conduct experiments related to electronic circuits |
| 7. | Apply systematic methods to the analysis of electric circuits |
| 8. | Safely use test and measurement instruments commonly found in industry. |
| 9. | Search for information about the course materials. |

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| V. Course Content: | | | | |
|--------------------------------|------------------------------------|---|---|----------------------|
| A – Theoretical Aspect: | | | | |
| Order | Topics List | Sub Topics List | Week Due | Contact Hours |
| 1. | Introduction to Electronics. | <ul style="list-style-type: none"> – The Atom – Materials used in Electronics – Current in Semiconductors – N-Type and P-Type Semiconductors – P-N Junction | 1 st and 2 nd | 4 |
| 2. | Diodes and Applications. | <ul style="list-style-type: none"> – Diode Operation – Half-Wave Rectifiers – Full-Wave and Bridge Rectifiers – Power Supply Filters and Regulators – Diode Limiters and Clampers – Voltage Multipliers | 3 rd , 4 th and 5 th | 6 |
| 3. | Special Purpose Diodes. | <ul style="list-style-type: none"> – Zener Diode and its Applications – Varactor Diode – Optical Diodes – Other Type of Diodes | 6 th and 7 th | 4 |
| 4. | Mid-Term Exam. | The First 3 Chapters | 8 th | 2 |
| 5. | Bipolar Junction Transistor (BJT). | <ul style="list-style-type: none"> – Bipolar Junction Transistor (BJT) Structure and Operation – BJT Characteristics and Parameters – BJT Applications | 9 th , 10 th and 11 th | 6 |
| 6. | Field Effect Transistors (FETS). | <ul style="list-style-type: none"> – JFETS Characteristics and Parameters – JFET Biasing and Ohmic Region – Metal Oxide Semiconductor FET (MOSFETS) Characteristics and Parameters – MOSFETS Biasing | 12 th , 13 th , 14 th and 15 th | 8 |
| 7. | Final Exam. | All the Chapters. | 16 th | 2 |

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|--|-----------|-----------|
| Number of Weeks /and Units Per Semester | 16 | 32 |
|--|-----------|-----------|

| B– Practical Aspect: | | | |
|--|---|-----------------------------------|----------------------|
| Order | Topics List | Week Due | Contact Hours |
| 1 | Lab1: Measuring Instruments and Tools. | 1 st , 2 nd | 2 |
| 2 | Lab2: Forward Biasing of the P-N Junction Diode, Verification of I-V Characteristics of P-N Junction Diodes. | 3 rd | 2 |
| 3 | Lab3: Errors of Measurement. Types of Errors. Mathematical Expression of Errors | 4 th | 2 |
| 4 | Lab4: Half- Wave and Full-Wave Rectifiers, Output Waveforms and Filtration. | 5 th | 2 |
| 5 | Lab5: Measurement of Zener Diode Characteristics. | 6 th | 2 |
| 6 | Lab6: Measurement the Output Waveform of Clamper Circuit. | 7 th | 2 |
| 7 | Lab7: Determination of the Q-Point of The Collector Characteristics. | 8 th | 2 |
| 8 | Lab8: Verification of DC Parameters and Variables of Bjts and Fetes in Different Configurations. | 9 th | 2 |
| 9 | Lab9: BJT as an Electronic Switch. | 10 th | 2 |
| 10 | Lab10: Verification of AC Parameters and Variables of Bits and Fetes in Different Configurations. | 11 th | 2 |
| 11 | Lab11: Output Characteristics Of BJT. | 12 th | 2 |
| 12 | Lab12: Transfer Characteristics of Fetes. | 13 th | 2 |
| 13. | Submission of the Lab. File. | 14 th | 2 |
| Number of Weeks /and Units Per Semester | | 14 | 28 |

| VI. Teaching strategies of the course: |
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| <ul style="list-style-type: none"> - Lectures. - Laboratories. |

| | | | | |
|---|--|---|--|---|
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|---|--|---|--|---|



- Class Discussion.

| VII. Assignments: | | | | |
|--------------------------|---|-------------------------------|--------------------------------------|-----------|
| No | Assignments | Aligned CILOs(symbols) | Week Due | Mark |
| 1 | Homework 1: P-N Junction Diode | a1, a2, a3 | 2 nd &3 rd | 1 |
| 2 | Homework 2: Zener Diode | a1, a2, a3, b1, c2, d1,d2 | 4 th | 1 |
| 3 | Homework 3: Half-Waves and Full-Waves Rectifiers | a1, a2, b1, b2, c2, d1,d2 | 4 th | 2 |
| 4 | Homework 4: Bjt Transistor | a1, a2, a3, b1, b2, c2, d1,d2 | 6 th to9 th | 3 |
| 5 | Homework 5: Fet Transistors | a1, a2, b1, b2, c2, d1,d2 | 10 th to 13 th | 3 |
| Total | | | | 10 |

| VIII. Schedule of Assessment Tasks for Students During the Semester: | | | | | |
|---|---|-------------------------------------|------|--------------------------------|----------------------------------|
| No. | Assessment Method | Week Due | Mark | Proportion of Final Assessment | Aligned Course Learning Outcomes |
| 1 | Home Works | 2 nd to 13 th | 10 | 10% | a1, a2, b1, b2, c2, d1 |
| 2 | Quizzes | 5 th , 10 th | 5 | | |
| 3 | Lab Work and Experiments Reports | 2 nd to 13 th | 15 | 10% | a1,b1,b2,c1, c2, d1, d2 |
| 4 | Practical Term-Project and Presentation | 3 rd to 14 th | 15 | 10% | a1,a2,b1, b2, c1, c2, d1 |
| 5 | Mid-Term Exam (Theoretically) | 8 th | 15 | 10% | a1, a2, b1, b2, c2 |
| 6 | Final-Term Exam (Practically) | 14 th | 15 | 10% | a1, b1, b2, c1, c2, d1 |

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 Prof. Dr. Al-Qassim Mohammed Abbas



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|--|------------------------------------|------------------|------------|-------------|-----------------------|
| 7 | Final-Term Exam (Theoretically) | 16 th | 75 | 50% | a1, a2, b1, b2, c2,d1 |
| Total Assessments Mark/Percentage | | | 150 | 100% | |

| IX. Learning Resources: | |
|--|---|
| <ul style="list-style-type: none"> Written in the following order: (Author - Year of publication – Title – Edition – Place of publication – Publisher). | |
| 1- Required Textbook(s) (maximum two). | |
| | 1- Thomas L. Floyd-2012- Electronic Devices- 2- Robert Boylestad & Louis Nashelsky – 2002 - “Electronic Devices and Circuit Theory”, Prentice Hall. |
| 2- Essential References. | |
| | 1- Robert L. Boylested, Louis Nashelsky, and Franz J. Manssen- 2002 – Electronics devices and circuit theory: Laboratory manual 2- A. Sedra & K. Smith – 1998 - “Microelectronic Circuits”, Holt, Rinehart and Winston. |
| 3- Electronic Materials and Web Sites etc. | |
| | 1- http://www.ocw.mit.edu/courses . 2- Faculty Electronic Library. |

| II. Course Policies: | |
|-----------------------------|--|
| 1 | Class Attendance: - The student should be attending not less than 75% of total contact hours of the subject, otherwise he will not able to take exam and be considered as an exam failure. If the student is absent due to illness, he/she should bring an approved statement from university Clinic. |
| 2 | Tardy: - For lateness in attending the class, the student will be initially notified . If he repeates late in attending class he will be considered absent . |
| 3 | Exam Attendance/Punctuality: - The student should attend the exam on time. He is permitted to attend the exam half one hour from exam beginning, after that he/she will not be permitted to take exam and he/she is considered absent in the exam. |
| 4 | Assignments & Projects: - In general one assignment is given after each chapter of a course. The student should submit the assignment on time, mostly one week after giving the assignment |

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| 5 | <p>Cheating:</p> <p>- For cheating in exam, the student is considered as failure. In case the cheating is repeated three times during study the student will be disengaged from the Faculty</p> |
| 6 | <p>Plagiarism:</p> <p>Plagiarism is the attending of the student the exam of a course instead of other student. If the examination committee proved a plagiarism of a student, he will be disengaged from the Faculty. The final disengagement of the student from the Faculty should be confirmed from the Student Affair Council of the university.</p> |
| 7 | <p>Other policies:</p> <ul style="list-style-type: none"> - The mobile phone is not allowable to be used during class lecture. It must be switched off, otherwise the student will be ordered to leave the lecture room. - The mobile phone is not allowed to be taken during the examination time. - Lecture notes and assignments may be given directly to students using soft or hard copy. |

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