



## Course Specification of Advanced Database Systems

| I. Course Identification and General Information |  |  |     |     |     |       |
|--|--|--|-----|-----|-----|-------|
| 1.   | Course Title:  | Advanced Database Systems                      |     |     |     |       |
| 2.   | Course Code & Number:                                  | CCE428   |     |     |     |       |
| 3.   | Credit hours:  | C.H  |     |     |     | Total |
|  |  | Th.  | Tu. | Pr. | Tr. |       |
|  |  | 2  | -   | 2   | -   |       |
| 4.   | Study level/ semester at which this course is offered: | 5 <sup>th</sup> Level/1 <sup>st</sup> Semester |     |     |     |       |
| 5.   | Pre –requisite (if any):                               | Database Systems (CCE323)                      |     |     |     |       |
| 6.   | Co –requisite (if any):                                | None.  |     |     |     |       |
| 7.   | Program (s) in which the course is offered:            | B.Sc. of Computer and Control Engineering      |     |     |     |       |
| 8.   | Language of teaching the course:                       | English  |     |     |     |       |
| 9.   | Location of teaching the course:                       | Class Room (Faculty of Engineering)            |     |     |     |       |
| 10.  | Prepared By:   | Prof. Abdul Raqib Abdo Asaad                   |     |     |     |       |
| 11.  | Date of Approval                                       |  |     |     |     |       |

## II. Course Description

This course aims to provide students with advanced concepts related to the design and implementation of modern database systems to IT applications in different social and marketing environments. Course topics include transaction management, replication & mobile databases, Web database, multimedia databases, distributed database, OOD Programming, data mining and database project. Throughout practical lab and term projects students will develop problem-solving skills related to the design and implementation of database systems for business and marketing issues.

| III. Course Intended learning outcomes (CILOs) of the course |   | Referenced PILOs |
|--|---|------------------|
| a1   | Distinguish the main stages of the database systems development life cycle.             | A1               |
| a2   | Recognize the main phases of database design (conceptual, logical and physical design). | A2, A3           |

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|           |   |        |
|-----------|---|--------|
| <b>b1</b> | Formulate user requirements clearly in order to design a proper database system.                  | B1     |
| <b>b2</b> | Evaluate approaches for integrating databases into the web environment.                           | B2, B4 |
| <b>c1</b> | Write SQL integrity constraints, showing the Oracle handles for concurrency control and recovery. | C1     |
| <b>c2</b> | Design a complete database system for a required application.                                     | C2, C4 |
| <b>d1</b> | Work in a group to achieve final course's project or during laboratory activities.                | D1     |
| <b>d2</b> | Consider the flow of standards in preparing reports and presentations.                            | D4, D5 |

| <b>(A) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies</b> |  |  |
|--|--|--|
| Course Intended Learning Outcomes  | Teaching strategies  | Assessment Strategies  |
| <b>a1</b> Distinguish the main stages of the database systems development life cycle.  | <ul style="list-style-type: none"> <li>▪ Active Lectures</li> <li>▪ Interactive Class discussions</li> <li>▪ Projects</li> </ul> | <ul style="list-style-type: none"> <li>▪ Written Test and Quizzes</li> <li>▪ Reports evaluation</li> <li>▪ Presentations evaluation</li> </ul> |
| <b>a2</b> Recognize the main phases of database design (conceptual, logical and physical design).                                      |  |  |

| <b>(B) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies</b> |   |  |
|--|---|--|
| Course Intended Learning Outcomes  | Teaching strategies   | Assessment Strategies  |
| <b>b1</b> Formulate user requirements clearly in order to design a proper database system.                                     | <ul style="list-style-type: none"> <li>▪ Active Lectures</li> <li>▪ Case study</li> <li>▪ Laboratory</li> <li>▪ Projects</li> </ul> | <ul style="list-style-type: none"> <li>▪ Written Test and Quizzes</li> <li>▪ Reports evaluation</li> <li>▪ Presentations evaluation</li> </ul> |
| <b>b2</b> Evaluate approaches for integrating databases into the web environment.  |   |  |

|   |  |   |  |   |
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| <b>(C) Alignment Course Intended Learning Outcomes of Professional and Practical Skills to Teaching Strategies and Assessment Strategies</b> |   |  |
|--|---|--|
| Course Intended Learning Outcomes  | Teaching strategies   | Assessment Strategies  |
| <b>c1</b> Write SQL integrity constraints, showing the Oracle handles for concurrency control and recovery.                                  | <ul style="list-style-type: none"> <li>▪ Active Lectures</li> <li>▪ Case study</li> <li>▪ Laboratory</li> <li>▪ Homework &amp; Assignments</li> <li>▪ Projects</li> </ul> | <ul style="list-style-type: none"> <li>▪ Written Test and Quizzes</li> <li>▪ Reports evaluation</li> <li>▪ Presentations evaluation</li> </ul> |
| <b>c2</b> Design a complete database system for a required application.  |   |  |

| <b>(D) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies</b> |  |   |
|--|--|---|
| Course Intended Learning Outcomes  | Teaching strategies  | Assessment Strategies   |
| <b>d1</b> Work in a group to achieve final course's project or during laboratory activities.                                   | <ul style="list-style-type: none"> <li>▪ Case study</li> <li>▪ Laboratory</li> <li>▪ Projects</li> </ul> | <ul style="list-style-type: none"> <li>▪ Observation</li> <li>▪ Reports evaluation</li> <li>▪ Presentations evaluation</li> </ul> |
| <b>d2</b> Consider the flow of standards in preparing reports and presentations.   | <ul style="list-style-type: none"> <li>▪ Projects</li> </ul>   | <ul style="list-style-type: none"> <li>▪ Reports evaluation</li> <li>▪ Presentations evaluation</li> </ul>                        |

| <b>IV. Course Content</b>     |                                  |                   |   |                 |               |
|-------------------------------|----------------------------------|-------------------|---|-----------------|---------------|
| <b>A – Theoretical Aspect</b> |                                  |                   |   |                 |               |
| Order                         | Units/Topics List                | Learning Outcomes | Sub Topics List   | Number of Weeks | Contact hours |
| 1.                            | Database basis continuous topics | a1, a2            | <ul style="list-style-type: none"> <li>• Relational database design</li> <li>• Recovery</li> <li>• Concurrency</li> <li>• Security</li> <li>• Integrity</li> <li>• Advanced database design concepts</li> </ul> | 3               | 6             |

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|  |                                     |                            |   |           |           |
|--|-------------------------------------|----------------------------|---|-----------|-----------|
| 2.   | Transaction, Replication and Mobile | a1, a2, b1                 | <ul style="list-style-type: none"> <li>• Transaction management</li> <li>• Replication databases</li> <li>• Mobile databases</li> </ul> | 3         | 6         |
| 3.   | OOD and Web Database                | a1, a2, b1, b2             | <ul style="list-style-type: none"> <li>• Object Oriented Database</li> </ul>  | 1         | 2         |
| 4.   | OOD and Web database                | a1, a2, b1, b2             | <ul style="list-style-type: none"> <li>• Object Oriented Database (Cont.)</li> <li>• Web database</li> </ul>                            | 2         | 4         |
| 5.   | Advanced Applications               | a1, a2, b1                 | <ul style="list-style-type: none"> <li>• Multimedia databases</li> <li>• Distributed databases</li> <li>• Data mining</li> </ul>        | 3         | 6         |
| 6.   | Database Project                    | a1, a2, b1, b2, c1, c2, d1 | <ul style="list-style-type: none"> <li>• Different applications on database design</li> </ul>   | 2         | 4         |
| <b>Number of Weeks /and Units Per Semester</b> |                                     |                            |   | <b>14</b> | <b>28</b> |

| <b>B - Practical Aspect</b> |   |                 |               |                        |
|-----------------------------|---|-----------------|---------------|------------------------|
| Order                       | Topics List   | Number of Weeks | Contact hours | Learning Outcomes      |
| 1.                          | Oracle developer, forms and reports (cont.)                     | 2               | 4             | a1, a2, b1, b2, c1, d1 |
| 2.                          | Builder, forms, and data block                                  | 1               | 2             | a1, a2, b1, b2, c1, d1 |
| 3.                          | Create Forms, Button, and Trigger-Enhancement performance forms | 2               | 4             | a1, a2, b1, b2, c1, d1 |
| 4.                          | Radio group, radio button, list item, and text item             | 2               | 4             | a1, a2, b1, b2, c1, d1 |
| 5.                          | Check box image   | 1               | 2             | a1, a2, b1, b2, c1, d1 |
| 6.                          | LOVs – move between interfaces, text item data                  | 1               | 2             | a1, a2, b1, b2, c1, d1 |
| 7.                          | Windows and Canvas DL/SQL                                       | 2               | 4             | a1, a2, b1, b2, c1, d1 |
| 8.                          | Records syntax errors   | 1               | 2             | a1, a2, b1, b2, c1, d1 |

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|  |                      |           |           |                               |
|--|----------------------|-----------|-----------|-------------------------------|
| 9.   | Projects discussions | 1         | 2         | a1, a2, b1, b2, c1, c2,<br>d1 |
| 10.  | Review               | 1         | 2         | a1, a2, b1, b2, c1, c2        |
| <b>Number of Weeks /and Units Per Semester</b> |                      | <b>14</b> | <b>28</b> |                               |

### V. Teaching strategies of the course

- Active Lectures
- Interactive Class discussions
- Case study
- Laboratory
- Projects
- Homework & Assignments.

### VI. Assignment & Reports

| No           | Assignments   | Aligned CILOs                 | Week Due                                | Mark      |
|--------------|---|-------------------------------|---|-----------|
| 1.           | Database Integrity, Security, Recovery & Concurrency    | a1, a2, b1, c1,<br>d1         | 3 <sup>rd</sup>                         | 1.5       |
| 2.           | Transaction, Replication and Mobile Database            | a1, a2, b1, c1, d1            | 5 <sup>th</sup> & 6 <sup>th</sup>       | 2         |
| 3.           | OOD & Web Applications                                  | a1, a2, b1, b2, c1, d1        | 9 <sup>th</sup> & 10 <sup>th</sup>      | 2         |
| 4.           | Advanced Database Applications Design & Implementations | a1, a2, b1, c1, c2,<br>d1, d2 | 11 <sup>th</sup> to<br>14 <sup>th</sup> | 2.5       |
| 5            | Laboratory Reports                                      | b1, b2, c1, c2, d2            | 2 <sup>nd</sup> to 12 <sup>th</sup>     | 7         |
| <b>Total</b> |   |                               |   | <b>15</b> |

### 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.  | Assignments & Reports | 3 <sup>rd</sup> to<br>14 <sup>th</sup> | 15   | 10%                            | a1, a2, b1, b2, c1, c2<br>d1, d2 |

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|              |   |  |            |             |                                   |
|--------------|---|--|------------|-------------|-----------------------------------|
| 2.           | Quizzes   | 5 <sup>th</sup> , 10 <sup>th</sup><br>& 14 <sup>th</sup>     | 10         | 6.67%       | a1, a2, b1, b2, c1                |
| 3.           | Midterm Exam (Theory)                                 | 8 <sup>th</sup>  | 20         | 13.33%      | a1, a2, b1                        |
| 4.           | Final Lab. Exam (including Course Project Evaluation) | 13 <sup>th</sup> ,<br>14 <sup>th</sup><br>& 15 <sup>th</sup> | 30         | 20%         | a1, a2, b1, b2, c1, c2,<br>d1, d2 |
| 5.           | Final Exam (Theory)                                   | 16 <sup>th</sup>   | 75         | 50%         | a1, a2, b1, b2, c1, c2            |
| <b>Total</b> |   |  | <b>150</b> | <b>100%</b> |                                   |

## 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 M. Connolly and Carolyn E. Begg (2009), “Database Systems: A Practical Approach to Design, Implementation and Management”, Fifth Edition, Pearson.
- 2- Ramez Elmasri and Shamkant B. Navathe (2015), “Fundamentals of Database Systems”, Seventh Edition, Pearson.

### 2- Essential References

- 1- Sikha Saha Bagui and Richard Walsh Earp (2011), “Database Design Using Entity-Relationship Diagrams”, Second Edition, Auerbach Publications.

### 3- Electronic Materials and Web Sites etc.

## IX. Course Policies:

|    |   |
|----|---|
| 1. | <b>Class Attendance:</b><br>-A student should attend not less than 75 % of total hours of the subject; otherwise he will not be able to take the exam and will be considered as exam failure. If the student is absent due to illness, he/she should bring a proof statement from university Clinic |
| 2. | <b>Tardy:</b><br>- For late in attending the class, the student will be initially notified. If he repeated lateness in attending class he will be considered as absent.   |
| 3. | <b>Exam Attendance/Punctuality:</b>   |

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|-----------|--|
|           | - A student should attend the exam on time. He is Permitted to attend an exam half one hour from exam beginning, after that he/she will not be permitted to take the exam and he/she will be considered as absent in exam.   |
| <b>4.</b> | <b>Assignments &amp; Projects:</b><br>- The assignment is given to the students after each chapter; the student has to submit all the assignments for checking on time.  |
| <b>5.</b> | <b>Cheating:</b><br>- For cheating in exam, a student will be considered as fail. In case the cheating is repeated three times during his/her study the student will be disengaged from the Faculty.   |
| <b>6.</b> | <b>Plagiarism:</b><br>Plagiarism is the attending of a student the exam of a course instead of another student. If the examination committee proofed 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 Council Affair of the university. |
| <b>7.</b> | <b>Other policies:</b><br>- Mobile phones are not allowed to use during a class lecture. It must be closed, otherwise the student will be asked to leave the lecture room<br>- Mobile phones are not allowed in class during the examination.<br>Lecture notes and assignments my given directly to students using soft or hard copy                   |

|                    |   |
|--------------------|---|
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## Course Plan (Syllabus) of Advanced Database Systems

| I. Information about Faculty Member Responsible for the Course |                                 |     |              |     |     |     |     |
|--|---------------------------------|-----|--------------|-----|-----|-----|-----|
| Name of Faculty Member   | Prof. Abdul Raqib<br>Abdo Asaad |     | Office Hours |     |     |     |     |
| Location & Telephone No.                                       |                                 | SAT | SUN          | MON | TUE | WED | THU |
| E-mail   |                                 |     |              |     |     |     |     |

| II. Course Identification and General Information |   |  |     |     |     |       |
|---|---|--|-----|-----|-----|-------|
| 1-  | Course Title:                                     | Advanced Database Systems                      |     |     |     |       |
| 2-  | Course Number & Code:                             | CCE428   |     |     |     |       |
| 3-  | Credit hours:                                     | C.H  |     |     |     | Total |
|   |   | Th.  | Tu. | Pr. | Tr. |       |
|   |   | 2  | -   | 2   | -   | 3     |
| 4-  | Study level/year at which this course is offered: | 5 <sup>th</sup> Level/1 <sup>st</sup> Semester |     |     |     |       |
| 5-  | Pre –requisite (if any):                          | Database Systems (CCE323)                      |     |     |     |       |
| 6-  | Co –requisite (if any):                           | None.  |     |     |     |       |
| 7-  | Program (s) in which the course is offered        | B.Sc. of Computer and Control Engineering      |     |     |     |       |
| 8-  | Language of teaching the course:                  | English  |     |     |     |       |
| 9-  | System of Study:                                  | Semesters                                      |     |     |     |       |
| 10-   | Mode of delivery:                                 | Collective and individual learning             |     |     |     |       |
| 11-   | Location of teaching the course:                  | Class Room (Faculty of Engineering)            |     |     |     |       |

| III. Course Description   |
|---|
| <p>This course aims to provide students with advanced concepts related to the design and implementation of modern database systems to IT applications in different social and marketing environments. Course topics include transaction management, replication &amp; mobile databases, Web database, multimedia databases, distributed database, OOD Programming, data mining and database</p> |

|   |  |   |  |   |
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project. Throughout practical lab and term projects students will develop problem-solving skills related to the design and implementation of database systems for business and marketing issues.

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

- Brief summary of the knowledge or skill the course is intended to develop:
  - 1- Distinguish the main stages of the database systems development life cycle.
  - 2- Recognize the main phases of database design (conceptual, logical and physical design).
  - 3- Formulate user requirements clearly in order to design a proper database system.
  - 4- Evaluate approaches for integrating databases into the web environment.
  - 5- Write SQL integrity constraints, showing the Oracle handles for concurrency control and recovery.
  - 6- Design a complete database system for a required application.
  - 7- Work in a group to achieve final course's project or during laboratory activities.
  - 8- Consider the flow of standards in preparing reports and presentations.

#### V. Course Content:

- Distribution of Semester Weekly Plan of Course Topics/Items and Activities

##### A – Theoretical Aspect:

| Order | Topics List                         | Sub Topics List   | Week Due  | Contact Hours |
|-------|-------------------------------------|---|---|---------------|
| 1.    | Database basis continuous topics    | <ul style="list-style-type: none"> <li>• Relational database design</li> <li>• Recovery</li> <li>• Concurrency</li> <li>• Security</li> <li>• Integrity</li> <li>• Advanced database design concepts</li> </ul> | 1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> | 6             |
| 2.    | Transaction, Replication and Mobile | <ul style="list-style-type: none"> <li>• Transaction management</li> <li>• Replication databases</li> <li>• Mobile databases</li> </ul>   | 4 <sup>th</sup> , 5 <sup>th</sup> , 6 <sup>th</sup> | 6             |
| 3.    | OOD and Web database                | <ul style="list-style-type: none"> <li>• Object Oriented Database</li> </ul>  | 7 <sup>th</sup>                                     | 2             |

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|  |                              |  |   |           |
|--|------------------------------|--|---|-----------|
| 4.   | Midterm Exam                 | <ul style="list-style-type: none"> <li>All previous topics except topic No. 3</li> </ul>                                   | 8 <sup>th</sup>   | 2         |
| 5.   | OOD and Web database (Cont.) | <ul style="list-style-type: none"> <li>Object Oriented Database (Cont.)</li> <li>Web database</li> </ul>                   | 9 <sup>th</sup> , 10 <sup>th</sup>                        | 6         |
| 6.   | Advanced Applications        | <ul style="list-style-type: none"> <li>Multimedia databases</li> <li>Distributed databases</li> <li>Data mining</li> </ul> | 11 <sup>th</sup> , 12 <sup>th</sup> ,<br>13 <sup>th</sup> | 6         |
| 7.   | Database Project             | <ul style="list-style-type: none"> <li>Different applications on database design</li> </ul>                                | 14 <sup>th</sup> , 15 <sup>th</sup>                       | 4         |
| 8.   | Final Exam                   | <ul style="list-style-type: none"> <li>All topics</li> </ul>   | 16 <sup>th</sup>  | 2         |
| <b>Number of Weeks /and Units Per Semester</b> |                              |  | <b>16</b>   | <b>32</b> |

| <b>B - Practical Aspect</b>                    |   |                                     |                      |
|--|---|-------------------------------------|----------------------|
| <b>Order</b>                                   | <b>Topics List</b>  | <b>Number of Weeks</b>              | <b>Contact hours</b> |
| 1.   | Oracle developer, forms and reports (cont.)                     | 1 <sup>st</sup> , 2 <sup>nd</sup>   | 4                    |
| 2.   | Builder, forms, and data block                                  | 3 <sup>rd</sup>                     | 2                    |
| 3.   | Create Forms, Button, and Trigger-Enhancement performance forms | 4 <sup>th</sup> , 5 <sup>th</sup>   | 4                    |
| 4.   | Radio group, radio button, list item, and text item             | 6 <sup>th</sup> , 7 <sup>th</sup>   | 4                    |
| 5.   | Check box image   | 8 <sup>th</sup>                     | 2                    |
| 6.   | LOVs – move between interfaces, text item data                  | 9 <sup>th</sup>                     | 2                    |
| 7.   | Windows and Canvas DL/SQL                                       | 10 <sup>th</sup> , 11 <sup>th</sup> | 4                    |
| 8.   | Records syntax errors   | 12 <sup>th</sup>                    | 2                    |
| 9.   | Projects discussions  | 13 <sup>th</sup>                    | 2                    |
| 10.  | Review  | 14 <sup>th</sup>                    | 2                    |
| 11.  | Final lab exam  | 15 <sup>th</sup>                    | 2                    |
| <b>Number of Weeks /and Units Per Semester</b> |   | <b>15</b>                           | <b>30</b>            |

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## VI. Teaching strategies of the course:

- Active Lectures
- Interactive Class discussions
- Case study
- Laboratory
- Projects
- Homework & Assignments

## VII. Assignments & Reports:

| No.          | Assignments   | Week Due                             | Mark      |
|--------------|---|--------------------------------------|-----------|
| 1.           | Database Integrity, Security, Recovery & Concurrency    | 3 <sup>rd</sup>                      | 1.5       |
| 2.           | Transaction, Replication and Mobile Database            | 5 <sup>th</sup> & 6 <sup>th</sup>    | 2         |
| 3.           | OOD & Web Applications                                  | 9 <sup>th</sup> & 10 <sup>th</sup>   | 2         |
| 4.           | Advanced Database Applications Design & Implementations | 11 <sup>th</sup> to 14 <sup>th</sup> | 2.5       |
| 5.           | Laboratory Reports                                      | 2 <sup>nd</sup> to 12 <sup>th</sup>  | 7         |
| <b>Total</b> |   |                                      | <b>15</b> |

## VIII. Schedule of Assessment Tasks for Students during the Semester:

| No.          | Type of Assessment Tasks                              | Week Due   | Mark       | Proportion of Final Assessment |
|--------------|---|--|------------|--------------------------------|
| 1.           | Assignments & Reports                                 | 3 <sup>rd</sup> to 14 <sup>th</sup>                    | 15         | 10%                            |
| 2.           | Quizzes   | 5 <sup>th</sup> , 10 <sup>th</sup> & 14 <sup>th</sup>  | 10         | 6.67%                          |
| 3.           | Midterm Exam (Theory)                                 | 8 <sup>th</sup>  | 20         | 13.33%                         |
| 4.           | Final Lab. Exam (including Course Project Evaluation) | 13 <sup>th</sup> , 14 <sup>th</sup> & 15 <sup>th</sup> | 30         | 20%                            |
| 5.           | Final Exam (Theory)                                   | 16 <sup>th</sup>                                       | 75         | 50%                            |
| <b>Total</b> |   |  | <b>150</b> | <b>100%</b>                    |

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## IX. Learning Resources:

### 1- Required Textbook(s)

- 1- Thomas M. Connolly and Carolyn E. Begg (2009), "Database Systems: A Practical Approach to Design, Implementation and Management", Fifth Edition, Pearson.
- 2- Ramez Elmasri and Shamkant B. Navathe (2015), "Fundamentals of Database Systems", Seventh Edition, Pearson.

### 2- Essential References

- 1- Sikha Saha Bagui and Richard Walsh Earp (2011), "Database Design Using Entity-Relationship Diagrams", Second Edition, Auerbach Publications.

### 3- Electronic Materials and Web Sites *etc.*

## X. Course Policies:

|    |  |
|----|--|
| 1. | <p><b>Class Attendance:</b><br/>                 -A student should attend not less than 75 % of total hours of the subject; otherwise he will not be able to take the exam and will be considered as exam failure. If the student is absent due to illness, he/she should bring a proof statement from university Clinic</p> |
| 2. | <p><b>Tardy:</b><br/>                 - For late in attending the class, the student will be initially notified. If he repeated lateness in attending class he will be considered as absent.</p>   |
| 3. | <p><b>Exam Attendance/Punctuality:</b><br/>                 - A student should attend the exam on time. He is Permitted to attend an exam half one hour from exam beginning, after that he/she will not be permitted to take the exam and he/she will be considered as absent in exam.</p>                                   |
| 4. | <p><b>Assignments &amp; Projects:</b><br/>                 - The assignment is given to the students after each chapter; the student has to submit all the assignments for checking on time.</p>   |
| 5. | <p><b>Cheating:</b><br/>                 - For cheating in exam, a student will be considered as fail. In case the cheating is repeated three times during his/her study the student will be disengaged from the Faculty.</p>  |
| 6. | <p><b>Plagiarism:</b></p>  |

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|           |  |
|-----------|--|
|           | <p>Plagiarism is the attending of a student the exam of a course instead of another student. If the examination committee proofed 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 Council Affair of the university.</p>  |
| <p>7.</p> | <p><b>Other policies:</b></p> <ul style="list-style-type: none"> <li>- Mobile phones are not allowed to use during a class lecture. It must be closed, otherwise the student will be asked to leave the lecture room</li> <li>- Mobile phones are not allowed in class during the examination.</li> </ul> <p>Lecture notes and assignments my given directly to students using soft or hard copy</p> |

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