



## Course Specification of Pharmacoeconomics

I. Course Identification and General Information:						
1	Course Title:	Pharmacoeconomics				
2	Course Number & Code:	Ph2923				
3	Credit hours:	C.H				Total
		Theoretical	Practical	Training	Seminar	
		1	-	-	-	1
4	Study level/ semester at which this course is offered:	Fifth year, First Semester				
5	Pre –requisite (if any):	Pharmaceutical Biostatistics				
6	Co –requisite (if any):	Fifth level				
7	Program (s) in which the course is offered:	Bachelor of pharmacy				
8	Department (s) in which the course is offered:	Pharmaceutics				
9	Language of teaching the course:	English				
10	Location of teaching the course:	Faculty of pharmacy – Sana'a University				
11	Prepared by:	Prof. Dr. Ahmed Mohamed Sabati				
12	Date of approval:					

## II. Course Description:

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ا.د. احمد سباتي

نائب العميد لشؤون الجودة  
ا.د. محمود البريهي

رئيس القسم  
ا.د. ماجد علوان

عميد الكلية  
د. خالد الشوية

عميدة مركز التطوير وضمان الجودة  
ا.م.د. هدى العماد

رئيس الجامعة  
ا.د. القاسم محمد عباس



This course introduces students to the principles of Pharmacoeconomics for use in analyzing the economic impact of pharmaceuticals on health care systems and Pharmacoeconomics analysis and costing of drugs and services. **Overall**

**Aims of Course:**

- Explain how Pharmacoeconomics distinguishes itself as a unique “toolbox” for use in analyzing the economic impact of pharmaceuticals on health care systems.
- Explain the different perspectives influence Pharmacoeconomics analysis and costing of drugs and services.

### I- Intended learning outcomes (ILOs) of the course:

At the end of this course, the students will be able to:

- Demonstrate a basic background of pharmacoeconomics.
- Recognize Pharmacoeconomics issues and able to address the effects of medication use in populations
- Describe the economic, institutional and policy aspects of the markets for health care and health care technologies
- Apply skills to the solution of real life problems by developing research questions, conducting research and sharing research findings with the scientific community.
- Recognize drug safety issues and develop appropriate strategies to optimize the benefit/risk ratio of the product involved.
- Write a study protocol in a clear, simple, and parsimonious manner, responsive to the question at hand, and proposing a methodological sound design.
- Derive the relevant cost and revenue streams needed to conduct a pharmacoeconomics analysis.
- Review skill to work in pharmaceutical companies and pharmacy benefits management, and government public health, medicine, and other related sectors.

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

#### (A) Knowledge and Understanding:

Alignment of Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: **Knowledge and Understanding.**

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Program Intended Learning Outcomes (Sub- PILOs) in: Knowledge and Understanding		Course Intended Learning Outcomes (CILOs) in: Knowledge and Understanding	
After completing this program, students will be able to:		After completing this course, students will be able to:	
A4-	Recognize the pharmaceutical dosage form design and the quality control of pharmaceutical formulations according to GMP and pharmacopeial requirements to support the pharmaceutical industries and research	a1-	Demonstrate a basic background of pharmacoconomics.
A5-	Demonstrate the basic knowledge of pharmacoconomics, pharmacovigilence, policy, legislation, marketing, administration and distribution of pharmaceutical and cosmetic	a2-	Recognize Pharmacoconomics issues and able to address the effects of medication use in populations

	products as well as ethics of health care..	a3	Describe the economic, institutional and policy aspects of the markets for health care and health care technologies
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### Teaching And Assessment Methods For Achieving Learning Outcomes:

#### Alignment of Learning Outcomes of Knowledge and Understanding to Teaching and Assessment Methods:

Course Intended Learning Outcomes (CILOs) in Knowledge and Understanding		Teaching strategies/methods to be used	Methods of assessment
After completing this course, students will be able to:		Lectures methods , Computer based teaching and learning, group discussion and tutorial	Oral Exam, Quizzes, Attendance, Participation, Short answers, reports, homework, and Written exam.
a1-	Demonstrate a basic background of pharmacoconomics.		
a2-	Recognize Pharmacoconomics issues and able to address the effects of medication use in populations		
a3-	Describe the economic, institutional and policy aspects of the markets for health care and health care technologies		

### (B) Intellectual Skills:

#### Alignment of Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: Intellectual skills

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Program Intended Learning Outcomes (Sub- PILOs) in Intellectual skills		Course Intended Learning Outcomes (CILOs) of Intellectual Skills	
After completing this program, students will be able to:		After completing this course, students will be able to:	
<b>B3-</b>	Design different types of safe and effective pharmaceutical dosage forms and develop novel methods of qualitative and quantitative analytical and biological analysis for pharmaceutical and biopharmaceutical products that support pharmaceutical research.	<b>b1-</b>	Apply skills to the solution of real life problems by developing research questions, conducting research and sharing research findings with the scientific community.
<b>B5-</b>	Interpret the prescriptions, patient and clinical data, Analysis all the encountered pharmaceutical problems and plan the strategies for their solution, to develop the health care.	<b>b2-</b>	Recognize drug safety issues and develop appropriate strategies to optimize the benefit/risk ratio of the product involved.

### Teaching And Assessment Methods For Achieving Learning Outcomes:

#### Alignment of Learning Outcomes of Intellectual Skills to Teaching Methods and Assessment Methods:

Course Intended Learning Outcomes (CILOs) in Intellectual Skills.		Teaching strategies/methods to be used	Methods of assessment
After completing this course, students will be able to:		Lectures methods, Group Discussion, Problem solving sessions, brainstorming and Computer based teaching and learning	Oral Exam, Quizzes, Attendance, Participation, Short answers, reports, homework, and Written exam.
<b>b1-</b>	Apply skills to the solution of real life problems by developing research questions, conducting research and sharing research findings with the scientific community.		
<b>b2-</b>	Recognize drug safety issues and develop appropriate strategies to optimize the benefit/risk ratio of the product involved.		

### (C) Professional and Practical Skills:

#### Alignment of Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: Professional and Practical Skills

Program Intended Learning Outcomes (Sub-PILOs) in Professional and Practical Skills	Course Intended Learning Outcomes (CILOs) in Professional and Practical Skills
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After completing this program, students will be able to:		After completing this course, students will be able to:	
C4-	Provide patient-oriented pharmaceutical care by collaboration with other health care Professionals to optimize therapeutic outcomes.	c1-	Write a study protocol in a clear, simple, and parsimonious manner, responsive to the question at hand, and proposing a methodological sound design.
C5-	Conduct research studies and utilize the results in different pharmaceutical fields.	c2-	Derive the relevant cost and revenue streams needed to conduct a pharmacoeconomics analysis.

### Teaching And Assessment Methods For Achieving Learning Outcomes:

Alignment of Learning Outcomes of Professional and Practical Skills to Teaching and Assessment Methods:			
Course Intended Learning Outcomes (CILOs) in Professional and Practical Skills		Teaching strategies/methods to be used	Methods of assessment
After completing this course, students will be able to:		Lectures methods Practical session, brainstorming and group discussion	Practical works, homework, practical exam and practical reports. -
c1-	Write a study protocol in a clear, simple, and parsimonious manner, responsive to the question at hand, and proposing a methodological sound design.		
c2-	Derive the relevant cost and revenue streams needed to conduct a pharmacoeconomics analysis.		

### (D) General / Transferable Skills:

Alignment of Course Intended Learning Outcomes (CILOs) to Program Intended Learning Outcomes (PILOs) in: General and Transferable skills			
Program Intended Learning Outcomes (PILOs) in General / Transferable skills		Course Intended Learning Outcomes (CILOs) in General / Transferable skills	
After completing this program, students will be able to:		After completing this course, students will be able to:	
D1-	Practice independent learning needed for continuous professional development	d1-	

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D2-	Employ proper documentation and filing systems in different pharmaceutical fields	Review the skills to work in pharmaceutical companies and pharmacy benefits management, and government public health, medicine, and other related sectors.
<b>Teaching And Assessment Methods For Achieving Learning Outcomes:</b>		
<b>Alignment of Learning Outcomes of General and Transferable skills to Teaching and Assessment Methods:</b>		
<b>Course Intended Learning Outcomes (CILOs) in General and Transferable Skills</b>		<b>Teaching strategies/methods to be used</b>
<b>Methods of assessment</b>		
After completing this course, students will be able to:		Small group discussions, Tutorials and Practical session
d1-	Review skills to work in pharmaceutical companies and pharmacy benefits management, and government public health, medicine, and other related sectors.	Homework and reports.

## I. Course Content:

### 1 – Course Topics/Items:

#### a – Theoretical Aspect

Order	Topic List / Units	CILOs (symbols)	No. of week	Contact Hours
1	Introduction of terminology; review of major methodologies- Definition of pharmacoconomics.	a1, a2	1	1
2	Basic principle of clinical epidemiology relevant to pharmacoconomics studies.	a1, a3, b1-2 c2	1	1
3	Role of pharmacoconomics in the health care system and academic	a1, a2, b1-2, c1,	1	1
4	Case-control, nested case-control studies; cross-over designs studies and matching in pharmacoconomics	a1, a3, b1-2, c1-2	1	1
5	Large Data Base Research Student discussion of data source selection	a1, a3, b1, c1	1	1
6	Drug Utilization studies	a1, a2, b1,c1	1	1

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7	Evaluating and improving physician prescription	a1, a3, b1-2, c2, d1	1	1
8	Role and importance of pharmacoeconomic analyses in drug management	a1, a3, b1-2, c2	1	1
9	Basic types of pharmacoeconomic analyses	a1, a3, b1-2, c2	1	1
10	Cost Effectiveness and Cost Minimization	a1, a3, b1-2, c2	1	1
11	Cost Benefit and Cost Utility	a1, a3, b1-2, c2	1	1
12	Pharmacoeconomics in Drug Development	a1, a2, c1	1	1
13	Quality of Life Assessment	a1, a3, b1-2, c1-2, d1	1	1
14	Quality of Life Assessment	a1, a3, b1-2, c1-2, d1	1	1
<b>Number of Weeks /and Units Per Semester</b>			<b>14</b>	<b>28</b>

#### I. a-Teaching strategies of the course:

Lecture method, Group Discussion, Problem solving sessions, case study, Computer based teaching and learning, tutorials, brainstorming and Practical sessions.

#### b- Assessment Methods:

Quizzes, Attendance, Participation, Short answers, reports, homework, and Written exam and reports.

#### I. Schedule of Assessment Tasks for Students During the Semester:

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No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes (CILOs symbols)
1	Participation and quizzes	1-12	5	5%	a1-3, b1-2, c1-2
2	Assignments	4-12	5	5%	a1-3, b1-2, c1-2
3	Mid-semester exam	8	20	20%	a1-3, b1-2, c1-2
5	Final Exam	16	70	70%	a1-3, b1-2, c1-2
<b>Total</b>			<b>100</b>	<b>100%</b>	

## II. Students' Support:

Office Hours/week	Other Procedures (if any)
-	-

## III. Learning Resource (MLA style or APA style)S:

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

1. Tilson HH, Chan KA. Editors. Pharmacoeconomics and Therapeutic Risk Management. Harvey Whitney press, Cincinnati, 2008.
2. Drummond MF, McGuire A. Economic evaluation in health care; merging theory with practice. Oxford University Press, 2001

### 2- Recommended Readings and Reference Materials

1. Drummond MF, O'Brien B. *Methods for the Economic Evaluation of Health Care Programmes*. 2nd Edition. Oxford University Press. New York, New York. 1997.
2. Strom BL, Kimmel SE. *Textbook of Pharmacoeconomics*. West Sussex, England: John Wiley & Sons Ltd, 2006.

### 3- Essential References

Course notes (lecture notes and practical notes) prepared by teacher of the subject.

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<b>4- Electronic Materials and Web Sites etc.</b>	
	International Society for Pharmacoepidemiology website. <a href="http://www.pharmacoepi.org">http://www.pharmacoepi.org</a>
<b>5- Other Learning Material:</b>	

<b>I. Facilities Required:</b>	
<b>1 - Accommodation:</b>	<ul style="list-style-type: none"> <li>- Well-equipped lecture halls with data show facilities, whiteboards, net connection, etc.</li> <li>- Well-equipped laboratories with all required equipment and reagents.</li> </ul>
<b>2 - Computing resources:</b>	<ul style="list-style-type: none"> <li>- Computer laboratory with internet facilities.</li> </ul>
<b>II. Course Improvement Processes:</b>	
<b>1- Strategies for obtaining student feedback on effectiveness of teaching</b>	
	<ul style="list-style-type: none"> <li>▪ Student-based assessment of the effectiveness of teaching using a questionnaire designed by the Quality Assurance Unit at the end of the semester.</li> <li>▪ Meeting with students and faculty (once per semester).</li> </ul>
<b>2- Other strategies for evaluation of teaching by the instructor or by the department.</b>	
	<ul style="list-style-type: none"> <li><input type="checkbox"/> Assessment of the course syllabus and contents by the teachers using a questionnaire designed by the Quality Assurance Unit of the university at the end of the semester.</li> <li><input type="checkbox"/> Regular meeting and discussion of the course content between the Head of Department and the teaching staff of the course (for theory and practice).</li> </ul>
<b>3- Processes for improvement of teaching.</b>	

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	<ul style="list-style-type: none"> <li>Revision of the course specification and its teaching strategies every three academic years after consideration of all issues raised by the teachers and/or students during regular meetings and discussions.</li> <li>Exploring any possible defects in the course that might be encountered by the teaching staff and</li> </ul>
	their mitigation in subsequent improved versions of course specification.
<b>4- Processes for verifying standards of students' achievement</b>	
	<ul style="list-style-type: none"> <li>Checking of a sample of students' work by an independent faculty member.</li> <li>Periodic exchange and check marking of a sample of students' assignments with a faculty member from another institution.</li> <li>Adoption of scoring rubrics to assess the students' achievement (both for ongoing or summative assessments).</li> <li>Regular follow-up of laboratory logbooks to assess the practical achievement of students.</li> </ul>
<b>5- Procedures for periodically reviewing of course effectiveness and planning for improvement</b>	
	<ul style="list-style-type: none"> <li>Student rating and feedback</li> <li>Peer rating and feedback</li> <li>Regular meeting of the Curriculum Committee of the faculty.</li> </ul>
<b>6- Course development plans</b>	
	<ul style="list-style-type: none"> <li>Conducting regular workshops for the staff for improving their course specification skills.</li> <li>Regular revision of course specification and syllabus items.</li> </ul>

### VIII. Course Policies: (including plagiarism, academic honesty, attendance etc)

The University Regulations on academic misconduct will be strictly enforced. Please refer to -----

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1	<b>Class Attendance:</b> <ul style="list-style-type: none"><li>Attendance of all lectures and practical sessions is required. Unexcused absence exceeding 25% of the lectures or practical sessions will disqualify the student from entering the final exam.</li></ul>
2	<b>Tardy:</b> <p>- Roll will be called in the very beginning of each lecture and practical class. Retardation for more than three weeks without a reasonable excursion, the student involved shall not be allowed to attend the class any longer and consequently shall be considered to be absent.</p>
3	<b>Exam Attendance/Punctuality:</b> <ul style="list-style-type: none"><li>Exam attendance is obligatory unless being excused by the department and faculty.</li><li>Absence from assignments or exams will be dealt with according to the general policy of the university.</li></ul>
4	<b>Assignments &amp; Projects:</b> <ul style="list-style-type: none"><li>Assignments: Written and oral; Laboratory logbook signed by the responsible demonstrator.</li><li>Projects: Not applicable.</li></ul>
5	<b>Cheating:</b> <ul style="list-style-type: none"><li>Punishment of cheating will be according to the general policy of the university in this respect.</li></ul>
6	<b>Plagiarism:</b> <ul style="list-style-type: none"><li>Plagiarism in written essays, reports, etc. is not accepted, and students who plagiarize the works of others will be punished according to the general policy of the university.</li></ul>
7	<b>Other policies:</b> <ul style="list-style-type: none"><li>General policies of the Students' Affairs of the University and the Quality Assurance Unit.</li></ul>

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### Course Plan of Pharmacoeconomics

#### II- Information about Faculty Member Responsible for the Course:

Name of Faculty Member	Location & Telephone No.	Office Hours					
		SAT	SUN	MON	TUE	WED	THU
E-mail							

#### III- Course Identification and General Information:

1-	Course Title:	Pharmacoeconomics
2-	Course Number & Code:	Ph2923

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3-	Credit hours:	C.H				Total
		Th.	Seminar	Pr.	F. Tr.	
		1	-			1
4-	Study level/year at which this course is offered:	Fifth year, First Semester				
5-	Pre –requisite (if any):	Pharmaceutical Biostatistics				
6-	Co –requisite (if any):					
7-	Program (s) in which the course is offered	Bachelor of pharmacy				
8-	Language of teaching the course:	English				
9-	System of Study:	Semesters				
10-	Mode of delivery:	Regular				
11-	Location of teaching the course:	Faculty of Pharmacy- Sana`a university				

#### IV. Course Description:

This course introduces students to the principles of Pharmacoeconomics for use in analyzing the economic impact of pharmaceuticals on health care systems and Pharmacoeconomics analysis and costing of drugs and services. **Overall Aims of Course:**

- C. Explain how Pharmacoeconomics distinguishes itself as a unique “toolbox” for use in analyzing the economic impact of pharmaceuticals on health care systems.
- D. Explain the different perspectives influence Pharmacoeconomics analysis and costing of drugs and services.

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

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**At the end of this course, the students will be able to:**

1. Demonstrate a basic background of pharmacoeconomics.
2. Recognize Pharmacoeconomics issues and able to address the effects of medication use in populations
3. Describe the economic, institutional and policy aspects of the markets for health care and health care technologies
4. Apply skills to the solution of real life problems by developing research questions, conducting research and sharing research findings with the scientific community.
5. Recognize drug safety issues and develop appropriate strategies to optimize the benefit/risk ratio of the product involved.
6. Write a study protocol in a clear, simple, and parsimonious manner, responsive to the question at hand, and proposing a methodological sound design.
7. Derive the relevant cost and revenue streams needed to conduct a pharmacoeconomics analysis.
8. Review skill to work in pharmaceutical companies and pharmacy benefits management, and government public health, medicine, and other related sectors.

**V. Intended learning outcomes (ILOs) of the course:**

Course Content:				
1 – Course Topics/Items:				
a – Theoretical Aspect				
Order	Topic List / Units	CILOs (symbols)	Week Due	Contact Hours
1	Introduction of terminology; review of major methodologies- Definition of pharmacoeconomics.	a1, a2	1	1
2	Basic principle of clinical epidemiology relevant to pharmacoeconomics studies.	a1, a3, b12 c2	2	1

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3	Role of pharmacoeconomics in the health care system and academic	a1, a2, b12, c1,	3	1
4	Case-control, nested case-control studies; cross-over designs studies and matching in pharmacoeconomics	a1, a3, b12, c1-2	4	1
5	Large Data Base Research Student discussion of data source selection	a1, a3, b1, c1	5	1
6	Drug Utilization studies	a1, a2, b1,c1	6	1
7	Evaluating and improving physician prescription	a1, a3, b12, c2, d1	7	1
8	Midterm exam	a1-3, b1-2, c1-2, d1	8	1
9	Role and importance of pharmacoeconomic analyses in drug management	a1, a3, b12, c2	9	1
10	Basic types of pharmacoeconomic analyses	a1, a3, b12, c2	10	1
11	Cost Effectiveness and Cost Minimization	a1, a3, b12, c2	11	1
11	Cost Benefit and Cost Utility	a1, a3, b12, c2	12	1
13	Pharmacoeconomics in Drug Development	a1, a2, c1	13	1
14	Quality of Life Assessment	a1, a3, b1-2, c1-2, d1	14	1
15	Quality of Life Assessment	a1, a3, b1-2, c1-2, d1	15	1
16	Final Term Exan	a1-3, b1-2, c1-2, d1	16	1
<b>Number of Weeks /and Units Per Semester</b>			<b>16</b>	<b>16</b>

## II. a-Teaching strategies of the course:

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Lecture method, Group Discussion, Problem solving sessions, case study, Computer based teaching and learning, tutorials, brainstorming and Practical sessions.

**b- Assessment Methods:**

Quizzes, Attendance, Participation, Short answers, reports, homework, and Written exam and reports.

**II. Schedule of Assessment Tasks for Students During the Semester:**

No.	Assessment Method	Week Due	Mark	Proportion of Final Assessment	Aligned Course Learning Outcomes (CILOs symbols)
1	Participation and quizzes	1-12	5	5%	a1-3, b1-2, c1-2
2	Assignments	4-12	5	5%	a1-3, b1-2, c1-2
3	Mid-semester exam	8	20	20%	a1-3, b1-2, c1-2
5	Final Exam	16	70	70%	a1-3, b1-2, c1-2
<b>Total</b>			<b>100</b>	<b>100%</b>	

**IV. Students' Support:**

Office Hours/week	Other Procedures (if any)
-	-

**V. Learning Resource (MLA style or APA style)S:**

**6- Required Textbook(s) ( maximum two )**

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	3. Tilson HH, Chan KA. Editors. <i>Pharmacoepidemiology and Therapeutic Risk Management</i> . Harvey Whitney press, Cincinnati, 2008.
	4. Drummond MF, McGuire A. <i>Economic evaluation in health care; merging theory with practice</i> . Oxford University Press, 2001
<b>7- Recommended Readings and Reference Materials</b>	
	3. Drummond MF, O'Brien B. <i>Methods for the Economic Evaluation of Health Care Programmes</i> . 2nd Edition. Oxford University Press. New York, New York. 1997.
	4. Strom BL, Kimmel SE. <i>Textbook of Pharmacoepidemiology</i> . West Sussex, England: John Wiley & Sons Ltd, 2006.
<b>8- Essential References</b>	
	Course notes (lecture notes and practical notes) prepared by teacher of the subject.
<b>9- Electronic Materials and Web Sites etc.</b>	
	International Society for Pharmacoepidemiology website. <a href="http://www.pharmacoepi.org">http://www.pharmacoepi.org</a>
<b>10- Other Learning Material:</b>	

<b>III. Facilities Required:</b>	
<b>1 - Accommodation:</b>	- Well-equipped lecture halls with data show facilities, whiteboards, net connection, etc. - Well-equipped laboratories with all required equipment and reagents.
<b>3 - Computing resources:</b>	- Computer laboratory with internet facilities.
<b>IV. Course Improvement Processes:</b>	
<b>6- Strategies for obtaining student feedback on effectiveness of teaching</b>	
	<ul style="list-style-type: none"> <li>▪ Student-based assessment of the effectiveness of teaching using a questionnaire designed by the Quality Assurance Unit at the end of the semester.</li> <li>▪ Meeting with students and faculty (once per semester).</li> </ul>



<b>7- Other strategies for evaluation of teaching by the instructor or by the department.</b>	
	<ul style="list-style-type: none"> <li>▪ Assessment of the course syllabus and contents by the teachers using a questionnaire designed by the Quality Assurance Unit of the university at the end of the semester.</li> <li>▪ Regular meeting and discussion of the course content between the Head of Department and the teaching staff of the course (for theory and practice).</li> </ul>
<b>8- Processes for improvement of teaching.</b>	
	<ul style="list-style-type: none"> <li>▪ Revision of the course specification and its teaching strategies every three academic years after consideration of all issues raised by the teachers and/or students during regular meetings and discussions.</li> <li>▪ Exploring any possible defects in the course that might be encountered by the teaching staff and their mitigation in subsequent improved versions of course specification.</li> </ul>
<b>9- Processes for verifying standards of students' achievement</b>	
	<ul style="list-style-type: none"> <li>▪ Checking of a sample of students' work by an independent faculty member.</li> <li>▪ Periodic exchange and check marking of a sample of students' assignments with a faculty member from another institution.</li> <li>▪ Adoption of scoring rubrics to assess the students' achievement (both for ongoing or summative assessments).</li> <li>▪ Regular follow-up of laboratory logbooks to assess the practical achievement of students.</li> </ul>
<b>10- Procedures for periodically reviewing of course effectiveness and planning for improvement</b>	
	<ul style="list-style-type: none"> <li>▪ Student rating and feedback</li> <li>▪ Peer rating and feedback</li> <li>▪ Regular meeting of the Curriculum Committee of the faculty.</li> </ul>
<b>6- Course development plans</b>	

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- Conducting regular workshops for the staff for improving their course specification skills.
- Regular revision of course specification and syllabus items.

### IX. Course Policies: (including plagiarism, academic honesty, attendance etc)

The University Regulations on academic misconduct will be strictly enforced. Please refer to -----

<b>1</b>	<p><b>Class Attendance:</b></p> <ul style="list-style-type: none"> <li>▪ Attendance of all lectures and practical sessions is required. Unexcused absence exceeding 25% of the lectures or practical sessions will disqualify the student from entering the final exam.</li> </ul>
<b>2</b>	<p><b>Tardy:</b></p> <p>- Roll will be called in the very beginning of each lecture and practical class. Retardation for more than three weeks without a reasonable excursion, the student involved shall not be allowed to attend the class any longer and consequently shall be considered to be absent.</p>
<b>3</b>	<p><b>Exam Attendance/Punctuality:</b></p> <ul style="list-style-type: none"> <li>▪ Exam attendance is obligatory unless being excused by the department and faculty.</li> <li>▪ Absence from assignments or exams will be dealt with according to the general policy of the university.</li> </ul>
<b>4</b>	<p><b>Assignments &amp; Projects:</b></p> <ul style="list-style-type: none"> <li>▪ Assignments: Written and oral; Laboratory logbook signed by the responsible demonstrator.</li> <li>▪ Projects: Not applicable.</li> </ul>
<b>5</b>	<p><b>Cheating:</b></p> <ul style="list-style-type: none"> <li>▪ Punishment of cheating will be according to the general policy of the university in this respect.</li> </ul>
<b>6</b>	<p><b>Plagiarism:</b></p> <ul style="list-style-type: none"> <li>▪ Plagiarism in written essays, reports, etc. is not accepted, and students who plagiarize the works of others will be punished according to the general policy of the university.</li> </ul>

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7	<b>Other policies:</b> <ul style="list-style-type: none"><li>General policies of the Students' Affairs of the University and the Quality Assurance Unit.</li></ul>
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