Sana'a University
Faculty of Engineering
Mechatronics Engineering Department
Mechatronics Engineering Program

Elective Course (2)
Course Specification of Machine Vision

I. Course Identification and General Information:

1.	Course Title:	Machine Vision.				
2.	Course Code & Number:	MT404.				
3.	Credit hours:	C.H				Total Cr. Hrs
		Th.	Seminar	Pr	Tu.	
		2	-	2	-	3
4.	Study level/ semester at which this course is offered:	Fifth Year - First Semester.				
5.	Pre –requisite (if any):	Computer Basics.				
6.	Co –requisite (if any):	None.				
7.	Program (s) in which the course is offered:	Mechatronics Engineering Program.				
8.	Language of teaching the course:	English Language.				
9.	Location of teaching the course:	Mechatronics Engineering Department.				
10.	Prepared By:	Prof. Dr. Abdullah Alkhorabi and Dr. Ahmed Al-Arashi.				
11.	Date of Approval:					

II. Course Description:

The aim of this course is to introduce machine vision main concepts, applications and problems involved in machine vision systems development. The course introduces the "low-level" algorithms of image processing that are necessary for the "mid-level" vision or feature extraction. Then it covers "high-level" algorithms such as pattern recognition, and 3D analysis and modeling of objects and scenes.

Prepared by	Head of Department	Quality Assurance Unit	Dean of the Faculty	Academic Development Center & Quality Assurance
1- Prof. Dr. Abdullah Alkhorabi	Ass. Prof. Dr. Abdul-Malik Momin	Ass. Prof. Dr. Mohammad Algorafi	Prof. Dr. Mohammed AL-Bukhaiti	Ass. Prof. Dr. Huda Al-Emad
2- Ass. Prof. Dr. Ahmed Al-Arashi.				

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

III. Course Intended learning outcomes (CILOs) of the course		**Referenced PILOs**
a.1	Define a machine vision system.	A1
a.2	Explain applications and problems involved in machine vision systems.	A2
b.1	Explore image segmentation using various techniques.	B2
b.2	Examine the studied image processing techniques using appropriate (Matlab) analysis.	B3
c.1	Compute a simple vision system.	C2
c.2	Choose the appropriate vision technique for a specific application.	C5
d.1	Co-operate with group members to develop and build problem solving machine vision systems.	D1
d.2	Review various web sites that provide information about machine vision	D7

(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- Define a machine vision system.	Lectures, pre-reading	Quizzes, oral exam, Mid-term, and Final exam
a2- Explain applications and problems involved in machine vision systems.	Lectures, pre-reading	Oral exam, interview sessions, presentations.

Prepared by
1- Prof. Dr. Abdullah Alkhorabi

2- Ass. Prof. Dr. Ahmed Al-Arashi.

Head of Department
Ass. Prof. Dr. Abdul-Malik Momin

Quality Assurance Unit
Ass. Prof. Dr. Mohammad Algorafi

Dean of the Faculty
Prof. Dr. Mohammed AL-Bukhaiti

Academic Development Center & Quality Assurance
Ass. Prof. Dr. Huda Al-Emad

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

(B) Alignment Course Intended Learning Outcomes of Intellectual Skills to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
b1- Explore image segmentation using various techniques.	Lectures, pre-reading, brainstorming sessions,	Mini-projects, Assignments
b2- Examine the studied image processing techniques using appropriate (Matlab) analysis**.**	Lectures, pre-reading, brainstorming sessions,	Assignments, class activities, report submission, presentation

(C) 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- Compute a simple vision system.	Lectures, pre-reading, brainstorming sessions	Mini-projects, Assignments
c2- Choose the appropriate vision technique for a specific application.	Lectures, pre-reading, brainstorming sessions	Assignments, class activities, report submission, presentation

(D) Alignment Course Intended Learning Outcomes of Transferable Skills to Teaching Strategies and Assessment Strategies:		
Course Intended Learning Outcomes	Teaching strategies	Assessment Strategies
d1- Co-operate with group members to develop and build problem solving machine vision systems.	Mini projects Brainstorming sessions, discuss about Group participation and Lab	Assignments, Class Activities, Report Submission, Presentation.
d2- Review various web sites that provide information about machine vision.	Mini-projects Brainstorming sessions	Assignments, Class Activities, Report Submission.

Prepared by
1- Prof. Dr. Abdullah Alkhorabi

2- Ass. Prof. Dr. Ahmed Al-Arashi.

Head of Department
Ass. Prof. Dr. Abdul-Malik Momin

Quality Assurance Unit
Ass. Prof. Dr. Mohammad Algorafi

Dean of the Faculty
Prof. Dr. Mohammed AL-Bukhaiti

Academic Development Center & Quality Assurance
Ass. Prof. Dr. Huda Al-Emad

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

IV. Course Content:

A – Theoretical Aspect:

Order	Units/Topics List	Learning Outcomes	Sub Topics List	Number of Weeks	contact hours
1.	Image Processing and Machine Vision.	a1	• Digital Image System. • Machine Vision System.	1	2
2.	Image Modeling and Analysis.	a1, c1.	• Image Fundamental Data Structures. • Image Binarization. • Thresholding. • Image Enhancement. • Image Filtering. • Fourier Transform.	3	6
3.	Image Segmentation.	a2, c2.	• Thresholding. • Extraction of connected Components. • Subpixel-Precise Thresholding.	2	4
4.	Morphological Image Processing.	b1, b2	• Region. • Hit-or-Miss Transform. • Opening and Closing. • Skeletonization. • Distance Transform.	2	4
5.	Mid-Term Exam.	a1, a2, b1, b2, c1, c2.	The first 4 Chapters.	1	2
6.	Image Understanding.	b1,b2, c1,c2,	• Feature Extraction: Region, Gray-Value. Contour Features.	3	6

Prepared by
1- Prof. Dr. Abdullah Alkhorabi

2- Ass. Prof. Dr. Ahmed Al-Arashi.

Head of Department
Ass. Prof. Dr. Abdul-Malik Momin

Quality Assurance Unit
Ass. Prof. Dr. Mohammad Algorafi

Dean of the Faculty
Prof. Dr. Mohammed AL-Bukhaiti

Academic Development Center & Quality Assurance
Ass. Prof. Dr. Huda Al-Emad

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

			• Classification. • Object Recognition.		
7.	Motion Estimation.	b1,b2.	• Optical Flow. • Motion Detection and Object Tracking.	2	4
8.	Wavelets and Multi Resolution Processing.	c1, c2.	• Wavelets. • Multi Resolution Processing.	1	2
9.	Final Exam.	a1, a2, b1, b2, c1, c2.	All the Chapters.	1	2
Number of Weeks /and Units Per Semester				**16**	**32**

B - Practical Aspect:

Order	Tasks/ Experiments	Number of Weeks	contact hours	Learning Outcomes
1.	Image Thresholding.	2	4	a1, a2, b1, b2, c1, c2, d1,d2
2.	Image Noise Reduction and Image Smoothing.	1	2	a1, a2, b1, b2, c1, c2, d1,d2
3.	Image Smoothing,	1	2	a1, a2, b1, b2, c1, c2, d1,d2
4.	Image Sharpening.	1	2	a1, a2, b1, b2, c1, c2, d1,d2
5.	Edge Detection.	1	2	a1, a2, b1, b2, c1, c2, d1,d2
6.	Opening and Closing.	1	2	a1, a2, b1, b2, c1, c2, d1,d2

Prepared by
1- Prof. Dr. Abdullah Alkhorabi

2- Ass. Prof. Dr. Ahmed Al-Arashi.

Head of Department
Ass. Prof. Dr. Abdul-Malik Momin

Quality Assurance Unit
Ass. Prof. Dr. Mohammad Algorafi

Dean of the Faculty
Prof. Dr. Mohammed AL-Bukhaiti

Academic Development Center & Quality Assurance
Ass. Prof. Dr. Huda Al-Emad

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

7.	Skeletonization	1	2	a1, a2, b1, b2, c1, c2, d1,d2
8.	Project	3	6	a1, a2, b1, b2, c1, c2, d1,d2
9.	Final Practical Exam.	3	6	a1, a2, b1, b2, c1, c2.
Number of Weeks /and Units Per Semester 14			**28**	

V. Teaching strategies of the course:

Lectures, Presentations, Assignments.
Labs , Mini-projects, Reports.

VI. Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1.	Exercises, Quizzes Home works, Class Activities and Assignments	a1, a2, b1,b2, c1, d1, d2.	1-14	10
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	Exercises, Quizzes Home works, Class Activities and Assignments	1-14	15	10%	a1, a2, b1,b2, c1.
2	Project (Written Report, Presentation and Practical exam)	13-15	30	20%	a1, a2, b1, b2, c1, c2, d1,d2

Prepared by
1- Prof. Dr. Abdullah Alkhorabi

2- Ass. Prof. Dr. Ahmed Al-Arashi.

Head of Department
Ass. Prof. Dr. Abdul-Malik Momin

Quality Assurance Unit
Ass. Prof. Dr. Mohammad Algorafi

Dean of the Faculty
Prof. Dr. Mohammed AL-Bukhaiti

Academic Development Center & Quality Assurance
Ass. Prof. Dr. Huda Al-Emad

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

3	Mid-Term Exam.	9	15	10%	a1, a2, b1, b2, c1, c2.
4	Final Exam (theoretical)	16	90	60%	a1, a2, b1, b2, c1, c2.
Total			**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- E.R. Davies, 2012, "Machine Vision: Theory, Algorithms, Practicalities", 4 th Ed., Academic Press.
2- D. Forsyth and J. Ponce, 2011, "Computer Vision: A Modern Approach", 2nd Ed., Prentice Hall, Englewood Cliffs, NY.

2- Essential References.

1- Richard Szeliski, 2010, "Computer Vision: Algorithms and Applications, " 1st Ed., Sprin
2- Rafael C. Gonzalez, Richard E. Woods, 2002, "Digital Image Processing", 2nd Edition, Prentice-Hall Inc.
3- Carsten Steger, Markus Ulrich, Christian Wiedemann, 2018,"Machine Vision Algorithm and Applications", Wiley-VCH-Verlag.

3- Electronic Materials and Web Sites *etc*.

1. en.wikipedio.org.
2. www.edn.com.
3. www.tmworld.com/Inspection_corner/ins_soc.html.

Prepared by	Head of Department	Quality Assurance Unit	Dean of the Faculty	Academic Development Center & Quality Assurance
1- Prof. Dr. Abdullah Alkhorabi 2- Ass. Prof. Dr. Ahmed Al-Arashi.	Ass. Prof. Dr. Abdul-Malik Momin	Ass. Prof. Dr. Mohammad Algorafi	Prof. Dr. Mohammed AL-Bukhaiti	Ass. Prof. Dr. Huda Al-Emad

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

IX.	**Course Policies:**
1.	**Class Attendance:** - The students should have more than 75% of attendance according to rules and regulations of the faculty.
2.	**Tardy:** - The students should respect the timing of attending the lectures. They should attend within 15 minutes from starting of the lecture.
3.	**Exam Attendance/Punctuality:** - The student should attend the exam on time. The punctuality should be implemented according to rules and regulations of the faculty for mid-term exam and final exam.
4.	**Assignments & Projects**: - The assignment is given to the students after each chapter; the student has to submit all the assignments for checking on time.
5.	**Cheating:** - If any cheating occurred during the examination, the student is not allowed to continue and he has to face the examination committee for enquires.
6.	**Plagiarism:** - If one student attends the exam on another behalf; he will be dismissed from the faculty according to the policy, rules and regulations of the university.

Prepared by	Head of Department	Quality Assurance Unit	Dean of the Faculty	Academic Development Center & Quality Assurance
1- Prof. Dr. Abdullah Alkhorabi	Ass. Prof. Dr. Abdul-Malik Momin	Ass. Prof. Dr. Mohammad Algorafi	Prof. Dr. Mohammed AL-Bukhaiti	Ass. Prof. Dr. Huda Al-Emad
2- Ass. Prof. Dr. Ahmed Al-Arashi.				

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

7.	**Other policies:** - All the teaching materials should be kept out the examination hall and mobile phones are not allowed. - Mutual respect should be maintained between the student and his teacher and also among students. Failing in keeping this respect is subject to the policy, rules and regulations of the university.

Reviewed By	Vice Dean for Academic Affairs and Post Graduate Studies: Dr. Tarek A. Barakat President of Quality Assurance Unit: Ass. Prof. Dr. Mohammed Algorafi Head of Mechatronics Engineering Department: Ass. Prof. Dr. Abdul-Malik Momin
	Deputy Rector for Academic Affairs Dr. Ibrahim AlMutaa Ass. Prof. Dr. Ahmed Mujahed Dr. Munaser Alsubri

Prepared by	Head of Department	Quality Assurance Unit	Dean of the Faculty	Academic Development Center & Quality Assurance
1- Prof. Dr. Abdullah Alkhorabi	Ass. Prof. Dr. Abdul-Malik Momin	Ass. Prof. Dr. Mohammad Algorafi	Prof. Dr. Mohammed AL-Bukhaiti	Ass. Prof. Dr. Huda Al-Emad
2- Ass. Prof. Dr. Ahmed Al-Arashi.				

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

Sana'a University
Faculty of Engineering
Mechatronics Engineering Department
Mechatronics Engineering Program

Elective Course (2)
Template for Course Plan of Machine Vision

I. - Information about Faculty Member Responsible for the Course:							
Name of Faculty Member	Prof. Dr. Abdullah Alkhorabi & Dr. Ahmed Al-Arashi	**Office Hours**					
Location& Telephone No.		**SAT**	**SUN**	**MON**	**TUE**	**WED**	**THU**
E-mail							

II. Course Identification and General Information:						
1.	Course Title:	Machine Vision.				
2.	Course Code & Number:	MT404.				
3.	Credit hours:	C.H				TOTAL
		Th.	Seminar	Pr	Tu.	
		2	-	2	-	3
4.	Study level/ semester at which this course is offered:	Fifth Year- First semester.				
5.	Pre –requisite (if any):	Computer Basics.				
6.	Co –requisite (if any):	None.				
7.	Program (s) in which the course is offered:	Mechatronics Engineering Program.				
8.	Language of teaching the course:	English Language.				
9.	Location of teaching the course:	Mechatronics Engineering Department.				
10.	Prepared By:	Prof. Dr. Abdullah Alkhorabi and Dr. Ahmed Al-Arashi				
11.	Date of Approval:					

Prepared by	Head of Department	Quality Assurance Unit	Dean of the Faculty	Academic Development Center & Quality Assurance
1- Prof. Dr. Abdullah Alkhorabi	Ass. Prof. Dr. Abdul-Malik Momin	Ass. Prof. Dr. Mohammad Algorafi	Prof. Dr. Mohammed AL-Bukhaiti	Ass. Prof. Dr. Huda Al-Emad
2- Ass. Prof. Dr. Ahmed Al-Arashi.				

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

III. Course Description:

The aim of this course is to introduce machine vision main concepts, applications and problems involved in machine vision systems development. The course introduces the "low-level" algorithms of image processing that are necessary for the "mid-level" vision or feature extraction. Then it covers "high-level" algorithms such as pattern recognition, and 3D analysis and modeling of objects and scenes.

IV. Course Intended learning outcomes (CILOs) of the course		Referenced PILOs
a.1	Define a machine vision system.	A1
a.2	Explain applications and problems involved in machine vision systems.	A2
b.1	Explore image segmentation using various techniques.	B2
b.2	Examine the studied image processing techniques using appropriate (Matlab) analysis.	B3
c.1	Compute a simple vision system.	C2
c.2	Choose the appropriate vision technique for a specific application.	C5
d.1	Co-operate with group members to develop and build problem solving machine vision systems.	D1
d.2	Review various web sites that provide information about machine vision	D7

Prepared by	Head of Department	Quality Assurance Unit	Dean of the Faculty	Academic Development Center & Quality Assurance
1- Prof. Dr. Abdullah Alkhorabi	Ass. Prof. Dr. Abdul-Malik Momin	Ass. Prof. Dr. Mohammad Algorafi	Prof. Dr. Mohammed AL-Bukhaiti	Ass. Prof. Dr. Huda Al-Emad
2- Ass. Prof. Dr. Ahmed Al-Arashi.				

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

V. Course Content:

A – Theoretical Aspect

Order	Units/Topics List	Sub Topics List	Number of Weeks	Contact hours
1.	Image Processing and Machine Vision.	• Digital Image System. • Machine Vision System.	1	2
2.	Image Modeling and Analysis.	• Image Fundamental Data Structures. • Image Binarization. • Thresholding. • Image Enhancement. • Image Filtering. • Fourier Transform.	2,3,4	6
3.	Image Segmentation.	• Thresholding. • Extraction of connected Components. • Subpixel-Precise Thresholding.	5,6	4
4.	Morphological Image Processing.	• Region. • Hit-or-Miss Transform. • Opening and Closing. • Skeletonization. • Distance Transform.	7,8	4
5.	Mid-Term Exam.	The first 4 chapters.	9	2
6.	Image Understanding.	• Feature Extraction: Region, Gray-Value, Contour Features • Classification • Object Recognition	10,11,12	6
7.	Motion Estimation.	• Optical Flow	13,14	4

Prepared by
1- Prof. Dr. Abdullah Alkhorabi

2- Ass. Prof. Dr. Ahmed Al-Arashi.

Head of Department
Ass. Prof. Dr. Abdul-Malik Momin

Quality Assurance Unit
Ass. Prof. Dr. Mohammad Algorafi

Dean of the Faculty
Prof. Dr. Mohammed AL-Bukhaiti

Academic Development Center & Quality Assurance
Ass. Prof. Dr. Huda Al-Emad

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

		• Motion Detection and Object Tracking		
8.	Wavelets and Multi Resolution Processing.	• Wavelets • Multi Resolution Processing	15	2
9.	Final Exam.	All the Chapters.	16	2
Number of Weeks /and Units Per Semester			**16**	**32**

B - Practical Aspect:

Order	Tasks/ Experiments	Number of Weeks	contact hours	Learning Outcomes
1.	Image Thresholding.	1,2	2	a1, a2, b1, b2, c1, c2, d1,d2
2.	Image Noise Reduction and Image Smoothing.	3	2	a1, a2, b1, b2, c1, c2, d1,d2
3.	Image Smoothing,	4	2	a1, a2, b1, b2, c1, c2, d1,d2
4.	Image Sharpening.	5	2	a1, a2, b1, b2, c1, c2, d1,d2
5.	Edge Detection.	6	2	a1, a2, b1, b2, c1, c2, d1,d2
6.	Opening and Closing.	7	2	a1, a2, b1, b2, c1, c2, d1,d2
7.	Skeletonization	8	2	a1, a2, b1, b2, c1, c2, d1,d2
8.	Project	9,10,11	6	a1, a2, b1, b2, c1, c2, d1,d2
9.	Final Practical Exam.	12,13,14	6	a1, a2, b1, b2, c1, c2.
Number of Weeks /and Units Per Semester 14			**28**	

VI. Teaching strategies of the course:

Lectures, Presentations, Assignments.
Labs , Mini-projects, Reports.

Prepared by	Head of Department	Quality Assurance Unit	Dean of the Faculty	Academic Development Center & Quality Assurance
1- Prof. Dr. Abdullah Alkhorabi	Ass. Prof. Dr. Abdul-Malik Momin	Ass. Prof. Dr. Mohammad Algorafi	Prof. Dr. Mohammed AL-Bukhaiti	Ass. Prof. Dr. Huda Al-Emad
2- Ass. Prof. Dr. Ahmed Al-Arashi.				

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

VII. Assignments:

No	Assignments	Aligned CILOs(symbols)	Week Due	Mark
1.	Exercises, Quizzes Home works, Class Activities and Assignments	a1, a2, b1,b2, c1, d1, d2.	1-14	10
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	Exercises, Quizzes Home works, Class Activities and Assignments	1-14	15	10%	a1, a2, b1,b2, c1.
2	Project (Written Report, Presentation and Practical exam)	13-15	30	20%	a1, a2, b1, b2, c1, c2, d1,d2
3	Mid-Term Exam.	9	15	10%	a1, a2, b1, b2, c1, c2.
4	Final Exam (theoretical)	16	90	60%	a1, a2, b1, b2, c1, c2.
Total			**150**	**100%**	

IX. Learning Resources:

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

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

1. E.R. Davies, 2012, "Machine Vision: Theory, Algorithms, Practicalities", 4 th Ed., Academic Press.

Prepared by
1- Prof. Dr. Abdullah Alkhorabi

Head of Department
Ass. Prof. Dr. Abdul-Malik Momin

Quality Assurance Unit
Ass. Prof. Dr. Mohammad Algorafi

Dean of the Faculty
Prof. Dr. Mohammed AL-Bukhaiti

Academic Development Center & Quality Assurance
Ass. Prof. Dr. Huda Al-Emad

2- Ass. Prof. Dr. Ahmed Al-Arashi.

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

	2. D. Forsyth and J. Ponce, 2011, "Computer Vision: A Modern Approach", 2nd Ed., Prentice Hall, Englewood Cliffs, NY.
2- Essential References.	
	1. Richard Szeliski, 2010, "Computer Vision: Algorithms and Applications, " 1st Ed., Spr 2. Rafael C. Gonzalez, Richard E. Woods, 2002, "**Digital Image Processing"**, 2nd Editio Prentice-Hall Inc. 3. **Carsten Steger, Markus Ulrich, Christian Wiedemann**, 2018,"Machine Vision Algorithms and Applications", Wiley-VCH-Verlag.
3- Electronic Materials and Web Sites *etc*.	
	1. en.wikipedio.org. 2. www.edn.com. 3. www.tmworld.com/Inspection_corner/ins_soc.html.

X. Course Policies:

Unless otherwise stated, the normal course administration policies and rules of the Faculty of Engineering apply. For the policy, see: ----------

1.	**Class Attendance:** - The students should have more than 75% of attendance according to rules and regulations of the faculty.
2.	**Tardy:** - The students should respect the timing of attending the lectures. They should attend within 15 minutes from starting of the lecture.
3.	**Exam Attendance/Punctuality:** - The student should attend the exam on time. The punctuality should be implemented according to rules and regulations of the faculty for mid-term exam and final exam.
4.	**Assignments & Projects**: - The assignment is given to the students after each chapter; the student has to submit all the assignments for checking on time.

Prepared by	Head of Department	Quality Assurance Unit	Dean of the Faculty	Academic Development Center & Quality Assurance
1- Prof. Dr. Abdullah Alkhorabi	Ass. Prof. Dr. Abdul-Malik Momin	Ass. Prof. Dr. Mohammad Algorafi	Prof. Dr. Mohammed AL-Bukhaiti	Ass. Prof. Dr. Huda Al-Emad
2- Ass. Prof. Dr. Ahmed Al-Arashi.				

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas

5.	**Cheating:** - If any cheating occurred during the examination, the student is not allowed to continue and he has to face the examination committee for enquires.
6.	**Plagiarism:** - If one student attends the exam on another behalf; he will be dismissed from the faculty according to the policy, rules and regulations of the university.
7.	**Other policies:** - All the teaching materials should be kept out the examination hall and mobile phones are not allowed. - Mutual respect should be maintained between the student and his teacher and also among students. Failing in keeping this respect is subject to the policy, rules and regulations of the university.

Prepared by	Head of Department	Quality Assurance Unit	Dean of the Faculty	Academic Development Center & Quality Assurance
1- Prof. Dr. Abdullah Alkhorabi	Ass. Prof. Dr. Abdul-Malik Momin	Ass. Prof. Dr. Mohammad Algorafi	Prof. Dr. Mohammed AL-Bukhaiti	Ass. Prof. Dr. Huda Al-Emad
2- Ass. Prof. Dr. Ahmed Al-Arashi.				

Rector of Sana'a University
Prof. Dr. Al-Qassim Mohammed Abbas