جامعة المجمعة
Majmaah University

Course Specifications

Muharram 1437 H

Institution:	Education College in Majmaah
Academic Department :	Biology
Programme :	Biology
Course :	Ecology BOT 213
Course Coordinator :	Dr. Hala Ali and Dr. Zeinab Abd Elmohdy
Programme Coordinator :	D. Mona Makia
Course Specification Approved Date :	30 / 11/1433 H

This form compatible with NCAAA 2013 Edition

A. Course Identification and General Information

1 - Course title : Ecology		Course Code: BOT 213	
2. Credit hours : (3)			
3 - Program(s) in which the course is offered: Biology			
4 – Course Language : Arabic			
5 - Name of faculty member responsible for the course: Dr. Hala Ali and Dr. Zeinab Abd Elmohdy			
6 - Level/year at which this course is offered : Third level			
7 - Pre-requisites for this course (if any) : • None			
8 - Co-requisites for this course (if any) : • None			
9 - Location if not on main campus : (Not applicable)			
10 - Mode of Instruction (mark all that apply)			
A - Traditional classroom	✓	What percentage?	50 %
B - Blended (traditional and online)	✓	What percentage?	5 %
D - e-learning		What percentage?	15 %
E - Correspondence		What percentage?	……. %
F - Other	✓	What percentage?	30 %
Comments : ……			

B Objectives

What is the main purpose for this course? Recognizes the concept of the environment and the ecosystem, the relationship between them and factors affecting them.
Briefly describe any plans for developing and improving the course that are being implemented : 1. Use of Internet sites that related with textbook topics. 2. Use of PowerPoint in teaching. 3. Use of internet to update textbook content. 4. Sharing experiences between the university and related scientific centers.

C. Course Description

1. Topics to be Covered

List of Topics		No. of Weeks	Contact Hours
1.	Definition of the environment, Ecology and their relationship to other sciences.	1	2
2.	Component of ecosystem ; living and non living	1	2
3.	Types of ecosystems	1	2
4.	Biological community	1	2
5.	Plant sequence and relationship between living organisms	1	2
6.	Midterm 1+ feedback	1	1
7.	Atmosphere as environmental factor	1	2
8.	Air and wind as environmental factor	1	2
9.	Light as environmental factor	1	2
10.	Heat as environmental factor	1	2
11.	Midterm 2+ feedback	1	1
12.	water	1	2
13.	Soil factors	1	2
14.	Ecological imbalance	1	2
15.	Recent technological methods that deal with ecological imbalance	1	2
	Practical part		
1.	Soil analysis physically	2	4
2.	Soil analysis chemically	4	8
3.	plant cover analysis quantitatively	5	10
4.	Devices of climatic measurements	3	6
5.	Revision	1	2

2. Course components (total contact hours and credits per semester):

	Credit	Contact Hours			Self-Study	Other	Total
		Lecture	Laboratory	Practical			
NCAAA	3 ch	28	30	-	-	-	58
ECTS	4.1 cp	28	30	-	50	13	121

3. Additional private study/learning hours expected for students per week.

2.5

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.1.1	Recognize concept of ecology and ecosystem as an integrated unit	Lecture	Theoretical exams
1.2.1	Characterize the various environmental factors and their impact on biodiversity	Discussion	Discussion and Theoretical exams
1.3.1	Classify components of ecosystem and their imbalance	Problem solving	Homework and Theoretical exams
2.0	**Cognitive Skills**		
2.1.1	Explain the effect of interactions between the components of the environment on the composition of the ecosystem	Problem solving	Theoretical exams
3.0	**Interpersonal Skills & Responsibility**		
3.1.1	Respond well in teamwork groups	Working in small groups	Discussion
4.0	**Communication, Information Technology, Numerical**		
4.1.1	Use modern technology in gathering and interpretation of information	e-learning	homework
5.0	**Psychomotor**		
5.1.1	Use properly laboratory devices and equipment in carrying out experiments of the course	Lab strategy	Practical exams and Lab report

5. Schedule of Assessment Tasks for Students During the Semester:

	Assessment task	Week Due	Proportion of Total Assessment
1	Midterm exam (1)	6th	10%
2	Midterm exam (2)	11th	10%
3	Homework, lab report and discussion	Throughout the semester	10%
4	Final practical exam	16th	20%
5	Final Theoretical exam	17th-19th	50%

D. Student Academic Counseling and Support

6-office hours per week according to the lecturer schedule.

The contact with students by e-mail , mobile, office and faculty website

Dr. Hala Ali

E.mail: h.saleh@mu.edu.sa

Dr.Zeinab Abd Elmohdy

E.mail : z.madkor@mu.edu.sa

E. Learning Resources

1. List Required Textbooks :

2. List Essential References Materials :

1. Abdullah (1433): Ecology, Faculty of Science, King Khaled University.
2. Abu-Elfath (1995): Science of Ecology, Deanship of Libraries Affairs in Riyadh, King Saud University

3. List Recommended Textbooks and Reference Material :

- .....

4. List Electronic Materials :

- www.google

5. Other learning material :

Microsoft Office, word , power point …….etc.

F. Facilities Required

1. Accommodation

- Number of seats in each hall equal 35
- Number of seats in each lab equal 20
- Mini lab for teaching
- Halls should be provided with advanced technology for teaching

2. Computing resources

- The hall should be provided with a computer
- Provide smart board and accessories

3. Other resources

- Climatic measurements devices (rain measuring device, temperature recording device, air pressure measuring device, measuring light intensity device
- wind intensity measuring device
- Devices for soil analysis (sieves - burning oven - hot plate- measuring the electrical conductivity of solutions)
- Equipped laboratories commensurate with the requirements of the course (devices and tools)

- lab Monitors

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching:

- A questionnaire for course evaluation is distributed among student

And then being analyzed

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor :

- Continuous follow up by supervisors
- Annual report of program

3 Processes for Improvement of Teaching :

- Provide the latest textbook and journals in library
- Allow the student to use website in library
- Organize program and training courses for staff members
- Periodic maintenance of teaching halls and lab
- Allow staff members to access international academic libraries and journals
- Apply the advanced technology in teaching process
- Apply e- learning program

4. Processes for Verifying Standards of Student Achievement

- Check marking by an independent department staff member of practical and final exam paper and model 1.
- check marking by the head of departments of a random sample (5%) of practical and final exam paper
- Check student exam paper by an independent faculty staff member of other department (5%)

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement :

- Results of student questionnaire of course evaluation.
- Course report.
- Program report.
- Program self-study.
- Periodical review of study plan and its improvement
- Periodical review of websites to update in the course

Course Specification Approved

Department Official Meeting No (6) Date 30 / 11 / 1433 *H*

Course's Coordinator		Department Head	
Name :	Dr.Hala Ali and Dr. Zeinab Abd Elmohdy	***Name :***	.....
Signature :	.....	***Signature :***	.....
Date :	15/ 4 / 1437 *H*	***Date :***	…./ … / …… *H*

Institution:	Education ……
Academic Department :	Biology ……
Programme :	Biology ……
Course :	Animal Histology ……
Course Coordinator :	Dr. Zeinab Al-Tahir Bakheet ……
Programme Coordinator :	Mona Makkeyah ……
Course Specification Approved Date :	30/ 11 / 1433 H

A. Course Identification and General Information

1 - Course title : Animal histology		Course Code: ZOO 211	
2. Credit hours : (3 hours)			
3 - Program(s) in which the course is offered: Biology			
4 – Course Language : Arabic			
5 - Name of faculty member responsible for the course: Dr. Zeinab El-Tahir Bakheet			
6 - Level/year at which this course is offered : Third Level			
7 - Pre-requisites for this course (if any) : • Cytology BIO123			
8 - Co-requisites for this course (if any) : • Not applicable			
9 - Location if not on main campus : (Not applicable)			
10 - Mode of Instruction (mark all that apply)			
A - Traditional classroom	√	What percentage?	60 %
B - Blended (traditional and online)	√	What percentage?	10 %
D - e-learning	-	What percentage?	0 %
E - Correspondence		What percentage?	0 %
F - Other	√	What percentage?	30 %
Comments : Other practical applications for the practical section of the course in the department laboratory			

B Objectives

What is the main purpose for this course?

The student shall be capable of:

Microscopically studying the tissues and organs related to their functions using optical microscope

Briefly describe any plans for developing and improving the course that are being implemented :

1- **Use power point**
2- **Navigating the related websites**
3- **The students shall prepare a brief study or scientific article as well as discussion**
4- **Updating education resources**
5- **Experience exchange between faculties and other universities**

having academic accreditation

C. Course Description

1. Topics to be Covered (Theoretical +Practical)

List of Topics	No. of Weeks	Contact Hours
Tissue concept - Epithelial tissues, their types and functions	2	8
Connective tissues, their types and functions	2	8
Muscle tissue, their types and functions	1	4
Nerve tissues, their types and functions	1	4
Mid-term Exam1+Feedback	1	3
Histological structure of skin and its appropriateness for its functions	1	4
Histological structure of the respiratory system and its appropriateness for its functions	1	4
Histological structure of the digestive system and its appropriateness for its functions	1	4
Mid-term Exam2+Feedback	1	3
Histological structure of the cardiovascular system and its appropriateness for its functions	1	4
Histological structure of the urinary system and its appropriateness for its functions	1	4
Histological structure of the reproductive system for male and female and its appropriateness for its functions	1	4
Types of exocrine and endocrine glands and their appropriateness for its functions	1	4

2. Course components (total contact hours and credits per semester):

	Credit	Contact Hours			Self-Study	Other	Total
		Lecture	Laboratory	Practical			
NCAAA	3 ch	28	30	-	-	-	58
ECTS	4.5 cp	28	30	-	56	18	132

3. Additional private study/learning hours expected for students per week.

3- hours weekly for free reading or navigating curriculum related websites

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
1.1.1	Recognize the scientific concept for the tissue and different types of tissues	-Lecture	-Written exams.
1.2.1	Identify the causes of various modification for every tissue	-Lecture	-Written exams.
.2.0	**Cognitive Skills**		
2.1.1	Explain the relation between the appropriateness of the histological structure of the tissue for the internal systems	-Lecture Brainstorming	-Written exams.
2.2.1	Compare between various types of tissues	-Lecture -Brainstorming	-Written exams.
3.0	**Interpersonal Skills & Responsibility**		
3.4.1	Perfect the skill of self-learning and responsibility.	-Discussion and dialogue	- Discussion
4.0	**Communication, Information Technology, Numerical**		
4.2.1	Perfects the skill of using technology and the modern techniques for research	-E-learning	-Research papers
5.0	**Psychomotor**		
5.2.1	Examine microscopic sectors with a detailed drawing of them .	-Laboratory strategy	-practical exams. -The Reports

5. Schedule of Assessment Tasks for Students During the Semester:

	Assessment task	Week Due	Proportion of Total

			Assessment
1	**First midterm exam**	7th week	10%
2	***Second* Midterm exam**	11th week	10%
3	**Practical activities, class engagement and continuous assessment**	During the semester	10%
4	**Final practical test**	16th week	20%
5	**Final Theoretical test**	17-19th week	50%

D. Student Academic Counseling and Support

faculty members shall provide academic consulting and guidance to students through

1. Office Hours shall be as semester schedule and be of 8 office hours per week
2. communicating through e-mail (email: z.eltahir@mu.edu.sa zeinabeltahir83@gmail.com

E. Learning Resources

1. List Required Textbooks :

- .....
- .....
- .....

2. List Essential References Materials :

- دليل الطالب للدروس العملية في علم الأنسجة الحيوانية (١٤١٦هـ) : الدكتور نوري طاهر الطيب و بشير محمود ، الطبعة الثانية- مطابع جامعة الملك سعود - الرياض.
- .....

3. List Recommended Textbooks and Reference Material :

- علم الأنسجة وتقنياتها . محمود، محمد الجوهري(١٤١٤ هـ): الطبعة الأولى- مكتبة الملك فهد الوطنية- الرياض.
- علم النسيج (الجزء النظري) دار الكتب الوطنية-بنغازي –ليبيا.

4. List Electronic Materials :

- **Histology, http://en.wikipedia.org/wiki**
- علم الأنسجة –الموسوعة العربية

5. Other learning material :

- **Using the internet**
- **Knowledge of computer as,** word , power point and excel

F. Facilities Required

1. Accommodation

- The class size shall commensurate the number of female students
- Providing adequate seats.
- the classroom shall be equipped with the latest teaching techniques and various display devices.
- Suitable lighting sources in the room and labs.
- Providing the devices such as microscopes in the lab

2. Computing resources

- Data Show
- PC

3. Other resources

- Completing the rest of the devices and animal models for histology and providing a sufficient number of well manufactured optical microscopes for every student

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching:

- Making a questionnaire to measure student achievement in the course.
- Annual reports by the department management

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor :

- Assessing of faculty member made by students through questionnaire.
- Assessment of course made by students through the distribution of questionnaires at the end of the semester.
- Internal follow-up as prepared by the department management

3 Processes for Improvement of Teaching :

- Providing modern scientific references and journals at the library.
- Providing the facility of using internet for students at the Library.
- Programs and training sessions for faculty members after official working hours.
- ensuring the provision of means and laboratory supplies required for the course.
- Follow up the latest and useful studies for teaching the course.
- Applying modern technology in the teaching process

4. Processes for Verifying Standards of Student Achievement

- **Reviewing exam answer papers that have been corrected by the course professor, another member from the department and an external member**

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement :

- **Regular meetings with the students for the positive and negative aspects.**
- **regular meeting of the faculty members to find out the strengths and weaknesses to overcome the later**
- **Reviewing and developing study plans depending on modern educational methods and the needs of society.**
- **Identifying the opinions of the students.**
- **continuous electronic access to specialzed sites related to the course**

Course Specification Approved

Department Official Meeting No (…..) Date … / …. / ….. *H*

Course's Coordinator		Department Head	
Name :	Dr. Zeinab Al-Tahir Bakheet Al-Tahir	***Name :***	Dr. Mona Makkie
Signature :	Zeinab	***Signature :***	.....
Date :	12/ 4 / 1437 *H*	***Date :***	…./ … / …… *H*

Institution:	College of Education
Academic Department :	Biology
Programme :	B.Sc
Course :	Organic Chemistry
Course Coordinator :	Muneerah Mohammed Alzouman
Programme Coordinator :	Dr.. Mona Abdullatif Makiya
Course Specification Approved Date :	30/ 11 /1433 H

A. Course Identification and General Information

1 - Course title :	Organic Chemistry	Course Code:	CHEM 201
2. Credit hours :	(2 hours theory + 1 hour practical = 3 credit hours)		
3 - Program(s) in which the course is offered:	Biology		
4 – Course Language :	Arabic		
5 - Name of faculty member responsible for the course:	Muneerah Mohammed Alzouman		
6 - Level/year at which this course is offered :	The 3rd level		
7 - Pre-requisites for this course (if any) :	• Physical and Inorganic Chemistry CHEM101		
8 - Co-requisites for this course (if any) :	• Not present		
9 - Location if not on main campus :	(Not applicable)		

10 - Mode of Instruction (mark all that apply)

A - Traditional classroom	√	What percentage?	%60
B - Blended (traditional and online)	√	What percentage?	10 %
D - e-learning	X	What percentage?	0 %
E - Correspondence	x	What percentage?	0 %
F - Other (Practical)	√	What percentage?	30%

Comments :

There are practical lessons

B Objectives

What is the main purposes for this course?

1. to gain the student a general idea about organic chemistry and organic compounds with methods of the identification of their composition and comparison between these compounds

2. to teach the student The definition of the some important organic compounds that interfere in important industries

3. to gain the student the skills that qualify her for laboratory work

4. to provide the student with the knowledge and theories and the latest developments in scientific fields

5. to make the student able on understanding the facts related to the practical aspects

6. to make the student able to use information teqnology for the collection and interpretation of information and ideas and to take responsibility for self-learning

7.to make the student able on dealing with technologies that used in the collection and interpretation of information and ideas and to take responsibility for self-learning

8. to make the student able on effectively communication verbally and in writing, and so get used to the confrontational style and self-confidence

9.to introduce innovative solutions to the problems that were suggested from the student taking into account the theoretical knowledge and practical experience of her

Briefly describe any plans for developing and improving the course that are being implemented :

1. Use of modern technologies in education in teaching
2. The development and updating of the topics in content of the course on the basis of new scientific theories after reviews of scientific researches in field of Organic Chemistry
3. Updating the scientific references to the course periodically
4. Development the teaching strategies and assessment methods used in the course
5 application of the feedback mechanism with the students periodically and use of its results.

C. Course Description

1. Topics to be Covered

List of Topics	No. of Weeks	Contact Hours
Showing general introduction about the course include introducing an overview about course specification and	1	2

introduce workshop to explain how the student deal with interface of the course on e-learning system and how the student can interact with the academic site of instructor		
Overview of organic chemistry in terms of the nature of the Chemical structure of organic compounds and the types of structural formulas and chemical bonds	1	2
Effective functional groups: Study the classification of organic compounds into different groups and common and iupac nomenclature and the aromatic and aliphatic hydrocarbons saturated and non-saturated including: alkanes	1	2
Alkenes	1	2
Alkynes	1	2
Mid-term exam1+feedback	1	2
Aromatic Compounds	1	2
Halide Alkyls	1	2
Alcohols	1	2
Amines	1	2
Mid-term exam2+feedback	1	2
Aldehydes	1	2
Ketones	1	2
Carboxylic Acids	1	1
Esters	1	1

The list of topics in Practical part	The number of weeks	Teaching hours
An introduction Explanation of the safety instructions in the laboratory Expirment (1) (a distinction between types of hydrocarbons)	1	2
Experience (2) chemical properties of alcohols	3	6
Experience (3) chemical properties of phenols	3	6
Experience (4) chemical properties of the aldehydes	2	4
Experience (5) chemical properties of ketones	2	4
Experience (6) chemical properties of carboxylic acids	2	4
Experience (7) chemical properties of esters	2	4

2. Course components (total contact hours and credits per semester):

	Credit	Contact Hours			Self-Study	Other	Total
		Lecture	Laboratory	Practical			
NCAAA	3 ch	28	30	-	-	-	58
ECTS	4.2 cp	28	30	-	50	15	123

3. Additional private study/learning hours expected for students per week.

2.6hrs

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
1.1.1	To gain a general knowledge about the essential and scientific theories in organic chemistry	Lectures	Editorial Exams
1.2.1	To know the relationship between the theories of biology and other scientific fields related to	Lectures	Editorial Exams
2.0	**Cognitive Skills**		
2.2.1	To analyzes the relationship between the nature of the construction and chemical composition of organic compounds and chemical reactions or processes that take place inside the bodies of living organisms in molecular	Lectures Experimental lessons	Editorial Exams Practical Exams

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
	and cellular levels		
3.0	**Interpersonal Skills & Responsibility**		
3.2.1	To exercise leadership of the group during teaching conditions in the laboratory	Cooperative learning	laboratory reports
4.0	**Communication, Information Technology, Numerical**		
4.1.1	To Communicate effectively both orally and in writing with the recipients from her colleagues in the course	Dialogue and discussion E-learning	The written Topics and comments in Scientific discussions that published on The learning management system D2l
4.2.1	To use the Information and communication technologies used in information collection , interpretation and implementation of teaching positions	E-learning	Activities (Homeworks) on The learning management system d2l
5.0	**Psychomotor**		
5.1.1	To mastered the practical use of tools and equipment in the laboratory experiments	Experimental lessons	laboratory reports Practical Exams

5. Schedule of Assessment Tasks for Students During the Semester:

	Assessment task	Week Due	Proportion of Total Assessment
1	The first test (theoretical)	6th week	10%
2	The 2ND test (theoretical)	11th week	10%
3	A variety of activities	the third week The sixth week	10%

		Ninth week	
4	The final test (practical)	16th week	50%
5	The final test (theoretical)	17-19th week	20%
Total			100%

D. Student Academic Counseling and Support

1. Office hours : 6 hours
2. phone# : 164043638
3. e-mail. m.alzoman@mu.edu.sa

E. Learning Resources

1. List Required Textbooks :

- There is no

2. List Essential References Materials :

- 1-Introduction to Organic Chemistry Tariq Mahmood Aldhiaflh Dar Al-Hamed for publication and distribution, - First Edition 2008
- 2. the basics of organic chemistry d. Mohammed and my grandfather continued - Modern academy for university book the first edition 2010

3. List Recommended Textbooks and Reference Material :

- Principles of Organic Chemistry d. Hassan Hazmi d. Mohammed Hassan - King Saud University (latest edition)
- Basis of organic chemistry d. Salem Thiyabi -mencrat King Saud University (latest edition)
- The principles of process chemistry Prof. Ahmed Medhat Islam - d. Mr. Ali Hassan - Egypt
- experiments in organic chemistry Mohammed Hassan Khraiji bookshop library (latest edition)

4. List Electronic Materials :

- Many seites contain of puplications on organic chemistry

5. Other learning material :

- Depend on using computer programs such as:
- E-learning system in the Majmaah University d2l
- Microsoft Office Programs such as Power Point and Word plus audio & video

files media player
- Educational CDs
- Evidences and pamphlets of regulatory rules for study and exams in Majmaah University
- Academic Guide Student

F. Facilities Required

1. Accommodation

- Furnitured Chemistry Laboratory with sufficient area to accommodate nearly 24 student as maximum so that the students is divided into sections
- Classrooms equipped with modern teaching techniques and suitable lighting and ventilation and enough seats for all students

2. Computing resources

- Electronic interactive smartboard with optical viewer device (projector)
- A good connection to the Internet for the students for digital researches purposes
- Training to students on e-learning system of Majmaah University and how it used

3. Other resources

- Laboratory of chemistry equipped in required material and tools to carry out different experiments, such as:
- Digital water baths - digital balance
- Water distillation device
- Glasswares & metal tools in sufficient numbers for students
- The necessary chemicals for carrying out experiments in sufficient quantities

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching:

- The distribution of questionnaires to assess the course and the instructor for students
- Immediate assessment for oral discussions with the student during lectures and practical lessons
- Direct dialog with students about their understanding of scientific subjects and listening to their points of view
- Multi and sequential activities on e-learning system (D2L) required to be done from students

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor :

- Multi and sequential activities on e-learning system (D2L) required to be done from students to measure the level of academic achievement

3 Processes for Improvement of Teaching :

1. Use of modern technologies in education in teaching
2. The development and updating of the topics in content of the course on the basis of new scientific theories after reviews of scientific researches in field of Organic Chemistry
3. Updating the scientific references to the course periodically
4. Development the teaching strategies and assessment methods used in the course
5 application of the feedback mechanism with the students periodically and use of its results.

4. Processes for Verifying Standards of Student Achievement

- Review of the answer sheets that have been corrected by instructor course at first and secondly from members of the in a committee control of exams
- Auditting of a sample of answer sheets from department Head.
- Matching the grades sheet with those entered in on academic system gate with faculty member
- External auditting of a sample of answer sheets from an independent external committee.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement :

- 1. Review of the new researches in the field of organic chemistry periodically about new discoveries and scientific theories and concepts to be added as updated content to the course
- 2. Assess the effectiveness of teaching strategies and methods of assessment used in the course for improvement purposes periodically
- 3. Measuring of student satisfaction level about the performance of faculty members by questionnaires periodically
- 4. Carrying out periodic updates on the books used as sceintific references for the course
- 5. Review of Curriculum under any comprehensive update for study plan for the program and make some changes

Course Specification Approved

Department Official Meeting No (…..) Date … / …. / ….. *H*

Course's Coordinator		**Department Head**	
Name :	Muneerah Mohammed Alzouman	***Name :***	Dr.. Mona Abdullatif Makiya
Signature :	……	***Signature :***	……
Date :	11./4/ 1437 *H*	***Date :***	…./ … / …… *H*

Institution:	Majmaah Faculty of Education
Academic Department :	Department Biology
Programme :	Biology
Course :	Morphology and Anatomy OF flowering plant
Course Coordinator :	Dr. Aisha Ohag Osman Mohammed
Programme Coordinator :	Dr. Mona Makkie

Course Specification Approved Date :	30/ 11 / 1433 H

A. Course Identification and General Information

1 - Course title :	Morphology and anatomy of flowering plants — Course Code: **BOT 212**
2. Credit hours :	(2 hours Theory + 2 hours Practical) (Credited 3 hours).
3 - Program(s) in which the course is offered:	Biology
4 – Course Language :	Arabic
5 - Name of faculty member responsible for the course:	Dr. Aisha Ohag Oman
6 - Level/year at which this course is offered :	Third Level

7 - Pre-requisites for this course (if any) :

- not applies

8 - Co-requisites for this course (if any) :

- not applies

9 - Location if not on main campus **:**

(.....)

10 - Mode of Instruction (mark all that apply)

A - Traditional classroom	√	What percentage?	٧٠%
B - Blended (traditional and online)	√	What percentage?	٠%
D - e-learning	√	What percentage?	١٠%
E - Correspondence		What percentage?	٠% .....
F - Other	√	What percentage?	٢٠%

Comments :

.....

B Objectives

What is the main purpose for this course?

To provide students with basic information about the morphology of the flowering plant and also the main characteristics of the plant organisms and an anatomy to show the different structures of cells and tissues and their functions.

Briefly describe any plans for developing and improving the course that are being implemented :

1- Periodic review course by the committee plans and schedules the department.
2- Regularly updated content as a modern developments in the field.
3- Keep up with the rapid development in the area through the use of new technologies.

4- Updating resources of learning the course regularly.

C. Course Description

1. Topics to be Covered (Theoretical+ Practical)

List of Topics	No. of Weeks	Contact Hours
Morphology of complete flowering plant	1	4
Study the root system (its functions, regions, types, mutations) shoot system: stem, bud, the leaf (morphology and functions - modification - distribution).	2	8
Study meristematic tissue (initial) and tissue types and their present in the plant and functions.	2	8
Midterm-Exam1+Feedback	1	3
Vascular cambium and phellogen cambium, and periderem, wound phellogen lenticls. Vascular bundle and their types.	1	4
Epidermis tissue (Epidermis cells, stomata) Secretory structures (external and internal) - and functions and environmental importance.	1	4
Anatomy of the primary structure of roots in monocots and dicots, anatomy of the secondary structure of the roots of the elderly.	2	8
Midterm-Exam2+Feedback	1	3
Anatomy primary structure of the leg in monocots and dicots, anatomy of the secondary structure elderly in mono and dicot stems, growth layers, soft wood and sap wood. connection between the root and vascular stem.	2	8
Anatomy of the primary structure of the leaves in monocots and dicots and defoliation.	1	4
The effect of the environment on the structure and functions of the plant and the distinction between xerophytes and hydrophytes plants morphologically and anatomically.	1	4

2. Course components (total contact hours and credits per semester):

	Credit	Contact Hours			Self-Study	Other	Total
		Lecture	Laboratory	Practical			
NCAAA	3 ch	28	30	-	-	-	58
ECTS	4.5 cp	28	30	-	58	15	131

3. Additional private study/learning hours expected for students per week.

3 hrs.

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
1.1.1	Basic information about the morphology of the plant tissue and its constituent organisms of the main characteristics and anatomy of the plant.	-Lecture	-Written exams.
1.2.1	Effect of environment on the plants	-Lecture	-Written exams.
2.0	**Cognitive Skills**		
2.1.1	To conclude the effect of the environment on different plant species.	-Lecture Brainstorming	Written exams.
2.2.1	Compare monocot and dicot morphologically and anatomically.	-Lecture Brainstorming	Written exams.
3.0	**Interpersonal Skills & Responsibility**		
3.4.1	Perfects the skill of self-learning and responsibility	-Discussion and dialogue	- Discussions
4.0	**Communication, Information Technology, Numerical**		
4.2.1	Use technology information in the research and writing proficiently.	e-learning	Research papers
5.0	**Psychomotor**		
5.2.1	Examine microscopic samples with a detailed drawing of them .	Laboratory strategy	Practical tests The observation Reports

5. Schedule of Assessment Tasks for Students During the Semester:

	Assessment task	Week Due	Proportion of Total Assessment

1	Assessment task (writing an article, test, group project, final test ..... etc.	Weekly	
2	Reports-duties- oral question-e. learning	weekly	10%
3	Mid-term exam (1)	6th week	10%
4	Mid-term exam (2)	11th week	10%
5	Final practical test	16thweek	20%
6	Final theoretical test	17-19thweek	50%

D. Student Academic Counseling and Support

Dr. Aisha Ohag Osman
E.mail: ai.osman@mu.edu.sa

E. Learning Resources

1. List Required Textbooks :

- None
- .....
- .....

2. List Essential References Materials :

١. أساسيات علم النبات (الشكل الظاهرى والتركيب الداخلى) (٢٠١٢)، المنوفى و آخرون مكتبة المعارف الحديثة، الإسكندرية.

٢-. مورفولوجيا وتشريح النبات– د. حسين العروسي، د.عماد الدين وصفي– مكتبة المعارف الحديثة–الإسكندرية عام ٢٠٠٠م.

3. List Recommended Textbooks and Reference Material :

١. مورفولوجيا النبات وتشريحه – الدعيجي ،عبد الله رشيد ،محمد عبدو العودات – مطابع جامعة الملك سعود ، عمادة شؤون المكتبات ، الرياض ١٩٩٢م .

٢. تشريح النبات العملي - الدعيجي ،عبد الله رشيد ،محمد عبدو العودات – مطابع جامعة الملك سعود، عمادة شؤون المكتبات ، الرياض ١٩٩٢م .

٣. النبات العام – العروسي ، حسين، أسامة عبد الحميد المنوفي ، جامعة الإسكندرية ، مكتبة المعارف الحديثة ، الإسكندرية ١٩٩٨م.

٤. مورفولوجيا النباتات الزهرية (علم الشكل والتركيب في النباتات الزهرية) – الحديدي ، مصطفى صالح، دار المريخ للنشر، الرياض ١٩٩٤م .

- ٥. الشكل الظاهري والتركيب التشريحي للنبات – سمور، رضا حلمي أحمد، دار الأندلس للنشر والتوزيع، حائل ٢٠٠٣م .

4. List Electronic Materials :

Websites related to the course.

5. Other learning material :

- Word and power point programs .

F. Facilities Required

1. Accommodation

Buildings
Class room for 40- 50

2. Computing resources

Computer connected with internet.

3. Other resources

- Smart blackboard
- Prepared slices of vegetarian samples and other sections of the plant.

Stereophonic sections of plant

Light microscopes
Black board

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching:

Distribution of questionnaires to students at the end of the semester for special assessment for the course.
Meeting some registered students interview course to take opinions.

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor :

Evaluation of colleagues in the department to perform faculty member in the provision of course and effectiveness of the tools used to be presented.
Internal periodic review for course (committee for plans of study and schedules).
Self-assessment of the program.
External audit.
The visiting professors assessment.

3 Processes for Improvement of Teaching :

Take audit results of the internal and external recommendations especially for the course.
Committee directives for the plans of study and schedules on the course.
Department management guidance about the performance faculty member based on direct observation.

4. Processes for Verifying Standards of Student Achievement

To use supervisors of similar courses of the course outside the university to review a sample of papers answers that have been corrected by a faculty member.
Collective correction by members of the department
Sample of papers that have been corrected by a special committee reviewing the department.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement :

Comparing the course to similar courses made in similar sections. .
Reviewing course characterization and syllabus regularly by a committee study plans and schedules.
Updating learning resources related to the course to make sure to keep pace of developments in the field.
Statistical evaluation of the results for students to benefit from the course and its results in the improve and develop.

Course Specification Approved
Department Official Meeting No (…..) Date 30 / 11 / 1437 *H*

Course's Coordinator		Department Head	
Name :	Dr. Aisha Ohag	***Name :***	Dr. Mona Makkya
Signature :	……	***Signature :***	……
Date :	12/ 4 / 1437 *H*	***Date :***	…./ … / …… *H*