

Ministry of Higher Education and Scientific Research

The supervision and scientific evaluation apparatus

Department of Quality Assurance and Academic Accreditation

**Academic program description form for colleges and institutes for the
academic year 2025/2026**

University: Al-Iraqiya

College / Institute: College of Education

Scientific Department: Life Sciences (Biology)

File filling date: 8/6/2026

Academic program description form for colleges and institutes
for the academic year

University: Al-Iraqiya

College / Institute: College of Education

Scientific Department: Life Sciences (Biology)

File filling date: 8/6/2026

Signature:

Name of the department head: Prof. Dr : Raghad Khlf Ibrahim

Date: 8/6/2026

Signature:

Scientific assistant name: Prof. Dr : Idris Ibrahim Saleh

The file was checked by the Division of Quality Assurance and University Performance.

Name of the Director of Quality Assurance and University Performance Division:

Date / /2026

Signature

The endorsement of the Dean

Description of the academic program

This description of the academic program provides a necessary summary of the most important characteristics of the program and the learning outcomes expected of the student to achieve, demonstrating whether he has made the most of the available opportunities. It is accompanied by a description of each course within the program.

1. The educational institution: Al- Iraqia University.
2. Scientific Department / Center: Department of Biology.
3. The name of the academic or professional program: Bachelor of Biology.
4. The name of the final certificate: Bachelor of Education.
5. The academic system (Annual / Courses / Other): Annual.
6. Accreditation program accredited: National Accreditation Standards.
7. Other external influences: Not found.
8. Description preparation date: 6/8/2021.
9. The objectives of the academic program:
 - 1- Teaching in all middle and secondary schools by working as a teacher.
 - 2-Teaching in all specialized education centers such as community service centers.
 - 3-Working in governmental and private agencies in which knowledge of some concepts of life sciences is required.
 - 4- Working in research centers that require knowledge of life sciences and biotechnologies.
 - 5- Acting as teaching assistants for distinguished students in the life sciences departments and the corresponding departments.
 - 6- Graduating a generation qualified to join the graduate studies program in the corresponding colleges.
10. The required program outcomes and methods of teaching, learning and assessment :
 - Cognitive goals.
 - A- Knowledge and understanding
 - A1- Knowledge of basic concepts in mathematics, statistics and operations research.
 - A2- Knowledge of basic concepts in computers and programming.
 - A3- Knowledge and familiarity with the rules of the English and Arabic languages.
 - A4- Familiarity with some moral, social and religious values.
 - B- The program's skill objectives:

B 1 - Cognitive skills, which include the student's ability to link and understand the relationship between the content of the curriculum.

B2 - Performance skills, which include the student's ability to conduct an experiment or analyze the facts he has learned.

B3 - Explanatory skills, which include the student's ability to explain what he has learned.

-Methods of teaching and learning

1- Short cognitive tests.

2- Conducting scientific research and following up on all new developments.

3- Quarterly exams.

4- Assignments and discussions within the lecture

-Evaluation modalities

Short and rapid tests

Verbal

Written

Assignments

Researches

C- Emotional and moral goals:

1- Developing the skills of listening, receiving, paying attention and paying attention.

2- Developing the skills of response, initiative, discussion, elaboration and cooperation.

3 - Developing the skills of accepting value and direction to support, enhance, support, assist and promote cooperative education.

4- Organizing attitudes and values and making the student discuss, consider, coordinate, specify or issue judgments.

5- Representing values, publicizing them, taking pride in them, and steadfast in them, such as correct customs, traditions, religion, and patriotism, teaching and learning methods.

-Methods of teaching and learning:

1- Use charts and illustrations

2- The student's understanding of the content of the lecture and his ability to express it in the simplest and fastest way.

3- Use summaries.

4- Using keywords.

-Evaluation modalities:

Direct tests.

Smart questions.

Examinations with graphics and illustration figures.

D- The transferred general and qualifying skills (other skills related to employability and personal development).

D1 - Acquisition of the skills of using special tools for conducting laboratory experiments.

D2 -- Acquire the skills of using a light microscope.

D3- Acquisition of understanding skills through illustrations and real forms of laboratory models.

D4- Acquiring the skills of recognizing the real relationship between living organisms within the ecosystem.

-Methods of teaching and learning:

1- Avoiding selfishness and working in a team spirit.

2- The ability to solve problems in difficult courses and to use drawings and abbreviations.

3- The ability to understand the relationships and link them in the different lectures.

-Evaluation modalities:

Short tests

1- Dialogue questions and discussions within the lectures.

2- Assigning the student to conduct research related to the course.

3- Attempting to identify the student's mistakes and correct them for him.

-Live lectures

-Laboratories.

-Ready-made software.

-Smart board.

- Power Point.

11. Program Structure:

Educational Stage	Course code	Name of the course	Credit hours	
			Theoretical	Practical
		Biology	2	2

First Stage		Plant anatomy	2	2
		Cell Biology	2	2
		General Chemistry	1	2
		Geology	1	-
		Foundations of Education and Teaching	1	-
		Developmental and Educational Psychology	2	-
		Arabic	1	-
		English Language	1	-
		Computer Science 1	1	-
		Biosafety and Biosecurity	1	-
		Human Rights and Democracy	1	-
Second Stage		Invertebrates	2	2
		Plant Taxonomy	2	2
		Tissues	2	2
		Embryology	2	2
		Biochemistry	1	2
		Educational Administration and Secondary Education	2	-
		Computers 2	1	-
		English Language	1	-
		Crimes of the Ba'ath Party in Iraq	1	-
		Arabic	1	-
		Comparative anatomy of	2	2

		chordates		
Third Stage		Algae and Archegoniates	2	2
		Genetics	2	2
		Fungi	2	2-
		Educational Counseling and Mental Health	2	-
		Teaching Curricula and Methods	2	2
		Ecology and Pollution	2	2
		Methodology and Philosophy of Scientific Research	2	-
Fourth Stage		Microbiology	2	2
		Optional	2	-
		Animal Physiology	2	2
		Plant Physiology	2	2
		Parasitology	2	2
		Immunology	2	2
		Research Project	2	2
		Measurement and Evaluation	2	-
		Observation and Application	1	2

12. Planning for personal development:

1- Thinking.

2- Planning, monitoring, organizing.

3- Using mental stimulants through smart questions.

4- Using cognitive strategies.

5- Logical thinking.

6- Developing the creativity capabilities of the student.

13. Admission criteria (setting up regulations related to joining a college or institute):

Central admission based on average, age and specialization.

14. The most important sources of information about the program:

1- Zubaydah Muhammad Qarni. 2001. Recent trends in teaching science, Al-Maktaba Al-Asriyya.

2- de Marrio and others. 2009. Dimensions of thinking, translated by Yaqoub Nashwan, Muhammad Khattab, Dar Al-Furqan Amman.

Template for course specification

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programmer specification.

1. Teaching Institution	Iraqia University / College of Education
2. University Department/Centre	Department of biology
3. Course title/code	Biology Statistics / Second stage
4. Modes of Attendance offered	Students Presence
5. Semester/Year	Annual system / 2025-2026
6. Number of hours tuition (total)	Two hours a week
7. Date of production/revision of this specification	8/ 6/ 2026

8. Aims of the Course

- 1- The course deals with the definition of biostatistics and its connection with other sciences, the identification of the most important statistical symbols and terminology that pertain to students and researchers, and the nature of data and variables.
- 2- The course includes the study of tabular presentation and graphic representation of frequency distribution tables
- 3- It also deals with the study of different measures of central tendency
- 4 -It also includes a study of the most important measures of dispersion and difference and the most widely applied

9. Learning Outcomes, Teaching ,Learning and Assessment Methode

A- Cognitive goals .

- 1- This course aims to teach statistical symbols and terminology and their relevance to the various topics and standards of statistics
- 2- Benefit from the tabular display of raw data and how to classify them in special tables, represent them with graphs, or express them in forms and analyze them .
- 3- Understanding measures of central tendency and estimating the value around which the majority of the data is concentrated and that this average or centered value is a single number that expresses or represents all the data of that group
- 4- Understanding the measures of dispersion and difference and how to measure the extent of divergence or convergence of values, which are used as a statistical indicator to determine the degree of convergence or dispersion .
- 5- Study probability distributions and how to predict outcomes .

B. The skills goals special to the course.

1. Understanding and appreciating the scientific ideas within the course that the student is exposed to in practice and how these ideas relate to each other .
2. Establish a strong and solid foundation for Biology statistics .
3. The ability to demonstrate and master theoretical and practical statistical skills orally and in writing, in a lecture, in the laboratory and in an examination
- 4- The ability to read relevant research and scientific literature .

Teaching and Learning Methods

Giving theoretical lectures through the use of the regular blackboard .

Assessment methods

1. First semester exam 20%
2. Second semester exam 20%
3. Final exam 40%

C. Affective and value goals

- 1- Create a spirit of competition among students
- 2 - Enhancing the student's self-confidence
- 3 - Linking science to the events of daily life

D. General and rehabilitative transferred skills(other skills relevant to employability and personal development)

- 1- Expanding the student's thinking and awareness by linking statistics with other sciences
- 2- The student does not rely solely on the teacher
- 3- Using accuracy in the scientific answer
- 4 - Investing in modern statistical programs to reach scientific results .

10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	2	Knowledge of life statistics and its connection with other sciences and the most important statistical symbols	Introduction in Statistics	Theoretical lectures	daily and quarterly exams
2	2	Know the types of statistical data	Data types and statistical symbols		
3	2	Identify the types of statistical tables and represent them graphically	Tabular presentation and graphic representation		
4	2	Data distribution in frequency tables	Frequency distribution tables		
5	2	A study of some measures of central tendency	measures of central tendency		
6	2	Study the application of these standards	Arithmetic mean, median, and mode		
7	2	Study the most important measures of dispersion or difference	Measures of dispersion or difference		
8	2	Study the application of these standards	range and mean deviation		
9	2	Study the application of these standards	Variance, standard deviation, and standard error		
10	2	Study the application of the coefficient of difference	Measures of relative dispersion		
11	2	Probability concepts and their applications	probability distributions		
12	2	Moral test study	Statistical tests		
13	2	The sum of squares of a number of independent variables	chi square distribution		

14	2	Data analysis to reach results	Variance analysis		
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11. Infrastructure	
1. Books Required reading:	nothing
2. Main references (sources)	Introduction to statistics / d. Khashaa Mahmoud Al-Rawi
A- Recommended books and references (scientific journals, reports...).	Recent scientific reports and research
B-Electronic references, Internet sites...	A number of scientific webcites
12. The development of the curriculum plan	
Reviewing lectures and vocabulary for relevant materials in Iraqi and international universities and trying to include them in the description of this course, in addition to following up on the modern statistical techniques and programs developed in this field and adding them to the description of this course.	

TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	College of Education / Iraqi University
2. University Department/Centre	Department of biology
3. Course title/code	Elective (molecular biology) / fourth stage
4. Modes of Attendance offered	Students Presence
5. Semester/Year	Annual system / 2025-2026
6. Number of hours tuition (total)	Two hours a week
7. Date of production/revision of this specification	8/ 6/ 2026
8. Aims of the Course	
The course deals with the study of deoxyribonucleic acid and RNA, in terms of structure, function and their interactions with proteins.	
2- The course includes the study of DNA replication, DNA repair mechanisms, transcription, building proteins, and regulating gene expression.	
3- Deals with mechanisms regulating gene expression, building proteins, interactions at the protein level, translating RNA, and controlling its stability.	
4- It also includes the modification mechanisms of RNA, and post-transcriptional processes that include studying the structure and function of genes, and chromosome remodeling.	
9. Learning Outcomes, Teaching ,Learning and Assessment Methode	

A- Cognitive goals .

A1- This course aims to teach the process of biosynthesis in living organisms in their different stages in terms of identifying the composition of nucleic acids in terms of structure, function, chemical composition, method of transcription and interaction with proteins to form chromosomes.

A2-- Understanding DNA transcription, errors that may occur during this process, and how to fix them

A3- Knowing the types of RNA and how it is transmitted and stabilized.

A4- Determine the changes that occur in RNA.

A5- Translating proteins and identifying the mechanism of gene expression and gene regulation.

B. The skills goals special to the course.

B1. Understanding and getting used to the basic ideas contained within the various facts that the student is exposed to in practice and how these ideas are related

B2 - Establish a strong and solid foundation for molecular biology.

B3 - The ability to demonstrate mastery of molecular technical skills orally and in writing, in a lecture, in the laboratory and on an exam.

B 4- The ability to read relevant research and scientific literature.

Teaching and Learning Methods

Giving theoretical lectures through the use of the data show and through the use of Power Point.

Assessment methods

1. First semester exam 20%

2. Second semester exam 20%

3. Final exam 60%

C. Affective and value goals

C1. Create a spirit of competition among students

C 2 - Enhancing the student's self-confidence

C 3 - Linking science to the events of daily life

D. General and rehabilitative transferred skills(other skills relevant to employability and personal development)

D1. Expansion of the student's thinking and awareness by linking the general to modern devices.

D2- The student does not rely solely on the teacher

D3- Using accuracy in the scientific answer

D4 - Investing in modern programs to reach scientific results

10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	2	Knowledge of molecular biology and its connection with other sciences.	Introduction in Molecular biology	Theoretical lectures	daily and quarterly exams
2	2	Learn about the structure of the chromosomes of the cell	The Chromosomes		
3	2	Identify the genetic material in the cell, the genetic material DNA and RNA	The Genetic Material		
4	2	Learn how DNA replicates	DNA replication		
5	2	Identify genes, their inherited structure and function	The Genes		
6	2	Learn how DNA copies	Transcription (Part 1)		
7	2	Learn how DNA copies	Transcription (Part 1)		
8	2	Learn about how protein in the cell makes	Translation		
9	2	The existence of an operon and its function	The Operons		
10	2	Identification of viruses and their gene expression.	Gene expression in viruses		
11	2	Identifying genetic mutations and their types	Genetic mutations		
12	2	Learn about PCR technique	polymerase chain reaction		
13	2	Learn about genetic engineering technology.	Genetic engineering (Part 1)		
14	2	Learn about genetic engineering technology.	Genetic engineering (Part 2)		

11. Infrastructure	
1. Books Required reading:	nothing
2. Main references (sources)	Introduction to Molecular Biology / Dr. Khaled Al-Kubaisi
A- Recommended books and references (scientific journals, reports...).	Recent scientific reports and research
B-Electronic references, Internet sites...	A number of scientific webcites
12. The development of the curriculum plan	
Reviewing lectures and vocabulary for relevant materials in Iraqi and international universities and trying to include them in the description of this course, in addition to following up on the new technologies developed in this field and adding them to the description of this course.	

Course Specification/Parasitology

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	Al-Iraqia University/college of education
2. University Department/Centre	Department of biology
3. Course title/code	Parasitology
4. Modes of Attendance offered	Two semester / yearly
5. Semester/Year	2025/2026
6. Number of hours tuition (total)	Four hours weekly=160 hours yearly for both studies
7. Date of production/revision of this specification	1 September 2026
8. Aims of the Course	The course recognized a set of academic standards that the college of education students should accomplish and also is to guarantee the gaining of the minimum required skills by the students before their graduation.
9. Learning Outcomes, Teaching ,Learning and Assessment Method	Familiarity and understanding of basic concepts of zootonic parasite and study their life cycle, prevention, treatment and diagnosis. Knowledge of basic concepts in medically important parasite and their relation with human health.

A- Cognitive goals.

Communicate effectively with the public, professional colleagues and appropriate authorities and understand medically important parasite and to study how to control the epidemic.

B. The skills goals special to the course.

Discerning and problem-solving method of use. The ability to achieve commitment and responsibility and leadership towards excellence and creativity in the field of profession and work in lab

Teaching and Learning Methods

Lectures

Practical sections

Assessment methods

students' assessments in relation to the described learning outcomes

Short tests

discussions within lectures

10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1		Introduction	TH/ -Introduction and definitions of term s. -Effects of parasites on their hosts Transmission of parasite infestation. -Life cycles. -Immunology. P/ - General laboratory diagnosis of parasitism - Stool and Blood examination.	2 hours theory 2 hours in lab	

2	5	Phylum: protozoa	Introduction and definitions of terms . - protozoal examintions		
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			equi Ascaridia galli +Hetrakis gallinarum .		
3	5	Phylum: Nematoda	Ancylostoma		
4	5	Phylum: Nematoda	Trichonematidae and Ancylostomatidae. -)		
5	5	Phylum: Nematoda	Trichostrongylidae, Dictyocaulidae)		
6	5	Phylum: Nematoda	Trichinellidae.		
7	5	Phylum: Nematoda	Spriuroidae and Fillariidae. - Trichuris trichura.		
8			Mid-term exam.		Theoretical (25) and practical (10) exams + reports (5)

9		Phylum: Platyhelminthes	-Family: Taeniidae.		
10		Phylum: Platyhelminthes	-Anoplocephaliidae and Thysanostonidae. - Raillietina (mature and gravid) R.tetragona scolex,		
11		Phylum: Platyhelminthes	Dipylidiidae.		
12		Phylum: Platyhelminthes	Hymenolepididae and Mesocystoidae. - Taenia spp (eggs+(mature and gravid)+scolex) of T.pisiformis,proto scolex, of Coenurus cerebralis		
13		Phylum: Platyhelminthes	Diphyllobothriidae. - Echinococcus granulosus		
14		Phylum: Trematoda	Families: Fasciolidae - Fasciola hepatica, Life cycle,		

15		Phylum: Trematoda	-Schistosomatidae. - Schistoma (male,female) In copulation,eggs of S.mansoni,eggs, S.japonicum+cercaria		
			Mid and Final-term exams.		theory and practice exam (30 +70)

11. Infrastructure	
1. Books Required reading:	
2. Main references (sources)	J.D. Smyth, (1994). Introduction to Animal Parasitology, 3 rd Edition. Cambridge Univ. Press, Cambridge . Cheng, T.C. (1984). General Parasitology. Academic Press. 2 nd Edition .
A- Recommended books and references (scientific journals, reports...).	Chandlers and Read (1961). Introduction to Parasitology. John Wiley & Inc., New York
B-Electronic references, Internet sites...	Online lectures of the college of education /Baylon university www.sciencedirect.com www.Pubmed.com
12. The development of the curriculum plan	
To Develop theoretical and practical knowledge about collection and processing of samples such as urine, blood, sputum, stool, CSF etc., Method of examination, culture and identification by periodical visits to medical veterinary colleges Also to Develop practical knowledge about commonly used serological tests in such as ELISA and microscopic examination and culture of specimens in parasitology	

Course Specification/Microbiology

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	Al-Iraqia University/college of education
2. University Department/Centre	Department of biology
3. Course title/code	Microbiology
4. Modes of Attendance offered	Two semester / yearly
5. Semester/Year	2025/2026
6. Number of hours tuition (total)	Tow hours weekly=80 hours yearly for both studies
7. Date of production/revision of this specification	1 September 2026
8. Aims of the Course	The course recognized a set of academic standards that the college of education students should accomplish and also is to guarantee the gaining of the minimum required skills by the students before their graduation.
9. Learning Outcomes, Teaching ,Learning and Assessment Method	Familiarity and understanding of basic concepts of microbiology and study their life, prevention, treatment and diagnosis. Knowledge of basic concepts in medically important bacteria and their relation with human health.

A- Cognitive goals.

Communicate effectively with the public, professional colleagues and appropriate authorities and understand medically important bacteria and to study how to control the epidemic.

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B. The skills goals special to the course.

Discerning and problem-solving method of use. The ability to achieve commitment and responsibility and leadership towards excellence and creativity in the field of profession and work in lab

Teaching and Learning Methods

Lectures

Practical sections

Assessment methods

Short tests

discussions within lectures

10. Course Structure

Week	Hours	ILOs	Unit/Module orTopic Title	Teaching Method	Assessment Method
1		Introduction n	sterilization.	2 hours in lab	

2			Culture media		
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3			microscope		
4			Microbiology cultures-		
5			Bacterial staining		
6			Differential methods		
7			Acid fast stain.		
8			Capsule stain.		

9			Structural stains		
10			Bacterial movement		

11. Infrastructure

11			Bacterial sensitivity to antibiotics		
12			Enzymes reactions		
13			Enzyme reactions in diagnosis		

1. Books Required reading:	Jawetz,E.; Brook, G.; Botel,S. and morse, S.A.(2013)
2. Main references (sources)	Jawetz,E.; Brook, G.; Botel,S. and morse, S.A.(2013) .
A- Recommended books and references (scientific journals, reports...).	Practical manual of medical microbiology
B-Electronic references, Internet sites...	Online lectures of the college of science /tikrit university www.Pubmed.com
12. The development of the curriculum plan	
To Develop theoretical and practical knowledge about collection and processing of samples such as urine, blood, sputum, stool, CSF etc., Method of examination, culture and identification Also to Develop practical knowledge about commonly used serological tests in such as ELISA and microscopic examination and culture of specimens	

Template for course specification

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programmer specification.

1. Teaching Institution	Iraqia University / College of Education
2. University Department/Centre	Department of biology
3. Course title/code	Plant physiology / fourth stage
4. Modes of Attendance offered	Students Presence
5. Semester/Year	Annual system / 2025-2026
6. Number of hours tuition (total)	Two hours a week
7. Date of production/revision of this specification	1/ 9/ 2026
8. Aims of the Course	
1- The course deals with the study of water, its properties, its physiological importance, water relations in plants, and various water efforts .	
2- The course includes the study of plant nutrition with various elements and the importance and impact of each element on plant growth and its functions, as well as the study of the transmission of these elements after their absorption by the plant	
3- It also deals with the study of vital processes such as transpiration, photosynthesis and respiration, and the interdependence of these processes with each other and their impact on different environmental conditions	
4- It also includes the study of phototropism and phytochrome, the study of plant hormones and their effect on plant growth, the study of climacteric and the study of seed dormancy and germination .	

A- Cognitive goals .

- 1-This course aims to teach the water relations in plants and the impact of these relations on vital processes such as photosynthesis, respiration and growth .
- 2- Knowledge of the mineral substances and elements necessary for plant nutrition and the effect of each element through its effect on plant growth and production.
- 3- Learn about the structure of plastids, the process of photosynthesis and the process of respiration, and the balance between the two processes.
- 4- Determine the positive and negative factors affecting photosynthesis and respiration.
- 5- A study of the phenomenon of plant flowering and its effect on genetic and environmental factors, and a study of plant hormones .

B. The skills goals special to the course.

1. Understanding and appreciating the scientific ideas within the course that the student is exposed to in practice and how these ideas relate to each other .
2. Establish a strong and solid foundation for plant physiology
3. The ability to demonstrate and master theoretical and practical physiological skills orally and in writing, in a lecture, in the laboratory and in an examination
- 4- The ability to read relevant research and scientific literature .

Teaching and Learning Methods

Giving theoretical lectures through the use of the regular blackboard and the Data Show projector and through the use of Power Point .

Assessment methods

1. First semester exam 20%
2. Second semester exam 20%
3. Final exam 40%

C. Affective and value goals

- 1- Create a spirit of competition among students
- 2 - Enhancing the student's self-confidence
- 3 - Linking science to the events of daily life

D. General and rehabilitative transferred skills(other skills relevant to employability and personal development)

1. Expansion of the student's thinking and awareness by linking the general to modern devices.
- 2- The student does not rely solely on the teacher
- 3- Using accuracy in the scientific answer
- 4 - Investing in modern programs to reach scientific results

10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	2	Knowledge of plant physiology and its connection with other sciences	Introduction in Plant physiology	Theoretical lectures	daily and quarterly exams
2	2	Identify the characteristics and physiological importance of water	Water relations and the importance of water		
3	2	Identify the types of solutions and how to prepare them	Solutions		
4	2	Identify the types of water stresses and their interrelationship	Water potential		
5	2	Recognizing the types of plasmolysis and imbibition	Plasmolysis and imbibing		
6	2	Learn about the mechanism of water absorption and how it is transported	Water absorption and transport in plants		
7	2	Study of transpiration, its types and how it occurs	transpiration		
8	2	Identify mineral elements and their importance to plants	Minerals elements		
9	2	How elements are absorbed and their transmission mechanism	Absorption and transport of mineral salts		
10	2	How does photosynthesis occur and its importance	Photosynthesis and plant pigments		
11	2	Study of light-dark interactions and C3 and C4 plants	Calvin and Benson cycle and Hagg and Slack interactions		
12	2	Studying the mechanism of respiration and its connection to photosynthesis	Respiration and endogenous chemical transformations		

13	2	Effect of light on plant growth and long and short day plants	Photoanalysis and phytochrome		
14	2	Identify the types of hormones, their functions and the causes of seed dormancy	Plant hormones and seed dormancy and germination		

11. Infrastructure	
1. Books Required reading:	nothing
2. Main references (sources)	Plant physiology / d. Abdul-Azim Kazem Muhammad
A- Recommended books and references (scientific journals, reports...).	Recent scientific reports and research
B-Electronic references, Internet sites...	A number of scientific webcites
12. The development of the curriculum plan	
Reviewing lectures and vocabulary for relevant materials in Iraqi and international universities and trying to include them in the description of this course, in addition to following up on the new technologies developed in this field and adding them to the description of this course.	

Course description form

Course description

This course description provides a necessary summary of the most important characteristics of the course and the learning outcomes expected of the student to achieve, demonstrating whether he has made the most of the available learning opportunities. It must be linked to the program description.

College of Education / Iraqi University	1. Teaching Institution
Department of biology	2. University Department/Centre
Elective (Entomology) / third stage	3. Course title/code
Students Presence	4. Modes of Attendance offered
Annual system / 2022-2023	5. Semester/Year
Two hours a week	6. Number of hours tuition (total)
7. Date of production/revision of this specification	
8. Aims of the Course	
-The course deals with the study of insects from the morphological point of view and the study of physiological systems and organs	
- The course includes studying the classification and division of insects into their taxonomic ranks, orders, families and types of each model.	
-The course deals with the study of useful species, including honey bees, the most important members of the hive, diseases and pests that affect these hives.	
It is interested in studying the stages of insect growth and development.	
- Interested in studying harmful insect pests and methods of controlling them.	
- Studying insect hormones and ways to use them in control methods	

10. .Course Outcomes and Methods of Teaching, Learning and Assessment

A- Cognitive goals

A1- This course aims to teach insects in terms of appearance, body modifications, and the physiology of . organs.

A2-- Understand the classification and classification of insects.

A3- Knowing the harmful and beneficial types o insects and their nature of living.

A4- Knowing ways to combat harmful ones.

A5- Knowing the nature and time of hormone secretions and their role in control

Course objectives. B1 - Understanding and getting used to the basic ideas contained within the various facts that the student is exposed to in practice and how these ideas are related B2 - Establishing a strong and solid foundation for entomology. B3 - The ability to demonstrate mastery of taxonomic skills orally and in writing, in a lecture, in the laboratory and in the examination B 4- The ability to read relevant research and scientific literature..
Methods of teaching and learning
Giving theoretical lectures through the use of the data show and through the use of Power Point. In addition to practical lesson
Evaluation modalities
1. First semester exam%20 2. The second semester exam%20 3. Final exam%60
C- Emotional and value goals C 1- Create a spirit of competition among students C 2 - Enhancing the student's self-confidence C 3 - Linking science to the events of daily life
D - Transferred general and qualifying skills (other skills related to employability and personal development.) D1 - Expansion of the student's thinking and awareness by linking the general to modern devices. D2- The student does not rely solely on the teacher D3- Using accuracy in the scientific answer D4 – Investing in modern programs to reach scientific results

10. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	8	Knowledge of entomology and its connection with other sciences.	General entomology (introduction)	Theoretical lectures and practical	daily and quarterly exams
2	8	Learn about insect morphology	External appearance changes		
3	8	Identify the excretory and respiratory system	anatomy		
4	8	Identify the digestive system	anatomy		
5	8	Identify the nervous system	anatomy		
6	8	Learn about the reproductive system and circulation	anatomy		
7	8	Learn about the classification of insects	Category		
8	8	Learn about the	growing stages		

		growth, development and transformation of insects			
9	8	Honey bees and honey formation	bees		
10	8	Identify diseases that affect the beehive.	honey bee		
11	8	Identify pests affecting bees	honey bee		
12	8	Identify the insect pest and its types	Insect pests		
13	8	Learn control methods.	Insect pests		
14	8	Identify insect hormones.	hormones		

.11. Infrastructure

.Books Required reading: 1.

Main references (sources) General Entomology / Dr khadorii khadoo

A- Recommended books and references (scientific journals, reports...). 2. Recent scientific reports and research

B-Electronic references, Internet sites... A number of scientific webcites

12 .The development of the curriculum plan

Reviewing lectures and vocabulary for relevant materials in Iraqi and international universities and trying to include them in the description of this course, in addition to following up on the new technologies developed in this field and adding them to the description of this course.

TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	College of Education / Iraqi University
2. University Department/Centre	Bio department
3. Course title/code	Curricula and teaching methods / third stage
4. Modes of Attendance offered	Presence
5. Semester/Year	2025/2026
6. Number of hours tuition (total)	60 hours
7. Date of production/revision of this specification	8/6/2026
8. Aims of the Course	
Introducing the student to the meaning of the curriculum	
Introducing the student to the meaning of teaching	
Enriching the student with information about the teaching process and class skills	
Giving the student the ability to know the types of teaching methods	
Giving the student the ability to know the curricula	
Enriching the student with the types of educational curricula	
Introducing the student to the educational methods of the teacher	
Providing the student with modern teaching trends	
9. Learning Outcomes, Teaching ,Learning and Assessment Methode	

A- Cognitive goals

A1- Introducing the student to the meaning of the curriculum

A 2- Defining the student with the meaning of methods

A 3- Introducing the student to the meaning of the educational method

A 4- Introducing the student to the types of teaching methods

A 5- Introduce the student to the differences between the methods used in teaching

A6- Providing the student with information about the individual differences between individuals

B - The soft skills objectives of the course.

B1 - The ability to explain the lesson in the student's own way

B2 - the ability to distinguish between the types of teaching methods

B3 - The ability to distinguish between the types of educational curricula

B4- The ability to identify modern methods and trends

Teaching and Learning Methods

1- The recital method

2- The dialogue way

3- Discovery and deductive methods

Assessment methods

1- Written exams

2- Preliminary tests

3- Research activities

4- Simulation tests

C- Emotional and value goals

A 1- The student's enjoyment of the lecture

C 2- The student's sympathy with the topic of the lesson

C 3 - The student's satisfaction with the knowledge he receives

C 4- Strengthening the relationship between the student and the course instructor

D - Transferred general and qualifying skills (other skills related to employability and personal development).

D1 - Developing the skill of recitation, dialogue and discussion

D2- Developing the knowledge that enables us to distinguish in the knowledge specialization

D3 - The educational and moral structure in the educational process

D4- Building a confident personality with the ability to interact and communicate in the educational process

10. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1-4	12	Knowledge of educational curricula	Definition of educational curricula	Dialogue and discussion	daily calendar
5-8	12	Know the types of curricula	Define the types of curricula	Dialogue and discussion	daily calendar
9-11	12	Knowledge of teaching methods	Define teaching methods	Simulation and role playing	daily calendar
12-15	9	Knowledge of different types of teaching methods	Define the types of methods	Presentation and discussion	Editorial calendar
16-20	12	Knowledge of the teaching style of the teacher	Define different types of teaching methods	Presentation and discussion	daily calendar
21-25	9	Knowledge of recent trends in teaching	Definition of recent trends	Simulation and role playing	daily calendar
26-28	9	Know how to draw up a teaching plan	Definition of a teaching plan	Presentation and discussion	Editorial calendar

11. Infrastructure	
1. Books Required reading:	Teaching concepts - methods - methods - strategies (Dr. Khaled Obeidat) Modern educational curricula (Dr. Muhammad Al-Haila)
2. Main references (sources)	Teaching concepts - methods - methods - strategies (Dr. Khaled Obeidat) Modern educational curricula (Dr. Muhammad Al-Haila)
A- Recommended books and references (scientific journals, reports...).	
B-Electronic references, Internet sites...	Comprehensive library site lamp
12. The development of the curriculum plan	
Deleting some details from some course titles Focusing on the cognitive and theoretical aspects of the course	

TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	College of Education / Iraqi University
2. University Department/Centre	the department of Arabic language
3. Course title/code	Foundations of education and counseling / second stage
4. Modes of Attendance offered	Presence
5. Semester/Year	2025/2026
6. Number of hours tuition (total)	60 hours
7. Date of production/revision of this specification	8/6/2026
8. Aims of the Course	
Introducing the student to the meaning of the foundations of education	
Introducing the student to the meaning of educational guidance	
Developing the skill of the educational system	
Enriching the student with information on how to deal with educational problems	
Giving the student the ability to manage counseling sessions	
Providing the student with general information about the ancient and modern educational systems	
Provide the student with a historical overview of the examination systems of ancient and modern civilizations	
Knowing the type of examinations of the Greek and Chinese civilizations	
Distinguish between ancient societies and civilizations	
9. Learning Outcomes, Teaching ,Learning and Assessment Methode	

A- Cognitive goals
A1- Knowing the foundations of education
A 2- Knowing the foundations of education systems
A 3- Knowing the types of ancient civilizations
A 4- Knowing the types of exams in ancient civilizations
A5- Knowledge of educational and psychological counseling
A6- Knowing the types of guidance

B - The soft skills objectives of the course.
B1 - The ability to distinguish between systems and general foundations of education
B 2 - Distinguish between the types of ancient civilizations
B3 - Distinguishing between educational counseling and psychological and vocational counseling
B4- Distinguish between psychological counseling sessions and psychological disorders

Teaching and Learning Methods

1- The recital method
2- The way of dialogue
3- Discovery and deductive methods

Assessment methods

1- Written exams
2- Preliminary tests
3- Research activities
4- Simulation tests

C- Emotional and value goals
C 1- Developing a sense of pride in civilization and the identity of the nation
C 2 - Developing the individual's sense of knowing education and defending its institutions
C 3 - Strengthening the student's connection to the counseling and guidance process
C 4 - Enriching the student with information about psychological counseling

D - Transferred general and qualifying skills (other skills related to employability and personal development).
D1 - Developing the skill of recitation, dialogue and discussion
D2- Developing the knowledge that enables us to distinguish in the knowledge specialization
D3 - The educational and moral structure in the educational process
D4- Building a confident personality with the ability to interact and communicate in the educational process

10. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1-4	12	Knowledge of the foundations and systems of civilization	Defining the foundations of education	Dialogue and discussion	daily calendar
5-8	12	Knowledge of the types of ancient civilizations	Definition of old educational systems	Diction, dialogue and deduction	daily calendar
9-11	12	Knowledge of the types of exams in ancient civilizations	Know the difference between old and new systems	Recitation and dialogue	Written test
12-15	9	Knowledge of educational counseling and general guidance	Definition of guidance and direction	Diction and deduction	daily calendar
16-20	12	Knowledge of psychological counseling and its types	Definition of psychological counseling	Method of simulation and imitation	daily calendar
21-25	9	Knowledge of vocational guidance and its types	Definition of counseling sessions	Method of simulation and imitation	daily calendar
26-28	9	Knowledge of the functions and tasks of the educational counselor	Definition of mental disorders	Method of simulation and imitation	Written test

11. Infrastructure	
1. Books Required reading:	Topics of the foundations of education and psychological counseling
2. Main references (sources)	1- Primitive Education (Dr. Nima Abdel Samad) 2- Counseling and mental health (Dr. Hussein Rabie)
A- Recommended books and references (scientific journals, reports...).	
B-Electronic references, Internet sites...	Comprehensive library site lamp
12. The development of the curriculum plan	
Deleting some details from some course titles Focusing on the cognitive and theoretical aspects of the course	