



Republic of Iraq  
Ministry of Higher Education  
and Scientific Research  
Southern Technical University  
Quality Assurance and  
Academic Performance

## Academic Program and Course Description Form

For the academic year 2023-2024

University Name : Southern Technical University

College Name: Technical College / Shatrah

Scientific Department: Department of Tissue Culture Techniques and Medicinal Plants

Academic Program Name : Bachelor of Tissue Culture Techniques and Medicinal Plants

Final Certificate Name : Bachelor of Tissue Culture Techniques and Medicinal Plants

Academic System: Semester

Date of preparation of the description : 30/3/2024

File filling date : 30/3/2024

Department Head: : Assist. Prof .Dr. Hussein

Razzaq

Date: 11.04.2024

signature:

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Associate Dean: Prof. Dr. Mohammad Saeed  
Harran

Date:

signature:

  
11/4/2024

Department of Quality Assurance and University Performance

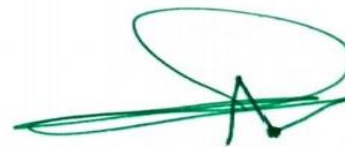
Name of the Director of Quality Assurance and University

Performance Department : Rabab Mutashar Naima

Date : 11/4/2024

Signature:





Dean's endorsement

Assistant Prof. Adnan Alwan

Dean's Agency

## Academic Program Description

### 1-Program Vision

Expanding the base of technical education and its modern applications in the field of agriculture and its relationship with various fields of development

### 2- Program Mission

- 1-Openness to society in the field of agriculture and activating relations with the private sector in scientific consultations, training and technical qualification.
- 2- Setting future plans for the development of educational and training curricula and graduating technical cadres in the field of tissue culture.
- 3- Focusing on scientific research between academics in the department and staff to develop plans to overcome problems in the fields in the field and in practice.
- 4-The use of computer technologies and the Internet in education and training

### 3 -Program Objectives

The department aims to prepare technical staff familiar with technical knowledge in the field of improving and propagating economic plants in tissue agriculture as an alternative to saving many plants and varieties that suffer from the difficulty of natural growth.

### 4-Program accreditation

There isn't any

### 5-Other external influences

Laboratories, field field, library, Internet, agricultural and industrial institutions and agricultural projects

1- Program Structure				
Program Structure	Number of Courses	Unit of Study	Percentage	Notes
Requirements of the institution				
College Requirements	27	78		
Department Requirements	14	34		
Summer Training	There is	There is		
Other				

7- Program Description						
Year/Level	Course Code or Course	Course Name	Credit Hours (Autumnal Semester)			
			Theoretical	Practical	Total	Number of Units
2023-2024 / second		Production of medicinal plants / 1	1	4	5	3
2023-2024 / second		Aromatic and stimulant plants/1	1	4	5	3
2023-2024 / second		Organic chemistry	2	2	4	3
2023-2024 / second		Principles of crop science	2	2	4	3
2023-2024 / second		Plant classification	1	2	3	2
2023-2024 / second		English /2	2	--	2	2
2023-2024 / second		Total	9	14	23	16

7- Program Description						
Year/Level	Course Code or Course	Course Name	Credit Hours (Spring Semester)			
			Theoretical	Practical	Total	Number of Units
2023-2024 /second		Production of	1	4	5	3

		medicinal plants / 1				
2023-2024 / second		Propagation of winter medicinal plants	2	2	4	3
2023-2024 / second		Oil crops and stimulants	1	2	3	2
2023-2024 / second		Green production	1	2	3	2
2023-2024 / second		counting	1	2	3	2
2023-2024 / second		Field irrigation and salinity	1	2	3	2
2023-2024 / second		Computer Fundamentals /2	1	2	3	2
2023-2024 / second		Baath regime crimes in Iraq	2	--	2	2
2023-2024 / second		Total	10	16	26	18

## 8- Expected learning outcomes of the program

### A. Knowledge

- 1- Delivering the acquired information related to the agricultural field to the beneficiaries and linking it to other sciences to reach a solution to the problems related to various agricultural operations .
- 2-Acquiring and demonstrating proficiency in specialized laboratory skills applicable in botanical research .
- 3-Proving the ability to analyze experimental measurements related to the specialization of tissue culture and medicinal plants and the accuracy of preparing reports on observations and analysis.
- 4- Communicating and discussing scientific concepts, experimental results and analytical arguments clearly and briefly orally and in writing.
- 5-Develop appropriate technology to solve farmers' problems and encourage research aimed at progress in all disciplines for long-term technical development.
- 6-Attracting qualified and talented scientific cadres, not as a result of scientific

research in the college.

7- Delivering knowledge and technology to farmers and farmers on a larger scale by training workers and officials of the Department of Agriculture on modern developments in all fields through specialists.

#### B. Skills

1-Conducting laboratory and field experiments, as well as conducting statistical analyzes and interpreting data results.

2-Preparation and submission of agricultural research reports.

3-Communicate with professionals and non-professionals involved in agricultural cooperation and the private sector.

4 - Development and use of computer programs in the fields of design and analysis of agricultural experiments.

#### C. Values

1-Appling knowledge in agricultural sciences in order to address agricultural problems.

2-Design and implementation of agricultural scientific experiments, as well as analysis and interpretation of data.

3-Designing an integrated or partial agricultural system or following a treatment system to meet the required agricultural needs within realistic constraints related to the economy, environment, health and safety.

4- Demonstrating the creative and innovative ability in plant protection and finding agricultural solutions in the field of formulating some designs related to plants.

5 – Use modern techniques, skills and tools necessary for agricultural technical practices

#### 9-Teaching and learning strategies

1- Providing students with the basics and additional topics related to the previous education outcomes of skills, to solve practical problems.

2-Appling the studied topics theoretically at the practical level.

- Asking students during practical lessons to conduct some applied research under the supervision of their professors.

Visiting practical laboratories by academic staff.

### **10. Evaluation methods**

- Daily and monthly exams

-Semester exams

-Participation grades for competition questions for subjects

- Homework and Report Writing Grades

<b>11- Faculty</b>						
<b>Faculty Members</b>						
<b>Academic Rank</b>	<b>Specialization</b>		<b>Special Requirements/Skills</b>		<b>Preparation of the teaching staff</b>	
	<b>year</b>	<b>special</b>			<b>Angel</b>	<b>lecturer</b>
Professor	Soil Science and Water Resources	Microsoil Biology			Angel	
Assistant Professor	Soil Science and Water Resources	Soil physics			Angel	
teacher	Computer Science	Information Technology			Angel	
teacher	Agricultural Sciences	Agricultural mechanization			Angel	
Assistant Lecturer	Agricultural Sciences	Plant production			Angel	
Assistant Lecturer	Soil Science and Water Resources	Soil physics			Angel	
Assistant Lecturer	Plant Production Techniques	Plant diseases			Angel	
Assistant Lecturer	Agricultural Sciences and Plant Protection	Propagation and improvement of plants			Angel	
Assistant Lecturer	Life Sciences	Environment			Angel	

Professor	Field crops	Field crops				lecturer
Master	chemistry	chemistry				lecturer

## Professional Development

### Orientation of new faculty members

Enable the student to use self-empowerment skills

- Ability to analyze and give guidance
- Practical problem-solving skills
- Knowledge and understanding
- Teaching students from the use of plant tissue culture laboratories
- Teaching students to prepare vegetable fields and conduct agricultural operations
- Teaching students to grow oil crops and stimulants
- Teaching students to propagate plants by modern methods, not plant propagation by tissue culture
- Teaching students to propagate plants seedly and vegetatively in the vegetable canopy.
  
- Teaching students to grow vegetables in greenhouses in protected agriculture

### Professional development of faculty members

- 1-Diagnosis, formulation and treatment of agricultural problems.
- 2-Enabling students to pass job interviews.
- 3-Enabling students to pass professional tests organized by local, regional and international bodies.
- 4-Enabling students to develop continuously after graduation.

## 12-Acceptance Criterion

Central / according to the requirements of the Ministry of Higher Education and

Scientific Research

### **13-The most important sources of information about the program**

- 1-Central Library in the college
- 2-Internet Information Network
- 3-Experiences of Arabic and international universities
- 4.Current Curriculum



### Curriculum Skills Map

please tick in the relevant boxes where individual Program Learning Outcomes are being assessed

#### Program Learning Outcomes

Year / Level	Course Code	Course Title	Core (C) Title or Option (O)	Knowledge and understanding				Subject-specific Skills				Thinking Skills				General and Transferable Skills (or) Other skills relevant to employability and personal development			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	D4
2024 /Second	Production of medicinal plants /1	Specialist				√				√			√				√		
	Aromatic and stimulant plants/ 1	Specialist																	
2024 /Second	Organic Chemistry	Specialist					√			√			√				√		√
	Principles of crop science	Specialist																	
2024 /Second	Plant	Specialist			√					√			√				√		√

	classificationeconomy																		
	English /2	General																	
2024 /Second	Production of medicinal plants /2	Specialist			√			√			√								√
	Propagation of winter medicinal plants	Specialist																	
2024 /Second	Oil and stimulant crops	Specialist				√		√				√							√
	Vegetable production	Specialist																	
2024 /Second	Count	help			√			√			√				√				
	Field irrigation and salinity	help																	
2024 /Second	Computer Fundamentals /2	General			√			√			√			√					
	Production of medicinal plants /1	Specialist				√		√				√				√			

# TEMPLATE FOR COURSE SPECIFICATION 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 program specification.

<b>1. Teaching Institution</b>	Technical College / Shatrah
<b>2. University Department/Centre</b>	Department of Tissue Culture Techniques and Medicinal Plants
<b>3. Course title/code</b>	Production of Medicinal Plants/\
<b>4. Program(s) to which it contributes</b>	present
<b>5. Modes of Attendance offered</b>	present
<b>6. Semester/Year</b>	Autumn semester / Second stage
<b>7. Number of hours tuition (total)</b>	75 hours, 1 hour theoretical + 4 practical hours
<b>8. Date of production/revision of this Specification</b>	20 / 3/ 2024
<b>9. Aims of the Course:</b> Granting the student a bachelor's degree in the theoretical and practical aspects in order to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena.	

## 10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
the first	1 theoretical 4 practical	My knowledge and skills	Medicinal plants and herbs, economic importance, benefits and .uses	Lecture and practical lesson	Questions and answers mini practical lesson
The second	1 theoretical 4 practical	My knowledge and skills	Genetic origins of medicinal plants, production and cultivation of medicinal plants	Lecture and practical lesson	ask questions
the third	1 theoretical 4 practical	My knowledge and skills	Used parts of medicinal plants, their types and methods of use	Lecture and practical lesson	Listen and ask questions
the fourth	1 theoretical 4 practical	My knowledge and skills	Medicinal and aromatic plants, economic importance, methods of reproduction	Lecture and practical lesson	Practical exercise, meeting and work groups
Fifth	1 theoretical 4 practical	My knowledge and skills	Marketing methods for medicinal plants	Lecture and practical lesson	Practical exercise, meeting and work groups
Six	1 theoretical 4 practical	My knowledge and skills	Collection of medicinal plants, the effect of collection date on the effectiveness of medicinal plants	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
Seventh	1 theoretical 4 practical	My knowledge and skills	Methods of drying and storing medicinal plants, the effect of the storage process on the active substances	Lecture and practical lesson	Case study Practical exercise and work groups
Eight	1 theoretical 4 practical	My knowledge and skills	Active substances in medicinal plants, active ingredients	Lecture and practical lesson	Listening and asking practical exercise questions and work

					groups
Nine	1 theoretical 4 practical	My knowledge and skills	The use of extraction methods and the separation of active substances	Lecture and practical lesson	Asking questions and listening practical exercise and work groups
The tenth	1 theoretical 4 practical	My knowledge and skills	Pharmacological effects and how they are synthesized inside the plant	Lecture and practical	Ask group work questions
Eleventh	1 theoretical 4 practical	My knowledge and skills	Propagation of medicinal plants using tissue culture technique	Lecture and practical lesson	Mini-lesson work groups
twelveth	1 theoretical 4 practical	My knowledge and skills	Oils extracted from medicinal plants, types, how to use them	Lecture and practical lesson	Practical exercise and workgroups
Thirteenth	1 theoretical 4 practical	My knowledge and skills	Juices extracted from medicinal plants, their types, how to use them	Lecture and practical lesson	ask questions
Fourteenth	1 theoretical 4 practical	My knowledge and skills	Medicinal herbal ointments, types, how to use them	Lecture and practical lesson	Asking practice questions
Fifteenth	1 theoretical 4 practical	My knowledge and skills	A visit to a medical herb to learn about the existing species and their characteristics	Lecture and practical lesson	Asking practical questions

#### 11. Admissions

- Providing the possibility of academic support in organizing field visits.
- Providing an appropriate classroom environment that enables the teacher to diversify teaching strategies.
- Providing information technology in the campus library.
- Hosting experts from outside the college, or from the work environment for

which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market.

## TEMPLATE FOR COURSE SPECIFICATION COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

### COURSE SPECIFICATION

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<b>1. Teaching Institution</b>	Technical College / Shatrah
<b>2. University Department/Centre</b>	Department of Tissue Culture Techniques and Medicinal Plants
<b>3. Course title/code</b>	Aromatic and stimulant plant/١
<b>4. Program(s) to which it contributes</b>	present
<b>5. Modes of Attendance offered</b>	present
<b>6. Semester/Year</b>	Autumn semester / Second stage
<b>7. Number of hours tuition (total)</b>	75 hours, 1 hour theoretical + 4 practical hours
<b>8. Date of production/revision of this Specification</b>	20 / 3/ 2024
<b>9. Aims of the Course:</b>	Granting the student a bachelor's degree in the theoretical and practical aspects in order to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena.

## 10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
the first	1 theoretical 4 practical	My knowledge and skills	Article details	Lecture and practical lesson	Questions and answers mini practical lesson
The second	1 theoretical 4 practical	My knowledge and skills	Preventive and historical overview of aromatic and valuable plants	Lecture and practical lesson	ask questions
the third	1 theoretical 4 practical	My knowledge and skills	The importance of aromatic and stimulant plants	Lecture and practical lesson	Listen and ask questions
the fourth	1 theoretical 4 practical	My knowledge and skills	The importance of aromatic and stimulant plants as their basic requirements	Lecture and practical lesson	Practical exercise, meeting and work groups
Fifth	1 theoretical 4 practical	My knowledge and skills	Division and classification of aromatic and stimulant plants	Lecture and practical lesson	Practical exercise, meeting and work groups
Sex	1 theoretical 4 practical	My knowledge and skills	Division and classification of aromatic and stimulant plants	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
Seventh	1 theoretical 4 practical	My knowledge and skills	A secondary compound of aromatic and stimulant plants	Lecture and practical lesson	Case study Practical exercise and work groups
Eight	1 theoretical 4 practical	My knowledge and skills	A secondary compound of aromatic and stimulant plants	Lecture and practical lesson	Listening and asking practical exercise questions and work

					groups
Nine	1 theoretical 4 practical	My knowledge and skills	A secondary compound of aromatic and stimulant plants	Lecture and practical lesson	Asking questions and listening practical exercise and work groups
The tenth	1 theoretical 4 practical	My knowledge and skills	General methods of administering chemicals to aromatic plants	Lecture and practical	Ask group work questions
Eleventh	1 theoretical 4 practical	My knowledge and skills	General methods for combating plant stimulants	Lecture and practical lesson	Mini-lesson work groups
twelveth	1 theoretical 4 practical	My knowledge and skills	Factors affecting the growth and development of aromatic and stimulant plants	Lecture and practical lesson	Practical exercise and workgroups
Thirteenth	1 theoretical 4 practical	My knowledge and skills	Cultivation of aromatic plants	Lecture and practical lesson	ask questions
Fourteenth	1 theoretical 4 practical	My knowledge and skills	Cultivation of stimulant plants	Lecture and practical lesson	Asking practice questions
Fifteenth	1 theoretical 4 practical	My knowledge and skills	Forestry, drying and storage of aromatic and stimulant plants	Lecture and practical lesson	Asking practical questions

#### 11. Admissions

- Providing the possibility of academic support in organizing field visits.
- Providing an appropriate classroom environment that enables the teacher to diversify teaching strategies.
- Providing information technology in the campus library.



-Hosting experts from outside the college, or from the work environment for which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market.

## TEMPLATE FOR COURSE SPECIFICATION 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 program specification.

<b>1. Teaching Institution</b>	Technical College / Shatrah
<b>2. University Department/Centre</b>	Department of Tissue Culture Techniques and Medicinal Plants
<b>3. Course title/code</b>	Organic Chemistry
<b>4. Program(s) to which it contributes</b>	present
<b>5. Modes of Attendance offered</b>	present
<b>6. Semester/Year</b>	Autumn semester / Second stage
<b>7. Number of hours tuition (total)</b>	90 hours, 2 hour theoretical + 4 practical hours
<b>8. Date of production/revision of this Specification</b>	20 / 3/ 2024
<b>9. Aims of the Course:</b>	Granting the student a bachelor's degree in the theoretical and practical aspects in order to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena.

## 10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
the first	2 theoretical 4 practical	My knowledge and skills	Organic compounds and their properties	Lecture and practical lesson	Questions and answers mini practical lesson
The second	2 theoretical 4 practical	My knowledge and skills	Types of bonds - bonding in organic compounds - structural formula - isomers - acids and bases	Lecture and practical lesson	ask questions
the third	2 theoretical 4 practical	My knowledge and skills	Alkanes - their names and properties	Lecture and practical lesson	Listen and ask questions
the fourth	2 theoretical 4 practical	My knowledge and skills	Alkanes - their reactions and preparation	Lecture and practical lesson	Practical exercise, meeting and work groups
Fifth	2 theoretical 4 practical	My knowledge and skills	Alkenes - their names and properties	Lecture and practical lesson	Practical exercise, meeting and work groups
Six	2 theoretical 4 practical	My knowledge and skills	Alkenes - their reactions and preparation	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
Seventh	2 theoretical 4 practical	My knowledge and skills	Aromatic compounds - their names, properties, interactions and preparation	Lecture and practical lesson	Case study Practical exercise and work groups
Eight	2 theoretical 4 practical	My knowledge and skills	Alcohols - their names, properties, interactions and	Lecture and practical	Listening and asking practical exercise

			preparation	lesson	questions and work groups
Nine	2 theoretical 4 practical	My knowledge and skills	Ethers - their names, properties, reactions and preparation	Lecture and practical lesson	Asking questions and listening practical exercise and work groups
The tenth	2 theoretical 4 practical	My knowledge and skills	Aldehydes - their names, properties, reactions and preparation	Lecture and practical	Ask group work questions
Eleventh	2 theoretical 4 practical	My knowledge and skills	Cations - their names, properties, reactions and preparation	Lecture and practical lesson	Mini-lesson work groups
Twelfth	2 theoretical 4 practical	My knowledge and skills	Ketones - their names, properties, reactions and preparation	Lecture and practical lesson	Practical exercise and workgroups
Thirteenth	2 theoretical 4 practical	My knowledge and skills	Carboxylic acids - their names, properties, reactions and preparation	Lecture and practical lesson	ask questions
Fourteenth	2 theoretical 4 practical	My knowledge and skills	Esters - their names, properties, reactions and preparation	Lecture and practical lesson	Asking practice questions
Fifteenth	2 theoretical 4 practical	My knowledge and skills	Amines - their names, properties, reactions and preparation	Lecture and practical lesson	Asking practical questions

## 11. Admissions

- Providing the possibility of academic support in organizing field visits.
- Providing an appropriate classroom environment that enables the teacher to diversify teaching strategies.
- Providing information technology in the campus library.
- Hosting experts from outside the college, or from the work environment for which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market.

# TEMPLATE FOR COURSE SPECIFICATION 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 program specification.

<b>1. Teaching Institution</b>	Technical College / Shatrah
<b>2. University Department/Centre</b>	Department of Tissue Culture Techniques and Medicinal Plants
<b>3. Course title/code</b>	Principles of Crop Science
<b>4. Program(s) to which it contributes</b>	Present
<b>5. Modes of Attendance offered</b>	present
<b>6. Semester/Year</b>	Autumn semester / Second stage
<b>7. Number of hours tuition (total)</b>	60 hours, 2 hour theoretical + 2 practical hours
<b>8. Date of production/revision of this Specification</b>	20 / 10/ 2021
<b>9. Aims of the Course:</b> Granting the student a bachelor's degree in the theoretical and practical aspects in order to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena.	

## 10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
the first	2 theoretical 2 practical	My knowledge and skills	Definition of crop science Crop division	Lecture and practical lesson	Questions and answers mini practical lesson
The second	2 theoretical 2 practical	My knowledge and skills	Definition of crop science Crop division, economic importance	Lecture and practical lesson	ask questions
the third	2 theoretical 2practical	My knowledge and skills	Fertilization and fertilizers	Lecture and practical lesson	Listen and ask questions
the fourth	2 theoretical 2 practical	My knowledge and skills	Environmental factors and their impact on crop productivity - climate and soil factors	Lecture and practical lesson	Practical exercise, meeting and work groups
Fifth	2 theoretical 2 practical	My knowledge and skills	Rice production - economic importance, favorable environmental conditions, rice production problems	Lecture and practical lesson	Practical exercise, meeting and work groups
Sex	2 theoretical 2 practical	My knowledge and skills	Maize production - economic importance, favorable environmental conditions, farming method	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
Seventh	2 theoretical 2 practical	My knowledge and skills	Cotton production - economic importance, favorable environmental conditions, transformative processes	Lecture and practical lesson	Case study Practical exercise and work groups
Eight	2 theoretical 2 practical	My knowledge and skills	Production of jute and jute crops, economic importance, favorable environmental	Lecture and practical lesson	Listening and asking practical exercise questions and

			conditions		work groups
Nine	2 theoretical 2 practical	My knowledge and skills	Production of sun flower, economic importance, favorable environmental conditions, quality of oil, production problems	Lecture and practical lesson	Asking questions and listening practical exercise and work groups
The tenth	2 theoretical 2 practical	My knowledge and skills	Sesame crop production - economic importance, favorable environmental conditions, production areas, production problems, and new technologies in production	Lecture and practical	Ask group work questions
Eleventh	2 theoretical 2 practical	My knowledge and skills	Production of field pistachio crop - economic importance, favorable environmental conditions, maturity and harvesting	Lecture and practical lesson	Mini-lesson work groups
twelveth	2 theoretical 2 practical	My knowledge and skills	Production of soybean crops - economic importance and favorable environmental conditions, areas of cultivation and improvement of production	Lecture and practical lesson	Practical exercise and workgroups
Thirteenth	2 theoretical 2 practical	My knowledge and skills	Production of livestock production - economic importance and favorable environmental conditions, areas of cultivation and improvement of production	Lecture and practical lesson	ask questions
Fourteenth	2theoretical 2 practical	My knowledge and skills	Production of tobacco crops - economic importance and favorable environmental conditions, areas of cultivation and improvement of production	Lecture and practical lesson	Asking practice questions

			areas of production, characteristics of good tobacco		
Fifteenth	2 theoretical 2 practical	My knowledge and skills	Methods of storing and marketing crops	Lecture and practical lesson	Asking practical questions

#### 11. Admissions

- Providing the possibility of academic support in organizing field visits.
- Providing an appropriate classroom environment that enables the teacher to diversify teaching strategies.
- Providing information technology in the campus library.
- Hosting experts from outside the college, or from the work environment for which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market.



# TEMPLATE FOR COURSE SPECIFICATION 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 program specification.

<b>1. Teaching Institution</b>	Technical College / Shatrah
<b>2. University Department/Centre</b>	Department of Tissue Culture Techniques and Medicinal Plants
<b>3. Course title/code</b>	Plant Taxonomy
<b>4. Program(s) to which it contributes</b>	present
<b>5. Modes of Attendance offered</b>	present
<b>6. Semester/Year</b>	Autumn semester / Second stage
<b>7. Number of hours tuition (total)</b>	45 hours, 1 hour theoretical + 2 practical hours
<b>8. Date of production/revision of this Specification</b>	20 / 3 / 2024
<b>9. Aims of the Course:</b>	Granting the student a bachelor's degree in the theoretical and practical aspects in order to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena.

## 10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
the first	1 theoretical 2 practical	My knowledge and skills	Name of the unit/course or subject	Lecture and practical lesson	Questions and answers mini practical lesson
The second	1 theoretical 2 practical	My knowledge and skills	Details of theoretical vocabulary	Lecture and practical lesson	ask questions
the third	1 theoretical 2 practical	My knowledge and skills	Protecting the science of plant classification - its goals and foundations	Lecture and practical lesson	Listen and ask questions
the fourth	1 theoretical 2 practical	My knowledge and skills	Classification terms used in plant descriptions	Lecture and practical lesson	Practical exercise, meeting and work groups
Fifth	1 theoretical 2 practical	My knowledge and skills	Perennial vegetative - arugula -	Lecture and practical lesson	Practical exercise, meeting and work groups
Sex	1 theoretical 2 practical	My knowledge and skills	Leaves - their types - arranged on ice	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
Seventh	1 theoretical 2 practical	My knowledge and skills	Methods of reproduction - the flower - its parts - symmetry - bracts	Lecture and practical lesson	Case study Practical exercise and work groups
Eight	1 theoretical 2 practical	My knowledge and skills	Pink reminder device (talaa)	Lecture and practical lesson	Listening and asking practical exercise questions and work

					groups
Nine	1 theoretical 2 practical	My knowledge and skills	Floral feminization device (baggage)	Lecture and practical lesson	Asking questions and listening practical exercise and work groups
The tenth	1 theoretical 2 practical	My knowledge and skills	Pink inflorescences	Lecture and practical	Ask group work questions
Eleventh	1 theoretical 2 practical	My knowledge and skills	Fruits - their types	Lecture and practical lesson	Mini-lesson work groups
Twelfth	1 theoretical 2 practical	My knowledge and skills	Its warehouses - its types - its spread	Lecture and practical lesson	Practical exercise and workgroups
Thirteenth	1 theoretical 2 practical	My knowledge and skills	Description of families of nudibranchs	Lecture and practical lesson	ask questions
Fourteenth	1 theoretical 2 practical	My knowledge and skills	Description of families of dicotyledonous plants	Lecture and practical lesson	Asking practice questions
Fifteenth	1 theoretical 2 practical	My knowledge and skills	Continuation - description of families of dicotyledons	Lecture and practical lesson	Asking practical questions

#### 11. Admissions

- Providing the possibility of academic support in organizing field visits.
- Providing an appropriate classroom environment that enables the teacher to diversify teaching strategies.
- Providing information technology in the campus library.
- Hosting experts from outside the college, or from the work environment for

which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market.

## TEMPLATE FOR COURSE SPECIFICATION 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 program specification.

<b>1. Teaching Institution</b>	Technical College / Shatrah
<b>2. University Department/Centre</b>	Department of Tissue Culture Techniques and Medicinal Plants
<b>3. Course title/code</b>	English2
<b>4. Program(s) to which it contributes</b>	present
<b>5. Modes of Attendance offered</b>	present
<b>6. Semester/Year</b>	Autumn semester / Second stage
<b>7. Number of hours tuition (total)</b>	30 hours, 2 hour theoretical + 0 practical hours
<b>8. Date of production/revision of this Specification</b>	20 / 4/ 2024
<b>9. Aims of the Course:</b>	Granting the student a bachelor's degree in the theoretical and practical aspects in order to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena.

## 10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
the first	2 theoretical 0 practical	My knowledge and skills	-Rooms and furniture -Grammar (There is/are preposition) -Pronunciation (Word stress) -Translations, Speaking (How to have good time in Sydney) -Reading and writing (Our house) -Every day English (Directions) -Exercises	Lecture and practical lesson	Questions and answers mini practical lesson
The second	2 theoretical 0 practical	My knowledge and skills	- Years - Grammar (was / were, past tense/irregular verbs) - Writing (famous people) - Vocabulary: words groups - Every day English (When is your Birthday?) - Exercises	Lecture and practical lesson	ask questions
the third	2 theoretical 0 practical	My knowledge and skills	- Past tense (We had a good time) - Grammar (past, simple, regular verbs, irregular verbs) - Listening (Mike is day), Writing (Last Saturday) - Pronunciation (Who were they?) - Vocabulary: Sports, Months - Questions (Where, what, who, etc) - Every day English (Fill in forms) - Exercises	Lecture and practical lesson	Listen and ask questions

the fourth	2 theoretical 0 practical	My knowledge and skills	<ul style="list-style-type: none"> <li>- Activities (We can do it!)</li> <li>- Listening (Can I be in your pop group?)</li> <li>- Pronunciation (can/ can not)</li> <li>- Requests and offers</li> <li>- Vocabulary (odd one out)</li> <li>- Every day English (What is the problem)</li> <li>- Exercises</li> </ul>	Lecture and practical lesson	Practical exercise, meeting and work groups
Fifth	2 theoretical 0 practical	My knowledge and skills	<ul style="list-style-type: none"> <li>- Asking politely (I want/ I would like)</li> <li>- Speaking – In the restaurant (Food and drink)</li> <li>- Pronunciation (odd one out)</li> <li>- Translation</li> <li>- Reading (You are what you eat)</li> <li>- Every day English (Going shopping)</li> <li>- Exercises</li> </ul>	Lecture and practical lesson	Practical exercise, meeting and work groups
Six	2 theoretical 0 practical	My knowledge and skills	<ul style="list-style-type: none"> <li>- Coloure (Here and now)</li> <li>- Grammar (Present simple, Present Continuous)</li> <li>- Translation</li> <li>- Reading (Summer in Portugal)</li> <li>- Vocabulary (Cloths)</li> <li>- Every day English (What is the Matter)</li> <li>- Exercises</li> </ul>	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
Seventh	2 theoretical	My knowledge and skills	<ul style="list-style-type: none"> <li>- Holidays (Time to go)</li> <li>- Grammar (Present continuous for the</li> </ul>	Lecture and practical	Case study Practical exercise and

	0 practical		<p>future)</p> <ul style="list-style-type: none"> <li>- Listening (Hannan is diary)</li> <li>- Pronunciation (shifting sentence stress)</li> <li>- Translation</li> <li>- Vocabulary; Transport and travel</li> <li>- Reading and Speaking (The Smiths)</li> <li>- Every day English (going sightseeing)</li> <li>- Exercises</li> </ul>	lesson	work groups
Eight	2 theoretical 0 practical	My knowledge and skills	<ul style="list-style-type: none"> <li>- Rooms and furniture</li> <li>- Grammar (There is/are preposition)</li> <li>- Pronunciation (Word stress)</li> <li>- Translations, Speaking (How to have good time in Sydney)</li> <li>- Reading and writing (Our house)</li> <li>- Every day English (Directions)</li> <li>- Exercises</li> </ul>	Lecture and practical lesson	Listening and asking practical exercise questions and work groups
Nine	2 theoretical 0 practical	My knowledge and skills	<ul style="list-style-type: none"> <li>- Years</li> <li>- Grammar (was / were, past tense/irregular verbs)</li> <li>- Writing (famous people)</li> <li>- Vocabulary: words groups</li> <li>- Every day English (When is your Birthday?)</li> <li>- Exercises</li> </ul>	Lecture and practical lesson	Asking questions and listening practical exercise and work groups
The tenth	2 theoretical 0 practical	My knowledge and skills	<ul style="list-style-type: none"> <li>- Past tense (We had a good time)</li> <li>- Grammar (past, simple, regular verbs, irregular verbs)</li> <li>- Listening (Mike is day), Writing (Last</li> </ul>	Lecture and practical	Ask group work questions

			<p>Saturday)</p> <ul style="list-style-type: none"> <li>- Pronunciation (Who were they?)</li> <li>- Vocabulary: Sports, Months</li> <li>- Questions (Where, what, who, etc)</li> <li>- Every day English (Fill in forms)</li> <li>- Exercises</li> </ul>		
Eleventh	2 theoretical 0 practical	My knowledge and skills	<ul style="list-style-type: none"> <li>- Activities (We can do it!)</li> <li>- Listening (Can I be in your pop group?)</li> <li>- Pronunciation (can/ can not)</li> <li>- Requests and offers</li> <li>- Vocabulary (odd one out)</li> <li>- Every day English (What is the problem)</li> <li>- Exercises</li> </ul>	Lecture and practical lesson	Mini-lesson work groups
twelveth	2 theoretical 0 practical	My knowledge and skills	<ul style="list-style-type: none"> <li>- Asking politely (I want/ I would like)</li> <li>- Speaking – In the restaurant (Food and drink)</li> <li>- Pronunciation (odd one out)</li> <li>- Translation</li> </ul>	Lecture and practical lesson	Practical exercise and workgroups
Thirteenth	2 theoretical 0 practical	My knowledge and skills	<ul style="list-style-type: none"> <li>- Reading (You are what you eat)</li> <li>- Every day English (Going shopping)</li> <li>- Exercises</li> </ul>	Lecture and practical lesson	ask questions
Fourteenth	2theoretical 0 practical	My knowledge and skills	<p>Speaking – In the restaurant (Food and drink)</p> <ul style="list-style-type: none"> <li>- Pronunciation (odd one out)</li> </ul>	Lecture and practical lesson	Asking practice questions



			- Translation		
Fifteenth	2 theoretical 0 practical	My knowledge and skills	- Activities (We can do it!) - Listening (Can I be in your pop group?)	Lecture and practical lesson	Asking practical questions

#### 11. Admissions

- Providing the possibility of academic support in organizing field visits.
- Providing an appropriate classroom environment that enables the teacher to diversify teaching strategies.
- Providing information technology in the campus library.
- Hosting experts from outside the college, or from the work environment for which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market.

## TEMPLATE FOR COURSE SPECIFICATION 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 program specification.

**1. Teaching Institution**

Technical College / Shatrah

<b>2. University Department/Centre</b>	Department of Tissue Culture Techniques and Medicinal Plants
<b>3. Course title/code</b>	Production of Medicinal Plants/2
<b>4. Program(s) to which it contributes</b>	present
<b>5. Modes of Attendance offered</b>	present
<b>6. Semester/Year</b>	Spring semester / Second stage
<b>7. Number of hours tuition (total)</b>	75 hours, 1 hour theoretical + 4 practical hours
<b>8. Date of production/revision of this Specification</b>	20 / 3/ 2024
<b>9. Aims of the Course:</b> Granting the student a bachelor's degree in the theoretical and practical aspects in order to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena.	

## 10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
the first	1 theoretical 4 practical	My knowledge and skills	Medicinal plants and herbs, economic importance, benefits and uses	Lecture and practical lesson	Questions and answers mini practical lesson
The second	1 theoretical 4 practical	My knowledge and skills	Genetic origins of medicinal plants, production and cultivation of medicinal plants	Lecture and practical lesson	ask questions
the third	1 theoretical 4 practical	My knowledge and skills	Used parts of medicinal plants, their types and methods of use	Lecture and practical lesson	Listen and ask questions
the fourth	1 theoretical 4 practical	My knowledge and skills	Medicinal and aromatic plants, economic importance, methods of reproduction	Lecture and practical lesson	Practical exercise, meeting and work groups
Fifth	1 theoretical 4 practical	My knowledge and skills	Marketing methods for medicinal plants	Lecture and practical lesson	Practical exercise, meeting and work groups
Sex	1 theoretical 4 practical	My knowledge and skills	Collection of medicinal plants, the effect of collection date on the effectiveness of medicinal plants	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
Seventh	1 theoretical 4 practical	My knowledge and skills	Methods of drying and storing medicinal plants, the effect of the storage process on the active substances	Lecture and practical lesson	Case study Practical exercise and work groups
Eight	1 theoretical 4 practical	My knowledge and skills	Active substances in medicinal plants, active ingredients	Lecture and practical lesson	Listening and asking practical exercise questions and work

					groups
Nine	1 theoretical 4 practical	My knowledge and skills	The use of extraction methods and the separation of active substances	Lecture and practical lesson	Asking questions and listening practical exercise and work groups
The tenth	1 theoretical 4 practical	My knowledge and skills	Pharmacological effects and how they are synthesized inside the plant	Lecture and practical	Ask group work questions
Eleventh	1 theoretical 4 practical	My knowledge and skills	Propagation of medicinal plants using tissue culture technique	Lecture and practical lesson	Mini-lesson work groups
twelveth	1 theoretical 4 practical	My knowledge and skills	Oils extracted from medicinal plants, types, how to use them	Lecture and practical lesson	Practical exercise and workgroups
Thirteenth	1 theoretical 4 practical	My knowledge and skills	Juices extracted from medicinal plants, their types, how to use them	Lecture and practical lesson	ask questions
Fourteenth	1 theoretical 4 practical	My knowledge and skills	Medicinal herbal ointments, types, how to use them	Lecture and practical lesson	Asking practice questions
Fifteenth	1 theoretical 4 practical	My knowledge and skills	A visit to a medical herb to learn about the existing species and their characteristics	Lecture and practical lesson	Asking practical questions

#### 11. Admissions

- Providing the possibility of academic support in organizing field visits.
- Providing an appropriate classroom environment that enables the teacher to diversify teaching strategies.
- Providing information technology in the campus library.
- Hosting experts from outside the college, or from the work environment for

which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market.

## TEMPLATE FOR COURSE SPECIFICATION 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 program specification.

<b>1. Teaching Institution</b>	Technical College / Shatrah
<b>2. University Department/Centre</b>	Department of Tissue Culture Techniques and Medicinal Plants
<b>3. Course title/code</b>	Production of Winter Medicinal/
<b>4. Program(s) to which it contributes</b>	present
<b>5. Modes of Attendance offered</b>	present
<b>6. Semester/Year</b>	Spring semester / Second stage
<b>7. Number of hours tuition (total)</b>	60 hours, 2 hour theoretical + 2 practical hours
<b>8. Date of production/revision of this Specification</b>	20 / 3 / 2024
<b>9. Aims of the Course:</b>	Granting the student a bachelor's degree in the theoretical and practical aspects in order to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena.

## 10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
the first	2 theoretical 2 practical	My knowledge and skills	Nursery - Types of nursery - Choosing the economic importance of the nursery - Planning the nursery - Building the nursery.	Lecture and practical lesson	Questions and answers mini practical lesson
The second	2 theoretical 2 practical	My knowledge and skills	Knowledge of sterilization methods	Lecture and practical lesson	ask questions
the third	2 theoretical 2 practical	My knowledge and skills	Methods of reproduction, the importance of sexual reproduction of medicinal plants, characteristics of good seeds	Lecture and practical lesson	Listen and ask questions
the fourth	2 theoretical 2 practical	My knowledge and skills	Composition of seed types	Lecture and practical lesson	Practical exercise, meeting and work groups
Fifth	2 theoretical 2 practical	My knowledge and skills	Seed storage - types of storage	Lecture and practical lesson	Practical exercise, meeting and work groups
Six	2 theoretical 2 practical	My knowledge and skills	Know the reasons for hoarding	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
Seventh	2 theoretical 2 practical	My knowledge and skills	Variation in seed germination purity	Lecture and practical lesson	Case study Practical exercise and work groups
Eight	2 theoretical	My knowledge	Asexual vegetative reproduction	Lecture and practical	Listening and asking practical

	2 practical	and skills		lesson	exercise questions and work groups
Nine	2 theoretical 2 practical	My knowledge and skills	Reproduction by physiological and anatomical methods.	Lecture and practical lesson	Asking questions and listening practical exercise and work groups
The tenth	2 theoretical 2 practical	My knowledge and skills	Factors affecting root formation - auxins and rooting.	Lecture and practical	Ask group work questions
Eleventh	2 theoretical 2 practical	My knowledge and skills	The purpose of vaccination, factors affecting the success of budding and vaccination.	Lecture and practical lesson	Mini-lesson work groups
Twelveth	2 theoretical 2 practical	My knowledge and skills	Application of rooting in plants and types of reproduction by cutting roots.	Lecture and practical lesson	Practical exercise and workgroups
Thirteenth	2 theoretical 2 practical	My knowledge and skills	The effect of root grafting on the variety and growth of medicinal plants.	Lecture and practical lesson	ask questions
Fourteenth	2 theoretical 2 practical	My knowledge and skills	Propagation by specialized stems and roots and propagation by other vegetative methods.	Lecture and practical lesson	Asking practice questions
Fifteenth	2 theoretical 2 practical	My knowledge and skills	Reproduction by tissue culture	Lecture and practical lesson	Asking practical questions

## 11. Admissions

- Providing the possibility of academic support in organizing field visits.
- Providing an appropriate classroom environment that enables the teacher to diversify teaching strategies.
- Providing information technology in the campus library.
- Hosting experts from outside the college, or from the work environment for which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market.

## TEMPLATE FOR COURSE SPECIFICATION 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 program specification.

<b>1. Teaching Institution</b>	Technical College / Shatrah
<b>2. University Department/Centre</b>	Department of Tissue Culture Techniques and Medicinal Plants
<b>3. Course title/code</b>	Oil and stimulant plants
<b>4. Program(s) to which it contributes</b>	Blended/present and e-learning
<b>5. Modes of Attendance offered</b>	Blended/present and e-learning
<b>6. Semester/Year</b>	Spring semester / Second stage
<b>7. Number of hours tuition (total)</b>	45 hours, 1 hour theoretical + 2



	practical hours
<b>8. Date of production/revision of this Specification</b>	20 / 3/ 2024
<b>9. Aims of the Course:</b> Granting the student a bachelor's degree in the theoretical and practical aspects in order to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena.	

## 10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
the first	1 theoretical 2 practical	My knowledge and skills	Historical introduction	Lecture and practical lesson	Questions and answers mini practical lesson
The second	1 theoretical 2 practical	My knowledge and skills	Oil crops and stimulants	Lecture and practical lesson	ask questions
the third	1 theoretical 2 practical	My knowledge and skills	Oil crops and stimulants	Lecture and practical lesson	Listen and ask questions
the fourth	1 theoretical 2 practical	My knowledge and skills	Oil crops and stimulants	Lecture and practical lesson	Practical exercise, meeting and work groups
Fifth	1 theoretical 2 practical	My knowledge and skills	Oil crops and stimulants	Lecture and practical lesson	Practical exercise, meeting and work groups
Sex	1 theoretical 2 practical	My knowledge and skills	Oil crops and stimulants	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
Seventh	1 theoretical 2 practical	My knowledge and skills	Oil crops and stimulants	Lecture and practical lesson	Case study Practical exercise and work groups
Eight	1 theoretical 2 practical	My knowledge and skills	Oil crops and stimulants	Lecture and practical lesson	Listening and asking practical exercise questions and work groups

Nine	1 theoretical 2 practical	My knowledge and skills	Oil crops and stimulants	Lecture and practical lesson	Asking questions and listening practical exercise and work groups
The tenth	1 theoretical 2 practical	My knowledge and skills	Oil crops and stimulants	Lecture and practical	Ask group work questions
Eleventh	1 theoretical 2 practical	My knowledge and skills	Oil crops and stimulants	Lecture and practical lesson	Mini-lesson work groups
twelveth	1 theoretical 2 practical	My knowledge and skills	Oil crops and stimulants	Lecture and practical lesson	Practical exercise and workgroups
Thirteenth	1 theoretical 2 practical	My knowledge and skills	Oil crops and stimulants	Lecture and practical lesson	ask questions
Fourteenth	1 theoretical 2 practical	My knowledge and skills	Oil crops and stimulants	Lecture and practical lesson	Asking practice questions
Fifteenth	1 theoretical 2 practical	My knowledge and skills	Oil crops and stimulants	Lecture and practical lesson	Asking practical questions

#### 11. Admissions

- Providing the possibility of academic support in organizing field visits.
- Providing an appropriate classroom environment that enables the teacher to diversify teaching strategies.
- Providing information technology in the campus library.
- Hosting experts from outside the college, or from the work environment for which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market.

# TEMPLATE FOR COURSE SPECIFICATION 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 program specification.

<b>1. Teaching Institution</b>	Technical College / Shatrah
<b>2. University Department/Centre</b>	Department of Tissue Culture Techniques and Medicinal Plants
<b>3. Course title/code</b>	Vegetable Production
<b>4. Program(s) to which it contributes</b>	present
<b>5. Modes of Attendance offered</b>	present
<b>6. Semester/Year</b>	Spring semester / Second stage
<b>7. Number of hours tuition (total)</b>	45 hours, 1 hour theoretical + 2 practical hours
<b>8. Date of production/revision of this Specification</b>	20 / 3/ 2024
<b>9. Aims of the Course:</b>	Granting the student a bachelor's degree in the theoretical and practical aspects in order to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena.

## 10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
the first	1 theoretical 2 practical	My knowledge and skills	Agricultural cycles for vegetable crops (definition, benefits, design principles, models for vegetable plant cycles).	Lecture and practical lesson	Questions and answers mini practical lesson
The second	1 theoretical 2 practical	My knowledge and skills	Production of vegetable seedlings (types of agricultural media, specifications of good seeds)	Lecture and practical lesson	ask questions
the third	1 theoretical 2 practical	My knowledge and skills	Classification of vegetable plants according to their resistance to salinity	Lecture and practical lesson	Listen and ask questions
the fourth	1 theoretical 2 practical	My knowledge and skills	Classification of vegetable plants according to their tolerance to water stress (drought)	Lecture and practical lesson	Practical exercise, meeting and work groups
Fifth	1 theoretical 2 practical	My knowledge and skills	Classification of vegetable plants	Lecture and practical lesson	Practical exercise, meeting and work groups
Sex	1 theoretical 2 practical	My knowledge and skills	Production of Solanaceae family plants (tomatoes and eggplant).	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
Seventh	1 theoretical 2 practical	My knowledge and skills	Solanaceae family (peppers and potatoes).	Lecture and practical lesson	Case study Practical exercise and work groups
Eight	1 theoretical	My knowledge	The Cucurbita family (cucumber	Lecture and practical	Listening and asking practical

	2 practical	and skills	and zucchini).	lesson	exercise questions and work groups
Nine	1 theoretical 2 practical	My knowledge and skills	The cucurbit family (cucumber, watermelon, cucumber).	Lecture and practical lesson	Asking questions and listening practical exercise and work groups
The tenth	1 theoretical 2 practical	My knowledge and skills	The legume family (cowpea, beans).	Lecture and practical	Ask group work questions
Eleventh	1 theoretical 2 practical	My knowledge and skills	Production of sweet potatoes and maza (tartufa).	Lecture and practical lesson	Mini-lesson work groups
twelveth	1 theoretical 2 practical	My knowledge and skills	Okra production.	Lecture and practical lesson	Practical exercise and workgroups
Thirteenth	1 theoretical 2 practical	My knowledge and skills	Production of basil, radish and mint.	Lecture and practical lesson	ask questions
Fourteenth	1 theoretical 2 practical	My knowledge and skills	Onion and garlic production.	Lecture and practical lesson	Asking practice questions
Fifteenth	1 theoretical 2 practical	My knowledge and skills	Production of vegetable plants under soilless culture	Lecture and practical lesson	Asking practical questions

#### 11. Admissions

- Providing the possibility of academic support in organizing field visits.
- Providing an appropriate classroom environment that enables the teacher to diversify teaching strategies.
- Providing information technology in the campus library.
- Hosting experts from outside the college, or from the work environment for which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market.

## TEMPLATE FOR COURSE SPECIFICATION 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 program specification.

<b>1. Teaching Institution</b>	Technical College / Shatrah
<b>2. University Department/Centre</b>	Department of Tissue Culture Techniques and Medicinal Plants
<b>3. Course title/code</b>	Statistics/
<b>4. Program(s) to which it contributes</b>	present
<b>5. Modes of Attendance offered</b>	present
<b>6. Semester/Year</b>	Spring semester / Second stage

<b>7. Number of hours tuition (total)</b>	45 hours, 1 hour theoretical + 2 practical hours
<b>8. Date of production/revision of this Specification</b>	20 / 3/ 2024
<b>9. Aims of the Course:</b> Granting the student a bachelor's degree in the theoretical and practical aspects in order to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena.	



## 10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
the first	1 theoretical 2 practical	My knowledge and skills	Details of theoretical and applied vocabulary	Lecture and practical lesson	Questions and answers mini practical lesson
The second	1 theoretical 2 practical	My knowledge and skills	Introduction to statistics - functions of statistics - forms of statistics	Lecture and practical lesson	ask questions
the third	1 theoretical 2 practical	My knowledge and skills	Frequency distribution	Lecture and practical lesson	Listen and ask questions
the fourth	1 theoretical 2 practical	My knowledge and skills	Graphic display method	Lecture and practical lesson	Practical exercise, meeting and work groups
Fifth	1 theoretical 2 practical	My knowledge and skills	How to calculate different statistical measures - the median	Lecture and practical lesson	Practical exercise, meeting and work groups
Sex	1 theoretical 2 practical	My knowledge and skills	Mode - arithmetic mean	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
Seventh	1 theoretical 2 practical	My knowledge and skills	Geometric mean - associative mean	Lecture and practical lesson	Case study Practical exercise and work groups
Eight	1 theoretical 2 practical	My knowledge and skills	The relationship between arithmetic, geometric and associative averages	Lecture and practical lesson	Listening and asking practical exercise questions and work

					groups
Nine	1 theoretical 2 practical	My knowledge and skills	Dispersion - measures of dispersion - range	Lecture and practical lesson	Asking questions and listening practical exercise and work groups
The tenth	1 theoretical 2 practical	My knowledge and skills	Mean Deviation - Standard Deviation	Lecture and practical	Ask group work questions
Eleventh	1 theoretical 2 practical	My knowledge and skills	Contrast – coefficient of variation (coefficient of variation)	Lecture and practical lesson	Mini-lesson work groups
twelveth	1 theoretical 2 practical	My knowledge and skills	Analysis of variance	Lecture and practical lesson	Practical exercise and workgroups
Thirteenth	1 theoretical 2 practical	My knowledge and skills	Analysis of variance between two groups - statistical tests	Lecture and practical lesson	ask questions
Fourteenth	1 theoretical 2 practical	My knowledge and skills	Correlation - correlation coefficients	Lecture and practical lesson	Asking practice questions
Fifteenth	1 theoretical 2 practical	My knowledge and skills	Regression	Lecture and practical lesson	Asking practical questions

#### 11. Admissions

- Providing the possibility of academic support in organizing field visits.
- Providing an appropriate classroom environment that enables the teacher to diversify teaching strategies.
- Providing information technology in the campus library.
- Hosting experts from outside the college, or from the work environment for which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market.

## TEMPLATE FOR COURSE SPECIFICATION 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 program specification.

<b>1. Teaching Institution</b>	Technical College / Shatrah
<b>2. University Department/Centre</b>	Department of Tissue Culture Techniques and Medicinal Plants
<b>3. Course title/code</b>	Field irrigation and salinity
<b>4. Program(s) to which it contributes</b>	Blended/present and e-learning
<b>5. Modes of Attendance offered</b>	Blended/present and e-learning

<b>6. Semester/Year</b>	Spring semester / Second stage
<b>7. Number of hours tuition (total)</b>	45 hours, 1 hour theoretical + 2 practical hours
<b>8. Date of production/revision of this Specification</b>	20 / 3/ 2024
<b>9. Aims of the Course:</b> Granting the student a bachelor's degree in the theoretical and practical aspects in order to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena.	

## 10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
the first	1 theoretical 2 practical	My knowledge and skills	The importance of irrigation - the concept of water scarcity	Lecture and practical lesson	Questions and answers mini practical lesson
The second	1 theoretical 2 practical	My knowledge and skills	Soil physical properties associated with irrigation	Lecture and practical lesson	ask questions
the third	1 theoretical 2 practical	My knowledge and skills	Soil water classification	Lecture and practical lesson	Listen and ask questions
the fourth	1 theoretical 2 practical	My knowledge and skills	Soil water potential - the water available to the plant - the amount of water in the soil	Lecture and practical lesson	Practical exercise, meeting and work groups
Fifth	1 theoretical 2 practical	My knowledge and skills	Irrigation water transportation and distribution	Lecture and practical lesson	Practical exercise, meeting and work groups
Six	1 theoretical 2 practical	My knowledge and skills	Water flow in canals and pipes - irrigation water measurements	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
Seventh	1 theoretical 2 practical	My knowledge and skills	Flow equations and advance and recede curves	Lecture and practical lesson	Case study Practical exercise and work groups
Eight	1 theoretical 2 practical	My knowledge and skills	Irrigation efficiency	Lecture and practical lesson	Listening and asking practical exercise questions and work

					groups
Nine	1 theoretical 2 practical	My knowledge and skills	Adequacy, efficiency and consistency of irrigation	Lecture and practical lesson	Asking questions and listening practical exercise and work groups
The tenth	1 theoretical 2 practical	My knowledge and skills	Plant water needs	Lecture and practical	Ask group work questions
Eleventh	1 theoretical 2 practical	My knowledge and skills	Plant water consumption	Lecture and practical lesson	Mini-lesson work groups
twelveth	1 theoretical 2 practical	My knowledge and skills	Irrigation methods	Lecture and practical lesson	Practical exercise and workgroups
Thirteenth	1 theoretical 2 practical	My knowledge and skills	Soil salinity	Lecture and practical lesson	ask questions
Fourteenth	1 theoretical 2 practical	My knowledge and skills	Factors affecting the salinity level of soil	Lecture and practical lesson	Asking practice questions
Fifteenth	1 theoretical 2 practical	My knowledge and skills	Methods of treating salinization in soil and coexisting with it	Lecture and practical lesson	Asking practical questions

#### 11. Admissions

- Providing the possibility of academic support in organizing field visits.
- Providing an appropriate classroom environment that enables the teacher to diversify teaching strategies.
- Providing information technology in the campus library.
- Hosting experts from outside the college, or from the work environment for

which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market.

## TEMPLATE FOR COURSE SPECIFICATION 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 program specification.

<b>1. Teaching Institution</b>	Technical College / Shatrah
<b>2. University Department/Centre</b>	Department of Tissue Culture Techniques and Medicinal Plants
<b>3. Course title/code</b>	Computer Fundamentals 2
<b>4. Program(s) to which it contributes</b>	Blended/present and e-learning
<b>5. Modes of Attendance offered</b>	Blended/present and e-learning
<b>6. Semester/Year</b>	Spring semester / Second stage
<b>7. Number of hours tuition (total)</b>	45 hours, 1 hour theoretical + 2 practical hours
<b>8. Date of production/revision of this Specification</b>	20 / 10/ 2021
<b>9. Aims of the Course:</b>	Granting the student a bachelor's degree in the theoretical and practical aspects in order to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena.

## 10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
the first	1 theoretical 2 practical	My knowledge and skills	The concept of networks and their types	Lecture and practical lesson	Questions and answers mini practical lesson
The second	1 theoretical 2 practical	My knowledge and skills	Excel spreadsheet processor program	Lecture and practical lesson	ask questions
the third	1 theoretical 2 practical	My knowledge and skills	Saving and retrieving the worksheet	Lecture and practical lesson	Listen and ask questions
the fourth	1 theoretical 2 practical	My knowledge and skills	Methods of collecting and sorting data	Lecture and practical lesson	Practical exercise, meeting and work groups
Fifth	1 theoretical 2 practical	My knowledge and skills	The concept of networks and their types	Lecture and practical lesson	Practical exercise, meeting and work groups
Sex	1 theoretical 2 practical	My knowledge and skills	Methods of collecting and sorting data, using some mathematical functions such as Max, Min, Sum, Count, Sqr	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
Seventh	1 theoretical 2 practical	My knowledge and skills	The concept of networks and their types	Lecture and practical lesson	Case study Practical exercise and work groups
Eight	1 theoretical 2 practical	My knowledge and skills	Excel spreadsheet processor program	Lecture and practical	Listening and asking practical exercise



				lesson	questions and work groups
Nine	1 theoretical 2 practical	My knowledge and skills	Saving and retrieving the worksheet	Lecture and practical lesson	Asking questions and listening practical exercise and work groups
The tenth	1 theoretical 2 practical	My knowledge and skills	The concept of networks and their types	Lecture and practical	Ask group work questions
Eleventh	1 theoretical 2 practical	My knowledge and skills	Excel spreadsheet processor program	Lecture and practical lesson	Mini-lesson work groups
twelveth	1 theoretical 2 practical	My knowledge and skills	Saving and retrieving the worksheet	Lecture and practical lesson	Practical exercise and workgroups
Thirteenth	1 theoretical 2 practical	My knowledge and skills	Quality Control panel applications, dealing with charts, dealing with commands such as: Summarize,	Lecture and practical lesson	ask questions
Fourteenth	1 theoretical 2 practical	My knowledge and skills	Custom table, Anova models, Non-parametric methods	Lecture and practical lesson	Asking practice questions
Fifteenth	1 theoretical 2 practical	My knowledge and skills	Worksheet and retrieving it, closing the program, retrieving the file, entering data and performing simple calculations, adjusting and formatting data	Lecture and practical lesson	Asking practical questions

## 11. Admissions

- Providing the possibility of academic support in organizing field visits.
- Providing an appropriate classroom environment that enables the teacher to diversify teaching strategies.
- Providing information technology in the campus library.
- Hosting experts from outside the college, or from the work environment for which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market.

# TEMPLATE FOR COURSE SPECIFICATION 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 program specification.

<b>1. Teaching Institution</b>	Technical College / Shatrah
<b>2. University Department/Centre</b>	Department of Tissue Culture Techniques and Medicinal Plants
<b>3. Course title/code</b>	The Crimes of the Baath regime in Iraq
<b>4. Program(s) to which it contributes</b>	present
<b>5. Modes of Attendance offered</b>	present
<b>6. Semester/Year</b>	Spring semester / Second stage
<b>7. Number of hours tuition (total)</b>	30 hours, 2 hour theoretical + 0 practical hours
<b>8. Date of production/revision of this Specification</b>	20 / 3/ 2024
<b>9. Aims of the Course:</b>	Granting the student a bachelor's degree in the theoretical and practical aspects in order to serve the preparation of a graduate of a distinguished level and his commitment to the practical arena.

## 10. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
the first	2 theoretical	My knowledge and skills	Crimes of the Baath regime according to the Iraqi Supreme Criminal Court Law in 2005	Lecture	Listen and ask questions
The second	2 theoretical	My knowledge and skills	The concept of crimes and their types	Lecture	Listen and ask questions
the third	2 theoretical	My knowledge and skills	Crime departments	Lecture	Listen and ask questions
the fourth	2 theoretical	My knowledge and skills	Types of international crimes	Lecture	Listen and ask questions
Fifth	2 theoretical	My knowledge and skills	Psychological and social crimes and their effects and the most prominent violations of the Baathist regime in Iraq	Lecture	Listen and ask questions
Six	2 theoretical	My knowledge and skills	Mechanisms of psychological crimes	Lecture	Listen and ask questions
Seventh	2 theoretical	My knowledge and skills	Social crimes	Lecture	Listen and ask questions
Eight	2 theoretical	My knowledge and skills	Militarization of society	Lecture	Listen and ask questions
Nine	2 theoretical	My knowledge		Lecture	Listen and ask

		and skills			questions
The tenth	2 theoretical	My knowledge and skills	Environmental crimes of the Baath regime in Iraq	Lecture	Listen and ask questions
Eleventh	2 theoretical	My knowledge and skills	Destruction of cities and villages	Lecture	Listen and ask questions
twelfth	2 theoretical	My knowledge and skills	Drying the marshes and razing the orchards	Lecture	Listen and ask questions
Thirteenth	2 theoretical	My knowledge and skills	Military and radioactive contamination and mine explosions	Lecture	ask questions
Fourteenth	2 theoretical	My knowledge and skills	Iraqi cemetery crimes	Lecture	
Fifteenth	2 theoretical	My knowledge and skills	Incidents of genocide graves committed by the Baathist regime in Iraq	Lecture	

#### 11. Admissions

- Providing the possibility of academic support in organizing field visits.
- Providing an appropriate classroom environment that enables the teacher to diversify teaching strategies.
- Providing information technology in the campus library.
- Hosting experts from outside the college, or from the work environment for which they are preparing to benefit from their expertise in developing the course according to the actual needs of the labor market.