

**Course Description
For the Academic
Year
2024-2025**



Sample course description

| Module Information | | | |
|------------------------------------|-------------------------------|-------------------------------|--|
| Course Information | | | |
| Module Title | Organic Chemistry | | Module Delivery |
| Module Type | Basic | | <input type="checkbox"/> Theory <input checked="" type="checkbox"/> Reading <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input checked="" type="checkbox"/> Practical <input type="checkbox"/> Seminar |
| Module Code | USAGFi1101 | | |
| ECTS Credits | 5 | | |
| SWL (hr/sem) | 125 | | |
| Module Level | 1 | Semester of Delivery | |
| Administering Department | Field Crops Section | College | Faculty of Agriculture |
| Module Leader | Name: Mohammed Hameed Mahal | Email | mhmaa84@gmail.com |
| Module Leader's Acad. Title | Assistant Professor Doctor | Module Leader's Qualification | Ph.D. |
| Module Tutor | | Email | |
| Peer Reviewer Name | Bilal Saad Mutlak | Email | Bilal.saad.m@uosamarra.edu.iq |
| Scientific Committee Approval Date | 2024/10/20 | Version Number | 33 |

| Relation with other Modules | | | |
|----------------------------------|------|----------|--|
| Relationship with other subjects | | | |
| Prerequisite module | None | Semester | |
| Co-requisites module | None | Semester | |

Module Aims, Learning Outcomes and Indicative Contents

Course Objectives, Learning Outcomes, and Instructional Contents

| | |
|--|---|
| <p>Module Objectives Course Objectives</p> | <ol style="list-style-type: none"> 1. The importance of studying organic chemistry lies in the fact that it is an influential and major factor in our lives, as it is concerned with the study of all living organisms and affects them, so we will explain this importance below: There is no scientific field that is related to our daily activities and changes in our bodies as organic chemistry is related 2. Organic chemistry is one of the branches of chemistry. It studies the structure, properties, and reactions of compounds and organic materials, i.e. materials containing the element carbon. It is concerned with the reactions and substances involved in the formation of living organisms or resulting from an organism, which is why it is called organic. 3. Most of the substances used in daily life are classified as organic substances, so the importance of organic chemistry appears in several areas of daily life. (NH₂-CH-proteins (CHO), Whole food is made up of carbon, carbohydrates .4 as well as vitamins that are organic in nature (CH-COO-CH) fatsCOOH), |
| <p>Module Learning Outcomes Learning Outcomes for the Course</p> | <ol style="list-style-type: none"> 1. Knowledge of the basics of physical and chemical properties of matter, and explain the theoretical principles and important applications of classical analytical methods 2. Classification and giving of organic compound nomenclature and detailed explanation of the qualitative and quantitative aspects of organic compounds <p>The student will be able to explain why chemistry is an essential activity to .3 address economic and environmental problems</p> |
| <p>Indicative Contents How-to Contents</p> | <p>In this second part it is designed to provide a basic overview of organic chemistry for a student interested in pursuing a career in science. It focuses primarily on the basic principles of understanding the structure properties, composition and preparation (by synthesis or other means) of carbon- hydrocarbon-based compounds and their derivatives. These compounds may contain any number of other elements, including ,hydrogen, nitrogen, oxygen, and halogens as well as phosphorus, silicon sulfur, and the reaction of organic molecules. The focus is on the reactions .of substitution and removal and the chemistry of the alkyl group</p> |

Learning and Teaching Strategies

Learning and Teaching Strategies

| | |
|--------------------------|--|
| <p>Strategies</p> | <p>The study of organic materials involves the use of spectroscopy (e.g., nuclear magnetic resonance), mass spectroscopy, and other physical and chemical methods to determine the chemical composition and chemical formula of organic compounds and understand ,food their reactions, and even to add materials that are useful to humans, such as fertilizers, and various polymers sometimes used as electrical insulators , medicines</p> |
|--------------------------|--|

Student Workload (SWL)

The student's academic load is calculated for 15 weeks

| | | | |
|--|------------|---|---|
| Structured SWL (h/sem) Student's regular academic load during the semester | 80 | Structured SWL (h/w) Regular Academic Load of the Student Weekly | 5 |
| Unstructured SWL (h/sem) Student's irregular academic load during class | 45 | Unstructured SWL (h/w) Student's irregular academic load per week | 3 |
| Total SWL (h/sem) The student's total academic load during the semester | 125 | | |

Module Evaluation

Assessment of the course

| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
|-------------------------|-----------------|-------------|----------------|---------------------------------|---------------------------|
| Formative assessment | Quizzes | 4 | 10% | Continuous throughout the class | |
| | Assignments | 3 | 10% | Continuous throughout the class | |
| | Projects / Lab. | 15 | 10% | Continuous throughout the class | |
| | Report | 1 | 10% | Continuous throughout the class | |
| Summative assessment | Midterm Exam | 2 | 10% | 8,14 | |
| | Final Exam | 1 | 50% | 16 | |
| Total assessment | | | 100% (100) | | |

Delivery Plan (Weekly Syllabus)

Theoretical Weekly Curriculum

| | Material Covered |
|----------------|--|
| Week 1 | Bonding in Chemical Compounds |
| Week 2 | Interpretation of Molecular Orbital Covalent Bonding |
| Week 3 | Aliphatic hydrocarbons |
| Week 4 | Preparation of the cans |
| Week 5 | Ring alkanes |
| Week 6 | Methods of Preparing Ring Canes |
| Week 7 | Alkenes |
| Week 8 | Alkene reactions |
| Week 9 | Creditors |
| Week 10 | Organisms |
| Week 11 | Aromatic hydrocarbons |
| Week 12 | Erinat |
| Week 13 | Alkyl halides |
| Week 14 | Alkyl halide reactions |

Delivery Plan (Weekly Lab. Syllabus)

Weekly Laboratory Curriculum

| | Material Covered |
|----------------|---|
| Week 1 | Devices and instruments used in organic chemistry laboratories |
| Week 2 | The first experiment is measuring the melting point of the melting point |
| Week 3 | The second experiment is measuring boiling point |
| Week 4 | The third experiment is the sublimation process |
| Week 5 | The Fourth Experiment Distillation Process and its Types |
| Week 6 | :The Sixth Experiment Recrystallization |
| Week 7 | Experiment Seven: Simple Filtration and Vacuum Filtration Simple Filter, Vacuum Filter |
| Week 8 | Experiment Eight Extraction |
| Week 9 | Extracting Caffeine from Tea |
| Week 10 | Experiment Ten: Preparation of Methane Gas |
| Week 11 | Experiment Eleven: Preparation of Acetylene Gas |
| Week 12 | Preparation of Nitrobenzene |
| Week 13 | Methods of diagnosing organic compounds |
| Week 14 | Final Report |

| | |
|----------------|----------------|
| Week 15 | Practical Exam |
|----------------|----------------|

| Learning and Teaching Resources | | |
|--|--|----------------------------------|
| Learning and Teaching Resources | | |
| | Text | Available in the Library? |
| Required Texts | Organic Chemistry Dr. Mohammad Nizar | |
| Recommended Texts | Fundamentals of Organic Chemistry Spill | No |
| Websites | Organic Chemistry Reactions Websites | |

| Grading Scheme | | | | |
|--|-------------------------|-------------------------|----------------|---------------------------------------|
| Grading Chart | | | | |
| Group | Grade | Recognition | Marks % | Definition |
| Success Group (50 - 100) | A - Excellent | Privilege | 90 - 100 | Outstanding Performance |
| | B - Very Good | Very good | 80 - 89 | Above average with some errors |
| | C - Good | Good | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | Medium | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | Acceptable | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 - 49) | FX - Fail | Deposit (in processing) | (45-49) | More work required but credit awarded |
| | F - Fail | Fail | (0-44) | Considerable amount of work required |
| Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above. | | | | |

MODULE DESCRIPTION FORM

Sample course description

| Module Information | | |
|---------------------------|----------------------|---------------------------------|
| Course Information | | |
| Module Title | General Plant | Module Delivery |
| Module Type | Core | <input type="checkbox"/> Theory |

| | | | | |
|------------------------------------|-------------------------|-------------------------------|---|--|
| Module Code | USAGFI1103 | | <input checked="" type="checkbox"/> Reading <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input checked="" type="checkbox"/> Practical <input type="checkbox"/> Seminar | |
| ECTS Credits | 7 | | | |
| SWL (hr/sem) | 175 | | | |
| Module Level | 1 | Semester of Delivery | 1 | |
| Administering Department | 2903Z100G003 | College | TyPe Collge code | |
| Module Leader | M.Dr. Mona Ayed Youssef | Email | muna.a.y@uosamarra.edu.iq | |
| Module Leader's Acad. Title | Lecturer Doctor | Module Leader's Qualification | PhD | |
| Module Tutor | | Email | | |
| Peer Reviewer Name | Tulane Khalid Ibrahim | Email | toleen.k@uosamarra.edu.iq | |
| Scientific Committee Approval Date | 2024/10/20 | Version Number | 33 | |

Relation with other Modules

Relationship with other subjects

| | | | |
|----------------------|------|----------|--|
| Prerequisite module | None | Semester | |
| Co-requisites module | None | Semester | |

Module Aims, Learning Outcomes and Indicative Contents

Course Objectives, Learning Outcomes, and Instructional Contents

| | |
|--|---|
| Module Objectives Course Objectives | 1. Introduce the student to botany, its importance and branches 2- Identify the plant cell and its parts 3. Distinguish between the types of plant cell division 4. Distinguish between plant tissue types Identify the parts of the plant and the importance of each part –5 |
| Module Learning Outcomes | 1- Identify the principles of different plant sciences: genetics, physiology, ecology, morphology, taxonomy, etc. 2- Identify the living and non-living contents of the cell, and the process of cell division. |

| | |
|---|---|
| Learning Outcomes for the Course | <p>3- Knowing the difference between plant tissue types, their importance and function in plants</p> <p>4- Students are able to diagnose the types of roots and stems, and what is the difference between them.</p> <p>5- Know the types of leaves, their sweating, and how to arrange them on the stem</p> <p>6- Knowing the main parts of the flower and the types of pollination</p> <p>Distinguish between the types of fruits and seeds -7</p> |
| Indicative Contents How-to Contents | 1. |

| Learning and Teaching Strategies | |
|---|---|
| Learning and Teaching Strategies | |
| Strategies | The lecturing, discussion, brainstorming, and collaborative learning strategy will be adopted in the delivery of this material and encourage students' participation in the lab, while at the same time improving and expanding their critical thinking skills. This will be achieved through classrooms, interactive lessons, and by looking at the types of simple experiments involving some sampling activities that interest students. |

| Student Workload (SWL) | | | |
|--|------------|---|---|
| The student's academic load is calculated for 15 weeks | | | |
| Structured SWL (h/sem) Student's regular academic load during the semester | 80 | Structured SWL (h/w) Regular Academic Load of the Student Weekly | 3 |
| Unstructured SWL (h/sem) Student's irregular academic load during class | 95 | Unstructured SWL (h/w) Student's irregular academic load per week | 2 |
| Total SWL (h/sem) The student's total academic load during the semester | 175 | | |

| Module Evaluation | | | | | |
|--------------------------|-------------|-------------|----------------|----------|---------------------------|
| Assessment of the course | | | | | |
| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
| Formative assessment | Quizzes | 2 | 10% (10) | 5 and 10 | LO #1, #2 and #10, #11 |
| | Assignments | 2 | 10% (10) | 2 and 12 | LO #3, #4 and #6, #7 |

| | | | | | |
|-----------------------------|------------------------|---|------------|------------|-------------------|
| | Projects / Lab. | 1 | 10% (10) | Continuous | Everyone |
| | Report | 1 | 10% (10) | 13 | LO #8, #9 and #12 |
| Summative assessment | Midterm Exam | 1 | 10% (10) | 7 | LO #1 - #7 |
| | Final Exam | 1 | 50% (50) | 16 | Everyone |
| Total assessment | | | 100% (100) | | |

Delivery Plan (Weekly Syllabus)

Theoretical Weekly Curriculum

| | Material Covered |
|----------------|--|
| Week 1 | Definition, Importance and Branches of Botany |
| Week 2 | Plant cell |
| Week 3 | Cell division |
| Week 4 | Definition of plant tissues and their types |
| Week 5 | Structural Tissue |
| Week 6 | Types of permanent tissues |
| Week 7 | Composite tissues |
| Week 8 | Root and its types |
| Week 9 | Leg and its types |
| Week 10 | Division of stems by function and difference between stem and root |
| Week 11 | Leaf Composition , Types and Leaf Arrangement on the Stem |
| Week 12 | Flower Parts |
| Week 13 | Types of Insemination |
| Week 14 | Composition of fruits and varieties |
| Week 15 | Seed and Composition |
| Week 16 | |
| Week 17 | |
| Week 18 | |
| Week 19 | |
| Week 20 | |
| Week 21 | |
| Week 22 | |
| Week 23 | |
| Week 24 | |
| Week 25 | |
| Week 26 | |
| Week 27 | |
| Week 28 | |

Delivery Plan (Weekly Lab. Syllabus)

Weekly Laboratory Curriculum

| | Material Covered |
|---------|---|
| Week 1 | Familiarity with laboratory instruments |
| Week 2 | Live and non-living contents of the cell |
| Week 3 | Direct and indirect cell division |
| Week 4 | Permanent tissue , parenchymal tissue anatomy |
| Week 5 | Difference Between Mermaids and Permanent Tissues |
| Week 6 | Essential tissues |
| Week 7 | Vascular tissues and vascular bundles and their types |
| Week 8 | Anatomy of the root and its internal structure |
| Week 9 | Leg - and Leg Morphology |
| Week 10 | Anatomy of the leg and its internal structure |
| Week 11 | Anatomy of a paper |
| Week 12 | Simple Papers, Compound Papers |
| Week 13 | Anatomy of the parts of the flower |
| Week 14 | Anatomy of the fruit |
| Week 15 | Seed Anatomy |

Learning and Teaching Resources

Learning and Teaching Resources

| | Text | Available in the Library? |
|-------------------|---|---------------------------|
| Required Texts | Mujahid, Ahmed Mohammad. (1992). Anglo-Egyptian Library. Cairo. General Plant | No |
| Recommended Texts | . Ministry of Agriculture. Department of Agricultural Education. Egypt(2021) Agricultural Botany Book. Written by John Percival.(Hassan, Abbas, Tawfiq Abu Tira and Bayoumi Al-Dara. (2021). Concepts on Botany Arab Press Agency .. | No |
| Websites | https://bookapa.com/e-books/-7102.html | |

Grading Scheme

Grading Chart

| Group | Grade | Recognition | Marks % | Definition |
|-------------------------------------|-------------------------|-------------------------|----------|---------------------------------------|
| Success Group (50 - 100) | A - Excellent | Privilege | 90 - 100 | Outstanding Performance |
| | B - Very Good | Very good | 80 - 89 | Above average with some errors |
| | C - Good | Good | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | Medium | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | Acceptable | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 – 49) | FX – Fail | Deposit (in processing) | (45-49) | More work required but credit awarded |
| | F – Fail | Fail | (0-44) | Considerable amount of work required |
| | | | | |

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

Sample course description

| Module Information | | | |
|-----------------------------|-------------------------|-------------------------------|---|
| Course Information | | | |
| Module Title | Computer | | Module Delivery |
| Module Type | Basic | | <input type="checkbox"/> Theory <input checked="" type="checkbox"/> Reading <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar |
| Module Code | USAGFi131 | | |
| ECTS Credits | 3 | | |
| SWL (hr/sem) | 75 | | |
| Module Level | 1 | Semester of Delivery | |
| Administering Department | 2903Z100G003 | College | Type College Code |
| Module Leader | Abdul Munem Hasan Ahmed | Email | moneim.h14@uosamarra.edu.iq |
| Module Leader's Acad. Title | Assistant professor | Module Leader's Qualification | Ph.D |
| Module Tutor | | Email | Email |
| Peer Reviewer Name | Name | Email | Email |

| | | | |
|------------------------------------|------------|----------------|----|
| Scientific Committee Approval Date | 2024/10/20 | Version Number | 33 |
|------------------------------------|------------|----------------|----|

| Relation with other Modules | | | |
|----------------------------------|------|----------|--|
| Relationship with other subjects | | | |
| Prerequisite module | None | Semester | |
| Co-requisites module | None | Semester | |

| Module Aims, Learning Outcomes and Indicative Contents | |
|--|---|
| Course Objectives, Learning Outcomes, and Instructional Contents | |
| Module Objectives Course Objectives | <p>The main objective of computer science is:</p> <ol style="list-style-type: none"> 1. Identify the concepts of computers , programs and their components. 2- Identify the computer parts and input and output units in the computer. 3. Identify memory types, core CPU components, and computer ports. 4. Recognize and GUI: Operating System; Fundamentals of Common Operating Systems. 5. Familiarize yourself with word processing software: basics of word processing, opening and closing documents: (text creation and processing; text formatting; table handling: spell checking). 6. Familiarize yourself with the presentation software: the basics of presentation software ; create presentations; prepare and present slides: slide show. 7. Understanding the Internet, Web Browsers: Fundamentals of Computer Networking, LAN and WAN Networks, Internet Concept and Applications, Internet Connection. 8. Identify communications and email: (Email Basics; Get an email account; send and receive emails). <p>Computer Troubleshooting: Identify and resolve common hardware and -9 .software issues faced by computer users</p> |

| | |
|--|--|
| Module Learning Outcomes Learning Outcomes for the Course | <ol style="list-style-type: none"> 1- Understanding the basics of computers: The student's ability to identify computer components and basic operating systems. 2- Proficiency in the use of office software such as (PowerPoint, Excel, word) Microsoft Office 3- Ability to collect, organize, and analyze data using computer tools. 4- Use online communication and collaboration tools effectively. 5- Ability to self-learn and acquire new skills in the field of information technology. <p style="text-align: right;">.Following the latest developments in computer technology -6</p> |
| Indicative Contents How-to Contents | <p>How-to content includes:</p> <ol style="list-style-type: none"> 1. Understand the concepts of computers , software and their components. .web browsers, and the basics of computer networks ,Understand the Internet .2 |

| Learning and Teaching Strategies Learning and Teaching Strategies | |
|---|---|
| Strategies | <ol style="list-style-type: none"> 1- Active learning in the computer subject is an educational method based on the active participation of students in the educational process so that the student is the center of the educational process . 2- Self-paced learning in the computer subject: It is the provision of various educational resources such as e-lessons and books to motivate students to explore the content on their own. 3- Developing academic education according to quality standards in higher education, which enables colleges and universities to produce outputs that are capable of production and excellence in the labor market . <p style="text-align: right;">Teaching the student practical applications and developing thinking skills to solve - 4 .emerging problems</p> |

| Student Workload (SWL) The student's academic load is calculated for 15 weeks | | | |
|---|-----------|---|---|
| Structured SWL (h/sem) Student's regular academic load during the semester | 48 | Structured SWL (h/w) Regular Academic Load of the Student Weekly | 3 |
| Unstructured SWL (h/sem) Student's irregular academic load during class | 27 | Unstructured SWL (h/w) Student's irregular academic load per week | 1 |
| Total SWL (h/sem) The student's total academic load during the semester | 75 | | |

| Module Evaluation | | | | | |
|--------------------------|-----------------|-------------|----------------|---------------------------------|---------------------------|
| Assessment of the course | | | | | |
| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
| Formative assessment | Quizzes | 4 | 10% | Continuous throughout the class | |
| | Assignments | 2 | 10% | 5,10 | |
| | Projects / Lab. | 15 | 10% | Continuous throughout the class | |
| | Report | 2 | 10 % | 4,11 | |
| Summative assessment | Midterm Exam | 2 | 10% | 7,13 | |
| | Final Exam | 1 | 50% | 16 | |
| Total assessment | | | 100% (100) | | |

| Delivery Plan (Weekly Syllabus) | |
|---------------------------------|--|
| Theoretical Weekly Curriculum | |
| | Material Covered |
| Week 1 | Introduction to Computer |
| Week 2 | Computer Parts (Input Units, Output Units, Memory Types) |
| Week 3 | CPU, PC Ports, PC (Features & Types) |
| Week 4 | Operating System (GUI: Operating System, Common Operating System Basics; User Interface, Use .(of Mouse Technologies: Use of Common Icons |
| Week 5 | Use of Mouse Techniques: Use Common Icons, Status Bar, Use Menu and Menu Selection, Concept .of Folders and Directories, Open and Close Different Windows: Create Shortcuts |
| Week 6 | Word processing: Word processing basics; opening and closing documents: text creation and ;processing |
| Week 7 | a Word Text formatting; table handling; spelling, language and synonyms preparation; printing document. |
| Week 8 | ,Spreadsheet: Spreadsheet Basics, Cell Manipulation, Formulas and Functions |
| Week 9 | .Edit spreadsheet, print spreadsheet |
| Week 10 | ;Presentation software: Presentation software basics |
| Week 11 | Prepare and present slides: Slide show, take hard copies of presentations/printouts |
| Week 12 | LAN ;Introduction to the Internet and Web Browsers: Fundamentals of Computer Networking Internet Concept and Applications, Internet Connectivity, World Wide Web; Web ;WANand .Address Domain Name: IP :URL Browsers. Search Engines: Understand |
| Week 13 | Communications and email: Email basics; get an email account; send and receive emails; access sent .emails; use emails; collaborate on documents |

| | |
|----------------|---|
| Week 14 | Computer troubleshooting: Identify and troubleshoot common hardware and software issues directed .by computer users. Basic troubleshooting techniques and tools for diagnosing and resolving problems |
| Week 15 | End of course exam |

| Delivery Plan (Weekly Lab. Syllabus) Weekly Laboratory Curriculum | |
|---|--|
| | Material Covered |
| Week 1 | Display of computer parts (inputs, outputs, memory types) |
| Week 2 | View memory types |
| Week 3 | CPU display, computer ports |
| Week 4 | GUI Training: For Operating System |
| Week 5 | Mouse Technique Training |
| Week 6 | Practice using the menu, choosing the menu , the concept of folders, opening and closing different .windows |
| Week 7 | Word Processing Software Training: Word Processing Basics; Opening and Closing Documents: Text .Creation and Processing |
| Week 8 | Table Handling Training: Spell Checking, Language and Synonyms Preparation; and Word Document ..Printing |
| Week 9 | .Spreadsheet training: Spreadsheet basics, cell handling; formulas and functions |
| Week 10 | .Spreadsheet editing training , spreadsheet printing |
| Week 11 | ;Presentation Software Training: Fundamentals of Presentation Software |
| Week 12 | .Slide preparation and presentation training: Slide presentation, hard copies of presentations/printouts |
| Week 13 | ,Web Browser Training: Fundamentals of Computer Networking, Internet Concept and Applications .Internet Connectivity, World Wide Web, Web Browsers. Search engines |
| Week 14 | Communication and email training: Email basics; Obtaining an email account; sending and receiving .emails |
| Week 15 | Computer troubleshooting training: Identify and resolve common hardware and software issues .directed by computer users |

| Learning and Teaching Resources Learning and Teaching Resources | | |
|---|---|---------------------------|
| | Text | Available in the Library? |
| Required Texts | Methodology: Fundamentals of Computers and Office Applications a.M.Dr.Ziad Mohamed Abboud A.Dr.Ghassan Hamid Abd El , Majid a.M.Dr.Amir Hassan Murad | |
| Recommended Texts | Fundamentals of Computer Systems: A Comprehensive Guide to Computer Systems and Applications by Roseline Paul (Author) | No |

| | |
|-----------------|---|
| Websites | https://icdlarabia.org/Ar/modules-computer-essentials |
|-----------------|---|

| Grading Scheme Grading Chart | | | | |
|---|-------------------------|-------------------------|----------|---------------------------------------|
| Group | Grade | Recognition | Marks % | Definition |
| Success Group (50 - 100) | A - Excellent | Privilege | 90 - 100 | Outstanding Performance |
| | B - Very Good | Very good | 80 - 89 | Above average with some errors |
| | C - Good | Good | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | Medium | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | Acceptable | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 – 49) | FX – Fail | Deposit (in processing) | (45-49) | More work required but credit awarded |
| | F – Fail | Fail | (0-44) | Considerable amount of work required |
| <p>Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.</p> | | | | |

MODULE DESCRIPTION FORM

Sample course description

| Module Information Course Information | | | |
|--|--------------------------------|-----------------------------|---|
| Module Title | Mathimatics | | Module Delivery |
| Module Type | S Supportive | | <input type="checkbox"/> Theory <input checked="" type="checkbox"/> Reading <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar |
| Module Code | USAGFi1105 | | |
| ECTS Credits | 5 | | |
| SWL (hr/sem) | 125 | | |
| Module Level | 1 | Semester of Delivery | |
| Administering Department | | College | Type collge code |
| Module Leader | Prof. Dr. Khaled Abdullah Sahr | Email | Khalid.a.s@uosamarra.edu.iq |

| | | | |
|---|------------------|--------------------------------------|-----|
| Module Leader's Acad. Title | Professor Doctor | Module Leader's Qualification | PhD |
| Module Tutor | | Email | |
| Peer Reviewer Name | | Email | |
| Scientific Committee Approval Date | 2024/10/20 | Version Number | 33 |

Relation with other Modules

Relationship with other subjects

| | | | |
|-----------------------------|------|-----------------|--|
| Prerequisite module | None | Semester | |
| Co-requisites module | None | Semester | |

Module Aims, Learning Outcomes and Indicative Contents

Course Objectives, Learning Outcomes, and Instructional Contents

| | |
|--|---|
| Module Objectives Course Objectives | Introduce the student to the general foundations of mathematics, including matrices, functions, derivatives, etc., and their applications in the agricultural field. |
| Module Learning Outcomes Learning Outcomes for the Course | <ol style="list-style-type: none"> 1- Making the student able to recognize matrices - the concept of matrices 2- Some types of matrices - operations on matrices 3- Making the student able to recognize the determinants – calculating the determinant for the matrix -properties 3x3 and the matrix 2x2 4- Make the student able to identify Kramer's method of finding the solution of the system of linear equations 5- Making the student able to deal with periods, types of periods, functions, determining the corresponding and graph of the field and scope for some functions. 6- Making the student able to recognize the displacement of the graph of functions – applications to the linear function 7. Make the student able to deal with the derivation of functions. 8. Making the student able to recognize the integration – the concept of integration – 9. Make the student able to identify applications on integration - calculating the area under the curve - calculating the area between two curves 10. Make the student able to recognize trigonometric functions - derivation of functions 11. Make the student able to recognize the integral calculus of trigonometric functions 12. Make the student able to recognize the logarithmic function - the properties of the function <p style="text-align: right;">- Logarithmic - Derivation of the logarithmic function</p> |
| Indicative Contents | 1. Make the student able to learn how to calculate the integration of a logarithmic function. Applications to the logarithmic function. |

| | |
|------------------------|--|
| How-to Contents | <p>2. Making the student able to recognize the exponential function, the properties of the exponential function, the derivation of the exponential function, the integration of the exponential function.</p> <p>3. Make the student able to identify inverse trigonometric functions, the concept of inverse functions, and the derivation of inverse functions.</p> <p>Make the student able to recognize how to calculate the integration of inverse .4 functions</p> |
|------------------------|--|

| Learning and Teaching Strategies | |
|---|---|
| Learning and Teaching Strategies | |
| Strategies | To make the learner able to solve the problems of matrices, derivatives, exponential functions, linear, trigonogram, logarithmic, and integration calculations in agricultural applications |

| Student Workload (SWL) | | | |
|--|------------|---|---|
| The student's academic load is calculated for 15 weeks | | | |
| Structured SWL (h/sem) Student's regular academic load during the semester | 48 | Structured SWL (h/w) Regular Academic Load of the Student Weekly | 3 |
| Unstructured SWL (h/sem) Student's irregular academic load during class | 77 | Unstructured SWL (h/w) Student's irregular academic load per week | 5 |
| Total SWL (h/sem) The student's total academic load during the semester | 125 | | |

| Module Evaluation | | | | | |
|-----------------------------|--------------------|-------------|----------------|---------------------------------|---------------------------|
| Assessment of the course | | | | | |
| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
| Formative assessment | Quizzes | 5 | 10% | Continuous throughout the class | |
| | Assignments | 5 | 10% | Continuous throughout the class | |

| | | | | | |
|-----------------------------|------------------------|---|------------|-----|--|
| | Projects / Lab. | 2 | 10% | 5,9 | |
| | Report | 1 | 10% | 13 | |
| Summative assessment | Midterm Exam | 1 | 10% | 10 | |
| | Final Exam | 1 | 50% | 16 | |
| Total assessment | | | 100% (100) | | |

Delivery Plan (Weekly Syllabus)

Theoretical Weekly Curriculum

| | Material Covered |
|----------------|---|
| Week 1 | Matrices - The concept of matrices - Some types of matrices - Operations on matrices |
| Week 2 | .x3delimiters – Calculate the delimiter for a matrix - Properties of delimiters3x22 |
| Week 3 | Kramer's method of finding the solution of the system of linear equations |
| Week 4 | Periods - Types of periods - Functions - Define the domain, the corresponding domain and .the graph of some functions |
| Week 5 | Function Graph Displacement – Applications to the Linear Function. .Calculating the integration of inverse functions |
| Week 6 | .Derivation - The concept of derivation - the derivative laws of functions |
| Week 7 | Integration – The Concept of Integration – General Forms of Integration |
| Week 8 | Applications on Integration - Calculating the Area Under the Curve - Calculating the Area Between Two Curves |
| Week 9 | .Trigonometric Functions- The derivation of trigonometric functions |
| Week 10 | .Integrity Calculation of Trigonometric Functions - Applications to Trigonometric Functions |
| Week 11 | Logarithmic Function - Properties of Logarithmic Function - Derivation of Logarithmic - Function |
| Week 12 | Calculation of the integration of a logarithmic function. Applications to the logarithmic .function |
| Week 13 | Exponential Function Properties of an Exponential Function - Derivation of an Exponential Function - Integration of an Exponential Function |
| Week 14 | Inverse Trigonometric Functions – The Concept of Inverse Functions – The Derivation of .Inverse Functions |
| Week 15 | Calculating integration for inverse functions |
| Week 16 | |

| | |
|---------|--|
| Week 17 | |
| Week 18 | |
| Week 19 | |
| Week 20 | |
| Week 21 | |
| Week 22 | |
| Week 23 | |
| Week 24 | |
| Week 25 | |
| Week 26 | |
| Week 27 | |
| Week 28 | |

Delivery Plan (Weekly Lab. Syllabus)

Weekly Laboratory Curriculum

| | Material Covered |
|---------|------------------|
| Week 1 | |
| Week 2 | |
| Week 3 | |
| Week 4 | |
| Week 5 | |
| Week 6 | |
| Week 7 | |
| Week 8 | |
| Week 9 | |
| Week 10 | |
| Week 11 | |
| Week 12 | |
| Week 13 | |
| Week 14 | |
| Week 15 | |

Learning and Teaching Resources

Learning and Teaching Resources

| | Text | Available in the Library? |
|-------------------|-------------------|---------------------------|
| Required Texts | Thomas - Calculus | |
| Recommended Texts | | No |

| | |
|----------|--|
| Websites | |
|----------|--|

| Grading Scheme Grading Chart | | | | |
|---|-------------------------|-------------------------|----------|---------------------------------------|
| Group | Grade | Recognition | Marks % | Definition |
| Success Group (50 - 100) | A - Excellent | Privilege | 90 - 100 | Outstanding Performance |
| | B - Very Good | Very good | 80 - 89 | Above average with some errors |
| | C - Good | Good | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | Medium | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | Acceptable | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 – 49) | FX – Fail | Deposit (in processing) | (45-49) | More work required but credit awarded |
| | F – Fail | Fail | (0-44) | Considerable amount of work required |
| <p>Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.</p> | | | | |

MODULE DESCRIPTION FORM

Sample course description

| Module Information | | | |
|--------------------------|---------------------------------|----------------------|---|
| Course Information | | | |
| Module Title | Engineering Drawing | | Module Delivery |
| Module Type | BASIC | | <input type="checkbox"/> Theory <input type="checkbox"/> Reading <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input checked="" type="checkbox"/> Practical <input type="checkbox"/> Seminar |
| Module Code | USAGFi1107 | | |
| ECTS Credits | 3 | | |
| SWL (hr/sem) | 75 | | |
| Module Level | 1 | Semester of Delivery | |
| Administering Department | 2903Z100G003 | College | Type College code |
| Module Leader | Qais Abd El , Amir Mahdi | Email | 50007@uotechnology.edu.iq |

| | | | |
|------------------------------------|---------------------|-------------------------------|-----|
| Module Leader's Acad. Title | Assistant Professor | Module Leader's Qualification | PhD |
| Module Tutor | | Email | |
| Peer Reviewer Name | | Email | |
| Scientific Committee Approval Date | 2024/10/20 | Version Number | 33 |

| Relation with other Modules | | | |
|----------------------------------|------|----------|--|
| Relationship with other subjects | | | |
| Prerequisite module | None | Semester | |
| Co-requisites module | None | Semester | |

| Module Aims, Learning Outcomes and Indicative Contents | |
|--|---|
| Course Objectives, Learning Outcomes, and Instructional Contents | |
| Module Objectives Course Objectives | <ol style="list-style-type: none"> 1. Expanding the mental ability to imagine geometric shapes. 2. Adjust the practical aspects of the course through laboratory sessions. 3. Introduce students to engineering designs and their importance in manufacturing products. 4. Introduce students to the basics of engineering drawing. 5. To enable students to understand the elements of three-dimensional visualization. 6. Introduce students to technical drawing techniques so that design ideas can be communicated and produced. 7. Introduce students to industry-related visual and written standard requirements. 8. To understand and interpret any form of geometric drawings. 9. To draw an object from different perspective perspectives. |
| Module Learning Outcomes Learning Outcomes for the Course | <ol style="list-style-type: none"> 1. Ability to read and analyze design maps. 2. The ability to represent engineering designs and convey them into reality. 3. Students should be able to understand the description of any design. |

| | |
|--|--|
| | <ol style="list-style-type: none"> 4. Learn and learn about common drawing symbols. 5. Identify the development of basic engineering models. 6. Students will be able to produce business drawings according to industry requirements. 7. Students will be able to draw the required scenery for assembly drawings that illustrate all the details. <p>Students will be able to apply the principles of art drawing to a .8 .variety of engineering applications</p> |
| <p>Indicative Contents How-to Contents</p> | <p style="text-align: right;">How-to content includes:</p> <p style="text-align: right;">Part A – Introduction to Graphic Styles Fonts, calligraphy, types of papers, and tools</p> <p style="text-align: right;">Part B – Drawing Techniques Drawing Sheets, Hand Drawing, Drawing with Tools</p> <p style="text-align: right;">Part C – Engineering Operations and Drawing Applications</p> <p style="text-align: right;">Part D. Projection Techniques and Spell Projection Applications</p> |

| | |
|---|---|
| <p>Learning and Teaching Strategies Learning and Teaching Strategies</p> | |
| <p>Strategies</p> | <ol style="list-style-type: none"> 1. Prompt and accurate decision-making. 2. Provide a detailed explanation in the chapter on the topic. 3. Provide sufficient illustration on the board with the help of a projector. 4. Make lecture periods interactive and integrate them into practical work. 5. Educational websites. 6. Give students class work during the lecture period .Giving homework at the end of each lecture .7 |

| | | | |
|---|------------------|---|-----------------|
| <p>Student Workload (SWL) The student's academic load is calculated for 15 weeks</p> | | | |
| <p>Structured SWL (h/sem)</p> | <p>45</p> | <p>Structured SWL (h/w) Regular Academic Load of the Student Weekly</p> | <p>3</p> |

| | | | |
|---|-----------|--|----------|
| Student's regular academic load during the semester | | | |
| Unstructured SWL (h/sem) Student's irregular academic load during class | 30 | Unstructured SWL (h/w) Student's irregular academic load per week | 2 |
| Total SWL (h/sem) The student's total academic load during the semester | 75 | | |

| Module Evaluation | | | | | |
|-----------------------------|-----------------|-------------|-------------------|---------------------------------|---------------------------|
| Assessment of the course | | | | | |
| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
| Formative assessment | Quizzes | 2 | 10% | 5,10 | |
| | Assignments | 5 | 10% | 3,5,7,9,13 | |
| | Projects / Lab. | 3 | 10% | 6,8,11 | |
| | Report | 1 | 10% | 14 | |
| Summative assessment | Midterm Exam | 1 | 10% | Continuous throughout the class | |
| | Final Exam | 1 | 50% | | |
| Total assessment | | | 100% (100) | | |

| Delivery Plan (Weekly Syllabus) | |
|--|------------------|
| Theoretical Weekly Curriculum | |
| | Material Covered |
| Week 1 | |
| Week 2 | |
| Week 3 | |
| Week 4 | |
| Week 5 | |
| Week 6 | |
| Week 7 | |
| Week 8 | |

| | |
|---------|--|
| Week 9 | |
| Week 10 | |
| Week 11 | |
| Week 12 | |
| Week 13 | |
| Week 14 | |
| Week 15 | |

| Delivery Plan (Weekly Lab. Syllabus) Weekly Laboratory Curriculum | |
|---|--|
| | Material Covered |
| Week 1 | Introduction to Engineering Drawing and Tools to be Available |
| Week 2 | Types of calligraphy, geometric shapes and their features |
| Week 3 | Configuring the drawing board, how to get started with a geometric drawing |
| Week 4 | Engineering Operations -1 |
| Week 5 | Engineering Operations-2 |
| Week 6 | Engineering Operations-3 |
| Week 7 | Comprehensive Exercises for Engineering Operations |
| Week 8 | Projection theory |
| Week 9 | Projections - 1 |
| Week 10 | Projections - 2 |
| Week 11 | Dimensions |
| Week 12 | Additional exercises |
| Week 13 | Holographic |
| Week 14 | Cut Projections -1 |
| Week 15 | Cut Projections -2 |

| Learning and Teaching Resources Learning and Teaching Resources | | |
|---|--|---------------------------|
| | Text | Available in the Library? |
| Required Texts | The geometric drawing of the author Abdul Rasool Al-Khafaf | yes |
| Recommended Texts | Engineering Drawing by M. B. Shah, B. C. Rana | No |

| | |
|----------|---|
| Websites | https://www.gcect.ac.in/download/assignment/Engineering-Drawing.pdf |
|----------|---|

| Grading Scheme Grading Chart | | | | |
|---|------------------|-------------------------|----------|---------------------------------------|
| Group | Grade | Recognition | Marks % | Definition |
| Success Group (50 - 100) | A - Excellent | Privilege | 90 - 100 | Outstanding Performance |
| | B - Very Good | Very good | 80 - 89 | Above average with some errors |
| | C - Good | Good | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | Medium | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | Acceptable | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 - 49) | FX – Fail | Deposit (in processing) | (45-49) | More work required but credit awarded |
| | F – Fail | Fail | (0-44) | Considerable amount of work required |
| <p>Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.</p> | | | | |

MODULE DESCRIPTION FORM

Sample course description

| Module Information | | | |
|-----------------------------|------------------|-------------------------------|--|
| Course Information | | | |
| Module Title | Soil principles | | Module Delivery |
| Module Type | support | | <input checked="" type="checkbox"/> Theory <input type="checkbox"/> Reading <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar |
| Module Code | USAG1106 | | |
| ECTS Credits | 7 | | |
| SWL (hr/sem) | 175 | | |
| Module Level | 1 | Semester of Delivery | |
| Administering Department | 2903Z100G003 | College | Type College Code |
| Module Leader | Ghasan Zad Mreef | Email | ghasan.zaid.m@uosamarra.edu.iq |
| Module Leader's Acad. Title | teacher | Module Leader's Qualification | M |

| | | | |
|---|-----------------------|-----------------------|--|
| Module Tutor | | Email | Email |
| Peer Reviewer Name | Mahmoud Shukr spectra | Email | atyaf.m@uosamarra.edu.iq |
| Scientific Committee Approval Date | 2024/10/20 | Version Number | 33 |

| Relation with other Modules | | | |
|------------------------------------|------|-----------------|--|
| Relationship with other subjects | | | |
| Prerequisite module | None | Semester | |
| Co-requisites module | None | Semester | |



| Module Aims, Learning Outcomes and Indicative Contents | |
|--|--|
| Course Objectives, Learning Outcomes, and Instructional Contents | |
| Module Objectives Course Objectives | <p>The main objective of studying soil principles is:</p> <ol style="list-style-type: none"> 1- Identify the concept of soil and its components. 2- Identifying the parts of the soil horizons and layers. 3- Identify the characteristics of the soil and its relationship with plant production. 4- Identify the types of soils to consider them as a medium for plant growth. 5- Identifying the contents of the soil in terms of decomposing organic and mineral materials. 6- Identifying the type of microorganisms that inhabit the soil. 7- Identify the factors of soil formation. 8- Identify the classification of soil construction. <p>.Identifying the biological classification of soil water -9</p> |
| Module Learning Outcomes Learning Outcomes for the Course | <ol style="list-style-type: none"> 7- Understanding the basics of soil components: The student's ability to recognize basic soil components . 8- Ability to collect data on soil layers. 9- Use the optimal medium of soil types to give optimal plant yield. 10- Ability to self-learn and acquire new skills in the field of biological classification of soil water and whether or not the plant benefits from it. <p>.Following up on recent developments in soil science -11</p> |
| Indicative Contents How-to Contents | <p>How-to content includes:</p> <ol style="list-style-type: none"> 1. Understand the concepts of soil and its components. |

| | |
|--|--|
| | Understanding the horizons, layers, characteristics, and types of soils and the -2 .factors affecting them |
|--|--|

| Learning and Teaching Strategies | |
|---|--|
| Learning and Teaching Strategies | |
| Strategies | <p>1- Active learning in the subject of soil principles is an educational and diagnostic method based on the effective participation of students in the educational process so that the student is the center of the educational process .</p> <p>2- Self-paced learning in Soil Principles: It is the provision of various educational resources such as e-lessons and books to motivate students to explore the content on their own.</p> <p>3- Developing academic education according to quality standards in higher education, which enables colleges and universities to produce outputs that are capable of production and excellence in the labor market .</p> <p>Teaching the student practical applications and developing thinking skills to solve - 4 .emerging problems</p> |

| Student Workload (SWL) | | | |
|--|----|---|---|
| The student's academic load is calculated for 15 weeks | | | |
| Structured SWL (h/sem) Student's regular academic load during the semester | 80 | Structured SWL (h/w) Regular Academic Load of the Student Weekly | 5 |
| Unstructured SWL (h/sem) Student's irregular academic load during class | 45 | Unstructured SWL (h/w) Student's irregular academic load per week | |
| Total SWL (h/sem) The student's total academic load during the semester | | | |

| Module Evaluation | | | | | |
|-----------------------------|----------------|-------------|----------------|-------------------------------------|---------------------------|
| Assessment of the course | | | | | |
| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
| Formative assessment | Quizzes | 2/6 | 10% | 2and 3and5and 6and 9and 11 | |

| | | | | | |
|-------------------------|-----------------|---------|------------|---------------------------------|--|
| | Assignments | 2/2 | 10% | 3 and 5 and 8 | |
| | Projects / Lab. | 2/8 | 10% | Continuou s | |
| | Report | 5/2 | 10 % | 2 and 4 and 5 and 8 and 9 | |
| Summative assessment | Midterm Exam | 2 | 10% | Continuous | |
| | Final Exam | 3 hours | 50% | 16 | |
| Total assessment | | | 100% (100) | | |

Delivery Plan (Weekly Syllabus)

Theoretical Weekly Curriculum

| | Material Covered |
|---------|--|
| Week 1 | General Definitions and Concepts of Soil Biology |
| Week 2 | Evolution of soils |
| Week 3 | Soil Formation Processes |
| Week 4 | Physical properties of the soil |
| Week 5 | Soil construction |
| Week 6 | Soil air and its components |
| Week 7 | Soil Temperature |
| Week 8 | Soil Water Classification |
| Week 9 | Colloids and Soil Chemical Properties |
| Week 10 | Organic collids |
| Week 11 | Biological Properties of Soil |
| Week 12 | Methods of measuring the importance of soil acidity number |
| Week 13 | Positive ion exchange capacity in soil |
| Week 14 | Main Collections of Soil Biology |
| Week 15 | End of course exam |

Delivery Plan (Weekly Lab. Syllabus)

Weekly Laboratory Curriculum

| | Material Covered |
|--------|---|
| Week 1 | View the main components of the soil (mediums, immature, mature, old) |

| | |
|----------------|---|
| Week 2 | View the processes that led to the formation of soils |
| Week 3 | Measurement of Soil Physical and Chemical Properties |
| Week 4 | Soil Horizon Classification Training |
| Week 5 | Measuring soil temperature and moisture |
| Week 6 | Soil Water Classification Training |
| Week 7 | Training in Soil Organic Colloids |
| Week 8 | Training on the classification of Hungarian organisms present in the soil |
| Week 9 | Training on methods of measuring and the importance of soil acidity number |
| Week 10 | Training to Understand Positive Ion Exchange Capacity in Soil |
| Week 11 | Soil Air Quality Inspection Training |
| Week 12 | Training on Soil Water Constants (Field Capacity, Wilting Point, Hychroscopic Laboratories) |
| Week 13 | Understanding Soil Tissue Varieties |
| Week 14 | Soil Organic Content Measurement |
| Week 15 | Measuring the level of minerals present in the soil |

Learning and Teaching Resources

Learning and Teaching Resources

| | Text | Available in the Library? |
|--------------------------|--|---------------------------|
| Required Texts | Methodology : Principles of Soil Science a.Dr. Abdullah Najm Al-Ani | |
| Recommended Texts | Fundamentals in Soil Science: Authorship Dr. Falah Abu Nuqta | No |
| Websites | | |

Grading Scheme

Grading Chart

| Group | Grade | Recognition | Marks % | Definition |
|-------------------------------------|-------------------------|-------------------------|----------|---------------------------------------|
| Success Group (50 - 100) | A - Excellent | Privilege | 90 - 100 | Outstanding Performance |
| | B - Very Good | Very good | 80 - 89 | Above average with some errors |
| | C - Good | Good | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | Medium | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | Acceptable | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 – 49) | FX – Fail | Deposit (in processing) | (45-49) | More work required but credit awarded |
| | F – Fail | Fail | (0-44) | Considerable amount of work required |

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

Sample course description

| Module Information | | | |
|------------------------------------|-----------------------------------|-------------------------------|---|
| Course Information | | | |
| Module Title | Human Rights and Democracy | | Module Delivery |
| Module Type | BASIC | | <input checked="" type="checkbox"/> Theory <input type="checkbox"/> Reading <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar |
| Module Code | USAGFi1104 | | |
| ECTS Credits | 2 | | |
| SWL (hr/sem) | 50 | | |
| Module Level | 1 | Semester of Delivery | |
| Administering Department | 2903Z100G003 | College | Type Collge Code |
| Module Leader | Mohammed Hassan Saeed | Email | |
| Module Leader's Acad. Title | Assistant Lecturer | Module Leader's Qualification | Master |
| Module Tutor | | Email | |
| Peer Reviewer Name | | Email | |
| Scientific Committee Approval Date | 22024/10/20 | Version Number | 33 |

| Relation with other Modules | | | |
|----------------------------------|------|----------|--|
| Relationship with other subjects | | | |
| Prerequisite module | None | Semester | |
| Co-requisites module | None | Semester | |

| Module Aims, Learning Outcomes and Indicative Contents | |
|--|--|
| Course Objectives, Learning Outcomes, and Instructional Contents | |
| | |

| | |
|--|--|
| <p>Module Objectives Course Objectives</p> | <ol style="list-style-type: none"> 1. Knowledge of the necessary human rights principles Knowledge of the principles of democracy and work to make it a success 2. Knowing the requirements of security and political stability in the country, consolidating the role of citizenship and preserving the national identity. 3. Spreading the culture of peaceful coexistence and respect for religious and ethnic specificities. 4. Knowledge of the state's policies in general in order to participate in their evaluation. 5- Students live together as individuals in an integrated society 6. Urging students to love the homeland and absolute loyalty to it. 7. Wide participation in political elections and active national presence in them. 8. The necessity of involving students in humanitarian and social activities that stimulate empathy with people |
| <p>Module Learning Outcomes Learning Outcomes for the Course</p> | <ol style="list-style-type: none"> 1. Focus on and respect the national identity and work to consolidate its principles 2. The necessity of loving the homeland and the sons of the homeland, sowing the seeds of peaceful coexistence and living with dignity for all components 3. Consolidate, respect and mature the principles of human rights and democracy 4. Spreading the culture of accepting the other and respecting his religious, political, cultural and social specificity. 5. The necessity of cooperating with state institutions in order to establish security and safety throughout the country |
| <p>Indicative Contents How-to Contents</p> | <p>Part A- Introduction to Human Rights Definition of Human Rights - Importance of Human Rights - The Difference Between Civil, Political, Social and Cultural Rights</p> <p>Part B- The Evolution of Human Rights Through the Ages – Key Milestones in the History of Human Rights – The Role of Social Movements in the Promotion of Human Rights</p> |

| | |
|--|---|
| | Part C- International Declarations and Charters Part D. Concepts of Democracy Definition of democracy, its forms and principles, the role of elections in promoting democracy and the relationship between democracy and human rights |
|--|---|

Learning and Teaching Strategies

Learning and Teaching Strategies

| | |
|-------------------|---|
| Strategies | <ol style="list-style-type: none"> 1. Classroom participation through discussions, interventions, expressing opinions , and urging students to work together 2- The various activities carried out by the professor and the involvement of the students 3. Knowledge of the principles of human rights, the coexistence of students with each other as members of an integrated society. 4- Urging students to love the homeland and be the absolute first to it. 5. Wide participation in political elections and active national presence in them. 6. Involve students in humanitarian and social activities that stimulate .6 empathy for people |
|-------------------|---|

Student Workload (SWL)

The student's academic load is calculated for 15 weeks

| | | | |
|---|-----------|---|-----|
| Structured SWL (h/sem) | 30 | Structured SWL (h/w) | 2 |
| Student's regular academic load during the semester | | Regular Academic Load of the Student Weekly | |
| Unstructured SWL (h/sem) | 20 | Unstructured SWL (h/w) | 1.3 |
| Student's irregular academic load during class | | Student's irregular academic load per week | |
| Total SWL (h/sem) | 50 | | |
| The student's total academic load during the semester | | | |

Module Evaluation

Assessment of the course

| | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
|---------|-------------|----------------|----------|---------------------------|
| Quizzes | 2 | 10% | 7 and 15 | 1,2,3 |

| | | | | | |
|----------------------|-----------------|----|------------|--|----------|
| Formative assessment | Assignments | 10 | 10% | 2and 3,4and 4 and 6 and 8 and 9 and 10 and 12 and 14 and15 | Everyone |
| | Projects / Lab. | 1 | 10% | 5 | 4,7,10 |
| | Report | 2 | 10% | 7 and 11 | 5,8,9 |
| Summative assessment | Midterm Exam | 1 | 10% | Continuous | |
| | Final Exam | 1 | 50% | | |
| Total assessment | | | 100% (100) | | |

Delivery Plan (Weekly Syllabus)

Theoretical Weekly Curriculum

| | Material Covered |
|---------|--|
| Week 1 | Human Rights in Ancient Civilizations |
| Week 2 | Human Rights in Divine Laws and Religions |
| Week 3 | Human Rights Sources (International Sources) |
| Week 4 | National Resources |
| Week 5 | Human rights guarantees |
| Week 6 | Human Rights Guarantees in Islam |
| Week 7 | First month exam |
| Week 8 | International human rights guarantees |
| Week 9 | The Role of Regional Organizations in the Protection of Human Rights |
| Week 10 | The Future of Human Rights |
| Week 11 | Democracy and Types of Democracy |
| Week 12 | Definitions, Elements and Pillars of Democracy |
| Week 13 | Forms of Democracy |
| Week 14 | Election |
| Week 15 | Second Month Exam |
| Week 16 | |
| Week 17 | |
| Week 18 | |
| Week 19 | |

| | |
|---------|--|
| Week 20 | |
| Week 21 | |
| Week 22 | |
| Week 23 | |
| Week 24 | |
| Week 25 | |
| Week 26 | |
| Week 27 | |
| Week 28 | |

| Delivery Plan (Weekly Lab. Syllabus) Weekly Laboratory Curriculum | |
|---|------------------|
| | Material Covered |
| Week 1 | |
| Week 2 | |
| Week 3 | |
| Week 4 | |
| Week 5 | |
| Week 6 | |
| Week 7 | |
| Week 8 | |
| Week 9 | |
| Week 10 | |
| Week 11 | |
| Week 12 | |
| Week 13 | |
| Week 14 | |
| Week 15 | |

| Learning and Teaching Resources Learning and Teaching Resources | | |
|---|--|---------------------------|
| | Text | Available in the Library? |
| Required Texts | The Book of Human Rights and Democracy by Assistant Professor Dr. Maher Sabri Kazim | |
| Recommended Texts | Democracy and Human Rights... Mohammed Abed Al , Jabri Recommended Books and References (Scientific Journals, Reports,.... | No |

| | | |
|-----------------|--|--|
| |Democracy is a synthetic attempt.... George Bordeaux Translated by Salem Nassar | |
| Websites | https://inee.org/sites/default/files/resources/ABC_Teaching_Human_Rights_AR.pdf | |

| Grading Scheme Grading Chart | | | | |
|--|-------------------------|-------------------------|----------|---------------------------------------|
| Group | Grade | Recognition | Marks % | Definition |
| Success Group (50 - 100) | A - Excellent | Privilege | 90 - 100 | Outstanding Performance |
| | B - Very Good | Very good | 80 - 89 | Above average with some errors |
| | C - Good | Good | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | Medium | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | Acceptable | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 - 49) | FX – Fail | Deposit (in processing) | (45-49) | More work required but credit awarded |
| | F – Fail | Fail | (0-44) | Considerable amount of work required |
| Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above. | | | | |

MODULE DESCRIPTION FORM

Sample course description

| Module Information Course Information | | | | |
|--|-----------------------------------|--------------------------------------|--|--|
| Module Title | Field Crops | | Module Delivery | |
| Module Type | Core | | <input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Reading <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Tutorial <input checked="" type="checkbox"/> Practical <input checked="" type="checkbox"/> Seminar | |
| Module Code | USAGFi1208 | | | |
| ECTS Credits | 7 | | | |
| SWL (hr/sem) | 175 | | | |
| Module Level | 1 | Semester of Delivery | | |
| Administering Department | Field Crops Section | College | Faculty of Agriculture | |
| Module Leader | Assoc. Prof. Dr. Mona Ayed Yousef | Email | muna.a.y@uosamarra.edu.iq | |
| Module Leader's Acad. Title | Lecturer Doctor | Module Leader's Qualification | PhD | |

| | | | |
|---|-------------------------|-----------------------|--|
| Module Tutor | | Email | |
| Peer Reviewer Name | Eng. Hussam Nafe Shaker | Email | iraqhusam91@gmail.com |
| Scientific Committee Approval Date | 20/10/2024 | Version Number | 33 |

| Relation with other Modules | | | |
|------------------------------------|------|-----------------|--|
| Relationship with other subjects | | | |
| Prerequisite module | None | Semester | |
| Co-requisites module | None | Semester | |

| Module Aims, Learning Outcomes and Indicative Contents | |
|--|---|
| Course Objectives, Learning Outcomes, and Instructional Contents | |
| Module Objectives Course Objectives | <ol style="list-style-type: none"> 1- Know the requirements for crop growth and the conditions of growth and production <ul style="list-style-type: none"> . Optimized for agricultural crops . Basic Principles of Agricultural Operations 2- Managing pre- and post-harvest operations for various crops; With the aim of ensuring the quality and longevity of its shelf life. 3- Systems of agricultural crop production and their relationship to environmental systems. 4- Choosing the appropriate varieties of crops, according to for the surrounding climatic conditions, the quality of the land, and water. 5- Implementing Integrated Crop Management 6- Designing an agricultural cycle suitable for the field 7- |
| Module Learning Outcomes Learning Outcomes for the Course | <ul style="list-style-type: none"> - Identify the basic concepts related to field crops and their economic and social importance. - Understand the environmental factors affecting the cultivation and production of field crops. - Identify the role of field crops in food security and industrial uses. - Applying modern agricultural techniques to improve the productivity of field crops. - Analyzing data related to agricultural production processes and assessing the impact of environmental factors on them. - Identify soil preparation methods and choose suitable crops based on climatic and soil conditions. - Ability to analyze agricultural problems related to field crops and propose |

| | |
|--|---|
| | <p>practical sustainable solutions.</p> <ul style="list-style-type: none"> - Developing scientific research skills in studying the life cycle of field crops and methods of improving them. <p>Professional Skills</p> <ul style="list-style-type: none"> - Acquire skills to work in a team to plan and implement integrated agricultural programs. - Understand the laws and policies related to field crop production and agricultural trade. - Strengthen capacities to communicate with farmers and provide technical advice to improve production. <p>Moving towards sustainability</p> <ul style="list-style-type: none"> - Recognizing the importance of sustainable agriculture and the conservation of natural resources in field crop management. <p>Adopting modern technologies to achieve high productivity while-</p> <ul style="list-style-type: none"> . minimizing the environmental impact |
| <p>Indicative Contents How-to Contents</p> | <p>Lecture One: Introduction to Field Crops</p> <ul style="list-style-type: none"> - Definition of field crops and their importance. - Scientific classification of field crops (food, industrial, fodder crops). - The role of field crops in food security and economic development. <p>Second: Environmental Factors Affecting Crop Production</p> <ul style="list-style-type: none"> - The impact of climate (temperature, light, precipitation) on crop growth. - The role of soil and its characteristics in crop production. - Water management and irrigation in field crops. <p>Third: Basic Agricultural Operations</p> <ul style="list-style-type: none"> - Choosing the right crops for different regions. - Preparing the soil for cultivation (tillage, leveling, soil improvement). - Farming practices such as traditional farming and modern farming. <p>Fourth: Life cycle of field crops</p> <ul style="list-style-type: none"> - Crop growth stages (germination, vegetative growth, flowering, maturity). - Factors affecting each stage of development. <p>Fifth: Techniques for the production of field crops</p> <ul style="list-style-type: none"> - Fertilization practices and the use of organic and mineral fertilizers. - Agricultural Pest and Disease Management. - Harvest and post-harvest techniques. <p>Sixth: Productivity and Quality of Crops</p> <ul style="list-style-type: none"> - Factors affecting productivity. - Improving the quality and characteristics of field crops. - Methods of storing and marketing crops. <p>Seventh: Sustainable Agriculture in Field Crops</p> <ul style="list-style-type: none"> - Conserving natural resources. - The use of modern agricultural technology. - Integration between field crops and sustainable environmental practices. <p>Eighth: Practical Case Studies</p> <ul style="list-style-type: none"> - Practical examples of field crop production management. |

. Field applications on the cultivation of specific crops such as wheat, maize, rice-

Learning and Teaching Strategies

Learning and Teaching Strategies

| | |
|-------------------|--|
| Strategies | <p>The lecture and discussion strategy will be adopted</p> <ul style="list-style-type: none"> - Allowing freedom of thought and developing self-confidence, and taking into account individual differences among students - Linking learning to life and making students feel the usefulness of this science - Developing students' planning skills, and carrying out multiple activities that lead to providing them with various new experiences <ul style="list-style-type: none"> - Teamwork, collaboration, and teamwork. - Brainstorming strategy. . . |
|-------------------|--|

Student Workload (SWL)

The student's academic load is calculated for 15 weeks

| | | | |
|--|------------|---|-----|
| Structured SWL (h/sem) Student's regular academic load during the semester | 80 | Structured SWL (h/w) Regular Academic Load of the Student Weekly | 5,3 |
| Unstructured SWL (h/sem) Student's irregular academic load during class | 95 | Unstructured SWL (h/w) Student's irregular academic load per week | 6,3 |
| Total SWL (h/sem) The student's total academic load during the semester | 175 | | |

Module Evaluation

Assessment of the course

| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
|-----------------------------|------------------------|-------------|----------------|------------|---------------------------|
| Formative assessment | Quizzes | 2 | 10% (10) | 5 and 9 | LO #8, #9 |
| | Assignments | 2 | 10% (10) | 3 and 7 | LO #3, #4 |
| | Projects / Lab. | - | 10% (10) | Continuous | Everyone |
| | Report | 3 | 10% (10) | 13 | LO #7, #8 and #9 |
| Summative assessment | Midterm Exam | hours 2 | 10% (10) | 7 | LO #1 - #7 |
| | Final Exam | hours 3 | 50% (50) | 16 | Everyone |
| Total assessment | | | 100% (100) | | |

Delivery Plan (Weekly Syllabus)

Theoretical Weekly Curriculum

| | Material Covered |
|---------|---|
| Week 1 | Introduction to field crop science , its definition, and importance |
| Week 2 | By Hosts, Use, Plant Division,Field Crop Division |
| Week 3 | Crop Growth, Factors Environmental factors and their relationship Climate , Heat , Damage High temperatures on field crops, Damage to low temperatures |
| Week 4 | Light, Crop Adaptation To the light, |
| Week 5 | Water, Crop Division according to their need for water, Pictures of water in the soil, Water Efficiency Before Harvest |
| Week 6 | Germination process of field crop seeds, Types of germination |
| Week 7 | Monthly exam |
| Week 8 | Soil Service Processes / Tillage, Leveling, Soil Smoothing, Cultivation |
| Week 9 | Seminar |
| Week 10 | Fertilization Processes and the Use of Organic and Mineral Fertilizers |
| Week 11 | Scientific visit |
| Week 12 | Crop growth stages (germination, vegetative growth, flowering, maturity) |
| Week 13 | Crop Pest Management , Presentation |
| Week 14 | Feedback 1 - 6 |
| Week 15 | Feedback 7-13 |
| Week 16 | |
| Week 17 | |
| Week 18 | |
| Week 19 | |
| Week 20 | |
| Week 21 | |
| Week 22 | |
| Week 23 | |
| Week 24 | |
| Week 25 | |
| Week 26 | |

| | |
|---------|--|
| Week 27 | |
| Week 28 | |

| Delivery Plan (Weekly Lab. Syllabus) Weekly Laboratory Curriculum | |
|---|---|
| | Material Covered |
| Week 1 | Definition of Field Crops, Crop Terms |
| Week 2 | Description of the grass family |
| Week 3 | Botanical description of spelt |
| Week 4 | Description of the legume family |
| Week 5 | Botanical description of beans |
| Week 6 | Germination of Field Crop Seeds |
| Week 7 | Germination experience in the lab and field |
| Week 8 | Soil Service Processes , Tillage, Smoothing |
| Week 9 | Agriculture, Irrigation |
| Week 10 | Scientific visit |
| Week 11 | Slippery and Herbaceous |
| Week 12 | Composting, Presentation |
| Week 13 | Harvesting and Storage |
| Week 14 | Feedback |
| Week 15 | Field Practice |

| Learning and Teaching Resources Learning and Teaching Resources | | |
|---|---|---------------------------|
| | Text | Available in the Library? |
| Required Texts | Al-Ansari, Majid Mohsen, et al. (1980). Principles of Field Crops, University of Baghdad, Ministry of Higher Education. and scientific research . Dar Al-Kutub for Printing and .Publishing | Yes |
| Recommended Texts | Hassanein, A. (2019); Al-Hawari, Muhammad Al-Asmar ; Saafan, Farouk Basics of Field Crop Production. Al-Azhar .(2021) . .University. Cairo | No |
| Websites | Crop Science Sci Magazine Website https://acsess.onlinelibrary.wiley.com/journal/14350653 | |

Grading Scheme Grading Chart

| Group | Grade | Recognition | Marks % | Definition |
|-----------------------------|------------------|-------------------------|----------|---------------------------------------|
| Success Group (50 - 100) | A - Excellent | Privilege | 90 - 100 | Outstanding Performance |
| | B - Very Good | Very good | 80 - 89 | Above average with some errors |
| | C - Good | Good | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | Medium | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | Acceptable | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 - 49) | FX - Fail | Deposit (in processing) | (45-49) | More work required but credit awarded |
| | F - Fail | Fail | (0-44) | Considerable amount of work required |

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54). The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

Sample course description

Module Information

Course Information

| | | | | |
|------------------------------------|--------------------------|-------------------------------|---|--|
| Module Title | Animal Production | | Module Delivery | |
| Module Type | Core | | <input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Reading <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input checked="" type="checkbox"/> Seminar | |
| Module Code | USAGFi1209 | | | |
| ECTS Credits | 5 | | | |
| SWL (hr/sem) | 125 | | | |
| Module Level | 1 | Semester of Delivery | | |
| Administering Department | Ring crops | College | Agriculture | |
| Module Leader | Mohamed Ali Abdullah | Email | mohammed.ali.a@uosamarra.edu | |
| Module Leader's Acad. Title | | Module Leader's Qualification | | |
| Module Tutor | | Email | | |
| Peer Reviewer Name | Nibras Majed Abbas | Email | nibras.m.a@uosamarra.edu.iq | |
| Scientific Committee Approval Date | 2024/10/20 | Version Number | 33 | |

| Relation with other Modules | | | |
|----------------------------------|--|----------|--|
| Relationship with other subjects | | | |
| Prerequisite module | | Semester | |
| Co-requisites module | | Semester | |

| Module Aims, Learning Outcomes and Indicative Contents | |
|--|---|
| Course Objectives, Learning Outcomes, and Instructional Contents | |
| Module Objectives Course Objectives | <ol style="list-style-type: none"> 1- Studying the reality of livestock in Iraq and the Arab world. 2- The most important obstacles facing the livestock production sector and how to overcome these obstacles. 3. Identify the most important international and local breeds of cows producing milk and meat and their most important production and formal specifications. 4. Identifying the most important world-famous breeds of sheep at the world level with knowledge of the importance of economic sheep. 5. The most important local sheep breeds. 6. International and local goat breeds and their most important production specifications. The importance of poultry and how to benefit from it, while identifying -7 the breeds of meat and egg production |
| Module Learning Outcomes Learning Outcomes for the Course | <ol style="list-style-type: none"> 1. Through it, the student learns about the importance of livestock and its products. 2- The student's knowledge of successful livestock projects in the Arab region. 3- Identifying the most important milk-producing breeds and the biological importance of dairy cattle. 4. How to learn about buffalo breeding. 5. Introduce the student to the importance of fish farming and the most important types of fish farmed in Iraq. 6. How to keep farm records of animal production projects. .Identify the health care of farm animals .7 |
| Indicative Contents How-to Contents | Use the lecture. Use of exams. Use of illustrations. .Use brainstorming |

| Learning and Teaching Strategies | |
|----------------------------------|--|
| Learning and Teaching Strategies | |
| Strategies | |

Student Workload (SWL)

The student's academic load is calculated for 15 weeks

| | | | |
|--|-----|---|-----|
| Structured SWL (h/sem) Student's regular academic load during the semester | 90 | Structured SWL (h/w) Regular Academic Load of the Student Weekly | 6 |
| Unstructured SWL (h/sem) Student's irregular academic load during class | 35 | Unstructured SWL (h/w) Student's irregular academic load per week | 2.3 |
| Total SWL (h/sem) The student's total academic load during the semester | 125 | | |



Module Evaluation

Assessment of the course

| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
|-----------------------------|------------------------|-------------|----------------|------------|---------------------------|
| Formative assessment | Quizzes | 5 | %10(10) | 2,5,7,9,11 | |
| | Assignments | 1 | %10(10) | | |
| | Projects / Lab. | 1 | %10(10) | | |
| | Report | 1 | %10 (10) | 13 | |
| Summative assessment | Midterm Exam | 2hrs | | | |
| | Final Exam | 3 hours | | | |
| Total assessment | | | 100% (100) | | |

Delivery Plan (Weekly Syllabus)

Theoretical Weekly Curriculum

| | Material Covered |
|---------------|---|
| Week 1 | Introduction, the concept of animal production, the reality of animal production in Iraq |
| Week 2 | The most important obstacles facing the livestock production sector, how to preserve livestock |
| Week 3 | Cow breeds (dairy cattle breeds) |

| | |
|---------|---|
| Week 4 | Breeds of beef cattle |
| Week 5 | Buffalo breeding |
| Week 6 | Challenges facing the meat sector |
| Week 7 | International and local sheep breeds |
| Week 8 | Some Biological Characteristics of Sheep |
| Week 9 | Goat breeds |
| Week 10 | The importance of poultry and the most important poultry breeds |
| Week 11 | Fish farming and its importance |
| Week 12 | Some of the farmed fish in Iraq and the Arab world |
| Week 13 | Livestock Project Management |
| Week 14 | Farm Animal Health Care |
| Week 15 | Farm Records |
| Week 16 | |
| Week 17 | |
| Week 18 | |
| Week 19 | |
| Week 20 | |
| Week 21 | |
| Week 22 | |
| Week 23 | |
| Week 24 | |
| Week 25 | |
| Week 26 | |
| Week 27 | |
| Week 28 | |

Delivery Plan (Weekly Lab. Syllabus)

Weekly Laboratory Curriculum

| | Material Covered |
|--------|--|
| Week 1 | Field Operations |
| Week 2 | Hatching and Hatch Management |
| Week 3 | Animal Field Records and Management |
| Week 4 | Animal Housing and Shelter |
| Week 5 | Calf care and care methods |
| Week 6 | Nutrition and Methods of Serving Farm Animals |
| Week 7 | Buffalo breeding methods |
| Week 8 | Large animal dwellings and methods of construction |
| Week 9 | Egg and Meat Chicken Housing and Design Methods |

| | |
|---------|--|
| Week 10 | Methods of Establishing Broiling Calves Housing |
| Week 11 | Horse and Camel Breeding Methods |
| Week 12 | Fish Farming |
| Week 13 | Methods of Establishing Fish Farms and Types of Fish Farms |
| Week 14 | Agricultural Animal Health |
| Week 15 | Farm Animal Health Care |

| Learning and Teaching Resources | | |
|---------------------------------|--|---------------------------|
| Learning and Teaching Resources | | |
| | Text | Available in the Library? |
| Required Texts | <p>Basics of Animal Production Dr. Zuhair Al-Jalili, Dr. Mohamed Adel, Dr. Farid Shahwani Talal Youssef Production of Milk Cattle, Dr. Natiq Hamid Al-Qudsi Basics of sheep and goat production and breeding Dr. Jalal Elia Pastor Dr. Zuhair Al-Jalili. Dr. Dayeb Ishaq Aziz</p> | Available |
| Recommended Texts | | No |
| Websites | Wikipedia. Kinana Online website. Iraqi academic journals website gafrd | |

| Grading Scheme | | | | |
|-----------------------------|------------------|-------------------------|----------|---------------------------------------|
| Grading Chart | | | | |
| Group | Grade | Recognition | Marks % | Definition |
| Success Group (50 - 100) | A - Excellent | Privilege | 90 - 100 | Outstanding Performance |
| | B - Very Good | Very good | 80 - 89 | Above average with some errors |
| | C - Good | Good | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | Medium | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | Acceptable | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 - 49) | FX – Fail | Deposit (in processing) | (45-49) | More work required but credit awarded |
| | F – Fail | Fail | (0-44) | Considerable amount of work required |
| | | | | |

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

Sample course description

| Module Information | | | |
|------------------------------------|-------------------------------|-------------------------------|--|
| Course Information | | | |
| Module Title | Plant Chemistry | | Module Delivery |
| Module Type | Basic | | <input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Reading <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar |
| Module Code | USAGFi210 | | |
| ECTS Credits | 6 | | |
| SWL (hr/sem) | 150 | | |
| Module Level | 2 | Semester of Delivery | |
| Administering Department | Field Crops Section | College | |
| Module Leader | Name: Mohammed Hameed Mahal | Email | mhmaa84@gmail.com |
| Module Leader's Acad. Title | Assistant Professor Doctor | Module Leader's Qualification | Ph.D. |
| Module Tutor | Eng. Widyhan Hamid Mahdi | Email | |
| Peer Reviewer Name | | Email | |
| Scientific Committee Approval Date | 20/10/2024 | Version Number | 33 |

| Relation with other Modules | | | |
|----------------------------------|--|----------|--|
| Relationship with other subjects | | | |
| Prerequisite module | | Semester | |
| Co-requisites module | | Semester | |

| Module Aims, Learning Outcomes and Indicative Contents | |
|--|--|
| Course Objectives, Learning Outcomes, and Instructional Contents | |
| | |

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| <p>Module Objectives Course Objectives</p> | <p>is a subject concerned with the study of the chemical components produced by plants and their impact on the environment and health. The objectives of this course include the following:</p> <ol style="list-style-type: none"> Understanding Phytochemical Compounds <ul style="list-style-type: none"> Study the types of chemical compounds found in plants (e.g. alkaloids, flavonoids, terpenes, volatile oils, etc.) Understanding the ways in which these compounds are formed within plants (primary and secondary metabolism) Analysis of plant compounds <ul style="list-style-type: none"> Learn how to extract chemical compounds from plants Use analytical techniques to determine the composition of these compounds (e.g., chromatography, spectroscopy, etc.) Explore health and medical benefits <ul style="list-style-type: none"> Studying the impact of plant compounds on human health (e.g., antioxidants, anti-inflammatories, natural remedies) Exploring Medicinal Plants and Their Uses in Traditional and Modern Medicine New Product Development The use of plant compounds in the development of medicines and cosmetics Study the possibility of using it in the food and agricultural industries Environmental Protection and Biodiversity <ul style="list-style-type: none"> Study of the role of plants and their compounds in ecosystems Promoting the preservation of plants of medicinal and economic value Promoting scientific research <ul style="list-style-type: none"> Training students for scientific research in the field of phytochemistry Encourage the exploration of new compounds with potential applications. <p>These goals contribute to the link between chemistry and botany, helping to develop environmental, medical, and industrial applications</p> |
| <p>Module Learning Outcomes Learning Outcomes for the Course</p> | <p>The learning outcomes of the plant chemistry course aim to equip students with the knowledge and skills necessary to understand plant chemistry and its scientific and practical applications. The outputs include:</p> <ol style="list-style-type: none"> Knowledge and Understanding <ul style="list-style-type: none"> Identify the main chemical components of plants (e.g., alkaloids, phenols, terpenes, etc.) Understanding the primary and secondary metabolic mechanisms in plants and their role in the production of plant compounds Understand the importance of plant compounds in health, the |

| | |
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| | <p>environment, and various industries.</p> <p style="text-align: right;">Practical skills².</p> <ul style="list-style-type: none"> Gain the ability to use phytochemical compound extraction techniques Be able to apply chemical analysis techniques (e.g. chromatography and spectroscopy) to identify plant compounds and study their properties Learn methods of separating and purifying plant compounds for use in various applications. <p style="text-align: right;">Critical and analytical thinking³.</p> <ul style="list-style-type: none"> Analysis of the relationship between the chemical structure of plant compounds and their biological functions Assessing the Impact of Plant Compounds on Health and the Environment Providing innovative solutions for the use of plant compounds in the development of pharmaceuticals and industrial products. <p style="text-align: right;">Practical and professional applications⁴.</p> <ul style="list-style-type: none"> Apply the knowledge gained to develop pharmaceutical, agricultural or industrial products based on plant compounds Utilizing medicinal plants sustainably and environmentally friendly Knowledge of the importance of preserving and exploiting plant diversity scientifically. <p style="text-align: right;">Research skills⁵.</p> <ul style="list-style-type: none"> Ability to conduct scientific experiments related to plant chemistry and analyze their results Design research projects focused on the study of plants and their medicinal or industrial uses Effective communication to present research results and new discoveries in plant chemistry. <p style="text-align: right;">Environmental Awareness⁶.</p> <ul style="list-style-type: none"> Understanding the role of plants and their compounds in maintaining environmental balance Raising awareness of the importance of medicinal plants and protecting them from extinction. <p>The course seeks to prepare students to be scientifically and professionally qualified to contribute to the fields of research, industry, and environmental conservation through the applications of plant chemistry</p> |
| <p>Indicative Contents How-to Contents</p> | <p>The Plant Chemistry Guidance Materials aim to provide a comprehensive and sequential framework for the study of the subject covering theoretical foundations and practical skills. The Plant Chemistry Guideline can be organized as follows:</p> |

1. Introduction to Plant Chemistry

- Definition and Importance of Plant Chemistry.
- History of the development of phytochemistry.
- The Relationship Between Plant Chemistry, Botany, and Pharmacology.
- Primary and secondary metabolism in plants.

2. Secondary plant compounds

A. Classification of plant compounds

- Alkali:
 - ,Definition, chemical composition, examples (e.g., caffeine morphine).
 - Its functions in the plant and its medicinal uses.
- Phenols:
 - Their chemical composition and examples (e.g. tannins and flavonoids).
 - Their role as antioxidants and antimicrobials.
- Turbines:
 - Types (Single, Double, Triple).
 - Its uses in perfumes and essential oils.
- Carbohydrates and proteins:
 - Their role as storage materials and functional compounds.
- Volatile oils:
 - Its sources, methods of extraction, and economic importance.

3. Extraction and Separation Techniques

- Principles of Plant Compound Extraction.
- Common extraction methods (use of solvents, distillation, hot water extraction).
- Separation techniques (paper chromatography, high-performance liquid chromatography - HPLC).
- Purification and Purity Testing of Plant Compounds.

4. Analytical methods for detecting plant compounds

- Use of physical and chemical methods in analysis.
- Analysis of Compounds Using Spectroscopy (UV-Vis AND NMR).
- Application of Chromatography in Vehicle Identification.

5. Medical and Industrial Applications of Plant Compounds

- Medicinal plants and their traditional and modern uses.
- Plant-derived medicines (e.g. atropine, digitalis).
- Use of plant compounds in the food and cosmetic industries.

| | |
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| | <p>6. The Role of Plants in the Environment and Health</p> <ul style="list-style-type: none"> • Environmental impacts of plant compounds (e.g. aromatics and insect repellents). • The relationship between plant diversity and human health. • Preserving and protecting medicinal plants from extinction. <p>7. Practical Experiments (Plant Chemistry Laboratory)</p> <ul style="list-style-type: none"> • Extraction of Essential Oils from Aromatic Plants. • Separation and analysis of plant compounds using thin-layer chromatography (TLC). • Identification of Alkaloids and Phenols in Plant Extracts. • Testing the biological activity of plant compounds (e.g. antibacterial activity). <p>8. Research and Applied Projects</p> <ul style="list-style-type: none"> • Design of studies on specific plants and analysis of their chemical components. • Study of Industrial and Pharmaceutical Applications of Plant Compounds. • Proposing sustainable ways to use medicinal plants. <p>9. Future Trends in Plant Chemistry</p> <ul style="list-style-type: none"> • Innovations in analytical techniques for the discovery of new plant compounds. • Modern Applications of Phytochemistry in the Pharmaceutical and Food Industries. • Preserving the environment through sustainable phytochemistry. <p>Instructional contents should include a balance between theoretical and practical aspects, with a focus on promoting research and application in medical, environmental, and industrial fields</p> |
|--|--|

| <h3 style="text-align: center;">Learning and Teaching Strategies</h3> <h4 style="text-align: center;">Learning and Teaching Strategies</h4> | |
|---|---|
| Strategies | <p>Teaching and learning strategies for plant chemistry aim to effectively achieve the objectives and outputs of the course through the use of various methods based on the integration of theoretical knowledge and practical application. The following are some of the proposed strategies:</p> <p style="text-align: right;">Interactive Lectures¹.</p> <ul style="list-style-type: none"> • Present theoretical information in a simplified and engaging way • using presentations and practical examples |

| | |
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| | <p>Use drawings and diagrams to illustrate chemical and biological processes in plants</p> <ul style="list-style-type: none"> • Ask motivational questions during the lecture to promote critical thinking in students. <p>Project-Based Learning2.</p> <ul style="list-style-type: none"> • Assign students to small projects related to the analysis of plant compounds or the study of medicinal plants • Encouraging them to look for real applications of plant compounds in various industries (pharmaceuticals, cosmetics, food) • Presentation and Group Discussion of Project Results. <p>Hands-on learning (laboratory experiments)3.</p> <ul style="list-style-type: none"> • Conducting laboratory experiments for the extraction, separation and analysis of plant compounds • Train students in the use of analytical tools such as chromatography and spectroscopy • Design experiments to test the biological activity of plant compounds, such as antimicrobial activity. <p>4. Problem-Based Learning</p> <ul style="list-style-type: none"> • Introducing real problems or scenarios related to plant chemistry (e.g., developing a new plant medicine) • Divide students into groups to solve the problem through research and discussion • Presenting and discussing solutions to enhance understanding. <p>Field Trips5.</p> <ul style="list-style-type: none"> • Visit botanical gardens or plant research centers • Identifying medicinal plants in nature and how to extract their compounds • Visit factories or laboratories specialized in the extraction of plant materials. <p>Learning with technology6.</p> <ul style="list-style-type: none"> • Using educational videos and electronic simulations to illustrate chemical reactions • Providing online platforms for sharing educational content and discussions • Use specialized software to analyze chemical and biological data. <p>Cooperative Education7.</p> <ul style="list-style-type: none"> • Divide students into working groups to analyze a specific plant compound or study its medicinal application |
|--|---|

| | |
|--|---|
| | <p>Organizing group discussions to analyze scientific texts on plant compounds</p> <ul style="list-style-type: none"> Promote collaboration through group laboratory activities. <p>Diverse Assessment Strategies8.</p> <p>Use Theoretical Tests to Assess General Understanding of the Material</p> <p>Evaluating practical performance in the laboratory through the accuracy of experiment execution and analysis of results</p> <ul style="list-style-type: none"> Evaluation of research projects and student presentations Organize individual or group discussions to assess students' understanding of the concepts. <p>Learning based on creativity and innovation9.</p> <p>Encourage students to propose new ideas for the application of plant compounds in industry or medicine</p> <ul style="list-style-type: none"> Motivating them to look for sustainable ways to use medicinal plants Enhance innovative thinking skills through the design of new products based on plant chemistry. <p>Linking theory and practice10.</p> <p>Explain the relationship between the theoretical knowledge of plant compounds and their practical applications in daily life</p> <ul style="list-style-type: none"> Inviting industry or research professionals to give lectures on their practical experiences. <p>The primary goal of teaching and learning strategies is to enhance students understanding of plant chemistry and enable them to apply what they learn in the fields of scientific research, industry, and environmental protection in a sustainable way.</p> |
|--|---|

| Student Workload (SWL) | | | |
|--|------------|---|---|
| The student's academic load is calculated for 15 weeks | | | |
| Structured SWL (h/sem) | | Structured SWL (h/w) | |
| Student's regular academic load during the semester | 60 | Regular Academic Load of the Student Weekly | 4 |
| Unstructured SWL (h/sem) | | Unstructured SWL (h/w) | |
| Student's irregular academic load during class | 90 | Student's irregular academic load per week | 6 |
| Total SWL (h/sem) | 150 | | |

| | |
|---|--|
| The student's total academic load during the semester | |
|---|--|

| Module Evaluation | | | | | |
|--------------------------|-----------------|-------------|----------------|----------|---------------------------|
| Assessment of the course | | | | | |
| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
| Formative assessment | Quizzes | 2 | 10%(10) | | |
| | Assignments | 2 | 10%(10) | | |
| | Projects / Lab. | 2 | 10%(10) | | |
| | Report | 2 | 10%(10) | | |
| Summative assessment | Midterm Exam | 2hr | 10%(10) | | |
| | Final Exam | 2hr | 50%(50) | | |
| Total assessment | | | 100% (100) | | |

| Delivery Plan (Weekly Syllabus) | |
|---------------------------------|--|
| Theoretical Weekly Curriculum | |
| | Material Covered |
| Week 1 | Introduction to Medicinal and Aromatic Plants |
| Week 2 | Conditions for the collection, preparation and preparation of medicinal plants |
| Week 3 | Main chemical groups in medicinal and aromatic plants |
| Week 4 | Volatile oils |
| Week 5 | Alkaloids |
| Week 6 | Glycosides |
| Week 7 | Resins |
| Week 8 | Tannins |
| Week 9 | Vegetable Gum |
| Week 10 | Chlorophyll |
| Week 11 | Carotenoids |
| Week 12 | Anthocyanins and Anthoxanthins |

| | |
|----------------|---------------------|
| Week 13 | Vegetable Sugars |
| Week 14 | Plant Proteins |
| Week 15 | Plant Nucleic Acids |
| Week 16 | Exam |

Delivery Plan (Weekly Lab. Syllabus)

Weekly Laboratory Curriculum

| | Material Covered |
|----------------|---|
| Week 1 | Devices and materials used to extract chemical compounds from plants |
| Week 2 | Methods of collecting plant samples and preparing them for extraction |
| Week 3 | Solvent extraction |
| Week 4 | Steam distillation to obtain essential oils using a Clafanger |
| Week 5 | Ultrasonic Extraction |
| Week 6 | The use of chromatography and its types for extraction |
| Week 7 | Crystallization for repurification of materials |
| Week 8 | Use of a rotary evaporator |
| Week 9 | Identify and identify plant compounds |
| Week 10 | Vehicle analysis using analytical instruments |
| Week 11 | Practical Applications |
| Week 12 | Documentation and Reporting |
| Week 13 | |
| Week 14 | |
| Week 15 | |

Learning and Teaching Resources

Learning and Teaching Resources

| | Text | Available in the Library? |
|--------------------------|--|---------------------------|
| Required Texts | Plant Chemistry | |
| Recommended Texts | Atlas of Medicinal and Aromatic Plants in the Arab World | No |
| Websites | | |

Grading Scheme

Grading Chart

| Group | Grade | Recognition | Marks % | Definition |
|-------|-------|-------------|---------|------------|
|-------|-------|-------------|---------|------------|

| | | | | |
|-------------------------------------|-------------------------|-------------------------|----------|---------------------------------------|
| Success Group (50 - 100) | A - Excellent | Privilege | 90 - 100 | Outstanding Performance |
| | B - Very Good | Very good | 80 - 89 | Above average with some errors |
| | C - Good | Good | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | Medium | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | Acceptable | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 – 49) | FX – Fail | Deposit (in processing) | (45-49) | More work required but credit awarded |
| | F – Fail | Fail | (0-44) | Considerable amount of work required |
| | | | | |

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

Sample course description

| Module Information | | | | |
|---|----------------------------------|--------------------------------------|--------------|--|
| Course Information | | | | |
| Module Title | Flat Area | | | Module Delivery |
| Module Type | Plane Surveying | | | <input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Reading <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar |
| Module Code | USAGFi1212 | | | |
| ECTS Credits | 4 | | | |
| SWL (hr/sem) | 100 | | | |
| Module Level | 1 | Semester of Delivery | | |
| Administering Department | | College | | |
| Module Leader | Abd El , Moneim Hassan Ahmed Ali | | Email | moneim.h14@uosamarra.edu.iq |
| Module Leader's Acad. Title | | Module Leader's Qualification | | |
| Module Tutor | Nibras Majed Abbas | | Email | nibras.m.a@uosamarra.edu.iq |
| Peer Reviewer Name | | Email | | |
| Scientific Committee Approval Date | | Version Number | | |

| Relation with other Modules | | | |
|----------------------------------|------|----------|--|
| Relationship with other subjects | | | |
| Prerequisite module | None | Semester | |
| Co-requisites module | None | Semester | |

| Module Aims, Learning Outcomes and Indicative Contents | |
|--|---|
| Course Objectives, Learning Outcomes, and Instructional Contents | |
| Module Objectives Course Objectives | <p>Theoretical :</p> <ul style="list-style-type: none"> - Developing the student's ability to deal with scientific means - Developing the student's ability to deal with the Internet Developing the student's ability to deal with multiple means Developing the student's ability to dialogue and debate Developing the student's ability to deal economically in the Scope <p>Practical :</p> <ul style="list-style-type: none"> - Developing the student's ability to dialogue and debate - Developing the student's ability to deal with scientific means |
| Module Learning Outcomes Learning Outcomes for the Course | <p>1 . Demonstrates the basic concepts of planar area and aerial photography and is able to prepare scientific surveys, visits and field surveys of natural, human and structural phenomena</p> <p>Completion of this webinar will be a student destined to</p> <p>02 Classifies land uses and natural and human phenomena at the rural and urban levels using GIS and remote sensing</p> <p>.3. It links the skill of fieldwork with planar surveying devices and aerial photographs, and is carried out with field survey procedures and methods.</p> <p>4. Applies the procedures for collecting and building various digital spatial databases, analyzing them, and processing spatial visualizations.</p> <p>Employ the skills acquired from the field survey course in preparing . 5 scientific research solving the geographical problem</p> |
| Indicative Contents How-to Contents | <p>Knowing the importance of surveying and documenting points on the ground</p> <p>Know the measuring instruments and types of tapes used</p> <p>Knowledge of the measurement of irregular boundary lands</p> <p>Read map gauges and install them on the ground</p> |

| Learning and Teaching Strategies | |
|----------------------------------|--|
| Learning and Teaching Strategies | |
| Strategies | |

| | |
|--|--|
| | <ul style="list-style-type: none"> - Interactive Lecture - Brainstorming - Dialogue and discussion - Assign teamwork to reveal leadership skills - assign tasks for each lecture of assigning tasks and reporting and duties |
|--|--|

| Student Workload (SWL) | | | |
|--|----|---|------|
| The student's academic load is calculated for 15 weeks | | | |
| Structured SWL (h/sem) Student's regular academic load during the semester | 60 | Structured SWL (h/w) Regular Academic Load of the Student Weekly | 4 |
| Unstructured SWL (h/sem) Student's irregular academic load during class | 40 | Unstructured SWL (h/w) Student's irregular academic load per week | 2.66 |
| Total SWL (h/sem) The student's total academic load during the semester | | | |

| Module Evaluation | | | | | |
|-----------------------------|------------------------|-------------|----------------|----------|---------------------------|
| Assessment of the course | | | | | |
| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
| Formative assessment | Quizzes | 1 | %10(10) | 3 | 1-3 |
| | Assignments | 1 | %10(10) | 7 | 4-6 |
| | Projects / Lab. | | | | |
| | Report | 1 | %10(10) | 10 | 1-12 |
| Summative assessment | Midterm Exam | 2 | %20(20) | 13 | all |
| | Final Exam | 3 | %50(50) | 16 | all |
| Total assessment | | | 100% (100) | | |

| Delivery Plan (Weekly Syllabus) | |
|--|---|
| Theoretical Weekly Curriculum | |
| | Material Covered |
| Week 1 | of space in agricultural work The student should learn about the importance |

| | |
|---------|--|
| Week 2 | .errors The student should be familiar with the measurement systems, units of measurement, and |
| Week 3 | The student should be familiar with the conditions for choosing the stations |
| Week 4 | The student should be familiar with the errors in the survey process and the ways to treat and .overcome them |
| Week 5 | The student should be familiar with the drawing scale, its types, types, and determining factors |
| Week 6 | .regular and irregular shapes, area with coordinates The student should be familiar with |
| Week 7 | .The student should be familiar with the terms of adjustment and the types of adjustments |
| Week 8 | of leveling , the phenomena of curvature and The student should be familiar with the types refraction and their treatment |
| Week 9 | The student should be familiar with the methods of calculating the levels of points and the .difference in height, direct and indirect |
| Week 10 | the longitudinal sectors and the steps of work The student should be familiar with the work of Determining a central axis |
| Week 11 | The student should be familiar with the calculation of the points levels and the measure of distances |
| Week 12 | The student should be familiar with the evaluation of the economics of the project |
| Week 13 | topographic maps and their methods of representation The student should be familiar with |
| Week 14 | and the ways to find The student should be familiar with the method of contour contour lines them |
| Week 15 | the horizontal and The student should be familiar with the theodolite device and measure .vertical angles |
| Week 16 | |
| Week 17 | |
| Week 18 | |
| Week 19 | |
| Week 20 | |
| Week 21 | |
| Week 22 | |
| Week 23 | |
| Week 24 | |
| Week 25 | |
| Week 26 | |
| Week 27 | |
| Week 28 | |

Delivery Plan (Weekly Lab. Syllabus)
Weekly Laboratory Curriculum

| | Material Covered |
|--------|---|
| Week 1 | .The measurement tools are: leveling scale, making leveling screws, and the concept of glasses |
| Week 2 | Explain the methods of using the tape, the measuring wheel and the use of pointers in the flat area |
| Week 3 | Measuring distance on maps |
| Week 4 | Erection of Columns |
| Week 5 | Measuring horizontal distances on flat ground |

| | |
|----------------|---|
| Week 6 | Measuring horizontal distances on sloping or inclined terrain |
| Week 7 | Drop the columns |
| Week 8 | Use of Leveling Devices |
| Week 9 | Types of Leveling and Reading Ruler |
| Week 10 | Measurement through an obstacle that prevents observation and does not prevent measurement (ground elevation) |
| Week 11 | Install the field book and field team names |
| Week 12 | Use of the theoladolite device and the tachymeter |
| Week 13 | Measurement through an obstacle that prevents measurement and prevents observation and can be circumvented (rock, lake) |
| Week 14 | Knowing the error in the leveling tool, line straightness, and the effect of weather conditions on the measuring instrument |
| Week 15 | Applying a field visit to some agriculture departments to learn about surveying tools |

Learning and Teaching Resources

Learning and Teaching Resources

| | Text | Available in the Library? |
|--------------------------|--|---------------------------|
| Required Texts | The Book of the Foundations of Planar and Topographical Area M. Riad Saleh Al , Khafaf | |
| Recommended Texts | Scientific journals, reports and research related to planar area | No |
| Websites | All locations that have to do with area and topography | |

Grading Scheme

Grading Chart

| Group | Grade | Recognition | Marks % | Definition |
|---------------------------------|-------------------------|-------------------------|----------|---------------------------------------|
| Success Group (50 - 100) | A - Excellent | Privilege | 90 - 100 | Outstanding Performance |
| | B - Very Good | Very good | 80 - 89 | Above average with some errors |
| | C - Good | Good | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | Medium | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | Acceptable | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 - 49) | FX - Fail | Deposit (in processing) | (45-49) | More work required but credit awarded |
| | F - Fail | Fail | (0-44) | Considerable amount of work required |

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

**Sample Description of General English Language for the Early Stages
at the Faculty of Agriculture**

| Course Information | | | |
|---|---------------------------------|--|---------------------------------|
| Module Information | | Module Delivery | |
| Module Title Unit Title | English | Module Delivery Giving Unity | |
| Module Type Unit Type | Basic | Theory X LectureX Lecture | |
| Module Code Module Code | UOS-12011 | | |
| ECTS Credits System Credits | 2 | | |
| SWL(hr/sem) | 50 | | |
| Module Level Unit Level | 1 | Semester of Delivery Delivery Separation | 1 |
| Administering Department Administrative Department | Type Dept. Code | College College | College Code Type |
| Module Leader Head of the Unit | Name:Abdullah Hashim Ibrahim | Email | email abdullah.h@uosamarra.e |
| Module Leader s Acad.Title Academic Degree of the Head of the Unit | Assistant Professor | Module Leader s Qualification Qualifications of the Head of the Unit | BUT |
| Module Tutor Unit Instructor | | Email | |
| Peer Reviewer Name Name of peer references | | Email | |
| Scientific Committee Approval Date Date of approval of the Scientific Committee | 2024/10/20 | Version Number Issue Number | 33 |

Relation with other Modules

| Relationship with other subjects | | |
|--|------|-------|
| Prerequisite module Prerequisites Module | None | Semes |
| Co-requisites module Common Requirements Module | None | Semes |

| Module Aims, Learning Outcomes and Indicative Contents | |
|---|---|
| Course Objectives, Learning Outcomes and Instructional Contents | |
| Module Aims Course Objectives | <p>The general objectives that the English language at College of Agriculture seeks to achieve through its programs are as follows:</p> <p>A. Student Education English language and all its skills.</p> <p>b. Prepare a competent physical education teacher who is able to use a secondary language.</p> <p>T. Preparing a student who is able to understand the English language and her skills.</p> <p>- W. Developing students' level and raising their awareness of the importance of language in the primary and advanced stages</p> <p>Investing in the English language subject theoretically and practically to improve the educational level</p> |
| Module Learning Outcomes Learning Outcomes for the Course | <p>1 – Master the four English language skills: listening, reading, speaking, and writing.</p> <p>2. Describe literary phenomena in different eras.</p> <p>Knowledge of the basic rules of the English language.</p> |
| Indicative Contents How-to Contents | None |

| Learning and teaching strategies | |
|----------------------------------|--|
| strategies | <p>Learning and Teaching Strategies</p> <p>.Active learning</p> <p>Collaborative Learning</p> <p>.Brainstorming</p> <p>Free and Guided Discussions</p> |

| Student Workload (SWL) Student's Academic Load | | | |
|---|-----|--|--|
| Structured SWL (h/sem) Student's regular academic load during the semester | 102 | Structured SWL (h/w) Regular Academic Load of the Student Weekly | |
| Unstructured SWL (h/sem) Student's irregular academic load during class | 30 | Unstructured SWL (h/w) Student's irregular academic load per week | |
| Total SWL (h/sem) The student's total academic load during the semester | 50 | | |

| Module Evaluation Assessment of the course | | | | | |
|---|--|-----------------|--------------------|-------------------------|--|
| | | Time/ Number | Weight(Mar ks) | Week DueDu e Week | Relevant Learning Qutcome Related Learnin |
| Formative Assessment | Quizzes Quizzes | 2 | 10%(10) | 5,10 | Lo#1,2,10 and |
| | Formative Assessment Assignments Duty | 2 | 10%(10) | 2,12 | |
| | Laboratory Project Projectes/Lab | 1 | 10%(10) | Contin uous | |
| | Report Report | 1 | 10%(10) | 13 | |
| Summative Assessment | Midterm Exam Midterm Exam | 2hr | 10%(10) | 7 | |
| | Final ExamFinal Exam | 2hr | 50%(50) | 16 | |
| Total Assessment | | | 100%(100) marks | | |

Theoretical Weekly Curriculum

| Delivery plan(Weekly Subllabus) | |
|---------------------------------|--|
| | Material coveredMaterials given |
| Week 1 | Times in general |
| Week2 | Question Composition – Introduction |
| Week3 | Present Tense - Introduction |
| Week4 | Past Tendes - Introduction |
| Week5 | Time and date |
| Week6 | Quantities |
| Week7 | Written exam |
| Week8 | Future Time |
| Week9 | Comparison and preference |
| Week10 | Directions |
| Week11 | Perfect Present |
| Week12 | Circumstances |
| Week13 | Short Answers |
| Week14 | Written exam |
| Week15 | Additional rules |

Learning and Teaching Resources

Learning and Teaching Resources

| | Text | Available in the Library? |
|---|--|---------------------------|
| Required Texts | Evaluation of Headway (Plus) Course book of EFL Undergraduate Iraqi Students | |
| Recommended Texts Recommended | New Headway Beginners | No |
| Websites | | |

Grading Scheme

Grading Chart

| Group | Grade | Recognition | Marks % | Definition |
|---|------------------|-------------------------|----------|---------------------------------------|
| Success Group (50 - 100) | A - Excellent | Privilege | 90 - 100 | Outstanding Performance |
| | B - Very Good | Very good | 80 - 89 | Above average with some errors |
| | C - Good | Good | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | Medium | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | Acceptable | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 - 49) | FX – Fail | Deposit (in processing) | (45-49) | More work required but credit awarded |
| | F – Fail | Fail | (0-44) | Considerable amount of work required |
| | | | | |

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

Note: Decimal marks above or below 0.5 will be rounded to the highest or lowest full score e.g., 54.5 will be rounded to 55, while 54.4 will be rounded to 54. The University has a policy of not tolerating "close pass failure" and therefore the only adjustment to the marks awarded by the original mark(s) will be the automatic rounding described above

MODULE DESCRIPTION FORM

Sample course description

| Module Information | | | |
|------------------------------------|------------------------|-------------------------------|--|
| Course Information | | | |
| Module Title | Arabic Language | | Module Delivery |
| Module Type | Basic | | <input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Reading <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar |
| Module Code | UOS-1102 | | |
| ECTS Credits | 2 | | |
| SWL (hr/sem) | | | |
| Module Level | 2 | Semester of Delivery | |
| Administering Department | Minor Crops Section | College | Agriculture |
| Module Leader | Inam Jassim Mohammed | Email | i@uosamarra.edu.iq |
| Module Leader's Acad. Title | Assistant Lecturer | Module Leader's Qualification | Master |
| Module Tutor | | Email | |
| Peer Reviewer Name | | Email | |
| Scientific Committee Approval Date | 2024/10/20 | Version Number | 33 |

| Relation with other Modules | | | |
|----------------------------------|------|----------|--|
| Relationship with other subjects | | | |
| Prerequisite module | None | Semester | |
| Co-requisites module | None | Semester | |

| Module Aims, Learning Outcomes and Indicative Contents | |
|--|--|
| Course Objectives, Learning Outcomes, and Instructional Contents | |
| Module Objectives Course Objectives | <p>This course description provides a brief summary of the importance of the Arabic language by preserving the Arab identity and culture in light of globalization and showing the beauty of the Arabic language, the breadth of its meanings, structural and rhetorical methods, and the beauty of its images, which are manifested first in the Holy Qur'an and literature, which enable one to read the Holy Qur'an correctly without errors, and to understand its</p> |

| | |
|---|--|
| | <p>true meaning, in addition to the fact that the course is based on the knowledge of the Arabic language. The basics of spelling, and if he makes a mistake, he learns from his mistakes, by drawing the word correctly, and the objectives of the course are:</p> <ol style="list-style-type: none"> 6. Enabling students to understand the rhetoric of the Holy Qur'an and learn about the aesthetics of the language in it 7. Training students to use punctuation marks between sentences correctly. 8. The students' literary horizons should be broadened in terms of ideas, meanings and moral values. <p>Teach students the basics of spelling, which enables them to draw .9 - .words correctly</p> |
| <p>Module Learning Outcomes</p> <p>Learning Outcomes for the Course</p> | <p>A. Cognitive Objectives</p> <p>A1- Knowledge of the basics of Arabic spelling.</p> <p>A2- Identifying world literature and their influence on Arabic literature .</p> <p>A3- Studying some Qur'anic verses in order to explore the linguistic and rhetorical aspects of them.</p> <p>b. Skill objectives of the course.</p> <p>B1 – Writing properly .</p> <p>B2 – Ability to extract common errors in daily use.</p> <p>B3- The ability to identify the points of Qur'anic rhetoric as well as to .know their impact on understanding the meanings</p> |
| <p>Indicative Contents</p> <p>How-to Contents</p> | <ol style="list-style-type: none"> 1. Good reading 2- Proper writing 3. Active listening 4. Speaking and Speaking 5. Text Analysis <p style="text-align: right;">Language Culture .6</p> |

| | |
|--|---|
| <p>Learning and Teaching Strategies</p> <p>Learning and Teaching Strategies</p> | |
| <p>Strategies</p> | <p>- Using educational discussion (educational dialogue) which depends on exchanging ideas to reach the facts</p> <p style="text-align: right;">Use of modern computer technologies -</p> |

| |
|--------------------------------------|
| <p>Student Workload (SWL)</p> |
|--------------------------------------|

The student's academic load is calculated for 15 weeks

| | | | |
|--|-----------|---|-----|
| Structured SWL (h/sem) Student's regular academic load during the semester | 30 | Structured SWL (h/w) Regular Academic Load of the Student Weekly | 2 |
| Unstructured SWL (h/sem) Student's irregular academic load during class | 20 | Unstructured SWL (h/w) Student's irregular academic load per week | 1.3 |
| Total SWL (h/sem) The student's total academic load during the semester | 50 | | |

Module Evaluation

Assessment of the course

| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
|-----------------------------|------------------------|-------------|----------------|---|---------------------------|
| Formative assessment | Quizzes | 2 | 10% | 7 and 15 | 1,2,3 |
| | Assignments | 10 | 10% | 2 and 3,4 and 4 and 6 and 8 and 9 and 10 and 12 and 14 and 15 | Everyone |
| | Projects / Lab. | 1 | 10% | 5 | 4,7,10 |
| | Report | 2 | 10% | 7 and 11 | 5,8,9 |
| Summative assessment | Midterm Exam | | 10% | | |
| | Final Exam | | 50% | | |
| Total assessment | | | 100% (100) | | |

Delivery Plan (Weekly Syllabus)

Theoretical Weekly Curriculum

| | Material Covered |
|---------------|---|
| Week 1 | Arabic among the world's languages |
| Week 2 | The Origin of the Spoken and Written Language and the Beginning of Codification |
| Week 3 | Grammar System Basic Introduction to Grammar - |

| | | |
|---------|---|--|
| Week 4 | Qur'anic Rhetoric | Surah Al-Duha - |
| Week 5 | Written System | Punctuation - |
| Week 6 | Written System - Connector and Cutting - Medium Hamza | Hamza at the end of the word - |
| Week 7 | | First Month Exam |
| Week 8 | | Quranic Rhetoric – Surah Al-Kahf |
| Week 9 | Written System - Tied and distracted | Elongated and Cabin Thousand - |
| Week 10 | | Issue in Arabic |
| Week 11 | | Arabic and Computer |
| Week 12 | Common mistakes in Arabic - Official correspondence | Daily use of language - |
| Week 13 | - Arabic and Arabization | Basic Introduction to the Science of Arabization - |
| Week 14 | - World Literature and Orientalism | Two poets model - |
| Week 15 | | Second Month Exam |
| Week 16 | | |
| Week 17 | | |
| Week 18 | | |
| Week 19 | | |
| Week 20 | | |
| Week 21 | | |
| Week 22 | | |
| Week 23 | | |
| Week 24 | | |
| Week 25 | | |
| Week 26 | | |
| Week 27 | | |
| Week 28 | | |

Delivery Plan (Weekly Lab. Syllabus)

Weekly Laboratory Curriculum

| | Material Covered |
|--------|------------------|
| Week 1 | |

| | |
|---------|--|
| Week 2 | |
| Week 3 | |
| Week 4 | |
| Week 5 | |
| Week 6 | |
| Week 7 | |
| Week 8 | |
| Week 9 | |
| Week 10 | |
| Week 11 | |
| Week 12 | |
| Week 13 | |
| Week 14 | |
| Week 15 | |

Learning and Teaching Resources

Learning and Teaching Resources

| | Text | Available in the Library? |
|-------------------|---|---------------------------|
| Required Texts | | |
| Recommended Texts | The Book by Sibuyeh, The Secrets of Rhetoric by Al-Jurjani, Spelling and Numbering in Arabic Writing .by Abdul Aleem Ibrahim | No |
| Websites | | |

Grading Scheme

Grading Chart

| Group | Grade | Recognition | Marks % | Definition |
|-------------------------------------|-------------------------|-------------------------|----------|---------------------------------------|
| Success Group (50 - 100) | A - Excellent | Privilege | 90 - 100 | Outstanding Performance |
| | B - Very Good | Very good | 80 - 89 | Above average with some errors |
| | C - Good | Good | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | Medium | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | Acceptable | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 - 49) | FX – Fail | Deposit (in processing) | (45-49) | More work required but credit awarded |
| | F – Fail | Fail | (0-44) | Considerable amount of work required |
| | | | | |

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

Sample course description

| Module Information | | | |
|---|------------------------|--------------------------------------|--|
| Course Information | | | |
| Module Title | Agricultural economics | | Module Delivery |
| Module Type | Reading | | <input checked="" type="checkbox"/> Theory <input checked="" type="checkbox"/> Reading <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar |
| Module Code | USAGFi1211 | | |
| ECTS Credits | 4 | | |
| SWL (hr/sem) | 100 | | |
| Module Level | The first stage | Semester of Delivery | 1 |
| Administering Department | Field Crops Section | College | College of Agriculture |
| Module Leader | zainab Riyadh Salim | | Email |
| Module Leader's Acad. Title | Assistant teacher | Module Leader's Qualification | |
| Module Tutor | zainab Riyadh Salim | | Email Zenab.r.sa@uosamarra.edu.iq |
| Peer Reviewer Name | | Email | |
| Scientific Committee Approval Date | 2024/10/20 | Version Number | 33 |

Relation with other Modules

Relationship with other subjects

| | | | |
|-----------------------------|------|-----------------|--|
| Prerequisite module | None | Semester | |
| Co-requisites module | | Semester | |

Module Aims, Learning Outcomes and Indicative Contents

Course Objectives, Learning Outcomes, and Instructional Contents

| | |
|--|--|
| Module Objectives Course Objectives | 10. The curriculum includes a comprehensive study of economics and identification of its most important branches and the productive function 11. Methods of calculating labor and disappearance , knowing supply and demand, and how to calculate labor productivity and disappearance. |
| Module Learning Outcomes Learning Outcomes for the Course | <ol style="list-style-type: none"> 1- Knowledge and Comprehension: Forming an economic foundation for understanding economic materials and expanding the student's abilities to understand, know, and analyze economics. 2- Special Skills: Expand students' abilities in economic analysis and give information about economics and the state of the market from supply and demand. 3- Lectures, Teaching and Learning Method. 4- Evaluation: Essay tests, topical tests, and are in the form of daily, monthly tests, and the final test. 5- Thinking skills and teaching and learning methods: using personal, linguistic and mathematical intelligence strategies as well as using the brainstorming method. 6- Evaluation Methods: Using methods that are compatible with the objectives of the Principles of Economics course, such as concepts, graphs, and applied .mathematical equations |
| Indicative Contents How-to Contents | |

Learning and Teaching Strategies

Learning and Teaching Strategies

| | |
|-------------------|--|
| Strategies | week in-person lectures with dialogues, discussions, and exercises, interspersed-15 .with monthly exams and daily exams, in addition to student reports and activities |
|-------------------|--|

Student Workload (SWL)

The student's academic load is calculated for 15 weeks

| | | | |
|--|------------|---|-----|
| Structured SWL (h/sem) Student's regular academic load during the semester | 48 | Structured SWL (h/w) Regular Academic Load of the Student Weekly | 3,2 |
| Unstructured SWL (h/sem) Student's irregular academic load during class | 52 | Unstructured SWL (h/w) Student's irregular academic load per week | 3,4 |
| Total SWL (h/sem) The student's total academic load during the semester | 100 | | |

| Module Evaluation | | | | | |
|--------------------------|-----------------|-------------|----------------|----------------|---------------------------|
| Assessment of the course | | | | | |
| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
| Formative assessment | Quizzes | 4 | 20% | 4 and 9 and 13 | |
| | Assignments | 2 | 10% | 2 and 12 | |
| | Projects / Lab. | | | | |
| | Report | 1 | 10% | 13 | |
| Summative assessment | Midterm Exam | 2hr | 10% | 7 | |
| | Final Exam | 3hr | 50% | 16 | |
| Total assessment | | | 100% (100) | | |

| Delivery Plan (Weekly Syllabus) | |
|---------------------------------|--|
| Theoretical Weekly Curriculum | |
| | Material Covered |
| Week 1 | The concept of economics and its elements and branches |
| Week 2 | Production Concept |
| Week 3 | Productive function |
| Week 4 | The Law of Declining Yields and Production Stages |
| Week 5 | Production Principles and Costs |
| Week 6 | Demand and Price Elasticity |
| Week 7 | Supply and Price Flexibility |
| Week 8 | First month exam |
| Week 9 | Production Costs |
| Week 10 | Work and work productivity |
| Week 11 | Measuring work productivity |
| Week 12 | Agricultural Marketing |
| Week 13 | Economics of agricultural production |
| Week 14 | Extinction of fixed assets |
| Week 15 | Methods of calculating extinction |
| Week 16 | |
| Week 17 | |
| Week 18 | |

| | | |
|--------------------------|---|--|
| Recommended Texts | | |
| Websites | https://www.agro-lib.site/2024/03/blog-post_65.html?m=1 | |

| Grading Scheme | | | | |
|---|-------------------------|-------------------------|----------------|---------------------------------------|
| Grading Chart | | | | |
| Group | Grade | Recognition | Marks % | Definition |
| Success Group (50 - 100) | A - Excellent | Privilege | 90 - 100 | Outstanding Performance |
| | B - Very Good | Very good | 80 - 89 | Above average with some errors |
| | C - Good | Good | 70 - 79 | Sound work with notable errors |
| | D - Satisfactory | Medium | 60 - 69 | Fair but with major shortcomings |
| | E - Sufficient | Acceptable | 50 - 59 | Work meets minimum criteria |
| Fail Group (0 - 49) | FX – Fail | Deposit (in processing) | (45-49) | More work required but credit awarded |
| | F – Fail | Fail | (0-44) | Considerable amount of work required |
| | | | | |
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