Ministry of Higher Education and
Scientific Research - Iraq
University of AL_mustaqbal
College of Science
Department of Biology

# MODULE DESCRIPTOR FORM
# نموذج وصف المادة الدراسية

## Module Information
معلومات المادة الدراسية

| | | | |
|---|---|---|---|
| **Module Title** | PLANT TAXONOMY | **Module Delivery** | |
| **Module Type** | CORE | **Theory**<br>**Lecture**<br>**Lab**<br>**Tutorial**<br>**Practical**<br>**Seminar** | |
| **Module Code** | UOMU0352402 | | |
| **ECTS Credits** | 8 | | |
| **SWL (hr/sem)** | 200 | | |
| **Module Level** | 2 | **Semester of Delivery** | 1 |
| **Administering Department** | Type Dept. Code | **College** | Type College Code |
| **Module Leader** | MSC. Jaafar.hamid.jaafar | **e-mail** | **Jaafar.hamid.jaafar@uomus.edu.iq** |
| **Module Leader's Acad. Title** | | **Module Leader's Qualification** | |
| **Module Tutor** | None | **e-mail** | None |
| **Peer Reviewer Name** | | **e-mail** | |
| **Review Committee Approval** | 08/06/2023 | **Version Number** | 1.0 |

## Relation With Other Modules
العلاقة مع المواد الدراسية الأخرى

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

## Module Aims, Learning Outcomes and Indicative Contents
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

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| **Module Aims** | The student should be able to: |

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| أهداف المادة الدراسية | 1- Understand the historical development of plant taxonomy<br>2- Describe, define and understand the basics of taxonomy.<br>3- Identify taxonomic systems and the basics of development.<br>4- Knowledge of the phenotypic structure of the vascular plants and the variations that phenotypic characteristics can exhibit.<br>5- Understand the process of pollination and its types and the means that help in the process of pollination and the relationship of vaccination to evolution. |
| **Module Learning Outcomes**<br><br>مخرجات التعلم للمادة الدراسية | 1. Identify the formal variation in floral and fruit compositions of higher plants growing around us, and then how to classify these plants in similar groups using the degree of similarity and variation in the development of taxonomic systems to distinguish between plants and distinguish.<br>2. Details of variance in higher plants based on the difference in the shape and composition of flowers, inflorescences and fruits.<br>3. Identify the different classification methods and apply some of these methods to different wild and cultivated plant groups.<br>4. Identify the many plants that surround it and their relationships with each other.<br>5. How to build a key to diagnose plants at the family level?<br>6. How to spread plants and mechanisms that help it?<br>7. Identify the general characteristics of a group of plant families belonging to single or two cotyledons |
| **Indicative Contents**<br>المحتويات الإرشادية | **Instructional content includes the following:**<br>1- Field scientific visits<br>2- Forming student groups to conduct practical experiments<br>3- Field research with the subject professor to identify some wild plants and collect them for the herbarium<br>4- Using modern display methods to simplify models and topics that need wide science fiction, and using video on display screens to clarify scientific films on the subject. |
| **Learning and Teaching Strategies**<br>استراتيجيات التعلم والتعليم | |
| **Strategies** | The main strategy to be adopted in delivering this unit is to encourage students<br>1- The student acquires a great knowledge about the plants that grow around him, how to differentiate between them and get him used to arranging them in similar groups.<br>2- Know the principles used in writing a description of a plant.<br>3- Knowing how plants are named and why plant names change.<br>4- How to use references in taxonomy. |

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| | 5- The interaction of the student with the scientific material, which is represented in his cooperation in providing plant samples, enables him to understand the differences between plants. |

## Student Workload (SWL)
الحمل الدراسي للطالب

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| **Structured SWL (h/sem)** الحمل الدراسي المنتظم للطالب خلال الفصل | 102 | **Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا | 7 |
| **Unstructured SWL (h/sem)** الحمل الدراسي غير المنتظم للطالب خلال الفصل | 98 | **Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا | 6.5 |
| **Total SWL (h/sem)** الحمل الدراسي الكلي للطالب خلال الفصل | 200 | | |

## Module Evaluation
تقييم المادة الدراسية

| | | Time/Number | Weight (Marks) | Week Due | Relevant Learning Outcome |
|---|---|---|---|---|---|
| **Formative assessment** | **Quizzes** | 2 | 10% (10) | 5, 10 | LO #1, 2, 10 and 11 |
| | **Assignments** | 2 | 10% (10) | 2, 12 | LO # 3, 4, 6 and 7 |
| | **Projects / Lab.** | 1 | 10% (10) | Continuous | |
| | **Report** | 1 | 10% (10) | 13 | LO # 5, 8 and 10 |
| **Summative assessment** | **Midterm Exam** | 2 hr | 10% (10) | 7 | LO # 1-7 |
| | **Final Exam** | 2hr | 50% (50) | 16 | All |
| **Total assessment** | | | 100% (100 Marks) | | |

## Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

| | **Material Covered** |
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| **Week 1** | Introduction to the importance of taxonomy in our daily lives and the objectives of taxonomy |
| **Week 2** | The relationship of taxonomy to other sciences - the history of taxonomy |
| **Week 3** | General terms -Root and Stem |
| **Week 4** | Leaf |
| **Week 5** | Supplemented by the leaf, the Bract |
| **Week 6** | Reproductive organs - Flower |
| **Week 7** | Calyx - Coralla |
| **Week 8** | Androecium and Gynoecium |

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| **Week 9** | Inflorescence |
| **Week 10** | Fruit |
| **Week 11** | Pollination |
| **Week 12** | Reproductive systems |
| **Week 13** | Scientific names |
| **Week 14** | Study of some families of monocotyledons and dicotyledons |
| **Week 15** | **Preparatory Week** |
| **Week 16** | **Final Exam** |

| **Delivery Plan (Weekly Lab. Syllabus)**<br>المنهاج الاسبوعي للمختبر | |
|---|---|
| | **Material Covered** |
| **Week 1** | Lab 1: General instructions for laboratory work in taxonomy, how to collect, dry, compress and use diagnostic keys. |
| **Week 2** | Lab 2: Root system and types of stems of flowering plants |
| **Week 3** | Lab 3: Leaf - petioles, petioles, types of venation |
| **Week 4** | Lab 4: Types of top, base and edge of the leaf, the nature of the surface covering of the leaves. |
| **Week 5** | Lab 5: Terminology for reproductive organs - bracts and calyx types |
| **Week 6** | Lab 6: Types of petals for flowering plants - the male organ of the plant |
| **Week 7** | Lab 7: The feminizing system of the plant - the morphology. |
| **Week 8** | Lab 8: Inflorescences and floral systems. |
| **Week 9** | Lab 9: The fruit and its types |
| **Week 10** | Lab 10: A field trip to collect samples (collecting at least twenty-five plant families) |
| **Week 11** | Lab 11: Examples of different families are diagnosed in the laboratory and are studied in detail and according to their availability. |
| **Week 12** | Lab 12: Examples of different families are diagnosed in the laboratory and are studied in detail and according to their availability. |
| **Week 13** | Lab 13: Examples of different families are diagnosed in the laboratory and are studied in detail and according to their availability. |
| **Week 14** | Lab 14: Examples of different families are diagnosed in the laboratory and are studied in detail and according to their availability. |

## Learning and Teaching Resources
مصادر التعلم والتدريس

| | Text | Available in the Library? |
|---|---|---|
| **Required Texts** | الموسوي, علي حسين (1987) علم التصنيف النبات وزارة التعليم العالي والبحث العلمي جامعة بغداد , العراق. | Yes |
| **Recommended Texts** | • Tod F. Stuessy. (2009). Plant Taxonomy .2nd.ed. Columbia university press, New York.<br>• Gurcharan Singh. (2010). Plant Systematics. 3rd.ed. Science Publishers, Enfield, NH, USA | yes |
| **Websites** | • https://byjus.com/neet/important-notes-of-biology-for-neet-plant-taxonomy/ | |

**APPENDIX:**

**GRADING SCHEME**
مخطط الدرجات

| Group | Grade | التقدير | Marks (%) | Definition |
|---|---|---|---|---|
| **Success Group (50 - 100)** | **A** - Excellent | امتياز | 90 - 100 | Outstanding Performance |
| | **B** - Very Good | جيد جدا | 80 - 89 | Above average with some errors |
| | **C** - Good | جيد | 70 - 79 | Sound work with notable errors |
| | **D** - Satisfactory | متوسط | 60 - 69 | Fair but with major shortcomings |
| | **E** - Sufficient | مقبول | 50 - 59 | Work meets minimum criteria |
| **Fail Group (0 – 49)** | **FX** – Fail | مقبول بقرار | (45-49) | More work required but credit awarded |
| | **F** – Fail | راسب | (0-44) | Considerable amount of work required |
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Note:

NB 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.

ملاحظة: هذا النموذج تم وضعه وتقديمه من قبل مديرية ضمان الجودة في وزارة التعليم العالي والبحث العلمي