

Kurdistan Region Government Ministry of Higher Education and Scientific Research Erbil Polytechnic University



# Module (Course Syllabus) Catalogue

## 2023-2024

| College/         | Khabat Technical Institute               |                          |  |
|------------------|--|--------------------------|--|
| Institute        |  |                          |  |
| Department       | Medicinal Plants Production - Evening    |                          |  |
| Module Name      | Plant Taxonomy                           |                          |  |
| Module Code      | PLT302                                   |                          |  |
| Degree           | Technical Diploma Bachler                |                          |  |
|                  | High Diploma 📃 Master                    | PhD                      |  |
| Semester         | Third                                    |                          |  |
| Qualification    | Master                                   |                          |  |
| Scientific Title | Lecturer                                 |                          |  |
| ECTS             | 6  |                          |  |
| (Credits)        |  |                          |  |
| Module type      | Prerequisite Core                        | Assist.                  |  |
| Weekly hours     |  |                          |  |
| Weekly hours     | (1) hr Class                             | (2) Total hrs Workload   |  |
| (Theory)         |  |                          |  |
| Weekly hours     | (3) hr Class                             | (4.5) Total hrs Workload |  |
| (Practical)      |  |                          |  |
| Number of        | 12                                       |                          |  |
| Weeks            |  |                          |  |
| Lecturer         | Bilal Ibrahim Muhammed                   |                          |  |
| (Theory)         |  |                          |  |
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| Mobile NO.       | (07504699939)                            |                          |  |
| Lecturer         | Bilal Ibrahim Muhammed                   |                          |  |
| (Practical)      | Shwan Mohamad Baper                      |                          |  |
| E-Mail &         | bilal.muhammed@epu.edu.iq                | 07504699939              |  |
| Mobile NO.       | shwan.baper@epu.edu.iq                   | 07513238524              |  |
| Websites         | https://epuit.net/cbook/portal/login.php |                          |  |

# **Course Book**

| Course Description             | The student will investigate the fundamental concepts of plant<br>taxonomy from an approach and participate in a laboratory and<br>field that demonstrate this study. The course is for students<br>studying agriculture.  |  |  |
|--------------------------------|--|--|--|
| Course objectives              | <ul><li>Plant taxonomy is the science that finds, identifies, describes, classifies, and names plants. It is also known as systematic botany.</li><li>It helps to identify and name various plants on the earth.</li></ul>   |  |  |
| Student's obligation           | <ul> <li>Students are asked to do mandatory the following duties during the 12 weeks of the semester:</li> <li>1- Quiz.</li> <li>2- Weekly practical report.</li> <li>3- Homework.</li> <li>4- Seminars.</li> <li>5- Semester report.</li> <li>6- Lab. activity.</li> </ul>  |  |  |
| Required Learning<br>Materials | Computer, PowerPoint, Data show, white board, field and laboratory   |  |  |
| Specific learning<br>outcome:  | <ul> <li>To know all plants on the earth with their names.</li> <li>To build up a reference system for plants for easy identification , naming and classification.</li> <li>To understand the facts of evolution of different plants.</li> <li>To give every plant an universal name to avoid confusions in naming of plants.</li> </ul> |  |  |

|                    | 1- Adrian D. Bell, 1991, Plant Form: An illustrated guide to flowering plant morphology, Oxford University Press, Oxford.  |
|--------------------|--|
|                    | 2- Elias, Thomas S. 1980. The complete trees of North<br>America: field guide and natural history. Van Nostrand<br>Reinhold Co., New York.   |
| Course References: | 3- Fernald, M. L. 1970. Gray's Manual of Botany: A<br>handbook of the flowering plants and ferns of the central<br>and northeastern United States and adjacent Canada, Van<br>Nostrand Reinhold Co., New York. |
|                    | <ul> <li>4- Jones, George Neville. 1963. Flora of Illinois, 3d ed.<br/>American Midland Naturalist, University of Notre Dame,<br/>Notre Dame, Indiana.</li> </ul>  |
|                    | 5- Kirt, Russell R. 1993. Prairie plants of northern Illinois: identification and ecology. Stipes Publ., Champaign.  |

| <b>Course topics (Theory)</b>    | Week | Learning<br>Outcome |
|----------------------------------|------|---------------------|
| Introduction to Plant Taxonomy   | 1    |                     |
| Principles of Classification     | 2    |                     |
| Nomenclature                     | 3    |                     |
| Plant Identification             | 4    |                     |
| Plant Morphology                 | 5    |                     |
| Plant Anatomy                    | 6    |                     |
| Plant Structures                 | 7    |                     |
| Taxonomic Methods and Techniques | 8    |                     |

| Taxonomic Literature              | 9    |                     |
|-----------------------------------|------|---------------------|
| Plant Evolution and Phylogeny     | 10   |                     |
| Taxonomy and Conservation         | 11   |                     |
| Recent Advances in Plant Taxonomy | 12   |                     |
| Practical Topics                  | Week | Learning<br>Outcome |
| Plant Identification              | 1    |                     |
| Plant Collection                  | 2    |                     |
| Plant Dissection                  | 3    |                     |
| Field Surveys and Data Collection | 4    |                     |
| Plant Pressing and Drying         | 5    |                     |
| Plant Diversity Surveys           | 6    |                     |
| Taxonomic Projects                | 7    |                     |
| Laboratory Work                   | 8    |                     |
| Order characters                  | 9    |                     |
| Family characters                 | 10   |                     |
| Some families in monocot          | 11   |                     |
| Some families in dicot            | 12   |                     |

## **Questions Example Design**

Q1/ Define the plant taxonomy, dissection and drying.

Q2/ Describe the historical development of plant taxonomy,

Q3What is the primary goal of plant taxonomy, and why is it important in the field of

botany?

Q4/ Why is it important to know the family characters?

Q5/ Write the classification of plant structures.

#### **Extra notes:**

### **External Evaluator:**