Department of Biology

College of Science

Salahaddin University -Erbil

Subject: General BotanyII

Course Book – (1st Year) Second semester

Lecturer's name Assistant Prof. Dr. Pakhshan M. Maulood

Lecturer's name Bnar Khalid Bakr (Practical)

Academic Year: 2023/2024

Course Book

1. Course name	**General Botany**
2. Lecturer in charge	**Pakhshan M. Maulood (Theory)** **Bnar Khalid Bakr (Practical)**
3. Department/ College	**Biology- Science**
4. Contact	**e-mail:** pakhshan.maulood@su.edu.krd **e-mail:** bnar.bakr@su.edu.krd
5. Time (in hours) per week	**Theory 2hr./week** **Practical 3hrs/week**
6. Office hours	**To be returned to the schedule on the office door**
7. Course code	**SBIO305**
8. Teacher's academic profile	**Dr. Pakhshan Mustafa Maulood CV:** **Attained BSc degree in Biology 1991, Salahaddin University, College of Science. Also, MSc in the same Department in 1997. Attained Scientific title Assistant Prof. on 6-3-2012. In 2020 attained PhD degree at the College of Science- Salahaddin University in Eco-Physiology specification. I published over 15 manuscripts in local and international Journals and participated in several local conferences and workshops.** **Ms. Bnar CV:** I garudate from Salahaddin Univeristy in (2005)(ranked 2 nd in collage) worked as Assistant biology for three years in various Lab. As in General biology lab. , in histology and embryology lab. , in anatomy and taxonomy lab. , …… In 2008 started in MSc till 2011 finished my MSc degree in plant taxonomy(Participate in teaching method training) then started worked as assistant lecturer in 2012 …. I teaching practical general biology in year 1 for one course after that I started teaching practical plant anatomy and taxonomy in year 2 till now. * During these five year I supervising 8 student in Year 6 at three research project . * For 3 year became head of Herbarium

	committee. * Now I am planning to make scientific research for better scientific performance in my field,; Plant anatomy , Plant taxonomy , Plant tissue , Plant parts , Plant morphology feature.
9. Keywords	**Botany, plant cell, plant tissue**

10. Course overview:

Botany means the scientific study of plant life. The course includes the study of plant body in general also plant parts from the cells to the organs and the importance of plants in humans live. The effect of plants on the environment. Photosynthesis process which is the critical factor for the most life features on our planet. At the end of the course, the students be able to understand botany in general, the plant body, tissues, growth, and other important subjects concerning to good understanding plant biology.

11. Course objective:

Botany is an excellent way to introduce you to the world of biology. In this year, we will examine a wide range of topics related to the biology of plants. We will investigate how the individual plant works: how plant bodies are built, how plants obtain and transport food and water, and how plants reproduce themselves. Upon these, the course is covering topics like plant cell, plant tissues, photosynthesis, plant growth, and structure of monocot and dicot seeds, soil and soil profile, alternation of generations and many other topics related to the plant science.

12. Student's obligation

***Exam policy:** Student Should take 3 exams during the course There will be no make-up exams for absences students without medical report.

***Classroom polices:**

1- Attendance: Students are strongly encouraged to attend class on a regular basis.

2- **Lateness:** Lateness to class is disruptive

3- **Electronic devices:** All cell phones are to be turned off at the beginning of class and put away during the entire class.

4-**Talking:** During class please refrain from side conversations. These can be disruptive to your fellow students and your professor

5- **No Disrespectful to both the professor and to your fellow students**.

13. Forms of teaching

Different forms of teaching will be used to reach the objectives of the course: power point presentations for the head titles and definitions and summary of conclusions, description the types of pollution and their sources and any other illustrations, besides worksheet will be designed to let the chance for practicing on several aspects of the course in the classroom.

Graduate students will be required to review a scientific paper that relates to one of the course topics. The review will consist of a paper that is at a maximum of five pages (typed) in length and an oral presentation of the review (15 minutes in length). The goal is to

have each student relate to the ecology. The format for the paper and presentation will be discussed in class.

14. Assessment scheme

Component	Date	Percent
Exam 1		50
Exam 2		50

15. Student learning outcome:

After completion of this course, you will be able to:
• Define common terms used in botany.
• Identify structure and shape of plants.
• Identify plant parts.
• Understanding plant growth.
• Understanding the relationship between humans and plants.

16. Course Reading List and References:

• Bendre A.,and P.C. Pande .2008.*Introductory Botany*,4th revised edition. New Delhi:Pastogi Publications.
• Raven P. H., R.F.Evert, and S.E. Eichhorn .2005. *Biology of Plants*, 7th ed. New York: W.H. Freeman and Company Publishers.
1- • Stern. K. R. 2006. *Introductory Plant Biology*,9th ed. New York: McGraw - Hill.Higher Education.

17. The Topics: (Theory)	Lecturer's name
Week one: Morphology of root.	Lecturer's name
Week Two: Anatomy of root	
Week Three: Structure of seed.	
Week Four: Examination.	
Week Five & Six: Seed germination.	
Week Seven: Fruits.	
Week Eight: Types of fruit.	
Week Nine: Flower.	
Week Ten: Examination.	
Week Eleven: The stem	
18. The Topics: (Practical)	**Lecturer's name**
Week 1: Introduction	

Week 2: Root Morphology	
Week 3: Stem morphology	
Week 4: Leaves morphology	
Week 5: Flowers morphology	
Week 6: Algae	
Week 7: Bryophytes plant	
Week 8: Pteridophytes	
Week 9: Examination	

Examination of practical botany

Name :
Group:

Q1l Identify this samples

1. Identify root in this picture

2. Identify Phylotaxy in this leaf

3. Identify venation in this leaf

4. Identify stem in this picture

5. Identify shape of flower

Q2/ Answer the following

1. Write differences between tap root and adventtiouse root?
2. Define Dioecious plant
3. By drawing differ between simple and compound leaf?
4. Write two characteristic of stem ?
5. Draw and label complet flower

20. Extra notes:

Here the lecturer shall write any note or comment that is not covered in this template and he/she wishes to enrich the course book with his/her valuable remarks.

21. Peer review **پێداچوونەوەی هاوەڵ**

This course book has to be reviewed and signed by a peer. The peer approves the contents of your course book by writing few sentences in this section.

(A peer is person who has enough knowledge about the subject you are teaching, he/she has to be a professor, assistant professor, a lecturer or an expert in the field of your subject).

ئەم کۆرسبووکە دەبێت لەلایەن هاوەڵێکی ئەکادیمیەوە سەیر بکرێت و ناوەڕۆکی بابەتەکانی کۆرسەکە پەسەند بکات و جەند ووشەیەک بنووسێت لەسەر شیاوی ناوەڕۆکی کۆرسەکە و واژووی لەسەر بکات.

هاوەڵ ئەو کەسەیە کە زانیاری هەبێت لەسەر کۆرسەکە و دەبیت پلەی زانستی لە مامۆستا کەمتر نەبێت.