



المركز الوطني للتقويم والاعتماد الأكاديمي
National Center for Academic Accreditation and Evaluation

ATTACHMENT 5.

T6. COURSE SPECIFICATIONS (CS)

Course Specifications

Institution: University of Tabuk	Date:
College/Department : Ummalage University College / Biology Department	

A. Course Identification and General Information

1. Course title and code: General Botany, BIO241			
2. Credit hours: 3 Hrs			
3. Program(s) in which the course is offered. (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course:			
5. Level/year at which this course is offered: Level 4			
6. Pre-requisites for this course (if any): General Biology2 (BIO202)			
7. Co-requisites for this course (if any): None			
8. Location if not on main campus:			
9. Mode of Instruction (mark all that apply):			
a. traditional classroom	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="75"/>
b. blended (traditional and online)	<input type="checkbox"/>	What percentage?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input checked="" type="checkbox"/>	What percentage?	<input type="text" value="25"/>
<p>Comments: Power point Lectures and different examples of plants from our daily life related to the course. Lectures given to them online. Presentation of different ideas and critical thinking with the help of e learning and Instructor student interaction. Discussion on various topics related with the course content.</p>			

B Objectives

1. What is the main purpose for this course?

What is Botany and what botanist do and what they need to understand the processes in nature and biodiversity in plant kingdom starting with the physiology of seed germination to plant natural adaptation.

This course also aims at providing students with an introduction to the plant morphology, different plant parts modification purpose and various uses of modification, like root, stem, leaf etc.

Describe the ultra-structure of different plant tissue and different types of plant cells. Compare and contrast the reproductive strategies of different plant groups (evaluating the costs and benefits of asexual versus sexual reproduction).

Recognize the different types of plant roots, stems, leaves, flowers, fruits, and seeds.

Describe the different types of plant tissue and anatomy of root, stem, and leaf.

Identify different organs of plants and recognize their functions, modifications and ecological adaptations in natural environment.

Use of compound microscope to observe the prepared slides of plant anatomy.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

The instructors will periodically review the course contents. The undergraduate course development committee can suggest new improved and relevant teaching methods.

Practical can be performed in the field (if needed) so it will be great help to the students in understanding the plant structure, modification and their uses in our daily life.

Increased use of computer based programs and web based reference material to support the course material to more understanding of general botany.

Encourage the student to introduce themselves in the field of plant anatomy, physiology and plant taxonomy.

C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

1. Topics to be Covered		
List of Topics	No. of Weeks	Contact hours
Introduction to botany	1	3
Seed and seed germination 1	1	3
Seed and seed germination 1	1	3
Morphology of roots	1	3
Morphology of stems 1	1	3
Morphology of stems 2	1	3
Morphology of leaves 1	1	3
Revision and Pre Final Exam		
Mid Term Vacation		
Morphology of leaves 2	1	3
Anatomy of roots (monocot-dicot)	1	3
Anatomy of stems (monocot-dicot)	1	3
Anatomy of leaves (monocot-dicot)	1	3
Morphology of the flower and inflorescence	1	3
Fruits, and revision	1	3
Final Exam		

2. Course components (total contact hours and credits per semester):							
		Lecture	Tutorial	Laboratory/ Studio	Practical	Other:	Total
Contact Hours	Planned	26		26			52
	Actual	2		1			3
Credit	Planned						
	Actual						

3. Additional private study/learning hours expected for students per week.	10
--	----

4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
--

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0			
1.1	-Describe and state the structure, function and modification of plant organs (such as roots, stems, leaves, flowers, inflorescence and fruits). - Recognize the types of seeds and methods of seed germination.	-Reproduce the lectures (using PowerPoint and illustrations on the white board) - Describe the Selflearning and cooperative learning. - Employ the scientific method in thinking by solving scientific problems.	-Evaluate the Pre-final and final exams. - Asses the of lab reports and practical examinations.
1.2	List, name and record the structure of flower and fruits. - Recognize the main differences between stem and root anatomy.	-Record the laboratory practice and microscope examination (Conducting experiments and writing reports). - Reproduce the activities and homework.	-Recall the homework and evaluations.
2.0	Cognitive Skills		
2.1	-Analyze the differences between monocot and dicot. Seeds, roots, stems and leaves. - Examining and describing plant organs.	-Lecture using data show and laptop. - Case study preparing through internet.	Oral presentation through the discussion of each item. - Making a report from each group o
2.2	-Explain the anatomical structure for monocot and dicot stem and leaves. - Differentiate the types of inflorescence,	-Rate the Poster prepared by the students at the end	-Rate the term written exam to assess knowledge

	fruits, leaves and roots.	of the course. - Summarize the reports prepared by each group of the students responsible for one item.	and understanding of the course - Evaluate the Practical Exam
3.0	Interpersonal Skills & Responsibility		
3.1	-Analyze the ability to work in a team to conduct a specific project.	- Use the cooperative learning and application of scientific thinking by solving scientific problems. - Illustrate the work as part of a team.	- Assessment of group projects.
3.2	- Show results of work to other.	- Choose group experiments and writing group reports.	- Judge the projects conducted individually.
4.0	Communication, Information Technology, Numerical		
4.1	-Demonstrate the work in a team to conduct a specific project. - Show the students to Solve problems.	-Assess and promote the students to submit activities, homework and writing reports	-Evaluate the laboratory written reports.
4.2	- Able to Use computers and internet. - Able to Conduct searches and restore information		- Assess the activities and homework.
5.0	Psychomotor		
5.1	Not Applicable	Not Applicable	Not Applicable
5.2			

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (i.e., essay, test, quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Quiz	5	10%
2	Mid-term lab Exam	8	10%
3	Final lab Exam	15	15%
4	Midterm Theory Exam	8	25%
5	Final Theory Exam	Last week	40%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)
 - Direct supervision by staff member over lab. Sessions.
 - Office hours 8 hr/ week.
 - Academic advice (by 20 student / teaching staff member).

E Learning Resources

1. List Required Textbooks
 - Campbell et al. (2007): Biology. Benjamin-Cummings Publishing Company.
 - Bendre, A. M. (2008): Practical Botany. Rastogi Publications, India.
2. List Essential References Materials (Journals, Reports, etc.)
 - Campbell et al. (2007): Biology. Benjamin-Cummings Publishing Company.
 - Bendre, A. M. (2008): Practical Botany. Rastogi Publications, India.
3. List Electronic Materials, Web Sites, Facebook, Twitter, etc.
 - A text book of General Botany (2011): Gilbert M. Smith
 - A Classbook of Botany (2000): A.C. Dutta
4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.
 - American Society for Plant Biologist
 - Botanicus

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access, etc.)
1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) - Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) - Lecture halls, containing white boards, and electronic monitors. The seats fit the number of students. - Laboratories equipped with three tables and water sources, microscopes and animal samples.
2. Technology resources (AV, data show, Smart Board, software, etc.) Not Applicable
3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

G Course Evaluation and Improvement Processes

1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching - Course evaluation by student - Students- faculty meetings
2. Other Strategies for Evaluation of Teaching by the Instructor or by the Department - Peer consultation on teaching - Departmental council discussions - Discussions within the group of faculty teaching the course
3. Processes for Improvement of Teaching -Conducting workshops given by experts on the teaching and learning methodologies - Periodical departmental revisions of its methods of teaching -Monitoring of teaching activates by senior faculty members
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution) - Providing samples of all kind of assessment in the departmental course portfolio of each course - Assigning group of faculty members teaching the same course to grade same questions for various students. Faculty from other institutions are invited to review the accuracy of the grading policy

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- The course material and learning outcomes are periodically reviewed and the changes to be taken are approved in the departmental and higher councils.
- The head of department and faculty take the responsibility of implementing the proposed Changes

Name of Course Instructor: _

Signature: Date Specification Completed:

Program Coordinator:

Signature: __ _____ Date Received: