



Course Specifications (Postgraduate Degree)

| | |
|----------------------|---------------------------------------|
| Course Title: | Advanced Experimental Taxonomy |
| Course Code: | BOT 621 |
| Program: | PhD BOTANY |
| Department: | BOTANY & MICROBIOLOGY |
| College: | SCIENCE |
| Institution: | KING SAUD UNIVERSITY |

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A. Course Identification

| |
|---|
| 1. Credit hours: (2+0) |
| 2. Course type <input checked="" type="checkbox"/> Required <input type="checkbox"/> Elective |
| 3. Level/year at which this course is offered: 2 ND |
| 4. Pre-requisites for this course (if any): None |
| 5. Co-requisites for this course (if any): None |

6. Mode of Instruction (mark all that apply)

| No | Mode of Instruction | Contact Hours | Percentage |
|----|-----------------------|---------------|------------|
| 1 | Traditional classroom | 30 | 30% |
| 2 | Blended | 70 | 70% |
| 3 | E-learning | | |
| 4 | Distance learning | | |
| 5 | Other | | |

7. Actual Learning Hours (based on academic semester)

| No | Activity | Learning Hours |
|--------------|-------------------|----------------|
| 1 | Lecture | 15 |
| 2 | Laboratory/Studio | |
| 3 | Seminars | |
| 4 | Others (specify) | |
| Total | | |

B. Course Objectives and Learning Outcomes

| |
|--|
| 1. Course Description |
| 2. Course Main Objective <ul style="list-style-type: none"> • Polymorphism and plant species. • Speciation and plant species limits. • Plant Taxonomy and Phylogeny. • Ecological and anatomical criteria in Plant Taxonomy. • Hybridization, Endemism, Usage of Computer in taxonomy |

3. Course Learning Outcomes

| Course Learning Outcomes (CLOs) | | Aligned PLOs* |
|---------------------------------|--|---------------|
| 1 | Knowledge and Understanding | |
| 1.1 | define plant species | |
| 1.2 | describe anatomical parts in the plants | |
| 1.3 | select ecological criteria in plant taxonomy | |
| 1... | | |
| 2 | Skills : | |
| 2.1 | translate taxonomic terms | |

| Course Learning Outcomes (CLOs) | | Aligned PLOs* |
|---------------------------------|--|---------------|
| 2.2 | Discuss mechanical processes in the plant such as hybridization and pollination | |
| 2.3 | | |
| 2... | | |
| 3 | Competence: | |
| 3.1 | Ability to express opinions and criticize peers | |
| 3.2 | Ability to bear responsibility and cope with positive and negative criticism from others | |
| 3.3 | Anatomical criteria in Plant taxonomy | |
| 3... | | |

* Program Learning Outcomes

C. Course Content

| No | List of Topics | Contact Hours |
|----|---------------------------------------|---------------|
| 1 | Polymorphism and species. | 2 |
| 2 | Speciation and species limits. | 2 |
| 3 | Plant Taxonomy and Phylogeny | 2 |
| 4 | Ecological criteria in Plant Taxonomy | 2 |
| 5 | Anatomical criteria in Plant taxonomy | 2 |
| 6 | Endemims ,Hybridization | 2 |
| 7 | Usage of Computer in plant taxonomy. | 2 |
| | Total | 14 |

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

| Code | Course Learning Outcomes | Teaching Strategies | Assessment Methods |
|------------|--|---------------------------|-----------------------------------|
| 1.0 | Knowledge and Understanding | | |
| 1.1 | Define plant species | Lectures and work modules | Exams, reports and assignments. |
| 1.2 | Describe anatomical parts in the plants | Demonstration and reports | Evaluation of student activities |
| ... | Select ecological criteria in plant taxonomy | | |
| 2.0 | Skills | | |
| 2.1 | Translate taxonomic terms | Library and web search . | Evaluation of student activities. |
| 2.2 | Discuss mechanical processes in the plant such as hybridization and pollination | Team studies and reports. | Evaluation of student activities |
| ... | | | |
| 3.0 | Competence | | |
| 3.1 | Ability to express opinions and criticize peers | Group discussions | Peer evaluation |
| 3.2 | Ability to bear responsibility and cope with positive and negative criticism from others | Group discussions | Peer evaluation |

| Code | Course Learning Outcomes | Teaching Strategies | Assessment Methods |
|------|--------------------------|---------------------|--------------------|
| ... | | | |

2. Assessment Tasks for Students

| # | Assessment task* | Week Due | Percentage of Total Assessment Score |
|---|-------------------------|----------|--------------------------------------|
| 1 | First midterm exam | 6 | 10 |
| 2 | Second midterm exam | 10 | 10 |
| 3 | Reports and assignments | 10 | 50 |
| 4 | Final exam | 15 | 30 |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |

*Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

Office hours (6 house weekly)
Email communications.

F. Learning Resources and Facilities

1. Learning Resources

| | |
|--------------------------------------|--|
| Required Textbooks | <p>1 - أساسيات علم النبات العام " فسيولوجيا – وراثية خلوية – مورفولوجيا وتشريح " - أ.د. محمود الباز يونس ، أ.د. محمد عبدالوهاب الناغي ، أ.د. وفاء . (2008) محروس عامر ، أ.د. محمد هاني عبدالعال مباشر و أ.د. هاني محمد عوض عبدالظاهر ، مكتبة الدار العربية للكتاب .</p> <p>2 - ” Plant Systematics”. (2006). Michael G. Simpson , Elsevier Academic Press.</p> |
| Essential Reference Materials | (Journals, Reports, etc.) |
| Electronic Materials | Web Sites, Facebook, Twitter, etc. |
| Other Learning Materials | such as computer-based programs/CD, professional standards or regulations and software. |

2. Educational and research Facilities and Equipment Required

| Item | Resources |
|--|-----------|
| Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.) | |
| Technology Resources (AV, data show, Smart Board, software, etc.) | |

| Item | Resources |
|---|-----------|
| <p style="text-align: center;">Other Resources</p> <p>(Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)</p> | |

G. Course Quality Evaluation

| Evaluation Areas/Issues | Evaluators | Evaluation Methods |
|---|------------|--|
| 1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching | Instructor | <ul style="list-style-type: none"> - Through electronic evaluation forms and teachers evaluation on edugate prior to viewing their results - Course evaluation by student - Students- faculty |
| 2. Other Strategies for Evaluation of Teaching by the Instructor or by the Department | Instructor | <ul style="list-style-type: none"> • Peer consultation on teaching • Departmental council discussions • Discussions within the group of faculty teaching the course |
| 3. Processes for Improvement of Teaching | Instructor | <ul style="list-style-type: none"> - 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) | Instructor | <ul style="list-style-type: none"> - 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 - Conducting standard exams such as the American Plant Society exams or others. |
| 5. Describe the planning arrangements for periodically reviewing course | Instructor | <ul style="list-style-type: none"> - The course material and learning outcomes are periodically reviewed and the |

| Evaluation Areas/Issues | Evaluators | Evaluation Methods |
|---|------------|---|
| effectiveness and planning for improvement. | | 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. |
| | | |
| | | |

Evaluation Areas/Issues (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify))

Assessment Methods (Direct, Indirect)

H. Specification Approval Data

| | |
|----------------------------|--|
| Council / Committee | Mona Alwhibi .Najatt Boukhari and Dr .Dr |
| Reference No. | |
| Date | 17/4/2021 |