



King Saud University

College of Food and Agriculture Sciences

Department of Plant Production

Seed Production and Testing (PPS 409)

Dr. Salah El-Hendawy

Instructor



Course Specifications

Institution: King Saud University	Date of Report: 2014
College/Department : College of Food and Agricultural Sciences, Plant production Department	

A. Course Identification and General Information

1. Course title and code: Seed Production and testing (PPS 409)		
2. Credit hours: 2 hours (1+1)		
3. Program(s) in which the course is offered. Plant production Sciences (If general elective available in many programs indicate this rather than list programs)		
4. Name of faculty member responsible for the course: Assoc. Prof. Salah El-Hendawy		
5. Level/year at which this course is offered: Elective Course, recommended level - 8th level/ 4th year		
6. Pre-requisites for this course (if any): Field Crop Production (PPS 340)		
7. Co-requisites for this course (if any): N/A		
8. Location if not on main campus: N/A		
9. Mode of Instruction (mark all that apply)		
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage? <input type="text" value="70%"/>
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="30%"/>
Comments:		
<p>Optional Modules are used to meet the particular interests of individual students. Students should be encouraged to develop learning contracts indicating their particular area of interest. The students learn the skills and experience needed to deal with seed formation, sampling, purity, germination, vigor test, dormancy, viability, seed index and seed laws. Therefore, Scientific trips to seeds company should be included in mode of instruction.</p>		



B Objectives

1. What is the main purpose for this course?

Main objectives of the course are to:

- Identify the problems facing seed production in Saudi Arabia
- Identify the type of pollinations in different crops
- Recognize the important tests for seed production
- Demonstrate knowledge about the limited conditions for seed production and tests
- Demonstrate the knowledge of different laws for seed production and import

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)

- Revision and updating of course materials.
- Introduce more quizzes.

C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

1. Topics to be Covered

List of Topics	No. of Weeks	Contact Hours
Nature of flowering, pollination and fruit formation	1	2
Nature of flowering, pollination and fruit formation. Factors affecting seed production. Seed production requirements.	1	2
Stages of seed production, Hybrid seed production	1	2
Seed treatment and seed storage	1	2
Seed processing, seed certification	1	2
Seed testing	2	4
Seed technology	2	4
Seed viability	2	4
Seed index	1	2
Seed laws	2	2



2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other	Total
Contact Hours	14	N/A	N/A	14	N/A	28
Credit	1	N/A	N/A	1	N/A	2

2. Additional private study/learning hours expected for students per week. None
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
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	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Recognize the world status of seed production for most important crops	Lecture / Discussion	Written test / report
1.2	Define appropriate seed testing	Lecture/ Discussion	Written Test, MCQs
1.3	Recognize the different pollination in different crops	Lecture / Discussion	Written Test, MCQs
1.4	Outline field for seed production	Lecture / Discussion	Written test / report
2.0	Cognitive Skills		
2.1	Explain common problems facing seed production in Saudi Arabia	Lecture / Discussion	Written Test
2.2	Design a general plan of investigations and management of common seed tests	Lecture / Discussion	Written Test
2.3	Plan appropriate management for evaluating field conditions for seed production	Lecture / Discussion	Written test / report
3.0	Interpersonal Skills & Responsibility		
3.1	Use means to find new information data or different seed testing.	Lecture / Discussion	Written test / report
3.2	Demonstrate ability to work in group.	Lecture / Discussion	Written test / report
4.0	Communication, Information Technology, Numerical		
4.1	Demonstrate good experiences related to seed production aspects.	Lecture / Discussion	Written test / report



4.2	Illustrate abilities to use technology tools and information in the seed production.	Lecture / Discussion	Written test / report
5.0	Psychomotor		
5.1	N/A	N/A	N/A

5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	1 st exam/ report	Week 7	30%
2	2 nd exam/ report	Week 14	30%
3	Final Exam	-	40%
	Total		100%

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)
2 hours per week

E. Learning Resources

1. List Required Textbooks	None
2. List Essential References Materials (Journals, Reports, etc.)	None
3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)	Copeland, L. O. and M. McDonald. 2001. Principles of Seed Science and Technology. Springer, New York.
4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)	1. http://www.freebookspot.es/TopTen.aspx?Category_ID=231 2. http://ebooksgo.org/free-agriculture-ebooks.html
5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.	None

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.)

Lecture and laboratory rooms should accommodate 30 students

2. Computing resources (AV, data show, Smart Board, software, etc.)

Data show and Smart Board

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

None

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

Course teaching evaluation by the students through “Edugate” system of King Saud University website by the end of each semester.

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor

None

3 Processes for Improvement of Teaching

- Training sessions for instructors.
- Workshops to facilitate the exchange of experiences among faculty members.
- Regular colleagues meetings where problems are discussed and solutions given.

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)

- Students are given chance to double-check marking of their exams.
- According to KSU rules, students can have their papers checked by a second reviewer.

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

- Compare syllabi and course description with other universities (including those on the net).
- Biannual meetings of members of department council to discuss improvement.
- Have an internal curriculum committee to review the curriculum periodically and suggest improvements.



Faculty or Teaching Staff: Dr. Salah El-Hendawy

Signature: _____ **Date Report Completed:** 2014

Received by Prof. Nasser A. Al-Suhaibani **Dean/Department Head**

Signature: _____ **Date:** 2014