



**King Saud University**  
**College of Food and Agriculture Sciences**  
**Department of Plant Production**

## **Course Specifications**

**PPS 324 -Date palm production**

**Instructor**

**Dr. Abdullah I. Alebidi**

### Course Specifications

Institution	King Saud University	Date of Report:	2015
College/Department: College of Food and Agriculture Sciences / Department of Plant Production			

#### A. Course Identification and General Information

1. Course title and code: <b>Date palm production (PPS324)</b>			
2. Credit hours: <b>2(1+1)</b>			
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: <b>Dr. Abdullah I. Alebidi</b>			
5. Level/year at which this course is offered: <b>level 8/ 4th year</b>			
6. Pre-requisites for this course (if any): <b>PPS 201 (Principles of Plant Production)</b>			
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?	<b>80%</b>
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 (Field Trips)	<input checked="" type="checkbox"/>	What percentage?	<b>20%</b>
Comments:			
Date palm production (PPS 324) course aims to outline the importance of date palm as a source of income to local farmers. The course explores the theoretical and horticultural sciences and practices of date palm (irrigation, fertilization, pruning, pollination and fruit thinning). Moreover, the course develops students' skills to identify environmental and physiological factors affecting date palm yield and fruit quality. The course diagrams essential date palm cultivars, pest and disease in Saudi Arabia.			

## B Objectives

<p>1. What is the main purpose for this course?</p> <ul style="list-style-type: none"> <li>• Highlight the importance of date palm fruits and tress.</li> <li>• Study the different date palm production practices under field conditions.</li> <li>• Illustrations of different environmental factors affecting date palm production.</li> <li>• Study common date palm varieties grown in Saudi Arabia.</li> <li>• Expose students to recent trends in date palm production.</li> </ul>
<p>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).</p> <ul style="list-style-type: none"> <li>• Deliver the course content implementing different teaching methods (such as case study, group discussion, media)</li> <li>• Evaluate students by quizzes and use different type of questions with feedback after each quiz.</li> <li>• Track modern methods to improve yield and fruit quality of date palm.</li> </ul>

## 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:		
Topic	No of Weeks	Contact hours
Date palm tree (definition – history- economics)	1	2
Date palm (anatomical structure of tree and fruit)	1	2
Environmental factors: temperature & soil	1	2
Environmental factors: wind, humidity & Light	1	2
Horticultural practices: fertilization (organic & mineral)	1	2
Horticultural practices: irrigation (surface and drop) & fertigation	1	2
Special practices in date palm (leaf pruning - removal bunch - bunch thinning)	1	2
Special practices in date palm (bunch covering and harvesting)	1	2
Pollination (methods of applications)	1	2
Pollination (metaxinia and its effects on fruit quality)	1	2
Common date palm varieties in Saudi Arabia	1	2

Date palm pests and diseases	1	2
Take advantage of nuclei- date palm fruit in the animal nutrition	1	2
Exams	1	2

2. Course components (total contact hours and credits per semester): 28 hours						
	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

3. Additional private study/learning hours expected for students per week.
N/A

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

	<b>NQF Learning Domains And Course Learning Outcomes</b>	<b>Course Teaching Strategies</b>	<b>Course Assessment Methods</b>
<b>1.0</b>	<b>Knowledge</b>		
1.1	Outline the basic concepts of date palm science includes physiology, environment and nutrition	Lectures – discussion Field and lab sessions	Written Test
1.2	Define properties and the fundamental advantages of the different varieties of date palm and their role on human health and nutrition.	Lectures – discussion	Written Test
1.3	Describe the various special agricultural practices and its effect on date palm	Lectures – discussion	Written Test
1.4	Define agricultural practices to establish and manage date palm orchards.	Lectures – discussion	Written Test
<b>2.0</b>	<b>Cognitive Skills</b>		
2.1	Analyze and develop solutions to problems associated with the various operations of date palm production.	Lectures – discussion	Written Test
2.2	Reorganize and explain approaches to manage date palm orchard	Lectures – discussion	Written Test
2.3	Evaluate environmental factors affecting date palm production.	Lectures - Group discussion	Written Test
2.4	Develop approaches to maintain sustainable production of date palm	Lectures - Group discussion	Report
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
3.1	Show ability to constructively work in a group.	Feedback and discussion during lectures	Lab reports and/ or exams
3.2	Demonstrate personal skills to identify	Group discussion	Oral Presentation

	factors affecting date palm production		
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
4.1	Show ability to calculate needed quantity of fertilizer applications.	Discussion	Reports and exams
4.2	Illustrate abilities to calculate quality parameters of dates palm fruits.	Group discussion	Written test
<b>5.0</b>	<b>Psychomotor</b>		
5.1	N/A	N/A	N/A
5.2	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 <sup>st</sup> mid-term theoretical and practical exams	5	25%
2	2 <sup>nd</sup> mid-term theoretical and practical exams	Week 10	25%
3	Presentations and/or report papers	At the end of term	10%
4	Final Exam	Date set by Univ.	40%
	<b>Total</b>		<b>100%</b>

#### 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 (**in Arabic**)

- El-Baker, A. J. 1972. The date palm. Al-Ani Press, Baghdad, Iraq (In Arabic)
- Ibrahim, A.M. and M.N. Hajaj, 1998. Date palm: its cultivation nursing and production in Arabic World. Ma'aref Publishing Company, Alexandria, Egypt.

2. List Essential References Materials (Journals, Reports, etc.)

[Jain, Shri Mohan, Al-Khayri, Jameel M., Johnson, Dennis V. Date Palm Biotechnology, 2011, XVIII, 743p. 161 illus.](#)

3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

- [Date Palm Products \(FAO Agricultural Services Bulletin\) Publisher: Food & Agriculture Org \(August 1993\)](#)

4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

- <http://www.fao.org/docrep/006/y4360e/y4360e00.htm>
- [www.britannica.com/EBchecked/topic/152224/date-palm](http://www.britannica.com/EBchecked/topic/152224/date-palm)
- [www.redpalmweevil.com/introDatepalm.htm](http://www.redpalmweevil.com/introDatepalm.htm)
- [www.experiencefestival.com/date\\_palm\\_-\\_production](http://www.experiencefestival.com/date_palm_-_production)
- [www.un.org/News/Press/docs/2004/sag276.doc.htm](http://www.un.org/News/Press/docs/2004/sag276.doc.htm)
- [http://www.pubhort.org/datepalm/datepalm1/datepalm1\\_28.pdf](http://www.pubhort.org/datepalm/datepalm1/datepalm1_28.pdf)
- <http://postharvest.ucdavis.edu/files/71533.pdf>
- <http://www.redpalmweevil.com/introdatepalm.htm>

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 accommodate up to 30 students

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

AV 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 mid-term exams.
- According to KSU rules, students who believe they are under graded 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 faculty members to discuss improvement
- Have a curriculum review committee to review the curriculum periodically and suggest improvements

Faculty or Teaching Staff: [Dr. Abdullah I. Alebidi](#)

Signature:

Date Report Completed: [23/2/2015](#)

Received by: [Professor Nasser A. Al-Suhaibani](#) Department Head



**Signature:**

**Date:** 23/2/2015