Description of Course:
This course is designed to teach applied and crop production practices for citrus and dates, and the plant physiological basis for those practices. You will learn about the history of the crops, along with their genetics, taxonomy and botany. You will learn of and taste some of the established and promising cultivars and rootstocks where appropriate. Production practices will be covered in detail, including site selection, propagation, planting training, pruning, nutrition, water relations, pest control, harvesting, worldwide production, economics and marketing. Emphasis will be placed not only on the practical aspects of each cultural practice, but also on the biological basis for the practice. Students will be able to utilize sound plant biological knowledge when decision making.

Course Prerequisites or Co-requisites:
None

Instructor and Contact Information:
Glenn C. Wright, Associate Professor, School of Plant Sciences, University of Arizona, Yuma Agriculture Center, Room 121

Phone: (928) 782-5876
Cell: (928) -502-0857
Fax: (928) 782-1940
E-mail gwright@ag.arizona.edu.

Office Hours / “Open Door Policy” - Consultations can be arranged either before or after class, or by appointment. Appointments can also be made via Zoom or Skype.

Course Format and Teaching Methods
Lecture

Course Objective:
This three-credit hour course is intended to provide an overview of citrus and date culture in Arizona.
Expected Learning Outcomes

Upon completing this course, students will be able to:

- Identify and describe common citrus and date cultivars grown in Arizona and explain their history and origins.
- Describe the impact of climate on citrus and dates and explain how climate affects plant growth and fruit quality.
- Describe key cultural practices for citrus and date production, explain why they are important, and explain the physiological bases for those practices.
- Identify insects and diseases that are commonly found in citrus and date production in the Southwest.
- Identify countries that are key producers and consumers of citrus and dates and describe how citrus and dates are marketed domestically and internationally.

Absence and Class Participation Policy

Participating in the course and attending lectures and other course events are vital to the learning process. As such, attendance is required at all lectures and discussion section meetings. Absences may affect a student’s final course grade. If you anticipate being absent, are unexpectedly absent, or are unable to participate in class online activities, please contact me as soon as possible. To request a disability-related accommodation to this attendance policy, please contact the Disability Resource Center at (520) 621-3268 or drc-info@email.arizona.edu. If you are experiencing unexpected barriers to your success in your courses, the Dean of Students Office is a central support resource for all students and may be helpful. The Dean of Students Office is located in the Robert L. Nugent Building, room 100, or call 520-621-7057.

The UA’s policy concerning Class Attendance, Participation, and Administrative Drops is available at: http://catalog.arizona.edu/policy/class-attendance-participation-and-administrative-drop

The UA policy regarding absences for any sincerely held religious belief, observance or practice will be accommodated where reasonable, http://policy.arizona.edu/human-resources/religious-accommodation-policy.

Absences pre-approved by the UA Dean of Students (or Dean Designee) will be honored. See: https://deanofstudents.arizona.edu/absences

Makeup Policy for Students Who Register Late

Students who register after the first class may make-up missed assignments/quizzes until 30 January 2020.

Course Communications

Course communications will be conducted online via D2L

Required Texts or Readings

No text, but you will be responsible for readings assigned in class.

Required or Special Materials

None

Required Extracurricular Activities:

Field trip is cancelled.
Assignments and Examinations: Schedule/Due Dates:
The course will have three regular examinations, 1 final exam and ten short quizzes. Participation in the field trip is required. There are 700 points total. The weighting is as follows:

- 3 regular in-class examinations @ 100 pts. each  
  300 pts.
- 1 Final Exam  
  200 pts.
- 1 Electronic Poster (10 points for topic, 20 points for outline and sources, 60 points for final product)  
  100 pts.
- Weekly Quizzes (13 at 10 pts each, lowest three will be dropped)  
  100 pts

Late assignments are not generally accepted. Extra Credit may be given at the discretion of the instructor.

Final Examination or Project:
Final Exam for the class is scheduled for Thursday, May 14th from 3:30 to 5:30 PM.
The date and time of the final exam or project, along with links to the Final Exam Regulations, https://www.registrar.arizona.edu/courses/final-examination-regulations-and-information, and Final Exam Schedule, http://www.registrar.arizona.edu/schedules/finals.htm

Grading Scale and Policies:
Grades:
- 90 - 100% A
- 80 – 89% B
- 70 - 79% C
- 60 - 69% D
- 0 - 59% E

University policy regarding grades and grading systems is available at http://catalog.arizona.edu/policy/grades-and-grading-system

Incomplete (I) or Withdrawal (W):
Requests for incomplete (I) or withdrawal (W) must be made in accordance with University policies, which are available at http://catalog.arizona.edu/policy/grades-and-grading-system#incomplete and http://catalog.arizona.edu/policy/grades-and-grading-system#Withdrawal respectively.

Dispute of Grade Policy:
Grades may be disputed within 14 days of their receipt.
Scheduled Topics/Activities:

<table>
<thead>
<tr>
<th>Date</th>
<th>Lecture Subjects</th>
<th>Quizzes and Poster Due Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 15</td>
<td>Introduction and History of Citrus Production</td>
<td>Quiz 1</td>
</tr>
<tr>
<td>January 22</td>
<td>Botany, Taxonomy, Genetics and Growth of Citrus, Mandarin Cultivars</td>
<td>Quiz 2</td>
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<tr>
<td>*January 29</td>
<td>Effect of Climate on Citrus, Orange Cultivars</td>
<td>Quiz 3</td>
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<tr>
<td>February 5</td>
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<td>Exam 1</td>
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<tr>
<td>February 12</td>
<td>Rootstocks and Nursery Production</td>
<td>Poster Topic Quiz 4</td>
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<tr>
<td>*February 19</td>
<td>Propagation, Site Selection, Plant Growth Regulators and Pruning of Citrus</td>
<td>Quiz 5</td>
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<tr>
<td>February 26</td>
<td>Nutrition, Fertigation and Frost Protection of Citrus</td>
<td>Quiz 6</td>
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<td>*March 4</td>
<td>Water Relations and Irrigation of Citrus, Grapefruit Cultivars</td>
<td>Quiz 7</td>
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<tr>
<td>March 11</td>
<td>SPRING BREAK</td>
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<tr>
<td>March 18</td>
<td>Harvesting, Packing and Processing of Citrus</td>
<td>Exam 2</td>
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<tr>
<td>March 25</td>
<td>Citrus Insects, Lemon and Lime Cultivars</td>
<td>Quiz 8</td>
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<tr>
<td>April 1</td>
<td>Citrus Diseases</td>
<td>Quiz 9</td>
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<tr>
<td>April 8</td>
<td>Citrus HLB and Worldwide Citrus Production</td>
<td>Quiz 10</td>
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<tr>
<td>April 15</td>
<td>Citrus Propagation and Citrus Marketing</td>
<td>Quiz 11</td>
</tr>
<tr>
<td>April 22</td>
<td>Date History and Varieties</td>
<td>Exam 3</td>
</tr>
<tr>
<td>April 29</td>
<td>Date Genetics, Taxonomy, Growth and Production Practices</td>
<td>Poster Outline and Sources Due Quiz 12</td>
</tr>
<tr>
<td>May 6</td>
<td>Date Insects, Diseases, Harvest, Packing and Marketing</td>
<td>Quiz 13</td>
</tr>
<tr>
<td>May 14</td>
<td></td>
<td>Posters Due Final Exam</td>
</tr>
</tbody>
</table>

*Dr. Wright will lecture from Tucson on these dates

Classes from March 18th onwards will be held remotely.
Bibliography

CITRUS


DATES


Poponoe, P.B. 1913. Date Growing in the Old World and the New. George Rice and Sons. Los Angeles, CA.


GENERAL


Classroom Behavior Policy:

To foster a positive learning environment, students and instructors have a shared responsibility. We want a safe, welcoming, and inclusive environment where all of us feel comfortable with each other and where we can challenge ourselves to succeed. To that end, our focus is on the tasks at hand and not on extraneous activities (e.g., texting, chatting, reading a newspaper, making phone calls, web surfing, etc.).

Additional recommendations depending on instructor preferences:

Students are asked to refrain from disruptive conversations with people sitting around them during lecture. Students observed engaging in disruptive activity will be asked to cease this behavior. Those who continue to disrupt the class will be asked to leave lecture or discussion and may be reported to the Dean of Students.

Threatening Behavior Policy

The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See [http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students](http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students).

Accessibility and Accommodations:

At the University of Arizona, we strive to make learning experiences as accessible as possible. If you anticipate or experience barriers based on disability or pregnancy, please contact the Disability Resource Center (520-621-3268, [https://drc.arizona.edu/](https://drc.arizona.edu/)) to establish reasonable accommodations.

Code of Academic Integrity

Students are encouraged to share intellectual views and discuss freely the principles and applications of course materials. However, graded work/exercises must be the product of independent effort unless otherwise instructed. Students are expected to adhere to the UA Code of Academic Integrity as described in the UA General Catalog. See: [http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity](http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity).

The University Libraries have some excellent tips for avoiding plagiarism, available at [http://new.library.arizona.edu/research/citing/plagiarism](http://new.library.arizona.edu/research/citing/plagiarism).

Selling class notes and/or other course materials to other students or to a third party for resale is not permitted without the instructor’s express written consent. Violations to this and other course rules are subject to the Code of Academic Integrity and may result in course sanctions. Additionally, students who use D2L or UA e-mail to sell or buy these copyrighted materials are subject to Code of Conduct Violations for misuse of student e-mail addresses. This conduct may also constitute copyright infringement.

UA Nondiscrimination and Anti-harassment Policy:

The University is committed to creating and maintaining an environment free of discrimination; see [http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy](http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy).

Our classroom is a place where everyone is encouraged to express well-formed opinions and their reasons for those opinions. We also want to create a tolerant and open environment where such opinions can be expressed without resorting to bullying or discrimination of others.
Additional Resources for Students

UA Academic policies and procedures are available at http://catalog.arizona.edu/policies

Student Assistance and Advocacy information is available at http://deanofstudents.arizona.edu/student-assistance/students/student-assistance

Confidentiality of Student Records


Subject to Change Statement:

Information contained in the course syllabus, other than the grade and absence policy, may be subject to change with advance notice, as deemed appropriate by the instructor.