

# SULTAN QABOOS UNIVERSITY

## **COURSE OUTLINE**

### **PROGRAM: Bachelor of Science in Plant Sciences**

| 1. Course Code   | PLNT3514                                       |   |  |  |  |
|--|--|---|--|--|--|
| 2. Course Title  | Fruit Production                               |   |  |  |  |
| 3. Credits   | 3 Cr Hrs, 12 Cr Points, 6 ECTS                 |   |  |  |  |
| 4. Pre-requisite Course(s)   | BIOL21   | )1, PLNT2515  |  |  |  |
| 5. Co-requisite Course(s)  |  |   |  |  |  |
| 6. Equivalent Course(s)  | CROP35   | 14, HORT3514  |  |  |  |
| 7. Incompatible Course(s)  |  |   |  |  |  |
| 8. Course Category   | □ University Requirement □ University Elective |   |  |  |  |
|  | □ Colleg                                       | ge Requirement  | □ College Elective   |  |  |
|  | 🛛 Depar  | tment Requirement   | □ Department Elective  |  |  |
|  | □ Specia                                       | lization Requirement  | □ Specialization Elective  |  |  |
|  | □ Other  | (specify):  |  |  |  |
| 9. Course Owner  | College:                                       | CAMS  | Department: Plant Sciences   |  |  |
| <b>10.</b> Course Type   | □ Lectu  | re  | ⊠ Lecture/Lab  |  |  |
|  | □ Lectur                                       | re/Seminar  | □ Lecture/Studio   |  |  |
|  | 🗆 Lectur                                       | re/Tutorial   | □ Lecture/Lab/Tutorial or Seminar  |  |  |
|  | □ Tutori                                       | al  | □ Laboratory (Practical)   |  |  |
|  | □ Field  | or Work Placement   | □ Studio   |  |  |
|  | □ Semin  | ar  | □ Internship   |  |  |
|  | □ Workshop                                     |   | Project  |  |  |
| 11. Language of Instruction  | English  |   |  |  |  |
| 12. Course Description   |  |   |  |  |  |
|  |  | ident with the taxonomic classification ops. Emphasis is especially placed or | n, botanical description, production trends,<br>n fruit crops grown in Oman. |  |  |
| 13. Teaching/Learning Strate   |  |   |  |  |  |
| Lectures<br>Field trips<br>Laboratory reports and assignments<br>Presentations                                 |  |   |  |  |  |
| 14. Assessment Components and Weight [%]   |  |   |  |  |  |
| ⊠ Quizzes 10   |  | ⊠ Practical 20  | ⊠ Other (specify): Lab final 10  |  |  |
| □ Homework assignments   |  | ⊠ Project 15  |  |  |  |
| $\square$ In-term examination(s) 10  |  | $\boxtimes$ Final examination 35  |  |  |  |
| 15. Grading Method   |  |   |  |  |  |
| ☑ A-F Scale □ Pass/Not passed  |  |   |  |  |  |
| 16. Textbook(s) and Supplemental Material  |  |   |  |  |  |
| Reiger, Mark. 2006. "Introduction to Fruit Crops" (available as hard copy and link to e-version on the Moodle) |  |   |  |  |  |

|   | Iatching Course Objectives with Pr   | ogram Outcomes   | and SQU Graduate Attribu  | tes   |  |  |
|---|--|--|---|---|--|--|
|   | QU Graduate Attributes   | D CON -  |   |   |  |  |
| <ul> <li>A. SQU graduates should be able to:</li> <li>1. apply the knowledge and skills relevant to the specialization</li> <li>2. communicate effectively and use information and communication technologies</li> <li>3. critically analyze complex information and present it in simple clear manner</li> </ul> |  | <ol> <li>interpersonal communication skills and<br/>alignment with culture of international<br/>labour market to assist them in practical<br/>life and in living successfully</li> <li>skills and motivation for independent<br/>learning and engagement in lifelong<br/>learning and research</li> </ol>  |   | relish go<br>qualities,<br>their nai<br>and<br>responsib<br>communi<br>be r | esponsible, engage in ommunity affairs and |  |
| #   | Intended Student Learning Outcome<br>/Course Learning Objective  |  | Relevant Program Outcome(s)   |   | Applicable<br>Attribute(s)                 |  |
| 1.  | Recognize the importance of fruit production in<br>Oman and the challenges faced. Introduce students<br>to fruit production practices and systems, as well as<br>the diversity of fruits and climates in Oman. |  | A.1.2 Graduates will have understanding of crop production systems in Oman  |   | A1   |  |
| 2.  | Gain practical experiences in fruit production<br>management, including plant nutrition, irrigation,<br>pruning, pest management, harvesting, and post-<br>harvest storage conditions.                         |  | <ul> <li>A.3 Graduates will be able to analyze and interpret data, draw conclusion and propose solutions to different issues in crop production, landscape design, and crop protection</li> <li>B.4 Graduates will have the ability to build teams and work in team for target-oriented tasks.</li> </ul> |   | A3, B4                                     |  |
| 3.  | Investigate new methods and varieties used in fruit<br>management including greenhouses, organic and<br>other systems of production. Gain practical<br>experience from field and farm visits.                  |  | A.1.3 Graduates will have an understanding of elements of the crop farming business<br>B4 Graduates will have the ability to build teams and work in team for target oriented tasks.  |   | A1, B4                                     |  |
| 4.  | Describe and explain how to pro<br>fruits in Oman, and how to produce<br>or cuttings to harvest.   | A.1.1, Graduates will have knowledge and A1, A3  |   |   |  |  |
| 5.  | Describe and explain the basic requi<br>production (water, temperature, soi<br>etc. Be able to successfully administ<br>fertility amendments and pest mana   | A.1.1 Graduates will have k<br>skills in crop sciences<br>A.1.2, Graduates will have<br>of crop production systems in<br>A.1.3, Graduates will<br>understanding of elements<br>farming business<br>A.1.4, Graduate will have an<br>environmental and manma<br>through design.<br>A.1.5 Graduates will be able<br>analyze problems related to con-<br>systems, and formulate realis | A1  |   |  |  |

| 6.  | Recognize and describe the dynamics of fruit crop<br>production on a commercial scale, as well as home-<br>garden scale. | A.1.3, Graduates will have an<br>understanding of elements of the crop<br>farming business<br>C Graduates will have knowledge of<br>relevant Omani laws, and understanding<br>and motivation for environmental<br>protection, resource conservation and social<br>service. | A1, C |
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#### 16. Student Responsibilities

It is the student's responsibility to know and comply with all University Academic Regulations relevant to participation in this course. These regulations specifically include attendance requirement and students' academic code of conduct.

For attendance, it is the student's responsibility to be punctual and to attend all classes.

Students are expected to perform their work with honesty and avoid any academic misconduct, which is defined as the use of any dishonest or deceitful means to gain some academic advantage or benefit. This can take many forms, including but not limited to, the following: copying, plagiarism, collusion and forging documents. For full details, please refer to the Undergraduate Academic Regulations and to the Student Academic Misconduct Policy.

Additionally, this course requires that you:

| COURSE INFORMATION        |  |              |                     |  |  |
|---------------------------|--|--------------|---------------------|--|--|
| Course Code               | Course Code PLNT3514 Course Title Fruit Production |              |                     |  |  |
| Semester/Year             | Spring   | Section(s)   | 10, 11              |  |  |
| Day, Time, and Place      | Day, Time, and Place                               |              |                     |  |  |
| <b>Course Coordinator</b> | Rashid AlYahyai                                    |              |                     |  |  |
| Office Location           | 1215   | Office Hours |                     |  |  |
| Office Tel. Ext.          | 1208   | Email        | alyahyai@squ.edu.om |  |  |

| Tentative Schedule |                    |   |                                       |  |  |
|--------------------|--------------------|---|---------------------------------------|--|--|
| Week               | Lecture<br>and lab | Topic/Material to be covered  | Assessment                            |  |  |
| 1                  | 1                  | Fruit overview, definitions, Lab: fruit morphology  | quiz, exam, final                     |  |  |
| 2                  | 2                  | Fruit of Oman, world fruit, climate, Lab: fruit classification -temperate                                 | quiz, exam, final                     |  |  |
| 3                  | 3                  | Lecture: Date palm and coconut, cultivars, growing conditions Lab: fruit classification - tropical        | quiz, exam, final                     |  |  |
| 4                  | 4                  | Lecture: Citrus, Lab: fruit crop management at SQU Botanical garden or AES                                | quiz, exam, final<br>plus lab reports |  |  |
| 5                  | 5                  | Lecture: Banana, Lab: determination of fruit maturity using Brix ratio and starch iodine test.            | quiz, exam, final                     |  |  |
| 6                  | 6                  | Lecture: Mango, Lab: field trip to Mawaleh market, see fruit storage units, banana ripening with ethylene | quiz, exam, final                     |  |  |
| 7                  | 7                  | Other tropical fruits, Lab: tree pruning and training   | quiz, exam, final                     |  |  |
| 8                  | 8                  | Midterm exam, Lab: field trip to Sohar Mango variety trials   | field trip report                     |  |  |
| 9                  | 9                  | Lecture: temperature fruits in Oman, berries, lab: maturity indices in fruit                              | quiz, exam, final                     |  |  |
| 10                 | 10                 | Temperate tree fruits in Oman, Lab: field trip to RCA nursery   | quiz, exam, final                     |  |  |
| 11                 | 11                 | Temperate vine fruits, Lab: Open lab, field trip  | Finalprojectpresentationandreport     |  |  |
| 12                 | 12                 | Fruit in the home landscape, Lab: orchard management, marketing   | quiz, exam, final                     |  |  |
| 13                 | 13                 | Quiz 2, project presentations 1   | quiz, exam, final                     |  |  |
| 14                 | 14                 | Possible holiday for lecture, project presentations 2   | lab report                            |  |  |
| 15                 | 15                 | Review of all topics, presentations   | quiz, exam, final                     |  |  |
| 16                 |                    |   |                                       |  |  |
| 17                 |                    |   |                                       |  |  |

|          | APPENDIX A: INSTRUCTORS OF MULTIPLE SECTIONS |                         |  |       |              |
|----------|--|-------------------------|--|-------|--------------|
| Section  | Instructor                                   | Day, Time,<br>and Place | Office<br>Location<br>and<br>Extension | Email | Office Hours |
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# **APPENDIX B: ADDITIONAL INFORMATION**