AGR 4240: Modern Crop Production (MCP)
Syllabus for Spring 2019 (3 credits)

Instructor: Dr. Amir Khoddamzadeh
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Class Schedule: Online

Office Hours: Monday and Wednesday 9:00 AM - 11:00 AM, walk-in and by arrangement (preferably via e-mail)

COURSE DESCRIPTION

➢ A foundation course with advanced theories in agronomy applying major crop production, soil, and ecophysiological sciences in understanding agricultural systems in the world. Includes introductory concepts of plant, seed, soil, tillage, pest, environmental, and sustainable aspects of crop production.

COURSE OBJECTIVES

✓ At the end of this course students should understand clearly the various agronomic crops, how they relate to their environment, what are the principles of production, management of problems, and the utilization of crops. Emphasis will be placed on agronomic crops that are currently of economic significance in South Florida; and the new crops that hold promise for the future in Miami-Dade County.

✓ To use a systematic approach to discuss topics in current agronomic crop management practices emphasizing those that increase production, enhance efficiency, and maintain environmental integrity.

✓ To develop an understanding of how to obtain, evaluate, and use agronomic and other pertinent agricultural information.
TEXTBOOK

Principles of Field Crop Production

4th Edition by Martin et al. 2006
ISBN-10: 0130259675

COURSE REQUIREMENTS AND POLICIES

Prior to coming to the theory discussion session, each student is required:

✔ Reading of the assigned chapters from the textbook and additional readings from Canvas prior to lecture is expected.

✔ If a student has a disability and needs assistance with class, please contact the Disability Resource Center (GC 190; 305-348-3532). It is the responsibility of each student to work with the Center and Instructor to make arrangements for the classroom and course activities as needed for their accommodations.

✔ Learn from the diverse group of people in the class by listening and considering what each person says and writes. You may disagree, but it must be in a way that shows respect and values each person.

PREREQUISITES

✔ General Biology I (BSC 1010) and General Biology II (BSC 1011) or equivalent or permission of the instructor.

INTERNET RESOURCES

✔ This is a web assisted course. A course webpage will be maintained with Canvas Learn.

Additional course materials contain this syllabus, articles, videos, lecture notes, and the announcements will be posted on Canvas.

To access this resource, go to https://ecampus.fiu.edu/ and click on Canvas under the Login menu. In the Canvas Login window enter your FIU MyAccounts User Name
and Password. Select AGR 4240–Modern Crop Production - RVC - Spring 2019. For help with Canvas, click the Student menu on the e-campus website call the UTS Help Center at (305) 348-2284.

ESTIMATED POINTS

- Discussions (5) 25%
- Case Studies (I and II) 10%
- Quizzes (2) 10%
- Final Project Presentation 15%
- Mid-Term Exam 20%
- Final Exam 20%

GRADING SCALE

A: 100% - 93%; A-: 92% - 90%; B+: 89% - 87%; B: 86% - 83%; B-: 82% - 79%; C+: 78% - 76%; C: 75% - 70%; D+: 69% - 67%; D: 66 – 59; F: <58%.

EARLY ALERT

In an effort to help you succeed in your academic courses, FIU utilizes an Early Alert system. Instructors are now able to notify students’ academic advisors if there are concerns about class performance. If an alert is submitted, your academic advisor will send you a message via your Student Dashboard (accessed via your MYFIU page) to discuss ways to improve your performance. Please respond to any communication you receive from your academic advisor about an early alert. Our goal with this program is to help you to be successful by identifying any issues as early on as possible and working to address them.

HONOR CODE

Florida International University is a community dedicated to generating and imparting knowledge through excellent teaching and research, the rigorous and respectful exchange of ideas, and community service. All students should respect the right of others to have an equitable opportunity to learn and honestly to demonstrate the quality of their learning. Therefore, all students are expected to adhere to a standard of academic conduct, which demonstrates respect for themselves, their fellow students, and the educational mission of the University. All students are deemed by the University to understand that if they are found responsible for academic misconduct, they will be subject to the Academic Misconduct procedures and sanctions, as outlined in the Student Handbook and through the following link:
CHEATING AND PLAGIARISM are violations of the academic honesty section of the FIU student code of conduct and will be reported to Judicial Services. Plagiarism is a serious offence will not be taken lightly. Plagiarism can be intentional (copying another student’s work, collaborating too closely with another student) or unintentional (not citing all references, collaborating too closely with another student.) The best ways to avoid unintentional plagiarism are to reference all outside information, and to do all work on your own. If you have any questions about what is plagiarism, please ask the instructor. Instructors may use plagiarism detection software (such as turnitin.com) to determine if plagiarism has taken place. Suspected acts of plagiarism may be investigated and taken to the FIU Grievance Committee. Plagiarism will result in you receiving a 0 grade for your assignment (no exceptions) and may also result in your suspension or expulsion from the University.

SEXUAL HARASSMENT POLICY

FIU’s sexual harassment policy is available at:
http://hr.fiu.edu/index.php?name=sexual_harassment

QUIZZES & EXAMS:

- Quizzes and exams will consist of fill-in-the-blank, short answer essay, multiple choice, matching, true/false, problem solving, etc., covering the textbook, theory discussion sessions, lab/field experiences, and commodity tours.

- Students will record a 20 min presentation and will post the YouTube link to the class blog. Grading will be based on quality and thoroughness of investigation, as well as delivery (rubric will be provided).

- If other required academic activity precludes a student’s taking a quiz or exam, the quiz or exam may be taken at full value prior to its scheduled time; however, arrangements for taking the quiz or exam must be made in person with Dr. Khoddamzadeh at least two weeks prior to the quiz’s or exam’s scheduled time as shown on the Course Schedule, and a letter from the advisor or professor of the conflicting activity must be presented at that time.

- Field trip (Saturday): Visit USDA-ARS Subtropical Horticultural Research Station - not mandatory.
## COURSE OUTLINE AND SCHEDULE

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<tr>
<th>Week</th>
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| 1    | Welcome and Course Overview  
      | Introduction and Trends of Crop Production in Florida, USA, and the World |
| 2    | Crop Plants in Relation to the Environment |
| 3    | Botany of Crop Plants |
| 4    | Tillage Practices  
      | Fertilizer, Green Manuring, Rotation, and Multiple Cropping Practices |
| 5    | Seed and Seedling |
|      | Mid-Term Exam (Feb. 4 - 6) |
| 6    | Harvest and Handling of Grain, Seeds, and Hay  
      | Case Study I: Virtual Lab Experiment – Starch, Flours, and Gluten |
| 7    | Biotechnology Applications in Crop Production |
| 8    | Biotic and Abiotic Stresses  
      | Corn |
| 9    | Sorghum  
      | Sugarcane |
| 10   | Spring Break |
| 11   | Wheat  
      | Rice |
| 12   | Soybean  
      | Avocado |
| 13   | Banana  
      | Citrus  
      | Cacao |
| 14   | Biofuels  
      | Case Study II: Economic Benefits of Precision Agriculture |
| 15   | Sustainable Agriculture |
| 16   | Final Project Presentation |
| 17   | Final Exam date/time will be announced. |

_Instructor reserves the right to change the outline, readings and dates of materials covered in this course._