



**AGR 3930 - Special Topics "Agriculture Colloquium"
Seed Technology, Biology, and Conservation
Syllabus for Fall 2017 (1 credit)**

Instructor: Dr. Amir Khoddamzadeh
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Class Schedule: Friday, 11 - 11:50 am

Class Room: Charles E. Perry (PC) - 447

Office Hours: Tuesdays and Thursdays 11:00 am – 12:00 pm, walk-in and by arrangement
(preferably via *e-mail*)

COURSE DESCRIPTION

The purpose of this colloquium is an overview on seed botany, biology, physiology, and the techniques to improve the seed varieties as the vital component of modern agricultural production systems. Students will learn about the biological factors that contribute to the development and maintenance of seed health, vigor and viability, storability and how those qualities are measured. It also presents the scientific background in seed conservation and seed banking strategies.

COURSE OBJECTIVES

To introduce students the principles of seed ecophysiology, seed vigor and evaluation tests. It also introduces the promising techniques of seed biotechnology such as embryo rescue and synthetic seed production.

FORMAT

- This colloquium is a primarily discussion based course with minor laboratory activity; therefore, participation will play a big role on your grade. Students will be required to watch videos and read articles from the *Blackboard* and be ready to discuss at class.
- Students will write 3 review papers on the subjects that will be given in the class using the articles on the *Blackboard*.

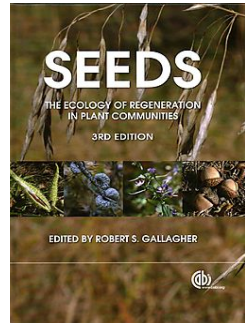
- Students will make a 15-min presentation to the class for final grade. Grading will be based on quality and thoroughness of investigation, as well as delivery.
- The lab portion of the class will consist of some experiments designed to better understanding of the course.

TEXTBOOK

Seeds: The Ecology of Regeneration in Plant Communities 3rd Edition by Robert S. Gallagher

ISBN-13: 978-1780641836

ISBN-10: 1780641834



COURSE REQUIERMENTS AND POLICIES

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

- ✓ On-time participation in all scheduled class activities is required. Absenteeism and/or nonparticipation not only preclude a student's learning the material in this course, but also will likely affect his/her performance.
- ✓ All electronic devices must be turned off/muted during class. Failure to comply with this rule, may result in the student being excused from class.
- ✓ Reading of the assigned chapters from the textbook and additional readings from *Blackboard* prior to class is expected.
- ✓ 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.

INTERNET RESOURCES

- ✓ This is a web assisted course. A course webpage will be maintained with Blackboard Learn.

Additional course materials contain this syllabus articles, short videos, and the announcements will be posted on **Blackboard**

- To access this resource, go to <https://ecampus.fiu.edu/> and click on **Blackboard** under the **Login** menu. In the Blackboard Login window enter your FIU MyAccounts User Name and Password. Select AGR 3930 - Section U01 – Fall 2017. For help with Blackboard, click the Student menu on the e-campus website call the UTS Help Center at (305) 348-2284.

ESTIMATED POINTS

Review papers (3)	45%
Final Presentation	35%
Class Activity and Participation and	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: <http://integrity.fiu.edu/>

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

COURSE SCHEDULE

Week	Date	Topic
1	Aug. 25	Welcome and Course Overview Seed Botany
2	Sept. 01	Seed Biology
3	Sept. 08	Seed Physiology and Storage
4	Sept. 15	
5	Sept. 22	Fairchild Seed Banking Strategies
6	Sept. 29	Seed Vigor and Viability Tests
7	Oct. 06	
8	Oct. 13	Embryo Rescue and Synthetic/Artificial Seed Technology
9	Oct. 20	
10	Oct. 27	Microbial Inoculations for Healthy Seed Germination and Establishment
11	Nov. 3	Seed Treatments
12	Nov. 10	Veterans Day Holiday
13	Nov. 17	Final Project Presentations
14	Nov. 24	Thanksgiving Holiday
15	Dec. 1	Final Project Presentations
16	Dec. 8	

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