



University of Puerto Rico
Mayagüez Campus
College of Agricultural Sciences
Department of Agricultural and Biosystems Engineering



OFFICIAL SYLLABUS

**AGROCLIMATOLOGY
SAGA 5017**

Credit Hours: 3	Contact Hours: 3 hours of conference per week
Prerequisites: Autorización del Director del Departamento	Co-requisites: None
Course Description (English): Study and application of the climatology and meteorology related to agriculture with emphasis on the Caribbean region.	
Course Description (Spanish): Estudio y aplicación de la climatología y meteorología aplicada a la agricultura con énfasis en la región del caribe.	
Learning Objectives: After completing the course, the student should be able to: a. Utilize climatic data for optimum crop production and crop modeling. b. Analyze data from climatologic parameters and interpret its effect on agricultural production. c. Use quantitative methods to represent or quantify climatological parameters. d. Describe any climatological factor and its effect on agricultural production.	

Content Outline and Time Distribution:

<i>Topics to be covered</i>		<i>Contact hours</i>
I.	Introduction, Scope of Agroclimatology	1.5
II.	Air temperature and Heat Index	3
III.	Soil Heat Flux and Soil Temperature	1.5
IV.	Relative Humidity	3
V.	Solar Radiation	4.5
VI.	Wind Speed and Measurements	4.5
VII.	Evaporation and evapotranspiration	4.5
VIII.	Precipitation	3
IX.	Soil Water Balance/ Leaf Energy Balance	4.5
X.	Mid-Term Examination	3
XI.	Remote data Acquisition Systems	3
XII.	Climate Modeling	3
XIII.	Student Presentations	3
XIV.	Student Presentations	1.5
XV.	Student Presentations	1.5
XVI.		
XVII.		
XVIII.		
<i>Total hours: (equivalent to course contact period)</i>		45

<i>Laboratories</i>		<i>Contact hours</i>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
<i>Total hours: (equivalent to laboratory contact period)</i>		0

Instructional Techniques:

- conference discussion computation laboratory
 seminar with formal presentation seminar without formal presentation workshop
 art workshop practice trip thesis special problems
 tutoring research others, please specify:

Learning Resources and Minimum Facilities Available or Required:

The lectures for the course and other course information will be available to the students on WebCT. Each student will have their own WebCT account. Any additional information required will be provided by the instructor. The students will be responsible for several homework assignments requiring the use of specific computer programs. These programs will be available on the Agricultural and Biosystems Engineering Computer Laboratory computers.

Evaluation Techniques and Relative Weight:

	Percent
<input checked="" type="checkbox"/> Exams (__% each)	30
<input type="checkbox"/> Final exam	
<input checked="" type="checkbox"/> Short quizzes	20
<input type="checkbox"/> Laboratory	
<input checked="" type="checkbox"/> Homework	20
<input type="checkbox"/> Monographies	
<input type="checkbox"/> Portfolio	
<input type="checkbox"/> Journals	
<input checked="" type="checkbox"/> Projects	30
<input type="checkbox"/> Others, specify:	
TOTAL: 100%	100%

Grading System:

- Quantifiable (letters) Not Quantifiable

Standard Curve: 90 to 100 A; 80 < 90 B; 70 < 80 C; 60 < 70 D; 0 < 60 F

Bibliography:

Crop Evapotranspiration Guidelines for Computing Crop Water Requirements. Allan, R. G., L. S. Pereira, Dirk Raes and M. Smith, 1998. FAO Irrigation and Drainage Paper 56, Food and Agriculture Organization of the United Nations, Rome.

The above document (required for the course) can be obtained from the following website for free: <http://www.fao.org/docrep/X0490E/X0490E00.htm>

All other required readings will be provided by the Professor

According to Law 51:

Law 51: The Comprehensive Educational Services Act for People with disabilities states that after identifying with the instructor and the institution, the student with disabilities will receive reasonable accommodation in their courses and evaluations. For more information contact the Department of Counseling and Psychological services at the Office of the Dean of Students (Office DE 21) or call 787-265-3864 or 787-832-4040 x 3772, 2040 and 3864.

Academic Integrity:

The University of Puerto Rico promotes the highest standards of academic and scientific integrity. Article 6.2 of the UPR Students General Bylaws (Board of Trustees Certification 13, 2009-2010) states that academic dishonesty includes, but is not limited to: fraudulent actions; obtaining grades or academic degrees by false or fraudulent simulations; copying the whole or part of the academic work of another person; plagiarizing totally or partially the work of another person; copying all or part of another person answers to the questions of an oral or written exam by taking or getting someone else to take the exam on his/her behalf; as well as enabling and facilitating another person to perform the aforementioned behavior. Any of these behaviors will be subject to disciplinary action in accordance with the disciplinary procedure laid down in the UPR Students General Bylaws.—

Policy Against Discrimination Based on Sex, Sexual Orientation, and Gender Identity:

The University of Puerto Rico prohibits discrimination based on sex, sexual orientation, and gender identity in any of its forms, including that of sexual harassment. According to the Institutional Policy Against Sexual Harassment at the University of Puerto Rico, Certification Num. 130, 2014-2015 from the Board of Governors, any student subjected to acts constituting sexual harassment, may turn to the Office of the Student Ombudsperson, the Office of the Dean of Students, and/or the Coordinator of the Office of Compliance with Title IX for an orientation and/or formal complaint.

Sexual Harassment: Certification 130-2014-2015 states:

Sexual harassment in the workplace and in the study environment is an illegal and discriminatory act and is against the best interests of the University of Puerto Rico. All persons who understand they have been subject to acts of sexual harassment at the University of Puerto Rico may file a complaint and request that the institution investigate, where necessary, and assume the corresponding action by the university authorities. If the complainant is a student, he or she must refer his or her complaint to the Office of the Student Ombudsperson or that of the Dean of Students.

Certification 06-43 of the Academic Senate states, "The academic guidelines for offering online courses," defines:

Traditional face-to-face courses are those that have less than 25% of the course's regular contact hours via the Internet. Therefore, a three-credit course will be considered "face to face" if, of the 45 hours of regular contact, 11 or less are taught via the Internet. According to certification 16-43 of the Academic Senate, a course may include up to 25% of its total contact hours via the Internet. The objective of this is so that all professors have this alternative in the case of any unscheduled eventuality.

Includes attachments:

Yes

No