AEB3550 – Agricultural Data Analysis
Spring 2015
Section: 0246 (3 credit hours)

Time: M 12:50-2:45 (6th-7th periods)
　　　W 1:55-2:45 (7th period)　　　　Location: NZH 0112
Lab session: T 12:50-2:45 (6th-7th periods)　　Location: MCCB 3086

Instructor and Contact Information:

Instructor:	Maria Bampasidou	I have an open door policy but I may not be able to
Office:	1179 McCarty Hall A	accommodate you without an appointment.
Office Hours:	M-T-W 10:40-11:30 (walk-ins), R by appointment	Additional office hours can be scheduled by appointment. Feel free to e-mail me to schedule one especially should
E-mail:	mabampasidou@ufl.edu	you want to discuss your class performance.
		Please **check my schedule** prior emailing me to schedule a meeting.

Communication:　E-mail is a preferable way to communicate with me outside office hours.
When e-mailing me, please **start the subject line with AEB 3550.**
Courteous and professional e-mails can expect a prompt reply.
I reserve every right not to respond to unprofessional emails, and text-format emails.
Please keep in mind that it takes at least a day to answer e-mails so send yours in a timely fashion.

FRE Program Assistant:　　Kathy Green; 1170 McCarty Hall A; (352) 294-7640
　　　　　　　　　　　　　Email: kagreen1@ufl.edu

Undergraduate Adviser:　　Anne Marie Mattison; McCarty Hall A; (352) 294-7638
　　　　　　　　　　　　　Email: mattison@ufl.edu

Teaching Assistant:　　　　TBA

General Course Information:

Catalog description:　Introduction to analysis of agricultural data. Incorporates statistical and agricultural economic theory into the analysis of agricultural problems. Knowledge in use of spreadsheets is assumed.

Prerequisites:　AEB3103; AEB3510; STA20223; Adequate knowledge of Excel

This course: More and more business and industries rely on good data "management". Data Analysis can be a powerful tool in analyzing market performance, estimating demand and supply trends in the market, as well as conveying information on the correlation, significance, and evaluation of market components.

The goals of the course are for students to:

(i)   Describe the use of descriptive statistics and their association in problem-solving scenarios

(ii)   Generate descriptive statistics (graphically, numerically) and communicate results

(iii)   Differentiate among random sample, sampling distributions, discrete and continuous distributions and identify the right distribution needed to model an agribusiness related problem

(iv)   Apply distributional analysis to agribusiness related issues

(v)   Develop inferential techniques for statistical analysis (confidence intervals, hypothesis testing)

(vi)   Use regression analysis in agribusiness and agricultural economic settings

Course Material:

Required Textbook: Anderson, Sweeney, Williams (2010), '*Essential of Statistics for Business and Economics*', 7th edition. CENGAGE Learning. ISBN: 9781133629658
*   You can get an earlier version of the book
*   A similar book is: `*Statistics for Business and Economics*', by Anderson, Sweeney, Williams, CENGAGE Learning.

Lecture notes
*   Students are responsible for printing a copy and bringing it to class.
*   **Handouts** will be provided as needed.

iClicker 2: ISBN 1464194556

Supplementary Textbook *(Optional)*:
Dretzke, B.J. (2009) "Statistics with Microsoft Excel", fourth edition. ISBN: 978-0-13-604387-4 (Excellent step-by-step Excel programming instructions utilizing descriptive and inferential techniques.)

Note that: Reading your book, lecture notes, and related handouts is imperative to benefit the most out of the course. You should expect to study a minimum of **3 hours/week** to cover and comprehend course material. During exam weeks the time-commitment will be significantly higher.

Canvas

- o Canvas is used for emails, announcements, course discussions, posted lecture notes, assignments, suggested exercises and solutions to assignments, quizzes, and exams.
- o To access Canvas you will need your Gatorlink username and password. Canvas can be accessed via https://lss.at.ufl.edu/. Should you have difficulties accessing Canvas, please contact UF Computing Help Desk directly by calling (352)-392 HELP or via e-mail helpdesk@ufl.edu

Course Outline

This is an upper-division analytical course. The course will be based on lectures where main theories, frameworks, and models will be presented in class followed by discussion sessions and applications.

Course Topics:

(A) Introduction to Data and Statistics
We will review basic concepts of statistics

Chapter 1:	Data and Statistics
Chapter 2:	Descriptive Statistics: Tabular and Graphical Presentations
Chapter 3:	Descriptive Statistics: Numerical Measures

(B) Probability Theory and Distributions

Handout:	Introduction to Probability
Chapter 5:	Discrete Probability Distributions
Chapter 6:	Continuous Probability Distributions

(C) Statistical Analysis

Chapter 7:	Sampling and Sampling Distributions
Chapter 8:	Interval Estimation
Chapter 9:	Hypothesis testing
Chapter 10:	Comparisons Involving Means, Experimental Design and Analysis of Variance
Chapter 11:	Comparisons involving Proportions and a Test of Independence

(D) Regression Analysis

Chapter 12:	Simple Linear Regression
Chapter 13:	Multiple Regression

Note that the instructor reserves the right to alter the sequence of the topics as well as add or drop topics. Based on the student-instructor interaction and discussion sessions, some of the topics can be integrated in earlier course modules.

Evaluation of Performance and Grading:

Grades: Your final grade for AEB 3550 will be based on the following:

Grade components		
Exams: Sum of highest two in-class exams		
(@ 85 points each)	max	170 points
Final exam **(mandatory)**		85 points
Course Activities: Assignments (best 8 out of 10)		
(@ 10 points each)		80 points
Attendance Quizzes	max	20 points
Class activities	max	45 points
Maximum Points		**400 points**

Final course grade will have the following benchmarks out of 400 possible grade points:

Letter	Course Equivalent	Notes
A	≥375	
A-	360-374	For general information about grading and grading policy at the
B+	348-359	University of Florida, please refer to:
B	332-347	http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html
B-	320-331	
C+	308-319	
C	292-307	
C-	280-291	Please note that grades are **not** "adjusted" in any way at the end of the
D+	268-279	term.
D	252-267	
D-	240-251	
E	Below 239	

Exams and Quizzes

Exams: Three (3) in-class exams starting at 12:50pm

Points: 85 potential points per exam

Format: Multiple-choice, T-F, problem-solving and short-answer questions.

Content: Material covered in class, from the book, or concepts implied by the material covered. Each exam will be based on specific sections covered in class within the respective time-period (i.e. no cumulative, though concepts are transferable and more than one ways to approach exam questions may be possible).

Missed exam policy: There are NO "excused" exams. It is expected that you adequately and thoroughly prepare for each one of them since they are counting towards your course grade. **Should you miss any of the in-class exams,** you will receive a zero for that exam score and it can count as the one you drop.

Exam day policy:

- It is expected that all students are on-time to exams. Please arrive early, if possible, to get seated and get your books/bags stowed away so that the exam can start on the stated-time.
- You may leave the class after 30 minutes.
- **NO ONE** WILL BE ALLOWED TO ENTER THE CLASSROOM TO BEGIN THE EXAM AFTER THE FIRST STUDENT HAS TURNED IN THEIR FINISHED EXAM
- Exams are closed book and closed notes.
- A simple calculator may be used. **Not acceptable** are the following items: graphing calculators and calculators with more than one display rows, cell phones, touch-screen devices, or other devices with the capability of storing formulae.

Exceptions (https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx**)**

1. UF's 12 day rule

If you are participating in a University of Florida sponsored event, you may make up a class exam only if you bring your documentation to your instructor **PRIOR to the event (at least 7 days prior to a scheduled exam).** Email documentation is **NO LONGER** enough. You need to bring a printed mail from the corresponding event organizers or association.

2. Illness

Should you miss an exam due to a serious, physician documented illness please contact the instructor by email prior to attending the next class period if a medical excuse will be used to take a makeup exam. The physician's medical excuse on office letter-head must be received by the instructor prior to the student attending the next class period so that a makeup date can be arranged. Failure to follow this policy will terminate any opportunity to take a makeup exam.

3. Religious Holiday Observance

Any student who must miss any regularly scheduled exam due to religious holiday observance need to inform the instructor within the first three days after the drop/add period ends.

Note that: Automobile problems, family obligations, alarm clock malfunctioning, work requirements, vacation trips, job interviews, etc. do not warrant an excused absence.

The Final Exam is mandatory and comprehensive

Points: 85 potential points

Format: Multiple-choice questions. Scantrons will be provided

Content: Cumulative and comprehensive. Material covered throughout the semester.

Exam day policy: Same with In-class exams.

Exam Date: **Wednesday April 29th, 12:30-2:30 (period C)**

The Final Exam is scheduled by the registrar's office and no early or late Final exams will be administered.
Failure to take the Final Exam will result automatically in an incomplete grade for AEB3550.

Course Activities

Homework problems: Homework problems will be assigned at a regular basis throughout the semester. There will be 10 assignments turned in for credit each worth 10 points. They are assigned to assist you in learning the material and are highly related to exam questions and hence to your performance in the course. The lowest two scores will be dropped, so a total of 80 possible points will count towards your course grade. These are **individual** assignments and will be treated as such!

Assignments are due before class starts. Since you are allowed to drop two assignments, late submission is not accepted though early submission is encouraged.

Homework Problems	Assigned Date	Due Date (before class begins)
HW1	January 12th	January 21st
HW2	January 21st	January 28th
HW3	January 28th	February 4th
HW4	February 11th	February 18th
HW5	February 18th	February 25th
HW6	February 25th	March 11th
HW7	March 18th	March 25th
HW8	March 25th	April 1st
HW9	April 1st	April 8th
HW10	April 8th	April 15th

Note that the due dates may be change depending on the material covered in class.

Attendance (max 20 points):

Students are expected to attend class and to be in class on-time. Given the nature and the quantity of material covered in class, regular attendance is a pre-requisite for performing well in this course.

Attendance will be taken **each time the class meets** through clicker questions.
- If you arrive late and attendance has been taken you cannot receive attendance credit.
- Three attendances will be excused (i.e., you can miss a total of 3 hour-long class periods without penalty; however, double-block periods count for two absences).
- If you forget to submit your attendance problems during the period in which attendance is taken, you will not receive attendance credit.
- It is your responsibility to ensure that you are in your seat no later than 5 minutes after class has begun; please discuss any circumstances with Dr. Bampasidou if this is not possible.
- Extra credit points may be offered during class periods; you must be present to earn any extra credit points offered.
- Students who expect some conflict with their ability to be present in class should contact the instructor immediately prior to the drop/add period.

Class Activities (max 45 points):

Students can earn up to 45 points through class activities. That includes but is not limited to:
- o discussion sessions
- o problem solving handouts
- o clicker quizzes
- o memos
- o lab sessions, and
- o exam reviews.

Based on the nature of the activity students may be given prior notification. As always, attendance is essential.

Grading Policy

Note that: Assignments, and Exams will be returned to you in class and grades will be posted in a timely-fashion on Canvas. You must retain all returned papers in case on any discrepancy with your course grade. We cannot correct any mistakes in grading or recording of scores without the original document.

IMPORTANTLY! You have 7 days after the grade has been posted to voice your concern. Should you believe that your exam/assignment is incorrectly graded or that your grade is incorrectly posted, please contact your TA as soon as possible. After the 7 days have passed, your posted grade will be assumed to be correct and accurate. Should you ask for a re-grade, please note that the **entire** assignment/exam will be reviewed for accuracy.

Professional Etiquette

The following guidelines are expected to be followed in order to have a productive classroom environment.
- CELLULAR PHONES are expected to be turned off. No texting or any other use of cellular phones is permitted or tolerated in class. So please take a moment to turn-off your devices before the class begins.
- You should also discontinue the use of any iPods, and tablets or similar devices unless indicated by the class activity of the day. Previous notification will be given to you in that event.
- Students are expected to be on-time for class.
- You should avoid talking amongst each other once the lecture begins unless otherwise stated (i.e. part of a classroom-activity/assignment). If you have any questions during class, please raise your hand and I will be happy to address any concerns you may have.
- You should avoid reading other course material or any type of newspaper during the class.

Failure to abide by these simple courtesy rules is considered disrespectful to me and your fellow student and you may be asked to leave the classroom. In that event Dr. Bampasidou reserves the right to account the student as absent.

Supplemental Information:

Students requesting classroom accommodation: The Disability Resource Center (DRC) coordinates the needed accommodations of students with disabilities. This includes registering disabilities, recommending academic accommodations within the classroom, accessing special adaptive computer equipment, providing interpretation services and mediating faculty-student disability related issues. Please contact office 0020 Reid Hall (tel: (352) 392-8565), www.dso.ufl.edu/drc. Any student requesting accommodation will have to provide documentation from the DRC.

"Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation."
Request for academic accommodations need to be made during the first week of the semester, except for unusual circumstance, so please arrange to meet with me as soon as possible.

Course Evaluation Process:

"Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at https://evaluations.ufl.edu
Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results."

Software Use:

All faculty, staff and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against university policies and rules, disciplinary action will be taken as appropriate.

UF Supporting Services: College life can sometimes being overwhelming. Resources are available on-campus to help students manage personal issues or gain insight into career and academic goals. Some of them are:

- Counseling and Wellness Center : http://www.counseling.ufl.edu/cwc/
- Student Health Care Center: http://shcc.ufl.edu/
- Career Resource Center: http://www.crc.ufl.edu/
- Dean of Students Office: http://www.dso.ufl.edu/
- For a full list of services please see https://catalog.ufl.edu/ugrad/current/support/info/student-services.aspx#SA

Academic Honesty: Academic dishonesty is defined as any behavior, active or passive, which attempts to subvert the legitimate teaching, learning, or testing of a subject. It includes, but is not limited to the following:
- cheating on an examination, using notes or other methods;
- assisting or allowing another student to cheat on an examination;

- submission of work that is not the authentic creation of the student (plagiarism, use of purchased term papers, etc.);
- providing false excuses for missing a scheduled examination;
- enabling the cheating or other academic dishonesty of another student;
- altering an examination after it has been graded to claim a better grade is deserved;
- obtaining examinations in advance of the scheduled exam, unless offered by the professor

Please remember that you committed yourself to academic honesty when you registered at the University of Florida by signing the statement:

"I understand that the University of Florida expects its students to be honest in all of their academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with the commitment may result in disciplinary action, up to and including expulsion from the University."

The penalty for <u>any</u> incidence of academic dishonesty is, as a minimum, a failing grade on the examination or assignment. If, in the professor's opinion, the offense deserves a more severe penalty, failure in the course may be the imposed penalty. In particularly egregious cases, the professor may ask the College to dismiss the student and refuse the student further enrollment rights at the College.

It is in your best interests to avoid even the *appearance* of any questionable behavior.

<u>**Important Dates:**</u>	January 6	Classes Begin
	January 12	**Drop/Add deadline**
	January 19th	**Martin Luther King Day**
	January 30th	Degree Applications
	February 9	**Exam 1**
	February 28-March 7	Spring Break
	March 16	**Exam 2**
	April 20	**Exam 3**
	April 22	Classes End
	April 29	**Final Exam (mandatory)**

Disclaimer: The instructor reserves the right to update the syllabus. Adequate time and accommodations will be provided should a conflict arise.

**By enrolling in this course you are <u>agreeing</u> to the terms outlined in this syllabus.
Please see me should you have any questions.**

Additional information for a BETTER course performance -- CANVAS

The course materials are uploaded on Canvas under the specified chapters. There you can find:

- A brief **introduction** to each chapter as well as **learning objectives**.
- **PPT presentations** linked to each chapter. Those PPTs are for your review but note that they do not substitute the textbook.
- **Lecture notes.** We will be using the lecture notes so please bring a copy in class.
- **Suggested exercises** per chapter and respective solutions. You are advised to work first on the problems alone and self-check your work.
- **Lab session information** and reference videos (when applicable).
- **Practice Quizzes**
    - ○ **Type I: Entry quiz**

        These quizzes will test for prerequisite knowledge depending on the chapter to be covered.

        Students are expected to take these quizzes individually and score at least 80% so as to secure a better understanding of the material.

        These quizzes will not count towards your grade.

    - ○ **Type II: Exit quiz**

        These quizzes will test important concepts for each chapter. They will be similar or the same as class activities and participation quizzes allowing you to review key concepts covered in class.

        These quizzes will not count towards your grade.

Advising Notes:

- **Work in groups with caution.** Avoid relying too heavily on group efforts as it typically leads to a false sense of security and may result in poor exam performance.
- **Keep pace with class material.** We will cover a lot of material in just a semester so attendance is crucial for a good performance in the course and understanding of the material.
- **Ask questions.** Be sure that if you have a question related to class material, most likely another of your fellow students will have a question. Some of the best lecture sessions start with a question.
- **Take advantage of instructor and TA office hours.** We are there to help you!
- **Worry about your grade during the semester <u>not</u> at the end of the semester,** after all your performance during the whole semester is reported in your grade. Proper time management is key in college.

Let's experience a rewarding and productive semester!