General Class and Course Information

<table>
<thead>
<tr>
<th>Course Number: STA2023</th>
<th>Course Title: Statistics - Honors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term/Dates: Spring 2014 - 1/6-5/7</td>
<td>Reference Number: 180859</td>
</tr>
<tr>
<td>Days: Monday/Wednesday</td>
<td>Credit Hours: 3</td>
</tr>
<tr>
<td>Time: 11:00-12:15 p.m.</td>
<td>Clock Hours: 48</td>
</tr>
<tr>
<td>Room: CB-212</td>
<td></td>
</tr>
</tbody>
</table>

Course Description: Probability, random variables, hypothesis testing, confidence intervals, correlation, regression, sample methods and non-parametric statistics. Participation in group and class projects.

Professor's Information

Name: Zalmond Abbondanza
Office Location: CB-216
Telephone: 561-862-4463
Email: abbondaz@palmbeachstate.edu
Faculty Web Page: http://www.palmbeachstate.edu/faculty/index.asp?id=barneyz
Office Hours: See web page for hours

Information on REQUIRED Textbooks:

<table>
<thead>
<tr>
<th>Title</th>
<th>Edition</th>
<th>Author</th>
<th>Publisher</th>
<th>ISBN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Statistics (Text and code)</td>
<td>12th</td>
<td>Mario Triola</td>
<td>Pearson</td>
<td>9780321890238</td>
</tr>
<tr>
<td>MyStatLab Code, Standalone Access</td>
<td></td>
<td></td>
<td>Pearson</td>
<td>9780321694645</td>
</tr>
</tbody>
</table>

Other Information on Textbooks and Materials needed for class:

Access code for MyStatLab is requirement for this class, purchase of textbook is optional. Course ID: barney08809

Course Learning Outcomes: As a result of taking this course, the student will be able to:

1. Define population and sample.
2. Describe a set of quantitative data by computing measures of central tendency (mean, median, and mode) and measures of dispersion (range, variance, standard deviation).
3. Calculate probabilities using the addition law of probability, law of complement, multiplication law, and conditional probability.
4. Solve probability problems using counting techniques.
5. Construct a probability distribution for a discrete random variable and compute the expected value (mean), variance, and standard deviation of this distribution.
6. Construct a binomial probability distribution and compute the mean, variance and standard deviation.
7. Find probabilities using the z-tables (Z is a standard normal variable).
8. Use the Central Limit Theorem to find the mean and variance of the sampling distribution of the sample mean.
9. Compute confidence intervals using the Z and t-distributions.
10. Use a hypothesis test to determine whether to accept or reject the null hypothesis: a statement, assertion, or claim about the nature of a population.
11. Calculate the coefficient of linear regression (correlation coefficient) for bivariate data.
12. Fit a least squares regression line to bivariate data.
13. Use the equation of the regressions line to predict a particular value of y of a specific value of x.
14. Conduct hypothesis tests using the Two-Sample Sign Test or the Rank-Sum Test.

Full Course Outline - Click on the following link: Course Outlines and enter the course number (no space between the prefix and the number).

Template Date - July 2013
Academic Dishonesty Policy and Penalty for Violation:
Any student found having any electronic device that is turned on and/or not put away during an exam will be given a zero for cheating on that exam. A zero will also be given for an exam if a student is found to be attempting to communicate with anyone else during an exam or has access to unapproved information during the course of the exam. The instructor will give students ample verbal notice during an exam as to the time left to finish the exam. If an exam is not handed in to the instructor by the assigned finish time for that exam, a zero will be given for that exam. A zero that is given for cheating on an exam will not be dropped or replaced for any reason.

Grading Scale and Policy: Your final class grade will be calculated using the following weights:
Homework: 10%
Class project: 15%
Group project: 35%
Four midterm exams: 40%

The grading scale will be as follows: A = 90 – 100, B = 80 – 89, C = 70 – 79, D = 60 – 69, F = 00 - 59

Tentative class schedule (dates to be announced):

<table>
<thead>
<tr>
<th>Class</th>
<th>Section</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1-1.4</td>
<td>2.1-2.3</td>
<td>Introduction to Statistics; Frequency Distributions and Histograms</td>
</tr>
<tr>
<td>3.1-3.4</td>
<td></td>
<td>Preview; Measures of Center; Measures of Variation Measures of Relative Standing and Box Plots; Review for Test</td>
</tr>
<tr>
<td>1/27</td>
<td>4.1-4.3</td>
<td>Test #1, Project Brainstorm Due Preview; Basic Concepts of Probability; Addition Rule</td>
</tr>
<tr>
<td>4.4-4.7</td>
<td></td>
<td>Multiplication Rule; Compliments; Conditional Probability; Simulations &amp; Counting Review for Test</td>
</tr>
<tr>
<td>2/17</td>
<td>5.1-5.2</td>
<td>Test #2, Project Research and Survey Questions Due Random Variables;</td>
</tr>
<tr>
<td>5.3-5.4</td>
<td>6.1-6.3, 6.5, 6.7</td>
<td>Binomial Probability Distribution; Mean and S.D. Normal Distribution; Central Limit Theorem;</td>
</tr>
<tr>
<td>3/10</td>
<td></td>
<td>Project Proposal Due</td>
</tr>
<tr>
<td>3/17</td>
<td>7.1-7.2</td>
<td>Test #3 Estimates of Population Means</td>
</tr>
<tr>
<td>7.3</td>
<td>8.1-8.4</td>
<td>Sample Size; Estimates of Proportion Hypothesis Testing – Mean of Samples; Proportions</td>
</tr>
<tr>
<td>9.1-9.4</td>
<td></td>
<td>Inferences for two means – Independent Samples Inferences for two Proportions; Dependent Samples</td>
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<tr>
<td>4/7, 4/9</td>
<td></td>
<td>Class Project</td>
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<tr>
<td>4/16</td>
<td></td>
<td>Test #4</td>
</tr>
<tr>
<td>10.1-10.3</td>
<td></td>
<td>Introduction Correlation &amp; Regression</td>
</tr>
<tr>
<td>13.1-13.2, 13.4</td>
<td>11.2</td>
<td>Nonparametric Introduction; Sign Test; Wilcoxon Rank-Sum Test; Goodness of Fit</td>
</tr>
<tr>
<td>4/28</td>
<td></td>
<td>Project Final Report Due</td>
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<tr>
<td>5/5</td>
<td></td>
<td>Group Project Presentations – 11:00 – 1:00 p.m.</td>
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Palm Beach State College
Course Syllabus – Classroom Courses

EQUIPMENT AND SUPPLIES

Calculator: A TI-83plus or TI-84plus calculator is required for this class.

Homework/MyStatLab: The purchase of an access code for MyStatLab is required. All homework assignments are to be completed through MyStatLab and use of MyStatLab is required to pass this class. Purchase of the textbook is optional. All homework assignments must be completed by the assigned due dates. Student may use computers provided on campus or may use home/laptop computers. An internet outage or computer problem is not an acceptable reason for an assignment not being done on time, student is expected to organize his/her time to allow for last-minute technical problems. This class is being given in a classroom that is equipped with computers for all students and some in-class exams and assignments will be given on the computer using MyStatLab.

CLASS POLICIES

Attendance: Professors are required to take attendance and you must attend a minimum of 90% of all classes. If you miss a class you will not be given credit for any assignments, quizzes or tests taken during class time. You are responsible for obtaining any information, notes or take-home assignments that may have been given out during the class that you missed. Missing a class is not an excuse for not being prepared. For every absence that puts the student below the 90% attendance requirement, the final class grade may be lowered by 5%. Arriving late to class three times is considered equivalent to an absence and leaving early is counted the same as arriving late.

Electronic Device Use: Cellphones must be turned to vibrate during class and if you are expecting an emergency call you must take the phone outside the classroom before answering. Texting and web-surfing is not allowed at any time. Possession of an electronic device during an exam is considered cheating.

Email Policy: Your official PBSC email account must be working and you must check your mail regularly. If there are any important communications from me that must be given between classes I will be sending email to this address only.

Professor’s Expectations: Participation in class is paramount. You will be expected to familiarize yourself with the material that will be discussed in class beforehand so you are in a position to ask questions and be able to participate in the learning process. Students will demonstrate respect for instructor and fellow students. Behavior that is disruptive to a positive learning environment reported by the instructor will result in a warning on the first instance; the second instance might result in expulsion from the course or campus. Questions that are relevant to the material being presented in class are always welcome, however the instructor will determine appropriate topics and may defer questions on a particular topic until after class is dismissed. As this is an honors class, students will be expected to keep up with an accelerated pace and to participate in all group and class projects and activities.

Late Assignment Policy: Homework assignments are due prior to the corresponding class exam, however they may be completed after the due dates with a penalty of 5% deducted per day. No assignment will be accepted after the start of the final exam.
Palm Beach State College
Course Syllabus – Classroom Courses

Make-up Exam Policy: No make-up exams will be given except in the case of documented emergencies to be approved at the discretion of the instructor. The student must inform the instructor in person, by email or by phone before the date of the absence and must provide documentation before the beginning of the next class in order to have a makeup exam approved and scheduled. A makeup exam will be scheduled for no more than one exam during the semester, makeups will not be given for a second exam for any reason. If the makeup exam is not taken as scheduled, there will be no further makeup exam scheduled and the grade will be recorded as a zero. The lowest exam grade will be replaced by the homework average.

Cheating On Exam: Any student found having any electronic device that is turned on and/or not put away during an exam will be given a zero for cheating on that exam. A zero will also be given for an exam if a student is found to be attempting to communicate with anyone else during an exam or has access to unapproved information during the course of the exam. The instructor will give students ample verbal notice during an exam as to the time left to finish the exam. If an exam is not handed in to the instructor by the assigned finish time for that exam, a zero will be given for that exam. A zero that is given for cheating on an exam will not be dropped or replaced for any reason.

Extra Credit: There will be no extra credit given in any case. Grades are based entirely upon performance on assignments and exams and participation in class and group projects.

Exam Reviews: It is the responsibility of the student to prepare for each exam and review the relevant material. Exams may be based upon the material presented in class, homework assignments or material in the textbook. The details of exams, such as the number and type of questions to be asked and specific material to be tested, is confidential and will not be shared with students prior to the exam. Students are responsible for all material taught and must be prepared to be tested on any and all of the presented material. In-class exam reviews may be conducted at the instructor’s discretion.

Student Learning Center/Math Lab: It is highly suggested that students spend as many hours as possible in the Math Lab. The staff of the Math Lab is always available for assistance with the course assignments. In addition, there is a multitude of resources, which will be most helpful for your successful completion of this class.

College Policies and Web Information

Academic Dishonesty
Academic dishonesty includes the following actions, as well as other similar conduct aimed at making false representation with respect to the student’s academic performance:
(1) Cheating on an exam, (2) Collaborating with others on work to be presented, if contrary to the stated rules of the course, (3) Submitting, if contrary to the rules of the course, work previously submitted in another course, (4) Knowingly and intentionally assisting another student in any of the above actions, including assistance in an arrangement whereby work, classroom performance, examination, or other activity is submitted or performed by a person other that the student under whose name the work is submitted or performed, (5) Plagiarism.
Please refer to the Palm Beach State College Student Handbook (www.palmbeachstate.edu/current) for link to the student handbook.

Classroom Etiquette and Student Behavior Guidelines
Students will demonstrate respect for professors and fellow students. Behavior that is disruptive to a positive learning environment reported by the professor will result in a warning on the first instance; the second instance might result in expulsion from the course or campus.

Computer Competency Component
Each student will, to the satisfaction of the professor, demonstrate a fundamental understanding of basic computer operations through various professor-determined exercises and/or assignments.
Disability Support Services
Students with disabilities are advised, in compliance with federal and state laws, that accommodations and services are available through the office of Disability Support Services (DSS). It is the student’s responsibility to contact Disabled Student Services Advisors and to submit appropriate documentation prior to receiving services. Please see the website at www.palmbeachstate.edu/current for web address for Disability Support Services.

Eating, Drinking and Smoking
Eating and drinking are confined to areas designated on the campus. Smoking is not permitted in any College building and only in areas designated at each campus.

Final Course Grade Appeal
The evaluation of academic work is the responsibility of the faculty member/instructor. The method for assigning the final course grade is established by the faculty member/instructor. Per Board Rule 6Hx-18-3.191, faculty/instructors shall communicate the grading policy of the course to their students in writing. If this policy changes during the term, students should be notified of any changes in writing. The method to determine final course grades must be given to students in a course syllabus at the beginning of the class. Should a student have a question about a final course grade, please follow the procedures as outlined in the student handbook: www.palmbeachstate.edu/current.

Mid-Term Grade Reporting
Within one week after the close of the mid-term grading period, mid-term grades will be made available to all students for each class by either written notification or individual conference.

Student Responsibility Policy
When a student attends the College, s/he becomes subject to its jurisdiction. Students are expected to conduct themselves in a responsible manner, in all areas of campus life. By enrolling, they pledge to obey the rules and regulations of the College and are responsible for observing all College policies and procedures as published in the student handbook, the College catalog and other College publications. The student will be responsible for preparing for class, participating in class, and completing assignments on time.

Palm Beach State Websites of Interest
Please see this web page (www.palmbeachstate.edu/current) for a list of web addresses for students.

Withdrawal Policy for Individual Courses
The last day to withdraw from a College course with a "W" grade in this course is March 27, 2014. It is the responsibility of the student to use the PantherWeb system or visit a campus Registrar’s office to withdraw. An official withdrawal entitles the student to a grade of "W" in the class.

Department Contact Information

<table>
<thead>
<tr>
<th>Name:</th>
<th>Dr. Nika Coleman-Ferrell</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Location:</td>
<td>AD-405</td>
</tr>
<tr>
<td>Telephone:</td>
<td>561-862-4415</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:ferrelln@palmbeachstate.edu">ferrelln@palmbeachstate.edu</a></td>
</tr>
<tr>
<td>Job Title:</td>
<td>Associate Dean</td>
</tr>
</tbody>
</table>

The student is responsible for all information contained in this syllabus. This syllabus is subject to change by the instructor at any time.