Course Description: Welcome to Stat 200. In today’s world, we are seeing a major trend throughout both industry and government where decisions are data-driven. Statistics is a discipline dedicated to unraveling the mystery of making such decisions in the face of uncertainty. More precisely, statistics is the art and science of using sample data to make generalizations about populations. The objective of this course is to explore and apply basic statistical concepts and procedures that are used when analyzing data.

Course topics covered include methods for:

- collecting and summarizing sample data
- evaluating the accuracy of estimates obtained from sample data
- making statistical inferences about populations

What you should discover is that statistics is not just another math course. While you will be exposed to new terminology and concepts, much of the time you will use statistical software to solve problems that require quantitative solutions. You will not be inundated with repetitive calculations. Instead you will explore data with a context. Basic algebra is the only prerequisite. Best wishes for success in this course.

Instructor: Dr. Kwame Kankam
Office Hours: M 2:30 - 3:30 PM; F 9:00 - 10:00 AM (424A Thomas)

TAs: Kyongwon Kim [kbk5206@psu.edu] - sections 13, 14 and 15
      Bahaeddine Taoufik [but129@psu.edu] - section 16
      Saksham Chandra [sxc497@psu.edu] - section 24

Class Times: Lectures: WF 8:00-8:50 AM (102 Forum)
Lab Section 13: TR 8:00-8:50 AM (064 Willard)
Lab Section 14: TR 9:05-9:55 AM (064 Willard)
Lab Section 15: TR 11:15-12:05 PM (064 Willard)
Lab Section 16: TR 12:20-1:10 PM (064 Willard)
Lab Section 24: TR 3:35-4:25 PM (115 Keller)

Course Objectives: A comprehensive list of objectives for this course is provided in Angel.

Required Course Materials:
   Textbook: Mind on Statistics (5th edition), by Utts and Heckard

   i>clicker Please be certain to purchase an i>clicker and not an i>clicker 2 or web>clicker. Need to have your i>clicker correctly registered and with good batteries by Wednesday, January
13. Clickers will be used to enhance learning in the large class setting.

**Targeted Coverage:** Most sections from Chapters 1 through 15. See detailed course schedule on Angel.

**Course Website:** Angel [cms.psu.edu](http://cms.psu.edu)

**Final Course Grades will be based on:**
- Clicker Quizzes: 5%.
- Weekly Unit Quizzes: 15%.
- Lab Activity Quizzes: 15%.
- Three midterm exams: 35%.
- Comprehensive Final exam: 30%.

**Final Grades:** Your final grade will be no lower than
- A : 93-100%, A- : 90-92%
- B+ : 87-89%, B : 83-86%, B- : 80-82%
- C+ : 77-79%, C : 70-76%
- D : 60-69% , F : 0-59%

**Correspondence:** All email correspondence to me must be done using the Angel email (under Communicate tab in Angel). All other email will not be answered.

**Shared Office Hours (SOH):** The teaching assistants for STAT 200 will provide shared office hours starting the second week of classes. Times and venue will be announced in class.

**Clicker Quizzes:**
- This class will use the i>Clicker system for quizzes during lectures.
- Several randomly timed, in-class quizzes will be given.

**Unit Quizzes:**
- These will be timed multiple-choice quizzes that will serve the purpose of homework.
- Will last from 20-40 minutes and range from 10-20 problems.
- Will be posted after lecture on Wednesdays and must be completed by 11:55 pm on Sundays.
- You may take unit quizzes from any computer and they will not require use of the statistical software Minitab.
- The purpose of unit quizzes is to ensure you try to understand the material as soon as it is presented and not wait till midterm exams.
- There will be 14 in all and the lowest 1 will be dropped.

**Lab Activities and quizzes:**
- On Tuesdays and Thursdays, there will be a lab activity for you to complete in the lab either individually or in small groups. Each lab activity has a corresponding quiz which has to be completed in Angel for credit. Even though you may work on lab activities in groups, you must take the quiz individually.
• Lab Activities will include both data analysis & concept illustration often requiring the use of the statistical software package Minitab.

• Be prepared to learn - bring your textbook, calculator, and/or lecture notes (review in advance).

• You must attend lab at the time listed for your section. Teaching assistants (TAs) and learning assistants (LAs) will be in the lab to facilitate your learning.

• You may work individually or in groups. The point of the labs is to wrestle with and understand the material. Ask questions.

• There will be 23 or so lab activity quizzes and the lowest 2 will be dropped.

• Very important: You cannot take lab activity quizzes outside of your scheduled lab location and lab time.

Midterm Exams:

• There will be 3 midterm exams given on February 8/9, March 15/16 and April 12/13.

• Exams are closed book. You are allowed one (1) sheet of HANDWRITTEN notes (may be front and back).

• No make-ups are available without prior approval from the instructor. If you miss an exam, your score will be recorded as a zero.

• You must bring your PSU ID to all exams.

Final Exam:

• Will be selectively comprehensive (40 questions, 80 minutes).

• Must be taken on scheduled date & time during exams week.

Course Rules:

1. No late or make-up exams will be given without prior approval from the instructor. If you must miss any exam, you should provide a valid reason IN WRITING to the instructor PRIOR TO THE EXAM.

2. No make-up quizzes (be it clicker quiz, unit quiz or lecture quiz) will be given for ANY reason.

3. Students are responsible for all announcements and supplements given within any lecture and email.

4. If you need to leave class early, please sit in the rear and leave as quietly as possible.

5. Please be courteous to your classmates and keep extra noise to a minimum.

6. Please turn off all cell phones and pagers during class.

Academic Integrity and Mutual Respect: All Penn State University, College of Science, and Department of Statistics policies regarding ethics, honorable behavior, and mutual respect apply in this course.
• Penn State’s Policies [http://www.psu.edu/ufs/policies/]

• College of Science’s Academic Integrity Policy [http://science.psu.edu/current-students/Integrity/Policy.html]

• College of Science’s Code of Mutual Respect and Cooperation [http://science.psu.edu/climate/code-of-mutual-respect-and-cooperation]

Disabilities Statement: Penn State welcomes students with disabilities into the University’s educational programs. If you have a disability-related need for reasonable academic adjustments in this course, contact the office for Disability Services (ODS) at 814-863-1807 or visit their website [http://equity.psu.edu/ods/]

Campus Emergencies: Campus emergencies, including weather delays, are announced on Penn State Live and communicated to cellphones, email, the Penn State Facebook page, and Twitter via PSUTXT (to sign up, please see [http://psutxt.psu.edu]).