

Community College of Philadelphia
Math 251 Statistics for Science
Distance Education
Detailed Syllabus (Updated on Jan 20 2017)
for Fall/Spring Semester
Summer Semester will be similar format

Part 1. General Information

Instructor: Dr. Yun Yoo

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The CCP distance education manager is Ms. Vaishali Sharma vsharma@ccp.edu ; 215-751-8415.

Overview: In this **on-line course** you will be learning the same material as in traditional in-class courses and you receive the same college credits for the course. You will have detailed guidelines and references for the course, and will regularly communicate with your instructor by mail in **Canvas**. You will be able to learn at a pace controlled by both you and your instructor. That is, **you will need to comply with your instructor's guidelines and schedules**, but you don't have to attend class sessions at the college and can study the material and work on the assignments at home. However, **this course is not "a weekend course"**. You can do most of the work during weekend if you wish, but you might need to spend some time on your course during the weekdays as well.

Live Help is available on weekdays during regular work hours, and includes tutoring sessions at the Learning Lab on Main Campus, meetings with the instructor during my office hours and mail communication with the instructor in **Canvas**.

Course description: Algebra-based statistics for science. Statistical topics include descriptive measures, graphical methods, discrete and continuous probability distributions, estimation, one- and two-tailed hypothesis testing and categorical data.

Prerequisite: MATH 118 with a grade of "C" or better or MATH 161 (or higher) placement.

Required Materials for Math 251: The **PearsonMyLab_MyStatLab Access Code** can be purchased at either PearsonMyLab.com (\$95.70 as of Fall 2015) or the CCP Main bookstore (printed customized text with access code \$160 as of Fall 2015). Only a PearsonMyLab access code is mandatory. PearsonMyLab contains ALL assignments, videos, and the text online ("Elementary Statistics," **12th Edition** by Mario F. Triola, Boston: Pearson/Addison-Wesley, ©2014) so a printed textbook is optional.

The outcomes for Math 251 - Student will be able to:

- (1) graph a set of one-variable data and identify symmetry, skewness, number of clusters, and outliers.
- (2) make a scatter plot of two-variable data and use it to describe the linear correlation between the two variables.
- (3) compute and interpret one-variable and two-variable descriptive statistics including mean, median, mode, range, interquartile range, standard deviation, variance, correlation, slope, and intercept.
- (4) use probability rules, counting rules, and formulas to compute probabilities.
- (5) compute confidence intervals and test hypotheses about proportions, means, and variances.
- (6) algebraically manipulate statistical formulas to derive other statistical formulas.

Calculator: TI-30X IIS or better one is required for your calculations.

On Line Course Management Systems:

(1) **Canvas** : <http://ccp.instructure.com> (for any communication with the instructor)

(2) **PearsonMyLab (MyStatLab)** : <http://www.PearsonMyLab.com> (for homework, test)

This is a strictly Math course supported by **Canvas and PearsonMyLab** course management computer systems. Both systems are relatively easy to deal with, reliable, and provide a tech support.

We provide students with necessary instructions and support, **and it will be student's responsibility to prepare a reliable personal computer with an Internet connection meeting basic requirements for both systems.**

Please note: After you registered for on-line course **you will be able to login to your course in PearsonMyLab on the first day of classes.**

You can find guides and help for **Canvas** at <http://guides.instructure.com>

For more information about Distance education at CCP or questions about **Canvas** please email distance_ed@ccp.edu, Office of Distance Education or email or call Ms. Vaishali Sharma: ysharma@ccp.edu , 215-751-8415.

Course Time Frame *(Please read carefully)*

Every week you will have some video lectures, and graded assignments: homework and a quiz or a test. All graded assignments must be presented for grading **through PearsonMyLab**.

All assignments have due dates. Tests become unavailable after the due date and cannot be reset individually. Comprehensive a departmental Final Exam will be given during the final week.

Make up Policy:

You can do assignments after the due dates (with penalty). Students with excusable documented reasons for missing Exam must contact the instructor before the due date. They will have an option of taking a **proctored exam** by pencil scheduled by instructor on **main campus**.

Attendance & Participation: College Policy states that if you missed an equivalent of two weeks of work you may be dropped from the course for lack of attendance or assigned an F grade. **(1) Visiting weekly sessions (modules) in Canvas, (2) reading and replying instructors' mails through Canvas inbox, and (3) submitting weekly assignments in PearsonMyLab are three required components of attendance** in this on-line course. Missing either of these components will result in unsatisfactory attendance, withdrawal from the course or an F grade. **If student's attendance in Canvas or in PearsonMyLab is unsatisfactory, access to the assignments in PearsonMyLab may be put on hold.** In this case, contact the instructor through **Canvas** ASAP.

In addition, **in case of unsatisfactory attendance and participation, students will have to take any allowed make ups on campus.**

Grades: Final grade will be based on the **weighted average** of Homework, Test, Final Exam:

Homework (in **PearsonMyLab**):50%;

Test (in **PearsonMyLab**): 30%;

Final Exam (in **PearsonMyLab**): 20%;

90%-100 %	A
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80%-80%	B
70%-79 %	C
60%-69 %	D
0%-59 %	F

No extra-credits available in this course.

Incomplete grade can be assigned if a student failed to complete some course assignments, including final exam, due to the acceptable and **not foreseen** reasons. Incomplete grade can be assigned if at least 65% of the total work is completed and a student earned a passing grade for submitted portion of the work. An incomplete portion of the work should be completed no later than in 4 weeks after the end of the semester. Incomplete portion of the course should be completed in person, at the beginning of the following semester, in the college, on the paper during regular weekday hours by scheduled appointment.

Academic integrity: Students are expected to uphold the highest standards of academic integrity. You must work alone on your tests, quizzes and final exam. **I reserve the right, in some special situations, to request a student to meet with me in my office during regular work hours and take an exam or a quiz in my presence.**

Students with Special Needs: Students registered with the Center of Disability or students who believe they may need an accommodation based on the impact of a disability should contact me privately to discuss their accommodation form and specific needs as soon as possible, but preferably within the first week of class. If you need to request reasonable accommodations, but do not have an accommodation form, please contact the Center on Disability, room BG-39, phone number 215-751-8050

Part 2. Detailed Information

● **Work in Canvas**

(1) Login directions to Canvas Follow on instructions on the site <http://ccp.instructure.com>

For assistance with **Canvas**, you can use site: <http://guides.instructure.com> or contact your DE manager, Ms. Vaishali Sharma vsharma@ccp.edu ; 215-751-8415.

(2) Reading content of Weekly sessions in Canvas.

Every week, a new session opens for your course in **Modules** in the **Canvas**. Reading weekly session's description in **Canvas** is a required component of attendance in this class. In weekly sessions, you will find your video assignments, recommended exercises, reminder for the due date of weekly graded assignments and instructions comments on specific topics. You will also find pages "**Course Information**" and "**PearsonMyLab Information**" with useful files in weekly sessions in **Canvas**. **To see weekly sessions, click on "Modules"** icon in the leftmost column on the front page of your course in **Canvas**

(3) Communication with instructor by mail in Canvas.

On-line communication with the instructor is exclusively **through inbox in Canvas**. Please don't send class-related e-mails to my regular CCP account. I will regularly send messages through **Canvas** with my comments on the results of the assignments, course information and updates to the entire class and to individuals. **Students are required to check their inbox in Canvas at least twice a week.** If you have any questions or there are any problems, send me an email through **Canvas**. I check my inbox in **Canvas** daily during the weekdays. Messages received over weekend will be answered next Monday.

Reading instructor's messages in **Canvas** on weekly basis is a second component of attendance. You don't have to confirm receiving and reading my messages: the system will do it automatically.

●● Work in PearsonMyLab

(1) How to Access PearsonMyLab

Watch the YouTube video for [Directions on Accessing PearsonMyLab](#)

You will need to create a username and password and use the

PearsonMyLab Course ID (will be provided at the Canvas.)

Register the **same name as used in the CCP registrar** (no nicknames!!)

If you do not have or able to buy the access code yet, you can get a [Temporary Access Code](#) for 14 days (linked at the bottom after you enter the Course ID). Do **NOT** create another account when the temp access code expires! **BEWARE!** of fake or used access codes being sold online through other vendors.

(2) Working in PearsonMyLab

After you roll in **PearsonMyLab** click "**Run the MyStatLab Browser Check**" on the opening page to make sure that you have all the components you need to view the exercises and multimedia in your course. You can also click on "**Review System Requirements**" icon to make sure that you have all correct components for using **PearsonMyLab**.

You will receive more information on how to use **PearsonMyLab** on **MyStatLab Information** page in **Canvas**, and I will regularly highlight important information for you during the semester.

●●● In Case of Technical Failure

(1) In case of technical problems with PearsonMyLab

Please access for PearsonMyLab Support:

<http://www.pearsonmylabandmastering.com/northamerica/students/support/index.html>

If you started your test, it is only possible to reset it as a new one. A new version will be generated, and you will have to start it over. This option is only possible if I receive your message before the due date and if you did not spend much time after you opened assignment. Otherwise, a score saved by the system could be submitted for the grade.

Please note that the system in this course is set up in a such way that there is no option of continuing a quiz or a test interrupted for any reasons. Neither you nor instructor could get you back to the interrupted quiz or test. (This option is set up for this course in order to provide academic integrity according to the college policy). It is important that you understood that this option is built-in this course structure and no one including instructor could change it.

(2) In case of all other tech problems

(Computer crash, loss of internet connection or other), students have to notify instructor immediately through inbox in **Canvas** and fix the problem ASAP. In case of single occurrence of such problem, quiz or test could be reset (only before the expiration date) or a score based on the saved work would be assigned.

In case of repeated computer problems students will be required to come to the main campus during regular work hours to take a proctored test or quiz.

This is a part of the course policy related to academic integrity requirements.

(3) Instructor in this course does not provide tech support

for student's personal computer, internet connection and internet browser. Since you have chosen on-line course, this is your responsibility to provide a computer meeting the system requirements with reliable internet connection.

CCP students with valid ID can use computers in the open computer lab, room B2-33 on the main campus. You can also check computer's availability with the CCP regional centers at the locations convenient to you.

Part 3. Covered topics from the text

Text: Elementary Statistics by Mario F. Triola (12th ED)

Week #1	1-1 Introduction to Statistics; 2-2 Frequency Distributions 2-3 Histograms; 2-4 Statistical Graphics
Week #2	3-2 Measures of Center; 3-3 Measures of Variation 4-2 Fundamentals ; 4-3 Addition Rule
Week #3	4-4 Multiplication Rule: Basics; 5-2 Random Variables
Week #4	5-3 Binomial Probability Distributions 5-4 Mean, Variance, and Standard Deviation for the Binomial
Week #5	6-2 The Standard Normal Distribution 6-3 Applications of Normal Distributions
Week #6	6-6 Normal as Approximation to Binomial 6-4 Sampling
Week #7	7-2 Estimating a Population Proportion 7-3 Estimating a Population Mean: σ Known 7-4 Estimating a Population Mean: σ Not Known

Week #8	<div>7-4 Estimating a Population Mean: σ Not Known</div> <div>7-5 Estimating a Population Variance</div>
Week #9	<div>8-2 Basics of Hypothesis Testing</div> <div>8-3 Testing a Claim about a Proportion</div>
Week #10	<div>8-3 Testing a Claim about a Proportion</div> <div>8-4 Testing a Claim about a Mean: σ Known</div>
Week #11	<div>8-5 Testing a Claim about a Mean: σ Not Known</div> <div>9-2 Inferences about Two Proportions</div>
Week #12	<div>9-2 Inferences about Two Proportions</div>
Week #13	<div>9-4 Inferences from Matched Pairs</div>
Week #14	<div>10-2 Correlation</div> <div>10-3 Regression</div>
Week #15	Comprehensive Final Exam

Disclaimer: The instructor reserves the right to make any reasonable changes to these policies. These changes will be announced at Canvas. You are responsible for keeping up with any changes in class policies.