STAT 121 Hybrid SUMMER 2012
Introduction to Statistics for the Social Sciences
Session I: May 29th – July 20th

Instructor: Ms. Bonnie Kegan

Face-to-Face Sessions: Mondays 6:00pm – 7:20pm SOND 205
1st meeting: Tuesday May 29th 6pm-7:30pm ECS 122/122A (Engineering)

Contact Numbers: Mobile Phone: 410-507-9328 (VZN) Work Phone: 301-763-7639 (M-Th)
*Feel free to text me with quick questions!! (Please remember to include your name in your text!)

Instructor Office Hours: I am happy to meet with students before or after class ***by appointment only***! Please contact me in advance if you need to meet with me.

Lecture Material and Quiz Site: http://oli.web.cmu.edu
COURSE KEY: STAT121SUM1
See further instructions for signing up and schedule of material on the Blackboard course page.
There is no textbook required for this course.

Calculator: You will need a basic calculator with a square root function for homework, quizzes and exams. A scientific calculator (TI-36X, or similar) is recommended. The TI-83 Plus, TI-84, or TI-86 will also do statistical calculations such as standard deviation, correlation, or regression coefficients which may prove useful, but are not required for the course.

Course Objectives: This course provides an introduction to statistical methods common to social science applications. Topics include: design of experiments, sample surveys, descriptive statistics, regression and correlation, elementary probability theory, and principles of inference.

By the end of this course, students should:

- Understand and remember the key ideas, concepts, and vocabulary of the subject. Examples in this course include the production of data through sample and experimental design, including the practical difficulties faced in designing samples and experiments that produce meaningful statistics; the description of sample data using graphics and numerical measures, regression and correlation, elementary probability theory, expected value, and inference for sample means, proportions, and 2-way tables. --> *This information will be discussed in the lectures. You will apply and use them in online quizzes, projects and in class exams*
- Be able to communicate the meaning of descriptive and inferential statistics in writing using the terminology of the subject correctly, and so that an audience with a non-statistical background could understand. --> *Quizzes, exams, and projects will address these skills.*
- Be able to communicate orally by discussing statistical ideas and concepts with the instructor as well as other students.--> *Group discussions, projects, and quizzes will contribute to this goal.*

Grading: Note the contribution of each graded item to your final grade below:

Item	Points	Percent	Grading
QUIZZES	150	30%	A 450-500 points
OLI CHECKPOINTS	50	10%	B 400-449 points
APPLICATION PROJECT	150	30%	C 350-399 points
FINAL EXAM	150	30%	D 300-349 points
TOTAL	**500**	**100%**	F Less than 300 points

COURSE POLICIES

E-MAIL:

- Compose and send ALL email to instructor using UMBC email.
- All messages should contain a subject line briefly identifying the subject and the course "STAT121".
- Email will be responded to within 24 hours, excluding weekends and holidays. If you need something answered on the weekend, text your question to my mobile phone!
- Remember, once sent, e-mail is a permanent and official record of your concerns and a representation of yourself!

QUIZZES:

- Quizzes will be given outside of OLI at least weekly (Format to be determined). These will be taken at home (notes are allowed).
- Students should pay close attention to quiz due dates. No late assignments will be accepted (without penalty)!

CHECKPOINTS:

- Students should pay close attention to CHECKPOINT due dates! Due dates can be found on the schedule of online material included on this syllabus. No late assignments will be accepted! *This is an accelerated course and on-time completion of checkpoints is critical*. The best 10 out of 13 checkpoints will be averaged into your final grade.
- Each checkpoint has **two** attempts. Take one early (you will only be given your score, not the correct answers/feedback) and then ask questions about problems you are unsure of before making the 2nd attempt.
- Do not wait until the last minute to complete a checkpoint in case technical issues arise. Send instructor an email if technical problems do occur! Please also report your technical issues to OLI tech support.

FACE TO FACE DISCUSSIONS:

- Students are encouraged to attend ALL face-to-face sessions. Be sure to view all related lecture material on OLI and complete related activities ***before*** class meetings.
- Students are expected to work through each module in the OLI course completing all *Learn by Doing, Did I Get This, My Response, StatTutor, Submit and Compare* activities. Modules should be completed as scheduled on the schedule of material.

APPLICATION PROJECT

- Students will be expected to plan and carry out a study, including study design, data collection, data analysis, and a final written report.
- Phases of the project will be checked throughout the semester according to the *Discussion Schedule included on this syllabus.*

FINAL EXAM

- The final exam will be given on Monday July 16th 6-7:20pm. You must be present to take the exam.
- Makeup exams will only be given under *reasonable circumstances* (i.e. illness, death in the family, car trouble, work conflicts etc.) and must be completed *within ONE week* of the test date.
- You should request a make-up exam **WITHIN 24 HOURS** of the missed exam (**BY PHONE-VOICE *not text***).
- Unexcused absences will receive a zero for the test. Be aware that your instructor *may request documentation* of your reasonable circumstance.

STUDENT CONDUCT:

- Please respect the rights of all members of the campus community by not disrupting or obstructing the teaching and learning process.
- *Please turn off all cell phones and pagers before EVERY class. During an exam 5% will be deducted from your exam grade if your cell phone goes off.*

ACADEMIC INTEGRITY POLICY

By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook, the Faculty Handbook, or the UMBC Policies section of the UMBC Directory.

THIS IS A GEP course. All general education mathematics courses:

- Have performance expectations demonstrating a level of mathematical maturity beyond Algebra II (high school intermediate algebra).
- Include development of analysis, synthesis and problem-solving skills, and introduce students to "ways of thinking" in mathematics.
- Introduce mathematical concepts and techniques that can be applied in further mathematics and/or other disciplines.
- Explore mathematical applications to other disciplines.

Discussion Schedule

Date	Material Covered	Date	Material Covered
5/29	Overview	6/25	Modules 5, 6 and 7
6/4	Modules 1 and 2	7/2	Modules 8 and 9
6/11	Module 3	7/9	Module 10 and 11
6/18	Module 4	7/16	**FINAL EXAM**

ONLINE MATERIAL AND GRADED ASSIGNMENT SCHEDULE

MODULE START BY DATE	**MODULE COMPLETE BY DATE**	**Online Course** http://oli.web.cmu.edu/openlearning/ **Course Key:** STAT121SUM1 (See Instructions on Blackboard under SYLLABUS link)	**Due Dates of Graded Assignments (due by 11:59pm)**
5/29	5/31	Introduction and Learning Strategies, Producing Data: Module 1 Sampling **Sampling CHECKPOINT**	CP 5/31
5/29	6/3	Producing Data: Module 2 Designing Studies **Designing Studies CHECKPOINTS #1 and #2**	CP 6/3
6/4	6/10	EDA: Module 3 Examining Distributions **Examining Distributions CHECKPOINTS #1 and #2**	Quiz #1 6/5 Project Plan 6/8 CP 6/10
6/11	6/17	EDA: Module 4 Examining Relationships **Examining Relationships CHECKPOINTS #1 and #2**	Quiz #2 6/12 CP 6/17
6/18	6/24	Module 5 Probability and Module 6 Random Variables **Random Variables CHECKPOINT**	Quiz #3 6/19 Study Data 6/22 CP 6/24
6/18	6/24	Module 7: Sampling Distributions through Behavior of Sample Proportion **Sampling Distributions Checkpoint #1 Sampling Distributions Checkpoint #2**	CP 6/24
6/25	7/1	Module 8 Intro to Inference and Module 9 Interval Estimation **Estimation Checkpoint**	Quiz #4 6/26 Data Analysis 6/29 CP 7/1
7/2	7/8	Inference: Module 10 Hypothesis Testing **Hypo. Testing Checkpoint**	Quiz #5 7/3 Rough Draft 7/6 CP 7/8
7/9	7/15	Inference: Module 11 Inference for Relationships Cases C->C only **Case C->C and Q->Q Checkpoint**	Quiz #6 7/10 Final Paper 7/18 CP 7/15
7/16	6:00-7:20pm	**FINAL (All Modules)**	**SOND 205**