MATH 175: Elementary Statistics
Spring 2017

Section DB: Mondays & Wednesday from 1 – 2:30 pm in 308 Academic Hall
Section DC: Tuesdays & Thursdays from 1 – 2:30 pm in 704 West Penn

Instructor: Matt Pascal
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Website: http://facstaff.pointpark.edu/mpascal
Office Hours: Mon – Thur: 11:20 – 12:50
Course Website: http://facstaff.pointpark.edu/mpascal/175.html
Course Materials: Each student must have access to a copy of *Elementary Statistics, A Brief Version, Step-by-Step Approach (7th ed)* by Allan Bluman (ISBN 978-0-07-772058-2)

Policy Issues: All make-ups and other related issues should be directed to the course instructor. See contact information above. Make-ups may be granted with prior notification for legitimate reasons.

Course Content: In this course, you will be exposed to *data analysis* and *charts*, *rules of probability*, *conditional probability*, *distributions, random variables, sampling, confidence interval estimates, hypothesis testing, regression*, and *correlation*

Course Objectives: Students who succeed in Math 175 will be able to . . .

1. Translate mathematical problems, equations, and ideas into written expressions.
2. Define statistical terms and concepts.
3. Make use of counting methods in probability problems.
4. Apply the fundamental rules of probability.
5. Identify the properties of discrete and continuous probability distributions.
6. Apply mathematical and statistical models such as formulas, functions, graphs, and tables using technology where appropriate.
7. Solve statistical problems using appropriate technology.
8. Represent and interrelate statistical information numerically, symbolically, graphically, verbally, and visually using appropriate technology.
9. Interpret statistical models drawing conclusions and making inferences based on those models.

Methods: Multiple forms of assessment will be used to measure your progress in understanding statistics.

- **Quizzes**: There are frequent quizzes in this course. You will be given the chance to ask questions before quizzes. Quizzes cannot be made up though your four worst quiz grades will be dropped when your course grade is computed.
- **Group problems**, facilitated by the instructor, will be completed and submitted in nearly every class. Groupwork cannot be made up though your four worst group activity grades will be dropped before computing your course grade. Groupwork will be available via the course website to be used for quiz practice. If groupwork is not completed in class, then each individual group member may submit their own completed assignment in the following class for full credit.
- **Exams**: There will be two regular exams as well as a comprehensive final exam. Exams may be made up for emergencies with PROMPT notification. The final exam will cover all content from the course. The final exam schedule is made by the college and will be announced when it is available. Based upon prior semesters, the Final Exam is likely to be held at 10 am on Thursday, April 30.

Policy on Academic Integrity: Just as violation of a professional code of conduct can have severe consequences in a professional setting, violation of the standards of academic integrity in this course will have severe consequences. A student who gives or receives unauthorized assistance on graded work, or plagiarizes another's work in any way in this course will receive an automatic grade of F for the term. The instructor will impose this penalty after due consideration of all available evidence and after a formal or informal hearing with the student involved. Students may appeal the instructor's decision according to published University policy.

STUDENTS WITH DISABILITIES: Students having a certifiable disability, as defined under the Americans with Disabilities Act (ADA) of 1990, and needing reasonable accommodations, should notify the Center for Student Success (CSS), West Penn (5th floor), 412-392-8153, as early in the semester as possible, preferably during the first week of class. The CSS office will provide specific information on the Point Park University ADA policy and application procedures to the student. CSS will contact individual instructors to verify a student's eligibility and to make arrangements for reasonable accommodations.

Evaluation: Your course grade will be computed using the following distribution:

Assessment	**Portion of Grade**
Quizzes *(total of 16 @ 3 points each; two dropped)*	42%
Group Activities *(16 assignments @ 2 points each; two dropped)*	28%
Exams *(2 exams @ 9 points each)*	18%
Comprehensive Final *(12 points)*	12%

Math 175 Course Schedule – Spring 2017					
1/9 - 12	Mon/Tue	1.1 – 1.3			
	Wed/Thur	1.4 – 1.6	**Q1**		
1/16	***MLK Holiday***				
1/17 - 23	Tue/Wed		**Q2**	**G1**	
	Thur/Mon	2.1 – 2.4			
1/24 - 30	Tue/Wed		**Q3**	**G2**	
	Thur/Mon	3.1 – 3.2		**G3**	
1/31 – 2/6	Tue/Wed	3.3 – 3.4	**Q4**		
	Thur/Mon		**Q5**	**G4**	
2/7 – 2/13	Tue/Wed				**Ex1**
	Thur/Mon	4.1 – 4.2		**G5**	
2/14 – 20	Tue/Wed	4.3 – 4.4	**Q6**		
	Thur/Mon	4.5	**Q7**		
2/21 – 26	Tue/Wed		**Q8**	**G6**	
	Thur	5.1 – 5.2		**G7**	
2/27 – 3/2	*Spring Break*				
3/6	Mon	5.1 – 5.2		**G7**	
3/7 – 13	Tue/Wed	5.3	**Q9**		
	Thur/Mon		**Q10**	**G8**	
3/14 – 20	Tue/Wed	6.1 – 6.2		**G9**	
	Thur/Mon		**Q11**	**G10**	
3/21 – 27	Tue/Wed				**Ex2**
	Thur/Mon	7.1 – 7.2		**G11**	
3/28 – 4/3	Tue/Wed	7.3 – 7.4	**Q12**		
	Thur/Mon		**Q13**	**G12**	
4/4 – 10	Tue/Wed	8.1 – 8.3		**G13**	
	Thur/Mon	8.4 – 8.5	**Q14**		
4/11 – 17	Tue/Wed		**Q15**	**G14**	
	Thur/Mon	10.1 – 10.2		**G15**	
4/18 – 26	Tue/Wed		**Q16**	**G16**	
	Thur/Mon		*Final Exam Review*		
12/15	TBA				**FINAL EXAM**

<u>Math – Knowing the Content</u>

I. C. Use of mathematical communication to:

- organize and consolidate mathematical thinking
- analyze and evaluate strategies of others
- express mathematical ideas precisely

I. J. Probability and statistics including:

- measures of central tendency and variability
- axioms of probability
- properties of discrete and continuous probability
- discrete and continuous probability distributions
- statistical inference