

**MTH 212 Statistics Syllabus  
Sections D and F  
Spring 2012**

**Department:** Mathematics  
**Credit Hours:** 3  
**Prerequisite:** MTH 098 or equivalent placement test score  
**Learning Outcomes:** I Knowledge of Human Cultures and the Physical and Natural World  
II Intellectual and Practical Skills  
**Instructor:** Sister M. Marguerite Polcyn  
**Office:** MCH 205  
**Phone:** 419-824-3690  
**E-mail:** [mpolcyn@lourdes.edu](mailto:mpolcyn@lourdes.edu)  
**Office Hours:** M 3:30 – 5:00 pm  
T 10:00 – 11:00 am  
W 1:00 – 2:00 pm  
Th 3:00 – 4:30 pm  
After class  
By appointment

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**Course Description:** Considers the basic concepts of statistics and methods of statistics including descriptive statistics, probability, hypothesis tests, estimation, sampling, correlation, regression, analysis of variance, and applications.

**Purpose of the Course:** To provide the educational support for students interested in careers in education, industry, health-related, and scientific fields.

**Learning Outcomes:** This course will help the student fulfill learning outcomes I and II:

- IC Students can use knowledge and the methods of inquiry and analysis appropriate to the physical or natural sciences, the social sciences. And mathematics to develop well reasoned solutions to local and global issues.
- IIB Students can comprehensively and objectively analyze and evaluate data in order to develop an informed conclusion.
- IID Students can use mathematical or formal reasoning to answer questions or to achieve desired goals.

**Course Objectives:** Upon completion of this course, the student will be able to:

1. Describe the data using measures of central tendency, variation, and position.
2. Demonstrate an understanding of probability: classical and empirical, addition and multiplication rules, and complementary events.
3. Estimate means and proportions of populations.
4. Test hypotheses using a variety of parametric and nonparametric procedures.
5. Analyze data using statistical procedures.

**Policies:**

1. **Emergency Response:** In case of a **tornado**, your instructor will direct you to the nearest shelter in accordance with Lourdes College's [Policy for Tornado Warning and Tornado Warning Procedures](#).

In case of **fire**, your instructor will direct you to the nearest exit. Please evacuate in a calm and efficient manner. Do not use the elevator. Do not block entrances once you are out. Also, refer to the [Emergency Evacuation Procedure for Persons with Disabilities](#), if this should apply to persons in your classroom.

2. **Statement on Disabilities:** If you have documented a disability with the Director of Academic Services, please discuss with me:
  - The adaptations or the accommodations you have established with the Director of Academic Services,
  - Emergency medical information, and/or
  - Special arrangements to be implemented if the building must be evacuated.
  
3. **Policy on Academic Honesty:** Academic dishonesty will not be tolerated. This includes any form of cheating or plagiarism. (See Student Handbook.) Cheating on a test will result in a grade of 0.
  
4. **Academic Grievance Policy:** Any student wishing to register concerns should obtain a grievance form from the course instructor. (See Student Handbook.)
  
5. **Attendance Policy:** Attend class. Attendance records will be maintained. If the unforeseen happens, please contact the instructor. Poor attendance, repeated tardiness, and leaving early can result in poor performance on assignments and tests.
  
6. **Evaluation Policy:**
  1. Read all assigned materials.
  2. Complete all assignments on time. Points will be deducted for late assignments (one point/day late). No late assignments will be accepted after the test is taken on the assigned chapters. (This includes the day of the test.)
  3. Expect pop quizzes throughout the course that will be checked. These are designed to check on proper calculator usage, comprehension of new concepts, understanding of assignments, and be a review of future tests.
  4. The course grade will be based on three tests, pop quizzes, and take-home assignments. Class participation and attendance will be taken into consideration in the final grade.
  5. Unless previous arrangements are made, all tests are to be taken on the assigned test date. Proper documentation must accompany any request on or after the test date to make up the test.
  6. Failure to take the final test will result in an automatic F for the final grade.

**Evaluation:** The number of points for the evaluation instruments are as follows:

Three tests	300 points
Quizzes/Assignments	<u>50 points</u>
	350 points

<b>Grading Point System:</b>	<u>Grade</u>	<u>Number of Points</u>
	A	329-350
	A-	314-328
	B+	303-313
	B	289-302
	B-	279-288
	C+	268-278
	C	254-267
	C-	244-253
	D+	233-243
	D	219-232
	D-	209-218
	F	0-208

The tests are basically problem solving. The blue insert from the text will be used for tables and formulas. One sheet of paper will be allowed for any extra notes. This sheet will be collected with the test. The course outline notes the dates of the tests and chapters covered on each test. Absence on the day of the test will require proper documentation (ER or Physician's signature, court order, etc.) before the test can be taken.

A calculator will be needed and used in each class. Be sure you are familiar with the keys and functions on your calculator. A 6-inch ruler will be needed for graphing and for reading the many statistical tables in the text. Do not bring a laptop to class. Also, do not buy a quick study statistics guide. The formulas are not the same as those in our text.

You must earn 50 points on the pop quizzes and assignments given to you in class. If you earn less, points will be subtracted from the 50 points allotted to assignments. Any points above 50 will be added to a low test grade.

The recommended problems for study are practice problems for you to keep in your notes. The answers to these problems are found in the text.

**Required Text:**

Bluman, A.G. (2010). Elementary statistics: A brief version (5th ed.). Boston: McGraw-Hill.

**References:**

Johnson, R., & Kuby, P. (2000). Elementary statistics (8<sup>th</sup> ed.). Pacific Grove, CA: Duxbury.

Lind, D.A., Marchal, W.G., & Wathen, S.A. (2005) Statistical techniques in business economics (12 ed.). Boston: McGraw-Hill/Irwin.

Sullivan, M. (2008). Fundamentals of statistics (2<sup>nd</sup> ed.). Upper Saddle River, NJ: Pearson Prentice Hall.