## MATH 120 - Introduction to Statistics

Spring 2016 MWF 8-8:50AM
Office : By Appointment Only

Prof. Heather Makarewicz

Email: hmakarew@olivet.edu

## COURSE OBJECTIVES

1. The student will recognize the pervasiveness of statistics in everyday life, and the necessity of having an understanding of statistical thinking.
2. The student will gain and/or enhance their ability to communicate statistics to others through writing.
3. The student will gain a critical approach to evaluating statistical graphs.
4. The student will recognize that statistics is a useful tool in any discipline.
5. The student will be able to distinguish between descriptive and inferential statistics.
6. The student will be able to construct both descriptive and inferential statistics from data.
7. The student will gain a basic understanding of the field of probability.
8. The student will be able to use a variety of statistical models including t -tests, p -values and confidence intervals.

## REQUIRED MATERIALS

1. Johnson and Kuby. Elementary Statistics (11th edition), Brooks/Cole.
2. Scientific or Graphing calculator.

## COURSE REQUIREMENTS

1. There will be homework assigned for each chapter. It is done as a quiz on Canvas.
2. Daily attendance is expected, even before breaks.
3. There will be three exams and a comprehensive final exam.
4. There will be a quiz about misleading statistical graphs. Included in the quiz will be questions on the effectiveness of the graphical display and any possible misinterpretations or misuses in the display.
5. There will be a quiz about inferential statistics in research and journal articles. Included in the quiz will be questions about the problem, procedure, statistical analysis used and the results from provided research or articles.

## COURSE POLICIES

1. Attendance Policy: In the case of educational leniency, the student is to inform the instructor and make any arrangements at least two days before the absence. Otherwise, you will be allowed 3 absences from class without penalty. Further absences will result in a $1 \%$ decrease in the final grade per absence.
2. Exam Policy: Exams missed due to educational leniency must be taken before the scheduled date of the exam. Exams missed for other reasons may be made up within a week of the original exam date as long as you provide documentation (ie prescription, note from doctor, etc). I do reserve the right to give a different exam for make ups.
3. Final Exam: The final exam will be scheduled by the university is to be announced. The exam cannot be arranged to be taken at a different time.
4. Assignments and Quizzes: Homework and Quizzes will be assigned regularly and will be completed on Canvas. Homework and Quizzes will not be accepted after the window has closed.
5. Cheating Policy:

- Cheating on an exam: First offence - $0 \%$ on exam, second offence, F in course.
- Copying on HW or project: $0 \%$ on assignment, $F$ in course for multiple offences.

6. Academic Coaching: Students who are having academic difficulty are encouraged to contact the professor first. If additional help is needed, please contact the Center for Student Success at 815-9295665 to schedule an appointment. The Center provides assistance with time management, test taking skills, note taking help, goal setting and other skills necessary to help students succeed academically.

Disability Support: It is the policy of Olivet Nazarene University to accommodate students with disabilities in accordance with federal and state laws. Undergraduate students with documented disabilities should notify Dr. Sue Rattin, assessment and learning support services director (Burke 117), to request course accommodations. The Learning Development Center (Benner 015) will coordinate accommodations for students with disabilities who are approved for services.

GRADING: The tentative point breakdown is in the table below.

| Homework | 100 |
| :--- | :--- |
| Exams | 300 |
| Quizzes | 30 |
| Final Exam | 150 |
| Total Points | $\mathbf{5 8 0}$ |

The final grade will be calculated by dividing the total points earned by the total points assigned. The final grades will be assigned as indicated in the table below.

|  |  | A | $93-100 \%$ | A- | $90-92.9 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| B+ | $87-89.9 \%$ | B | $83-86.9 \%$ | B- | $80-82.9 \%$ |
| C+ | $77-79.9 \%$ | C | $73-76.9 \%$ | C- | $70-72.9 \%$ |
| D+ | $67-69.9 \%$ | D | $63-66.9 \%$ | D- | $60-62.9 \%$ |
| F | $0-59.9 \%$ |  |  |  |  |

HELP/TUTORING: The Math Help Lab is located in Burke 012. The hours are posted on the door. Students who are very knowledgeable will be there to assist you with any problems you may have. Otherwise, I check my email daily and can help before or after class. However, I am an adjunct and have no official office hours.

