TRINE
UNIVERSITY

COURSE SYLLABUS

COURSE TITLE: STATISTICS

TERM & YEAR:

COURSE & SECTION NUMBER: MA 253

TIME & PLACE:

NUMBER OF CREDIT HOURS: 3-0-3

INSTRUCTOR:

OFFICE LOCATION/HOURS:

OFFICE PHONE:

EMAIL:

COURSE DESCRIPTION: Topics include: laws of probability, frequency distributions, sampling, expectation and variance, normal and sampling distributions, hypothesis testing, least squares, point, and interval estimates of parameters. Not open to engineering/science majors.

PREREQUISITES: MA 113 College Algebra

REQUIRED TEXT:

REFERENCES:

OTHER MATERIALS: Required: Calculator - TI 84 equivalent

LEARNING OUTCOMES: Upon completion of this course, the student should be able to:

1. Identify types of data
2. Create a frequency distribution and histogram
3. Calculate mean and standard deviation
4. Solve conditional probability and Bayes' theorem problems
5. Set up and solve problems involving the binomial distribution and the normal distribution
6. Solve problems involving the sampling distribution
7. Perform hypothesis tests
8. Utilize ANOVA (Analysis of Variance)
9. Perform Chi Squared tests
10. Use Linear Regression methods

COURSE REQUIREMENTS:

ATTENDANCE/PARTICIPATION: Indicate your class attendance policy. (Remember that for Trine University to receive federal financial aid for its students, faculty are expected to take roll and be able to verify when students are and are not attending class.)

GRADING/EVALUATION: Indicate your grading procedure and the type of evaluations you plan to use.

OTHER POLICIES: You may wish to indicate policies such as the consequences of academic misconduct, methods of communication, student expectations, instructor expectations and any other policy that needs to be clarified at the beginning of the course.

ACADEMIC MISCONDUCT

The University prohibits all forms of academic misconduct. Academic misconduct refers to dishonesty in examinations (cheating), presenting the ideas or the writing of someone else as one's own (plagiarism) or knowingly furnishing false information to the University by forgery, alteration, or misuse of University documents, records, or identification. Academic dishonesty includes, but is not limited to, the following examples: permitting another student to plagiarize or cheat from one's own work, submitting an academic exercise (written work, printing, design, computer program) that has been prepared totally or in part by another, acquiring improper knowledge of the contents of an exam, using unauthorized material during an exam, submitting the same paper in two different courses without knowledge and consent of professors, or submitting a

forged grade change slip or computer tampering. The faculty member has the authority to grant a failing grade in cases of academic misconduct as well as referring the case to Student Life.

PLAGIARISM
You are expected to submit your own work and to identify any portion of work that has been borrowed from others in any form. An ignorant act of plagiarism on final versions and minor projects, such as attributing or citing inadequately, will be considered a failure to master an essential course skill and will result in an F for that assignment. A deliberate act of plagiarism, such as having someone else do your work, or submitting someone else's work as your own (e.g., from the Internet, fraternity file, etc., including homework and in-class exercises), will at least result in an F for that assignment and could result in an F for the course.

ELECTRONIC DEVICES:
Use of electronic devices including smart watches and cell phones is prohibited during exams or quizzes unless directly allowed by the instructor.

COURSE CALENDAR/SCHEDULE:

ADDITIONAL INFORMATION: You may wish to include other information here. Include information that you would repeat in lessons, practices, policies, etc.