St. Catherine University　　　　　　　**Stat 1090 – Statistical Analysis D03**
Fall, 2017　　　　　　　　　　　　　　　　　　　　　　　　**CRN: 15402**
　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　　4 credit hours

Instructor: Dr. Joe Roith　　　　　　　　　　　　**Office**: 403 D Mendel Hall
Class Time: MTWF 12:15 p.m. – 1:20 p.m.　　**Phone**: 651.690.6854 (office)
Location: Mendel Hall 410　　　　　　　　　　**E-mail**: jmroith@stkate.edu
Office Hours:　M/W 8:30 a.m. – 9:30 a.m. and 2:45 p.m. – 3:45 p.m.
　　　　　　　　　　T/TH 9:30 a.m. – 11:30 a.m.
　　　　　　　　　　or by appointment

Textbook: *Stats: Data & Models* by De Veaux, Velleman, and Bock. Pearson Education In. Fourth Edition 2016.

Other Required Course Materials:
1. Access to MyStatLab for homework and study material. You need to register for our course at: https://www.pearsonmylabandmastering.com/northamerica/mystatlab/ Also through the link on our D2L page. The course ID is: **roith84031**
2. A graphing/scientific calculator (graphing calculator is preferred but not required).

Prerequisites: High school higher algebra and appropriate level on Mathematics/Statistics Placement Assessment.

Catalog Description: Introduction to fundamental uses and misuses of statistics. Exploratory data analysis, regression and correlation, uncertainty and randomness, intuitive probability, one- and two-sample inference, one-way analysis of variance, interpretation and communication of results. Use of computers integrated throughout course. Offered every semester.

Course Goals: Students will engage in:

1. increasing awareness of data and its statistical applications in everyday events and circumstances;
2. increasing confidence and ability to critique and to construct statistical statements;
3. practicing and improving critical thinking and problem solving skills;
4. practicing and improving computational skills.

Learning Outcomes: Students will be able to:

1. use and apply descriptive statistics to organize, summarize, and display categorical and quantitative data;
2. appropriately use and interpret Standard Normal probabilities / area under the Normal curve and z-scores;
3. carry out linear regression analysis and interpret/apply characteristic measurements, such as correlation coefficient, slope and intercept values;
4. understand and use simulation to model/estimate outcomes;
5. understand and apply the concept of randomness and its use in sampling methods and
6. experiments;
7. understand and apply basic rules of probability and discrete probability distributions;
8. appropriately identify, apply, and interpret statistical inference procedures, including confidence intervals, hypothesis testing.

Grading: Course grades will be determined by the following:

MyStatLab Homework: Assignments for each chapter available online. Check MyStatLab calendar for due dates. Late homework incurs 10% penalty per day. Lowest 2 scores will be dropped. Make-ups only allowed for documented emergencies.

Quizzes: Every week on Friday, other than those with an exam, we will have a short quiz in class. ***No make-up quizzes will be given.*** Your lowest quiz score will be dropped.

In-class: Participate in class/group discussions and activities. Occasionally you will be required to turn in worksheets (not graded for correctness).
Discuss + Questions – Cellphones = All the points

Tests: Three (3) exams (paper and pencil) will be given during class on the dates specified on the calendar. No exam will be dropped. A make-up test will be given only in the case of a verifiable emergency and only if you contact me **prior** to the test.

Final Exam: The mandatory cumulative Final Exam will be given on **Thursday December 21, 1:30 p.m. – 3:30 p.m.**

Point Summary:

In-class Activities	10%
Homework	15%
Quizzes	15%
Exam 1	15%
Exam 2	15%
Exam 3	15%
Final Exam	15%

Grading Scale:

		93.0 – 100	A	90.0 – 92.9	A-
87.0 – 89.9	B+	83.0 – 86.9	B	80.0 – 82.9	B-
77.0 – 79.9	C+	73.0 – 76.9	C	70.0 – 72.9	C-
67.0 – 69.9	D+	60.0 – 66.9	D	59.9 & below	F

Incomplete Grades (Catalog statement): A grade of incomplete is given only when unusual circumstances deem it appropriate. Ordinarily, such circumstances would involve matters that are not wholly within your control, such as illness. If you wish to receive an incomplete grade you must complete a Petition for Incomplete Grade form (available online) no later than the last day of the term in which course requirements are due. You must be making satisfactory progress in the course and you must have completed 75% of the course at the time the petition is filed. Incompletes are awarded at the instructor's discretion. If granted, the normal deadline for completion of the work is no more than 8 weeks after the last day of classes in the session or sub-session in which the course is offered. The instructor may establish a due date after the normal deadline if you request it and special circumstances warrant it. The instructor will submit an alternate grade that will automatically be recorded if you do not complete the requirements for the course by the deadline. If you complete the course requirements in the time allotted, the instructor must submit the final grade by the deadline. Extensions to the due date originally agreed to by you and your instructor must be approved by the appropriate academic dean**.**

Attendance: Attendance is required for ALL class meetings. If you must be absent, it is **your responsibility** to get the lecture notes and handouts.

Religious holidays*:* I want to be sensitive to the honoring of your observation of religious and spiritual holidays. Please speak with me in advance regarding an absence for this reason.

Academic Integrity: Academic integrity is expected of all students as explained in the "Academic Integrity Policy" found in the catalog:
http://catalog.stkate.edu/undergraduate/student-rights-responsibilities/academic-integrity-policy/

Kateway/D2L: I will be posting messages, handouts, notes, activities, etc. on D2L. Be sure to check this site regularly.

O'Neill Center/Tutors: Drop-in tutoring is available in the O'Neill Center (on the lower level of Coeur de Catherine). You can check the schedule for available times.

Accommodations: SCU is committed to equal access for all and recognizes that disability is an aspect of diversity. The University's goal is to create learning environments that are usable, equitable, inclusive and welcoming. If there are aspects of the instruction or design of this course that result in barriers to the learning environment, accurate assessment or your achievement, please contact the Resources of Disabilities Office as soon as possible. Access Consultants can be reached in the O'Neill Center at 651-690-6563 to discuss academic adjustments or accommodations.

Stat 1090 advances the attainment of the University's "Goals of a Liberal Arts Education", specifically as this course prepares students to explore the nature of critical thinking in mathematics. Specific liberal arts goals addressed in this course include Critical and Creative Inquiry and Discipline-Based Competence.

Common courtesy and respect, particularly within the computer classroom, is extremely important and highly valued. It is expected that **NO** viewing of personal websites/accounts such as email, Facebook, etc. or sending items of any kind to the printer will occur during class time.

Stat 1090 MTWF 12:15 – 1:20 Mendel 410

Tentative Schedule:

Week 1 Sept 6 – 8   Introduction, Ch. 1

Week 2 Sept 11 – 15   Ch. 2, Ch. 3

Week 3 Sept 18 – 22   Ch. 3, Ch. 4

Week 4 Sept 25 – 29   Ch. 4, Ch. 5

Week 5 Oct 2 – Oct 6   Ch. 5, Review
           Friday, Exam 1: Part I

Week 6 Oct 8 – 13   Ch. 6, Ch. 7

Week 7 Oct 16 – 20   Ch. 7

Week 8 Oct 23 – 25   Ch. 8, Ch. 10, Ch. 11
           No class Oct 27 – Mid-term break

Week 9 Oct 30 – Nov 3   Ch. 12, Review
           Friday Exam 2: Part II and III

Week 10 Nov 6 – 10   Ch. 17

Week 11 Nov 13 – 17   Ch. 18, Ch. 19

Week 12 Nov 20 – 22   Ch. 19, Ch. 20
           Thanksgiving break, no classes Nov 23 & 24

Week 13 Nov 27 – Dec 1   Ch. 20, Ch. 21, Review
           Friday Exam 3: Part V

Week 14 Dec 4 – 8   Ch. 22, Ch. 24

Week 15 Dec 11 - 15   Ch. 24, Ch. 26, Review
           Final Exam Thursday December 21, 1:30 p.m. – 3:30 p.m.
               Topic: Cumulative

Dates to be mindful of:

- Last day to drop the course with no W recorded: September 13
- Last day to add a course: September 19
- Last day to designate S/U grading option: November 10
- Last day to withdraw from a course: November 10