

# STAT 145 : INTRODUCTION TO PROBABILITY AND STATISTICS

Section 501 (T/Th 4:30- 5:45), CRN 22940

Fall 2018

**Instructor:** Ian Burch

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**Office and Hours:** A123 M/T/W/Th 10:00 - 11:00

A123 M/W 1:30 - 2:30

Stem Center T/Th - 12:00 - 1:00

## Course Goals

Techniques for the visual presentation of numerical data, descriptive statistics, introduction to probability and basic probability models used in statistics, introduction to sampling and statistical inference, and a variety of statistical tests illustrated by examples from a variety of fields. Meets New Mexico Lower-Division General Education Common Core Curriculum Area II: Mathematics (NMCCN 1113).

**Prerequisites:** ACT=>22 or SAT =>510 or COMPASS Algebra >54 or COMPASS College Algebra >33 or (MATH 101 and MATH 102) or (MATH 118 and MATH 119) or MATH 120 or MATH 121 or MATH 123 or MATH 150 or MATH 162 or MATH 163 or MATH 180 or MATH 181 or MATH 264.

**Materials:** Gould/Ryan, *Introductory Statistics: Exploring the World Through Data 2<sup>nd</sup> Edition*

StatLab course code: **burch24778**, Pearson website access code (student purchase, with text or via the site).

**Expectations:** Students are expected to conduct themselves in a professional and collegial manner. Please refrain from using cell phones during class unless approved in advance by instructor. Absences may be excused only with a documented reason, preferably given in advance. Students with more than 4 absences may be dropped from the course

**Disability Statement:** If you have a documented disability, please provide me with a copy of your letter from Equal Access Services as soon as possible to ensure that accommodations are provided in a timely manner. If you feel you need accommodations but have not documented your disability, please contact Jeanne Lujan, the coordinator for Equal Access Services at 925-8910 or [jmlujan@unm.edu](mailto:jmlujan@unm.edu)

**Academic Honesty:** Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, including dismissal, against any student who is found responsible for academic dishonesty. Any student who has been judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course. Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests or assignments, claiming credit for work not done or done by others; hindering the academic work of other students; and misrepresenting academic or professional qualifications within or outside the University.

**Title IX :** In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants (TA), and Graduate Assistants (GA) are considered responsible employees. This designation requires that any report made to a faculty member, TA, or GA regarding sexual misconduct or gender discrimination must be reported to the Office of Equal Opportunity and the Title IX Coordinator. For more information on the campus policy regarding sexual misconduct, see: <https://policy.unm.edu/university-policies/2000/2740.html>

**Late Work :**

Homework past the due date will not be accepted without an emailed or written request prior to the deadline.

**Grade Breakdown**

Final Exam	25%
Midterm Exam	20%
Homework	20%
Projects	15%
Quizzes	15%
Attendance	5%

Letter grades will be given as follows, with + or - given for the highest and lowest 3% in each range, respectively.

90% - 100%	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
0% - 59%	F

Earning a 70% or above in the course is a condition for passing, although some subsequent courses may require a C (73%) or above in this course in order to qualify.

**Tentative Schedule :**

Week 1: Basic Statistics & Graphs	Week 9: Margin of Error
Week 2: More Graphs & Variance	Week 10: T-Tests
Week 3: Normal Distributions	Week 11: More T-Tests
Week 4: Probability	Week 12: Linear Regression
Week 5: Central Limit Theorem	Week 13: TBD
Week 6: Z-Tests	Week 14: Chi-Squared
Week 7: Proportion Tests	Week 15: Chi-Squared
Week 8: Review & Midterm (Oct 10th)	Week 16: Review & Final