

# STATISTICS MULTI DISCIPLINES (STAM)

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## **STAM 200 Introduction to Statistics Units: 3.00**

An introduction to the analysis of data from real life situations. Covers study design, descriptive and inferential statistics. Topics include probability, t-tests, regression, Chi-square tests, analysis of variance. Emphasis is in the foundation of statistical inference and practical application of statistical methods using statistical software.

NOTE Offered online, consult Arts and Science Online.

NOTE Also offered at Bader College, UK (Learning Hours may vary).

**Learning Hours:** 120 (96 Online Activity, 24 Private Study)

**Requirements:** Prerequisite None. Exclusion BIOL 243/3.0; CHEE 209/3.5; COMM 162/3.0; ECON 250/3.0; GPHY 247/3.0; HSCI 190/3.0; KNPE 251/3.0; NURS 323/3.0; POLS 285/3.0; POLS 385/3.0\*; PSYC 202/3.0; SOCY 211/3.0; STAT 263/3.0.

One-Way Exclusion May not be taken with or after STAT 269/3.0.

**Offering Faculty:** Faculty of Arts and Science

### **Course Learning Outcomes:**

1. Develop an appropriate study design for a given question, and define the accompanying statistical population, sample and observation unit.
2. Distinguish descriptive statistics from inferential statistics, and define the role of each in quantitative analyses.
3. Compute descriptive statistics for a dataset using contemporary software and create the appropriate visualizations.
4. Identify and conduct the appropriate statistical test for a question and dataset using contemporary software.
5. Interpret the results of statistical tests and data software output to draw valid conclusions, and communicate them in written form.
6. Apply knowledge of statistics and research design (e.g., sampling) to critically evaluate research findings.