

**MCS142: INTRODUCTION TO STATISTICS  
SYLLABUS Spring2012**

**INSTRUCTOR:** Aaron Nienow  
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**COURSE MATERIALS:**

**Text:** Introduction to the Practice of Statistics, by David S. Moore and George McCabe (6th Edition)

**Calculator:** TI-83, TI-83+, TI-83+Silver Edition, TI-84+, TI-84+ Silver Edition

**Class time:** Section 001 9:00 in Olin 321

Section 002 10:30 in Olin 321

**Office Hours:** MWHF 1:30, T By Appointment

**Pre-requisite:** Calculus 1 (MCS121) or equivalent

**General Education Requirement:** MATHL

**COURSE OBJECTIVES:** Upon completion of this course, a student will:

- Understand fundamental statistical terminology and notation.
- Apply statistical concepts in real-world settings.
- Select appropriate graphical techniques in a particular setting.
- Apply fundamental graphing principles to create graphical displays.
- Identify misleading or deceptive graphical displays.
- Interpret statistical information in a variety of disciplines and settings.
- Choose a suitable statistical procedure for a specific problem.
- Recognize the capabilities and limitations of statistical inference.
- Perform statistical calculations using appropriate technology.
- Critique published statistical information.

<b>TENTATIVE TOPIC SCHEDULE</b>	<b>SECTIONS</b>
<b>Visual Displays (pie charts, bar graphs, histograms, stem-and-leaf plots)</b>	1.1
<b>Numerical Measures (measures of center and spread, box-and-whisker plots)</b>	1.2
<b>Probability</b>	4.1-4.4
<b>Normal Distribution</b>	1.3
<b>Sampling</b>	3.3
<b>Sampling Distributions (Central Limit Theorem)</b>	3.4, 5.2
<b>Confidence Intervals for a Population Parameter</b>	6.1, 7.1, 8.1
<b>Tests of Significance for a Population Parameter</b>	6.2, 7.2, 8.1
<b>Experimental Design</b>	3.1, 3.2
<b>Inference for Two Populations</b>	7.2, 8.2
<b>Simple Linear Regression</b>	10.1, 10.2

## ASSESSMENT AND GRADING:

The final grade will consist of the following components:

COMPONENT	%	DUE DATES AND OTHER INFORMATION
Exams	35	50 point Midterm and a 100 point Final
Quizzes	30	In class / Out of class
Homework	20	Twice a week
Articles & Presentation	10	Details on separate handout
Class Attendance	5	Attendance will be taken on 20 randomly selected days

## TENTATIVE GRADING SCALE:

A (100-93), A- (93-90), B+ (90-87), B (87-83), B- (83-80), C+ (80-77), C (77-73), C- (73-70), D (70-60), F (60-0)

## COURSE EXPECTATIONS AND POLICIES:

- Turn off cell phones during class.
- Bring your calculator to class every day.
- Attend EVERY class.  
If you must be absent, please notify me in advance (if possible) by e-mail or voice mail. You are responsible for obtaining all materials and information covered in your absence.
- Be prepared for every class—bring completed assignments.
- Participate fully in each class by asking questions and contributing to in-class activities.
- Due dates for all assignments, quizzes, and exams are non-negotiable. No late homework!
- All work submitted must be legible, well organized and labeled, and stapled together. No frayed edges! Include the homework assignment number as well as the assigned problems on all homework.

## COLLEGE POLICIES:

### Academic Honesty Policy

The faculty of Gustavus Adolphus College expects all students to adhere to the highest standards of academic honesty, and to refrain from any action that impinges upon academic freedom of other members of the college community. In all academic exercises, examinations, presentations, speeches, papers, and reports, students shall submit their own work. Footnotes or some other acceptable form of citation must accompany any use of another's words or ideas. Students are especially cautioned that quoting or paraphrasing from electronic sources without proper citation is as serious a violation as copying from a book or other printed source.

In the case of cheating or plagiarism, the instructor will inform the student and the Office of the Provost of the nature of the offense, the penalty within the course, and the recommendation of the instructor as to whether further disciplinary action is warranted. Another instance of academic dishonesty will result in review of the student's record by the probation committee and may result in the student being placed on academic probation. If a pattern of academic dishonesty continues, the student may be permanently dismissed from the College.

A student may not submit work that is substantially the same in two courses without first gaining permission of both instructors if the courses are taken concurrently, or permission of the current instructor if the work had been submitted in a previous semester.

The faculty regards the damaging of library materials and failing to sign out or to return them properly, and the misuse of computer files and programs as equally serious violations of the ethical standards of courtesy, fairness, and honesty that bind together a community of scholars.

Individuals who use the College's computer facilities assume the responsibility of seeing that these resources are used in an appropriate manner. Misuse of computer hardware, software, data, and output is a violation of College policy and regulations and may also be a violation of law if data of other computer users are disturbed or the privacy of individuals is violated.

Finally, students who serve the College in positions of responsibility in which they deal with test materials, letters of recommendation, and other matters that must be held in confidence are expected to maintain confidentiality and to adhere to the same high standards of personal integrity.

**Disability Services** Gustavus Adolphus College is committed to ensuring the full participation of all students in its programs. If you have a documented disability (or you think you may have a disability of any nature) and, as a result, need reasonable academic accommodation to participate in class, take tests or benefit from the College's services, then you should speak with the Disability Services Coordinator, for a confidential discussion of your needs and appropriate plans. Course requirements cannot be waived, but reasonable accommodations may be provided based on disability documentation and course outcomes. Accommodations cannot be made retroactively; therefore, to maximize your academic success at Gustavus, please contact Disability Services as early as possible. Disability Services <https://gustavus.edu/advising/disability/> is located in the Advising and Counseling Center. Disability Services Coordinator [Laurie Bickett](#) or x6286) can provide further information.