Communication Studies (CMNS) 308

Understanding Statistical Evidence (Revision 7)

Status:	Replaced with new revision, see the **course listing** for the current revision
Delivery mode:	**Individualized study online**
Credits:	3
Areas of study:	Arts or Social Science
Prerequisites:	None; however, fundamental mathematical skills are required. The university offers an **online test** containing 70 questions that will help you assess your mathematical skills. If you are unsure about your ability to complete CMNS 308, you may wish to register in **MATH 100** (a non-credit course) designed to assist students in strengthening their mathematical skills. You may also wish to contact the course coordinator for CMNS 308.
Precluded:	CMNS 308 may not be taken for credit if credit has already been obtained for HSRV 308.

Challenge:	CMNS 308 has a challenge for credit option.
Faculty:	**Faculty of Humanities and Social Sciences**

Overview

Many people working in journalism, public relations and other communications fields need to be able to understand how statistics are used in order to present information and frame arguments. This course is designed for those who want to become critical consumers of statistical evidence. It emphasizes a conceptual rather than a computational approach to learning statistics. Using examples taken from popular media, the course explains how people use and abuse statistics for purposes of persuasion and influence.

Outline

There are eight units in the course.

Unit 1: Why Study Statistics?

The history of statistics, the importance of studying statistics, and the scope, structure, and mechanics of the course.

Unit 2: The Significance of Sampling

Sampling procedures used to draw appropriate samples in order to make reliable and valid statements about populations; how to evaluate the results of surveys and polls.

Unit 3: Understanding Scientific Experiments

Introduction to experimental designs and their implications for making causal statements; recognizing elements of bias in designs.

Unit 4: Measurement

A focus on the reliability and validity of the numbers generated in research; making informed judgements about reported conclusions based on numbers.

Unit 5: Describing Distributions

The ways in which numbers are organized and displayed, and the importance of measures of central tendency, dispersion or variability, and “normal” distributions; making accurate interpretations.

Unit 6: Understanding Relationships

Relationships between measures, or variables; understanding the results of multiple-variable research and the validity of related conclusions.

Unit 7: Probability: The Language of Chance

The language of probability, or the degree of likelihood of the occurrence of an event; the importance of probability for statistical tests of significance.

Unit 8: Inference: Conclusions with Confidence

Methods for drawing formal conclusions from data; making informed judgements about the use and abuse of inferential techniques. Unit 8 summarizes the course.

Evaluation

To **receive credit** for CMNS 308, you must complete all of the assignments, achieve a grade of at least 50 percent on the Final Assessment, and an overall course grade of at least a **D (50 percent)** .

Activity	Weight	Complete by
Assignment 1	6%	After Unit 2

Activity	Weight	Complete by
Assignment 2	6%	After Unit 4
Online Quiz 1	4%	After Unit 4
Essay	6%	After Unit 4
Assignment 3	6%	After Unit 5
Assignment 4	6%	After Unit 6
Online Quiz 2	4%	After Unit 6
Assignment 5	6%	Unit 7
Assignment 6	6%	Unit 8
Online Quiz 3	4%	After Unit 8
Course End Project	14%	After Unit 8
Final Assessment	32%	
Total	**100%**	

To learn more about assignments and examinations, please refer to Athabasca University's **online Calendar** .

Materials

Crossen, Cynthia. (1994). *Tainted truth: The manipulation of fact in America*. New York: Simon and Schuster. (Print)

Moore, D. S., & Notz, W. I. (2020). *Statistics: Concepts and controversies* (10th ed.). New York: W. H. Freeman. (Print)

All other course materials are available online. They include an extensive study guide and the publisher's interactive resources that accompany the textbook *Statistics: Concepts and Controversies*.

Challenge for credit

Overview

The challenge for credit process allows you to demonstrate that you have acquired a command of the general subject matter, knowledge, intellectual and/or other skills that would normally be found in a university-level course.

Full information about **challenge for credit** can be found in the Undergraduate Calendar.

Evaluation

To **receive credit** for the CMNS 308 challenge registration, you must achieve a grade of at least **D (50 percent)** on the two-part challenge assessment.

Activity	Weight
Part I: Essay Assessment	50%
Part II: Test Assessment	50%
Total	**100%**

Challenge for credit course registration form

Important links

- **Academic advising**
- **Program planning**
- **Request assistance**
- **Support services**

Athabasca University reserves the right to amend course outlines occasionally and without notice. Courses offered by other delivery methods may vary from their individualized study counterparts.

Opened in Revision 7, December 14, 2020

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View **previous revision**