

CATALOG INFORMATION

Dept and Nbr: MATH 215 Title: STAT CONCURRENT SUPPORT
Full Title: Elementary Statistics Concurrent Support
Last Reviewed: 10/22/2018

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	2.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	2.00	Lab Scheduled	0	8	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	35.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00

Total Student Learning Hours: 105.00

Title 5 Category: AA Degree Applicable
Grading: P/NP Only
Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:
Formerly:

Catalog Description:
A review of the core prerequisite skills, competencies, and concepts needed in statistics. Intended for students who are concurrently enrolled in (MATH 15) Elementary Statistics. Topics include concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand the basics of college-level statistics. Additional emphasis is placed on solving and graphing linear equations and modeling with linear functions.

Prerequisites/Corequisites:
Concurrent Enrollment in MATH 15

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: A review of the core prerequisite skills, competencies, and concepts needed in statistics. Intended for students who are concurrently enrolled in (MATH 15) Elementary Statistics. Topics include concepts from arithmetic, pre-algebra, elementary and intermediate

algebra, and descriptive statistics that are needed to understand the basics of college-level statistics. Additional emphasis is placed on solving and graphing linear equations and modeling with linear functions. (P/NP Only)

Prerequisites/Corequisites: Concurrent Enrollment in MATH 15

Recommended:

Limits on Enrollment:

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area	Effective:	Inactive:
CSU GE:	Transfer Area	Effective:	Inactive:
IGETC:	Transfer Area	Effective:	Inactive:
CSU Transfer:		Effective:	Inactive:
UC Transfer:		Effective:	Inactive:

CID:

Certificate/Major Applicable:

Not Certificate/Major Applicable

Approval and Dates

Version:	01	Course Created/Approved:	10/22/2018
Version Created:	9/14/2018	Course Last Modified:	12/30/2023
Submitter:	Ivana Gorgievska	Course last full review:	10/22/2018
Version Status:	Approved New Course (First Version)	Prereq Created/Approved:	10/22/2018
Version Status Date:	10/22/2018	Semester Last Taught:	Fall 2023
Version Term Effective:	Summer 2019	Term Inactive:	

COURSE CONTENT

Student Learning Outcomes:

At the conclusion of this course, the student should be able to:

1. Apply arithmetic, pre-algebra, and algebra skills necessary for success in Elementary Statistics.
2. Apply knowledge of algebra and descriptive statistics to inferential statistics.

Objectives:

At the conclusion of this course, the student should be able to:

1. Apply statistics-related pre-algebra skills necessary for success in Elementary Statistics.
2. Apply statistics-related algebra skills necessary for success in Elementary Statistics.
3. Apply descriptive statistics to communicate findings in the context of the data.
4. Apply knowledge of linear functions to construct, use, and interpret mathematical models to represent and communicate relationships in quantitative data.
5. Apply proportional reasoning, percents, and fractions to probability problems found in an Elementary Statistics course.

6. Recognize the distinction between sample statistics and population parameters and interpret the results of statistical inference contextually.
7. Use technology to solve problems found in an Elementary Statistics course, such as calculating probabilities, data exploration, regression, and statistical inference.
8. Apply effective learning strategies for success in college.

Topics and Scope:

- I. Topics from Pre-Algebra: Review of Pre-Algebra Topics, as Needed, in the Context of Statistics That May Include:
 - A. Arithmetic of signed numbers
 - B. Conversion of verbal descriptions of inequalities to interval form, graphical and algebraic form
 - C. Operations with fractions, as needed, proportions, ratios and percent
 - D. Exponents, square roots, scientific notation
 - E. Simplification of algebraic expressions; order of operations
 - F. Graphing fractions, decimals, and signed numbers on a number line
 - G. Graphing ordered pairs in the Cartesian coordinate system
- II. Topics from Beginning and Intermediate Algebra: Review of Algebra Topics, as Needed, in the Context of Statistics That May Include:
 - A. Evaluation of expressions and formulas
 - B. Mathematical models
 - C. Linear functions, constant rate of change, graphing, interpreting slope and y-intercept in context
 - D. Scatterplots and regression lines
 - E. Area under the graph of a function
- III. Topics from Elementary Statistics: Concurrent Support for Statistical Topics That May Include:
 - A. Summarizing and communicating essential features of data sets
 - B. Interpreting results of statistical inference in context
 - C. Calculating probabilities and using the rules of probability in applied situations
- IV. Technology (Calculator or Computer Software)
 - A. Evaluate Formulas
 - B. Calculate probabilities
 - C. Analyze data
 - D. Perform statistical inference
- V. Topics Related To Developing Effective Learning Skills
 - A. Study skills: organization and time management, test preparation and test-taking skills
 - B. Self-assessment: using performance criteria to judge and improve one's own work, analyzing and correcting errors on one's test
 - C. Use of resources: strategies identifying, utilizing, and evaluating the effectiveness of resources in improving one's own learning, e.g., peer study groups, computer resources, lab resources, tutoring resources

Assignment:

1. Reading outside of class (0-60 pages per week)
2. Problem sets (5-16 per week)

3. Quizzes (0-4 per week)
4. Projects (0-5)
5. Exams (0-5)
6. Final exam

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments are more appropriate for this course.

Writing
0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Problem sets

Problem solving
5 - 80%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations
0 - 0%

Exams: All forms of formal testing, other than skill performance exams.

Exams and quizzes

Exams
20 - 50%

Other: Includes any assessment tools that do not logically fit into the above categories.

Projects

Other Category
0 - 50%

Representative Textbooks and Materials:

Elementary Statistics. 13th ed. Triola, Mario. Pearson. 2018

Mathematics in Action: An Introduction to Algebraic, Graphical, and Numerical Problem Solving. 5th ed. The Consortium for Foundation Mathematics. Pearson. 2016

Intermediate Algebra: Functions & Authentic Applications. 5th ed. Pearson. 2015

Instructor prepared materials

OTHER REQUIRED ELEMENTS

STUDENT PREPARATION

Matric Assessment Required:		Unknown
Prerequisites-generate description:	A	Auto-Generated Text
Advisories-generate description:	NA	No Advisory
Prereq-provisional:	N	NO
Prereq/coreq-registration check:	Y	Prerequisite Rules Exist
Requires instructor signature:	N	Instructor's Signature Not Required

BASIC INFORMATION, HOURS/UNITS & REPEATABILITY

Method of instruction:	02	Lecture
Area department:	MATH	Mathematics
Division:	73	Science, Technology, Engineering & Mathematics
Special topic course:	N	Not a Special Topic Course
Program status:	2	Not Certificate/Major Applicable
Repeatability:	00	Two Repeats if Grade was D, F, NC, or NP
Repeat group id:		

SCHEDULING

Audit allowed:	N	Not Auditable
Open entry/exit:	N	Not Open Entry/Open Exit
Credit by exam:	N	Credit by examination not allowed
Budget code: Program:	0000	Unrestricted
Budget code: Activity:	1701	Mathematics-General

OTHER CODES

Discipline:	Mathematics	
Basic skills:	N	Not a Basic Skills Course
Level below transfer:	A	1 Level Below the Transferable Level
CVU/CVC status:	N	Not Distance Ed
Distance Ed Approved:	N	
Emergency Distance Ed Approved:	Y	Fully Online Partially Online Online with flexible in-person activities
Credit for Prior Learning:	N	Agency Exam
	N	CBE
	N	Industry Credentials
	N	Portfolio
Non-credit category:	Y	Not Applicable, Credit Course
Classification:	Y	Liberal Arts and Sciences Courses
SAM classification:	E	Non-Occupational
TOP code:	1701.00	Mathematics, General
Work-based learning:	N	Does Not Include Work-Based Learning
DSPS course:	N	Not a DSPS Course
In-service:	N	Not an in-Service Course