

MATH 120 - Fundamentals of College Mathematics (3 Credits)

DESCRIPTION:

Topics include probability, statistics, geometry, and consumer mathematics. It may include problem solving, sets, logic, mathematical systems, numeration, and measurement. Course is broad in scope, emphasizing applications. Prerequisite: MATH 096 or MATH 097 both with a grade of C or better; or a satisfactory ACT/SAT/Placement Test score.

TEXT:

Mathematics in Our World; 1st Edition; Bluman

NOTE: Full-time instructors have the right to use no text or a different text.

OUTLINE:

The indicated topics from **ALL** of the following chapters must be covered.

Ch 09 - Sections 9.1, 9.2, 9.3, 9.4, 9.5

Ch 10 - Sections 10.2, 10.3, 10.4, 10.5

Note: Sections 10.1, 10.6, 10.7 are optional

Ch 11 - Sections 11.1, 11.2, 11.3, 11.5, 11.6, 11.7, 11.8

Note: Section 11.4 is optional

Ch 12 - Sections 12.1, 12.2, 12.3, 12.5

Note: Sections 12.4, 12.6, 12.7, 12.8 are optional

The indicated topics from **at least two** of the following chapters must be covered.

NOTE: Topics found in Chapters 5, 7 & 8 are considered prerequisite materials and should not be covered.

Ch 1 - Sections 1.1, 1.2 & 1.3

Ch 2 - Sections 2.1, 2.2, 2.3, 2.4

Note: Section 2.5 is optional

Ch 3 - Sections 3.1, 3.2, 3.3

Note: Sections 3.4 and 3.5 are optional

Ch 4 - Sections 4.1, 4.2, 4.3

Ch 6 - Sections 6.1, 6.2, 6.3

Ch 13 - Sections 13.1, 13.2, 13.3

OUTCOMES:

- a. Determine the probability and odds of an event.
- b. Determine the expected value of an event.
- c. Read, create and understand tree diagrams.
- d. Work with basic statistical operations.
- e. Identify, interpret, and create various statistical graphs and plots.
- f. Calculate perimeters and areas.
- g. Work with congruent and similar triangles.
- h. Solve problems involving simple and compound interest.
- i. Perform basic calculations with installment buying and mortgages.
- j. Apply and extend all concepts.

EVALUATION:

Grades will be determined by student performance in one or more of the following areas: in-class tests, take-home tests, homework assignments, quizzes, special projects, papers, attendance, and class participation. Degree of importance and types of assessment used will depend on the instructor. However, at least 50% of the course grade used is to be determined by proctored individual exams/assessments.

This course satisfies or partially satisfies the Math component of a degree or certificate program at CSN.