

Effective: Fall 2024

COURSE INFORMATION

Course Title: Mathematics for Everyday Life

Course Number: MATH 197

Credits: 3

Total Weeks: 14 (Fall, Spring)
12 (Summer)

Total Hours: 39

Course Level: ☒ First Year ☐ Second Year
☐ New ☐ Revised Course
☐ Replacement Course

Department: Math / Statistics

Department Head: G. Belchev

Former Course Code(s) and Number(s) (if applicable): N/A

Pre-requisites (If there are no prerequisites, type NONE): PREC 11 (minimum grade of C-) or Foundations of Math 11 (minimum grade of C)

Co-requisite Statement (List if applicable or type NONE): NONE

Precluded Courses: N/A

COURSE DESCRIPTION

This course explores topics in mathematics that are being used in our everyday life to improve our quantitative reasoning and decision-making, as well as to develop an appreciation for the power and beauty of mathematics. A wide range of topics such as the probability of winning the lottery, the likelihood of getting a false positive for a disease, compound interest and exponential growth and statistical reasoning are investigated in this course.

LEARNING OUTCOMES

Upon successful completion of the course, students will be able to:

- Reflect on the role that mathematics has played in their lives, both past and present.
- Explore the potential role of mathematics in their future.
- Use flexible, effective, and personalized strategies to analyze and solve increasingly complex problems in situational contexts.
- Become financially literate, which supports and underpins sound financial decision making.
- Develop the perseverance and confidence to apply mathematical thinking in everyday life.
- View and navigate their world with a mathematical perspective.
- Develop a capacity for abstract thinking, which includes the critical thinking skills necessary for understanding global issues in society.

INSTRUCTION AND GRADING

Instructional (Contact) Hours:

Type	Duration
Lecture	39
Seminars/Tutorials	
Laboratory	
Field Experience	
Other (<i>specify</i>):	
Total	39

Grading System: Letter Grades ☒ Percentage ☐ Pass/Fail ☐ Satisfactory/Unsatisfactory ☐ Other ☐

Specify passing grade: 50%

Evaluation Activities and Weighting (total must equal 100%)

Assignments: 10% <i>Weekly assignment through online platform</i>	Lab Work: %	Participation: % <i>Specify nature of participation:</i>	Project: % <i>Specify nature of project:</i>
Quizzes/Test: %	Midterm Exam: 50% Midterm 1 (25%) Midterm 2 (25%)	Final Exam: 40%	Other: % <i>Specify:</i>

TEXT(S) AND RESOURCE MATERIALS

Provide a full reference for each text and/or resource material and include whether required/not required.

Bennett, J. O., & Briggs, W. L. (2019). *Using and understanding mathematics: a quantitative reasoning approach, 7th Edition*. Boston: Pearson.

COURSE TOPICS

List topics and sequence covered.

Week	Topic	Chapter
Week 1	Language and Notation of Mathematics	1
Week 2	Critical Thinking	1
Week 3	Problem Solving	2
Week 4	Percentage, Ratio, and Number Sense	3
Week 5	Linear and Exponential Growth	8
Week 6	Financial Mathematics	4

Week 7	Review MIDTERM EXAM	
Week 8	Counting and Probability I	7
Week 9	Counting and Probability II	7
Week 10	Statistical Reasoning I	5
Week 11	Statistical Reasoning II	6
Week 12	Mathematics in Art and Music	11
Week 13	Mathematics and Politics	12
Week 14	Review FINAL EXAM	

NOTES

1. Students are required to follow all College policies. Policies are available on the website at: [Coquitlam College Policies](#)
2. To find out how this course transfers, visit the BC Transfer Guide at: bctransferguide.ca

Last Revised: September 2024

Last Reviewed: September 2024