

Policies

Attendance: Your engagement and participation in class activities is important. Please try to notify your instructor in advance of any planned absences.

Basic Needs: Any student who faces challenges securing food, housing, or other basic needs and believes this may affect their performance in this course is urged to contact Ms. Denine Rocco, Dean of Students (508-531-1276 drocco@bridgew.edu). Please also notify your instructor if you are comfortable doing so.

Collaboration: Working collaboratively with your classmates is highly encouraged. However, the work you hand in on individual assignments must be your own. Collaboration on assignments which do not permit collaboration will constitute a violation of the BSU Policy on Academic Integrity.

Coupons: Every student begins with five (5) coupons redeemable for additional revisions, see pp. 2-3.

Disability Resources: In compliance with BSU policy and equal access law, your instructor is available to discuss appropriate accommodations you may require as a student with a disability. Requests for academic accommodation must be made during the add/drop period. Students are encouraged to register with the Disability Resources Office (Academic Achievement Center, Maxwell Library) for determination of reasonable accommodations.

Tutoring: Math Services offers tutoring for this course at no cost to students, located in the Academic Achievement Center. Tutoring is available on a drop-in basis, or (preferred) by appointment. Hours of operation: Monday & Thursday 8:00-5:00 Tuesday & Wednesday 8:00-8:00 Friday 8:00-3:00 Appointments at bsumath.com.

Learning Plan for Our Course

Dates listed subject to change.

		<i>Complete in Knewton Alta</i>					<i>Blackboard, Pencil/Paper Opportunities for Mastery = 2 \checkmark per row</i>
		<i>"Me Time:" Complete introductory tasks on own. Due Tuesdays.</i>		<i>"We Time:" Complete more advanced tasks with a group, then quiz. Due Saturdays.</i>			
Sun	Mon	Tue	Wed	Thu	Fri	Sat	
			Complete preliminary 9/8 tasks; course introductions				Quiz Exam
1		9/11 Sets; Venn diagrams	Use Venn diagrams to depict subset relationships		9/15		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2		9/18 Operations on Sets	Apply include/exclude method to 3-set survey data		9/22		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3		9/25 Logic Statements	Identify and critique the form of logical arguments		9/29		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		10/2 Exam Review	Exam 1 Due to Blackboard				
4		10/9 Linear Functions	Identify & reason about slope and intercept in context		10/13		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
5		10/16 Linear Regression	Use technology to fit & predict with a linear model		10/20		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6		10/23 Exponents, %Growth	Model simple interest with exponential functions		10/27		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7		10/30 Compound Interest	Apply models of compound interest in context		11/3		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		11/6 Exam Review	Exam 2 Due to Blackboard				
8		11/13 Basic Probability	Calculate probability and odds, in careful notation		11/17		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
9		11/20 Independent Events	Quiz only; no We Time work		11/24		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
10		11/27 Sampling Methods	Assess sampling choice for its potential to mislead		12/1		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
11		12/4 Central Tendency	Choose graph & central measure to best depict data		12/8		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
12		12/11 Normal Distribution	Compute and interpret normal distribution statistics		12/15		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
		12/18 Exam Review	Exam 3 Due to Blackboard				
		Projects Due	12/22 (Optional) Final Exam Due				

The optional final exam provides an additional opportunity to demonstrate mastery on all material. It also contributes to your plus/minus modifier (p. 3).

Mathematical Thought & Practice



MATH 105–W01

Fall 2018

Web-Only

What You'll Learn

- Use sets, logic, and number theory as problem solving tools.
- Use linear and exponential models to analyze and predict.
- Critique uses and presentations of statistics and data.
- Use and evaluate arguments using quantitative evidence.
- Communicate mathematical and quantitative ideas with clarity and precision.

How You'll Learn It

Some of this mathematics will be familiar to you; some will not. Our standards-based grading gives you several opportunities to show how your understanding of each topic is improving over time, letting you focus more on learning goals than on performance tasks.

You Should Know

Find course mastery standards, policies, important dates, and other information here.

Dr. Matt Salomone

msalomone@bridgew.edu
 » [bsumath105.slack.com](https://www.slack.com/join/shared_invite/zt-1000000000-1000000000-1000000000)
 DMF Science, Room 433
 Office Hours:
 Web: matthematics.com



Live Mathematically.

“When will we ever use this math in our lives?”

That’s a frequent question for students working their way through the increasingly-specialized algebra, geometry, and trigonometry courses taught in high school. And it’s a fair question: in many professions, and in our daily lives, mathematical thinking doesn’t look like solving an equation for x . But that doesn’t mean it’s not math!

Our course is an introduction to three modes of mathematical thought: logic, growth, and data. Your mastery of these modes of thinking — if you can develop them into *habits of mind* for approaching your world — can benefit your life as a professional in any workplace, a public citizen, and an informed consumer. And they may give you a new perspective on what mathematics can be.

Math Readiness (MATH 090) or higher, or a qualifying score on placement or SAT-Math exams, is prerequisite for this course.

Progress, Not Points: Our Grading Specifications

Here are the learning activities of our course, and the specifications to which each is assessed.

Making the Grade: Your Progress Chart

Check off your progress in each learning area from left to right on this chart.

Mastering mathematics requires a significant investment of time and struggle. Our grading system gives many opportunities to show what you know. It's most important that you learn, not when you learn!	Does the work demonstrate understanding of the concept & meet expectations?				Learning Progress, Attainment, & Engagement: "The Bundle"				Plus/Minus Modifier C- needed for prereq/transfer	
	YES — Full Mark <input checked="" type="checkbox"/> Is it complete & well communicated?		NO — No Mark Yet <input type="checkbox"/> Is there evidence of partial understanding?		Kinds of learning and thinking tasks	To complete a bundle, check every box in its column. No partial credit is awarded. No box may be checked unless all boxes to its left are checked.				
YES Exemplary	NO Satisfactory	YES Progressing	NO Not Assessed			Beginner D	Intermediate C	Advanced B	Master A	
Project (Blackboard): With a group, complete a project to analyze, interpret, and communicate quantitative ideas from a real-world context.	Project is submitted on time, meets both all specifications for satisfactory completion <u>and</u> all stretch goals.	Project is submitted on time and meets all specifications for satisfactory completion.	Project is submitted on time but fails to meet a maximum of two (2) specifications for satisfactory completion.	Project fails to meet three or more specifications for satisfactory completion.	Create, Critique		P <input type="checkbox"/>	S <input type="checkbox"/>	E <input type="checkbox"/>	Plus (+) <input type="checkbox"/> & <input type="checkbox"/> 70+ XP 70%+ final exam
Retention (Blackboard): Your exams demonstrate retention of mastery of prior material over time.	All exam topics meet "E" standard for mastery. ↓	All exam topics meet "S" standard for mastery. ↓	Revise. A maximum of one (1) "P" earned on exam, with full marks (E/S) for all others.	Revise with coupon. A maximum of one (1) "N" or two (2) "P" marks.				<input type="checkbox"/>	<input type="checkbox"/>	
Mastery (Blackboard): Pencil/paper quizzes and exams to demonstrate your skill with course material. Due on Saturdays. Each <input checked="" type="checkbox"/> on this page = two <input checked="" type="checkbox"/> on the same topic on page 4.	All problems are complete, correct, and fully supported by both appropriate steps <u>and</u> thorough written explanation. Only trivial errors in computation.	Most (about 80%) problems meet "E" criteria. Those that do not either have insufficient supporting work, or errors that do not impair reasoning.	Revise. Substantive efforts are made on every problem, but sufficient errors or omissions indicate a need for additional instruction on this topic.	Revise with coupon. An inconsequential attempt, or no attempt, is made on one or more problems by the due date.	Demonstrate, Interpret Compare, Contrast	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	At least three (3) Es needed in this row for B grade <input type="checkbox"/> <input type="checkbox"/>	At least six (6) Es needed in this row for A grade <input type="checkbox"/> <input type="checkbox"/>	Base (no +/-) <input type="checkbox"/> & <input type="checkbox"/> 40+ XP 40%+ final exam
We Time (Knewton Alta): More advanced learning to complete with discussion with group and instructor. Due on Saturdays.	Assignment is completed and earns 100% credit in Knewton Alta prior to due date.			Assignment is incomplete as of due date.		Apply, Construct Identify, Explain	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
Me Time (Knewton Alta): Introductory learning to complete on your own. Due on Tuesdays.	Assignment is completed and earns 100% credit in Knewton Alta prior to due date.			Assignment is incomplete as of due date.	Understand, Illustrate Recite, Remember	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

Revisions on quizzes and exams are done by submitting an alternate version to Blackboard by Saturday. A maximum of one (1) revision is permitted per week. Two (2) revisions in a week may be submitted but will expend a coupon.

Experience Points (XP) ▲ are awarded for completing various tasks that enhance your and your classmates' learning environment.

Course Resources

This course makes use of low-cost and Open Educational Resources.

Course Website: blackboard.bridgew.edu

Required Text:
Online Accounts:

Quantitative Reasoning with Coreq Support: A Targeted Review. Available through *Knewton Alta* (\$10/month or \$44/two years), knewtonalta.com
Some free online tools are used in this course; see the course website for details on getting signed up and started.