Instructor:	**Kristen Abernathy**		**Instructor's Teaching Schedule:**	MW 9:30-10:45 MW 11:00-12:15 MW 12:30-1:45 W 3:30-4:45
Office:	Bancroft 148			
Office Phone:		803-323-4681	**Office Hours:**	M 3:30-4:30 T 8:30-9:30 R 10:00-11:00
Math Department:		803-323-2175		
Campus Email:		abernathyk@winthrop.edu		

The instructor reserves the right to make modifications to this syllabus. Students will be notified in class & by email.
A complete syllabus and schedule is available at: www.winthrop.edu/cas/math/syllabus.

Course Description: This course covers the skills and tools needed to work with quantitative information in daily life - numbers in the news, taxes, debt, inflation, and probabilities. The emphasis is on real world, open-ended exercises that involve reading, writing, calculating, synthesizing, and clearly reporting results. Topics include back-of-an-envelope estimation, descriptive statistics, linear, and exponential models, spreadsheets and the wise use of internet resources.

Determination of Grade:
Participation (10%) Group work will play an integral role in classroom learning. It's my goal to allow you time to try, make mistakes, and figure concepts out for yourselves each class. To achieve this, we'll have effort assignments, such as group work, exit questions, etc. Unlike homework which is graded for correctness, these assignments will be graded on an effort basis.

Homework (25%) Homework will be regularly assigned from each chapter and a subset will be collected and graded for correctness. For these graded problems, you are expected to turn in a written solution that explains the mathematical steps taken to solve the problem. Homework will be graded on the ability to correctly solve the mathematical problem, as well as provide a clear explanation of the mathematical problem-solving steps taken for the designated problems that require written solutions. Late homework will be accepted for one week after the due date at a five point penalty for each day it is late.

Projects (15%) One of the important parts of this course is the ability to apply mathematics to the understanding of real-world problems. Since this course is about learning techniques to understand things that matter in the real world, you will be assigned two projects to give you a chance to practice these learning techniques. The first project will focus on numbers in the news and the second will allow you the chance to plan for the future financially. Each project will culminate in a written report. More information about each project, as well as a rubric for the written report, will be distributed later in the semester.

Midterm (25%) To complete the assessment process, there will be a midterm and final exam. Each exam will comprise of an in-class portion and take home portion. The take-home portion will be open book and open notes, but it must be the course textbook (no supplementary material). You are expected to take the exams at the scheduled time. Make-up exams are not given. An unexcused absence will result in the grade of zero for any missed test. Excused absences from tests will be dealt with at the end of the term and may depend on individual circumstances. Anticipated absences should be reported and verified in advance; emergency absences must be verified within one week after returning to class. Any questions concerning grading of tests must also be resolved within one week after the tests are returned.

Final Exam (25%) The in-class portion of the final exam is scheduled for Tuesday, December 12th, 2017, 11:30-2:00. The take home portion will be due at this time.

Letter Grade Determination:

92-100 A	90-91.99 A-	87-89.99 B+	82-86.99 B	80-81.99 B-
77-79.99 C+	72-76.99 C	70-71.99 C-	67-69.99 D+	62-66.99 D
60-61.99 D-				

Text, Materials, and Resources
- Required Text: *Quantitative Literacy: Thinking Between the Lines.* B. Crauder, B. Evans, J. Johnson, and A. Noell. 2nd edition.

- MATH111 students are expected to have a scientific calculator.
- Students are encouraged to use office hours as a way to receive extra help.
- The Mathematics Tutorial Center information is available at: www.winthrop.edu/mtc .

Course Policies
1. Winthrop University is committed to providing access to education. If you have a condition which may adversely impact your ability to access academics and/or campus life, and you require specific accommodations to complete this course, contact the Office of Accessibility (OA) at 803-323-3290, or, accessibility@winthrop.edu. Please inform me as early as possible, once you have your official notice of accommodations from the Office of Accessibility.
2. Review the student code of conduct for university polices on academic misconduct. Academic misconduct will not be tolerated and will result in a failing grade on the assignment and/or in the course. The full handbook is available online at: (http://www2.winthrop.edu/studentaffairs/handbook/StudentHandbook.pdf)
3. All electronic devices (including cell phones) other than a calculator should be set to silent and kept in your book bag or purse throughout class time unless otherwise instructed.
4. Students may not use cell phones, MP3 players, or other electronic devices in place of a calculator. Students may not share calculators during quizzes, tests, or the final exam. Any student caught using an unapproved electronic device during a quiz, test, or the final exam will receive a grade of zero on that assessment and the incident will be reported to the Dean of Students.

Course Goals/Student Learning Outcomes and Alignment with the General Education Goals
MATH111 meets the Quantitavive Reasoning requirement through the following goal alignment:

Course Goals/SLO	General Education Program Goals	University Level Competencies
Students will develop basic skills and tools to analyze quantitative information in daily life.	2.1 Solve mathematical problems of the type necessary for living in today's and tomorrow's world. 2.2 Make valid inferences from data. 2.3 Understand that quantitative analysis is important to almost every endeavor of humankind. 2.4 Understand the concept and application of quantitative relationships. 3.1 Identify sound and unsound reasoning. 3.2 Analyze and use a variety of information gathering techniques. 3.3 Conduct independent research. 3.4 Use computers competently.	**Competency 1** **Winthrop graduates think critically and solve problems.** Winthrop University graduates reason logically, evaluate and use evidence, and solve problems. They seek out and assess relevant information from multiple viewpoints to form well-reasoned conclusions. Winthrop graduates consider the full context and consequences of their decisions and continually reexamine their own critical thinking process, including the strengths and weaknesses of their arguments. **Competency 3** **Winthrop graduates understand the interconnected nature of the world and the time in which they live.** Winthrop University graduates comprehend the historical, social, and global contexts of their disciplines and their lives. They also recognize how their chosen area of study is inextricably linked to other fields. Winthrop graduates collaborate with members of diverse academic, professional, and cultural communities as informed and engaged citizens. **Competency 4** **Winthrop graduates communicate effectively.** Winthrop University graduates communicate in a manner appropriate to the subject, occasion, and audience. They create texts – including but not limited to written, oral, and visual presentations – that convey content effectively. Mindful of their voice and the impact of their communication, Winthrop graduates successfully express and exchange ideas.
Students will use concepts in algebra, statistics, and discrete mathematics to demonstrate reasoning through problem solving.		
Students will develop oral and written skills to interpret and communicate mathematical information.		
Students will use appropriate technology to study and understand real-world data.		

For purposes of departmental and general education program assessment of student learning in this course, performance on sections of the final exam may be tabulated for all students. Individual tests and course grades may also be used as an indication of progress toward the above goals.

Attendance Policy
The University attendance policy is stated in the current catalog (http://www.winthrop.edu/recandreg/default.aspx?id=7380).

Tentative Course Schedule

Date			Topic
W	8/23	A1 & A5	Introductions, Fermi estimates, problem solving
M	8/28	A1 & A5	Unit conversions
W	8/30	1.5	Critical thinking and number sense
W	9/6	A4 & 2.1	Percentages, Sales tax, and Discounts
M	9/11	4.5	Inflation
W	9/13	2.1	Average Values
M	9/18		GPA
W	9/20	3.1	Lines and linear growth
M	9/25	3.1	Lines and linear growth
W	9/27	3.2	Exponential growth and decay
M	10/2	3.2	Exponential growth and decay
W	10/4	3.2	Exponential growth and decay
M	10/9		Review for Midterm
W	10/11		**Midterm**
W	10/18	4.1	Compound Interest
M	10/23	4.2	Borrowing and loans
W	10/25	4.2	Mortgages and Amortization Schedules
M	10/30	4.3	Saving for retirement
W	11/1	4.4	Credit cards
M	11/6	2.1	Date visualization
W	11/8	6.1	Data summary and presentation
M	11/13	5.1	Calculating probabilities
W	11/15	5.5	Expected value and the lottery
M	11/20	8.2	Voting methods
M	11/27	8.2	More voting methods and electoral college
W	11/29	8.3	Fairness in voting
M	12/4		Review for Final

Drop/Add: Through 8/25   **Course Withdraw Date:** F 10/20
Fall Break: M 10/16 to T 10/17   **Final Exam:** T 12/12 11:30-2:00