Quantitative Literacy – Math 1030 – 001

Fall Semester – 2014

1:30 pm – 2:50 pm – TTh – Noyes 130

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Office Hours: Wed 8:30 am – 9:50 am
Fri 9:30 am – 11:20 am
MWF 1:30 pm – 2:30 pm
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Introduction: Welcome to MATH 1030 at Snow College. Please read this syllabus carefully. It will answer most of the questions you may have about how Math 1030 fits in with your goals as a student at Snow College and will detail the requirements you must meet to complete the course.

Prerequisites: This course is for students who have successfully completed Math 1010 with a C or better, ACT math score 23 or higher or appropriate placement test score. Prerequisite score or class must have been completed within the last two years or you must (re-)take the placement test.

Other prerequisites for this course include an open and curious mind and the willingness to put aside any preconceived prejudices or dislikes for mathematics.

Course Description: This course provides an introduction to mathematical modeling and problem solving utilizing algebra, discrete mathematics, geometry and statistics.

In this class we will consider some of the greatest ideas of humankind – ideas comparable to the works of Shakespeare, Plato, and Michelangelo. The great ideas we will explore here are within the realm of which requires both imagination and creativity. In this course, we will experience what mathematics is all about by delving into some beautiful and intriguing issues. There are four basic goals for this course.

1. To attain a better understanding of some rich mathematical ideas.
2. To build sharper skills for analyzing life issues that transcends mathematics.
3. To develop a new perspective and outlook on the way you view the world.
4. To have FUN.

The overriding theme of the course is to gain an appreciation for math in everyday life. We will follow the text reasonably closely although we will not cover all the material in class.

Student Learning Outcomes: To successfully complete Math 1030, students will be able to:

- Know when and how to apply mathematical knowledge to real world problems
- Interpret and critique quantitative information or arguments
- Construct quantitative, logical arguments
- Understand and use mathematics as a language to communicate
- Explore and analyze mathematical concepts, using technology as appropriate.
- Estimate, reason through, and make sense of mathematical processes and results.

Course Structure: This class will meet two days a week as outlined in the course calendar. Class instruction will include lectures, PowerPoint presentations, group work, student presentations, etc.

You should be prepared to spend at least two hours each day out of class for each hour of in-class instruction. That is <u>at least</u> 6 to 10 hours per week minimum outside of class. If your schedule does not allow this time commitment you should consider taking Math 1030 another semester.

REQUIRED TEXT:

The Heart of MATHEMATICS: An Invitation to EFFECTIVE THINKING (4th Edition), by Edward B. Burger & Michael Starbird (Publisher Wiley). You may purchase the hard back edition of the book or you may purchase an electronic edition of the book. (Textbook ISBN: 9781118156599, CourseSmart e-textbook ISBN: 9781118581186)

CLASS EXPECTATIONS AND POLICIES:

Use of class time: Classroom time is precious, and we will strive to make the best use of every minute we have. This means that your experience in this course will likely be quite different from mathematics courses you have had in the past. Rather than me lecturing on the material and then presenting several examples of the given topic, you will instead be expected each day to discuss the topics and actively work on the topics we are studying. This does not mean I will never lecture, but it will not be our primary means of classroom interaction.

Because of this, it is important that you come to class each day well-prepared and ready to participate in class. Preparation includes doing all assigned reading and having questions ready about portions of the text that were unclear to you; working the assigned homework problems to the point that you understand the material or you know which parts are giving you trouble; and a willingness to share your thoughts with the class, however outlandish you may think them. Your full participation will help you and your classmates learn better and will enrich the experience for all.

Attendance: Since your participation is necessary for you and others to learn in this class, your attendance is expected at every class session. If you need to miss class (for athletics, debate, music, etc.), contact me **BEFORE** the absence so that the necessary accommodations can be made.

Cell Phones, Ipods & MP3 Players: Smart phones and iPods may only be used in class if accessing the e-textbook for this course. Out of respect for others, I expect **NO CELL PHONE CALLS, TEXT MESSAGING, OR LISTENING TO MUSIC** during class. If a cell phone rings during class, the owner of the phone will be excused for the rest of the class period!

EXTRA HELP:

Please ask me for help if you are struggling with the any of the material, the earlier the better. You are welcome to drop by my office during my scheduled office hours. If my office hours are inconvenient for you, feel free to email me and we can try to work out another time for you to meet with me.

It is also a good idea to form study groups for this class. You can meet and study in groups in the Math Lab (Noyes 101). In addition, the Math Lab is staffed with tutors during the following hours:

MTWTh	Friday	Saturday & Sunday
8:30am - 7:30pm	8:30am - 3:30pm	Closed

HOMEWORK & QUIZZES:

Homework will be assigned regularly from the text, collected, and graded. *Clarity of exposition is important*, and one should strive for **well-written, polished solutions.** For the most part, collaboration on homework with other members of this class is allowed, although solutions must be individually written up and collaborators *should be acknowledged*. It will be made clear when collaboration is not permitted. There will also be several presentations and *short* writing assignments throughout the semester. Short quizzes may be given intermittently to check on your reading and class discussion comprehension. They will be unannounced and if missed, may **not be made up.**

Late Submission: While it is possible to submit homework late, doing so will result in a 20% per class period penalty on the late work.

PRESENTATIONS: Students will give several presentations throughout the semester about Mathematicians and mathematical concepts. The mathematical concepts presented must be convincing and clear to both students and teacher. A written paper must accompany the presentations.

MID TERM EXAMS: There will be 2 midterm exams given over the course of the semester. These exams will be administered in the testing center. You will be required to have a valid PHOTO ID in order to take the exams. **If during a test, your cell phone rings, vibrates, or you are caught using a cell phone, this will result in a 0% for the test.** Testing Center (283-7197) hours: (Hours subject to change with school holidays or special circumstances.)

MTWTh	Friday	Saturday	Sunday
9 am – 10:30 pm	9 am – 7 pm	12 pm – 4 pm	5 pm – 9 pm

FINAL PROJECT: In lieu of a final exam, students will present a group project in class during the scheduled final exam time.

CATEGORY WEIGHTS & GRADING SCALE:

Homework/Quizzes	25%
Presentations/Papers	15%
Class Participation	10%
Midterm Exams	30%
Final Presentation	20%

A	94-100%	B-	80-82%	D+	64-67%
A-	90-93%	C+	76-79%	D	60-63%
B+	86-89%	C	72-75%	D-	56-59%
B	83-85%	C-	68-71%	F	0-55%

You need a C- in order to meet graduation requirements. However, some 4-year schools require at least a C in order for the class to count as a prerequisite.

ACADEMIC HONESTY: Academic dishonesty includes, but is not limited to cheating on tests or other course work, collusion (this includes telling others about problems on an exam), falsifying, and plagiarism. Evidence of, or strong suspicion of, academic dishonesty will result in a 0 for the test/work and possibly failing grade for the course. Suspension may also be pursued.

WITHDRAWAL POLICY: September 10th, 2014 is the final day to withdraw from a course without a $25 fee or a "W". The final day to withdraw from a course (with a $25 change of program fee and a "W" on your transcript) is October 30th, 2014. NO withdrawals will be approved after that date.

ADA: Snow College is committed to policies of equal opportunity in employment and educational programs, and to allow all persons access to college programs regardless of sex, age, color, religion, national origin, sexual orientation, disability, marital status, or veteran disability in compliance with Title VII of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, Americans with Disabilities Act of 1990, and the Vocational Amendments of 1976, and other federal and state constitutional and statutory provisions.

Students with medical, psychological, learning or other disabilities desiring accommodations or services under ADA must contact the Accessibility Resource Center (ARC). The ARC determines eligibility for and authorizes the provision of these accommodations and services for the college.

For assistance, please contact the Accessibility Services Coordinator.
Address: Snow College, 241 Greenwood Student Center, 150 East College Avenue, Ephraim, UT 84627
Phone: (435) 283-7321 Fax: (435) 283-7314 Email: katie.larsen@snow.edu

Final Note: I reserve the right to make changes to the syllabus. Any changes will be announced in class. Students are responsible for such changes.