Quantitative Literacy – MATH 1030

Fall Semester – 2014
Sect. 002 10:30-11:20a MWF Noyes 140

Instructor:	Steven Zollinger	***Website:***	http://www.snow.edu/stevez
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Office Hours:	8:30-9:20a OR By Appt.	***Fax:***	435-283-7518

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. Imagination, creativity, and sound logic will all be crucial components of our mathematical explorations. The overriding theme of the course is to gain an appreciation for math in everyday life. Topics covered may include general problem-solving strategies, logic and gaming, cryptology, trigonometry, alternate dimensions, math in art, and networking.

The four basic goals for this course are:
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.

Student Learning Outcomes (SLOs) for Math 1030
To successfully complete this course, the student must show proficiency with:
- Applying mathematical knowledge to real world problems
- Interpreting and critiquing quantitative information or arguments
- Constructing quantitative, logical arguments
- Understanding and use mathematics as a language to communicate
- Exploring and analyzing mathematical concepts, using technology as appropriate.
- Estimating, reasoning through, and making Burger and Ssense of mathematical processes and results.

Instructor's Role and Commitments
- Provide subject-matter expertise
- Assess student learning in a variety of ways
- Provide regular feedback to students to help them achieve the learning objectives
- Provide regular opportunities for creative problem-solving and collaboration
- Be reasonably accessible and available to assist students
- Be professional and respectful
- Have a thorough understanding of and access to the technologies used in the course

Student's Role and Commitments
- Utilize a variety of resources to aid in the learning process (i.e. teacher, peers, websites, tutors, etc.)
- Become an expert in his or her own learning
- Provide regular feedback to peers and instructor to help maximize the learning potential of everyone in the class
- Actively engage in the class and apply your knowledge, skills, and experiences to creative problem-solving and collaborative activities
- Check email, Canvas mail, and the discussion board daily to keep updated on class announcements, discussions, and upcoming deadlines
- Be professional and respectful
- Have a thorough understanding of and access to the technologies used in the course.
- Apply the self-discipline and time management skills necessary to meet course deadlines and to achieve the learning objectives of the course.

Required Materials (Bring to EVERY class)

- Your textbook: *The Heart of MATHEMATICS: An Invitation to EFFECTIVE THINKING* (4th Edition)
- Paper and pencils
- OPTIONAL: calculator, laptop

Grading Scale

4.0	A	93-100%	2.7	B-	80-82%	1.3	D+	67-69%
3.7	A-	90-92%	2.3	C+	77-79%	1.0	D	63-66%
3.3	B+	87-89%	2.0	C	73-76%	0.7	D-	60-62%
3.0	B	82-86%	1.7	C-	70-72%	0.0	F	0-59%

Grading

Semester Grades			
Homework	30%	Quizzes & Tests	20%
Projects & Presentations	30%	Final Exam/Project	20%

Homework (30% of your semester grade)

- Homework will be assigned regularly.
- Homework may include of any of the following: textbook problems, worksheets, guided notes, problems from teacher or peer presentations.
- If you do not attend the class, you may receive a zero for any activities completed during class.
- Each homework assignment must be completed by its due date.
- The average student should plan to spend at least two hours outside of class for each hour inside of class. Since we meet 4 days each week, you should plan to spend ***at least 12 hours*** per week working on homework and studying.
- Many students benefit from a fixed time to study, from joining a study group, and from regular attendance at the math lab.

Projects & Presentations (30% of your semester grade)

- During the semester several individual and/or group projects and presentations will be assigned in order to give you additional experience with your creative and applied problem solving skills.

Quizzes & Tests (20% of your semester grade)

- Regular quizzes and tests will be given in to assess your understanding the material.
- if you have a conflict with any scheduled quiz or test, you are responsible to make alternative arrangements with me **PRIOR** to the scheduled quiz or test date.

Final Exam/Project (20% of your semester grade):

- The final exam/project may pull from any of the course content, experiences, and discussions and may also include prompts for self-reflection and future applications of your experiences and learning.
- The final exam/project may be in the form of a written exam, a presentation, portfolio, or essay.
- Date of your Final Exam:
  Section 002: Wednesday**, Dec 10, 12:00-2:00pm**
- A request to take a final exam at any time other than when it is officially scheduled must be initiated with the Vice President for Academic Affairs (3rd floor of the Noyes Bldg, west end). A charge may be assessed if the request is approved. Students are discouraged from taking final exams outside of the scheduled time.
- Students who do the following typically improve their learning in this course and maximize their chances of passing:
  1. Come to class daily and turn in all assignments
  2. Study for and take each exam
  3. Come to me if they are struggling
  4. Study for the final both in class and with a study group

Content Support

- You will have access to teacher and tutor support during class. Please take advantage of this support.
- Outside of class, I am available regularly via email (steve.zollinger@snow.edu), the Canvas discussion board, or during my scheduled office hours. Please take advantage of these support opportunities.
- You may also seek assistance via the web. Search for your topic (i.e. in Google, Youtube, etc.) to find many source for supplemental instruction.
- I also recommend that you find other reliable people (i.e. family, friends, neighbors, teachers, etc.) who are willing to make themselves available to you when you require additional face-to-face assistance.
- You may also go to the Math Lab (Noyes 101) for assistance.
  Go to http://www.snow.edu/advise/lab_hours.html to view the Math Lab hours for this semester.

Communication Etiquette

When communicating with your instructor or peers, please follow these guidelines to ensure that that all interactions are effective, efficient, and respectful:

- Always explicitly identify who you are (i.e. use a signature at the end of all email, discussion posts, and other written communications, introduce yourself by name during any synchronous voice communications)
- Provide a clear, concise description for the purpose of the communication upfront (i.e. in the subject line of an email or discussion post)
- Always speak respectfully and avoid (as much as possible) statements that could be easily misinterpreted
- Use emoticons and other descriptors to help convey your intended meaning
- Avoid typing in ALL CAPS (it's the written equivalent yelling)

Academic Honesty

- POLICY SUMMARY:
  Everyone in this course is expected to adhere to the highest standards of academic honesty. Therefore, all work submitted by students must appropriately reflect their individual abilities, efforts, and learning. The most common academic honesty infractions involve cheating (i.e. using unauthorized assistance to complete course assessments, assignments, and objectives), fraud (knowingly falsifying information or knowledge), and plagiarism (i.e. using the words, ideas, or works of others without proper acknowledgement and citations). All suspected infringements of this academic honesty policy will be carefully investigated by the instructor and reported to the Office of the Registrar and Academic Standards Committee as appropriate. Depending upon the severity of the infraction, guilty students will receive appropriate consequences, which may include failing the assignment in questions, failing the course, suspension, or expulsion. For a more detailed explanation of the academic honesty policy for our institution, refer to the "Academic Honesty" section of the "Snow College Catalog" (http://www.snow.edu/general/catalog/registration.pdf).
- HELPFUL TIPS:
  - Always use proper citations and references when you use and incorporate the work of others in your work.
  - Only use authorized sources of assistance when completing your work. For individual assignments in particular, you should work out your math problems and responses as much as possible on your own before seeking additional assistance. Authorized sources for assistance (when appropriate for a given assignment) may include the teacher, the class tutor, student tutors in the Math Lab, another math faculty member, or even a friend or classmate. For group work, you are expected to work together with the other group members to achieve the group's objectives. Group activities and projects will typically be assessed on individual and group contributions.
  - If you are unsure whether or not a specific action would qualify as an infringement of the academic honesty policy, discuss it IMMEDIATELY with your instructor for clarification before you proceed with a given assignment or activity.

ADA/Section 504 Compliance Notice:

- 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, academic adjustments, or auxiliary aids should contact the Accessibility Resource Center, Room 241 Greenwood Student Center, phone number 435 283 7321. The Americans with Disabilities Act (ADA) Coordinator in the Student Success Center determines eligibility for and authorizes the provision of appropriate services and aids. For assistance please contact the Accessibility Services Coordinator:
    - Katie Jean Larsen
      Accessibility Resource Center
      Snow College
      150 East College Avenue
      Ephraim, Utah 84627
      435 283 7321
      Katie.larsen@snow.edu

Ephraim Ambulance Contingency Plan

- I am a volunteer EMT for the Ephraim Ambulance. As a result, I will on occasion be on call with the ambulance during our class. So if I do not show for class when class is to begin or if I must leave in the middle of class, you will STILL HOLD CLASS as usual. Work on any outstanding assignments, discuss concepts and issues covered in class, plan and develop any individual or group projects or presentations.

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.