

Syllabus
Quantitative Literacy
MA 101 (4 Credits)

Time/Location: **Section 01 (80847) Monday/Wednesday 9:00-10:40 JAMR 3317**
 Section 02 (81119) Tuesday/Thursday 9:00-10:40 JAMR 3317

Term: Fall 2024

Instructor: Mrs. Jennifer Vollenweider (Mrs. V)

E-Mail: jvollenw@nmu.edu.

Office Hours: JAMR 2219 or Zoom link found on Educat:

M,T,W,R: 8:15-8:50

M,W,R: 11:00-11:50

*Additional times by appointment

Optional Textbook: David Lippman, *Math in Society*, 2.5e *Electronic version available for free: opentextbookstore.com/mathinsociety

Websites for this class:

- Educat: educat.nmu.edu
- My Open Math: myopenmath.com
 - **Course ID: 242400**
 - **Course name: MA101 F24**
 - **Enrollment key: fractionsareyourfriends**

Course Description: This interdisciplinary course covers a range of mathematical concepts and techniques that will be useful for informed citizens in our information-laden society. It is a project-based course with the primary focus on preparing students to use quantitative reasoning in a principled manner when identifying, formulating, and solving real-world problems.

Learning Outcomes

- Recognize, use, and apply mathematical thinking to solve problems that are part of everyday life such as:
 - Consumption and finance: borrowing, taxation, personal finance
 - Art and nature: Fibonacci sequence, golden ratio, geometric transformations
 - Statistics and probability: numerically and graphically summarizing data, measures of central tendency, measuring uncertainty and basic probability
 - Graph theory: Euler paths and Hamiltonian circuits, Traveling Salesperson Problem, networks, and scheduling
- Interpretation: Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).
- Representation: Convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words).
- Calculation: Identify and perform appropriate calculations and communicate results.
- Application / Analysis: Make judgments and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis.
- Communication: Express quantitative evidence in support of the argument or purpose of the work (in terms of what evidence is used and how it is formatted, presented, and contextualized)

Prerequisites: B- grade or better in **MA080** or satisfactory score on math placement exam.

Technical skills: Student must be able to navigate websites including Educat, and www.myopenmath.com. Students must use Google Slides and Google Docs. They must use and check their @nmu.edu email daily.

Technology requirements: Computer with internet access and web cam, access to scanner or smartphone, scientific calculator (the one on your school laptop works great for this class). Does not have to be a graphing calculator.

Grades: Grades are based on the following scale

93-100%	A	80-83%	B-	67-69%	D+
90-92%	A-	77-79%	C+	64-66%	D
87-89%	B+	74-76%	C	60-63%	D-
84-86%	B	70-73%	C-	0-59%	F

Your grade has the following components:

Attendance/Participation:	5%
Key Questions:	10%
MyOpenMath Homework:	25%
Projects:	50%
Final Exam:	10%

Each unit will usually involve online homework, weekly Key Questions quizzes/questions, group forum posts, as well as inquiry-based projects that are designed to authentically explore the subject matter of each unit.

Late Policy: Assignments will earn 0 if not done by the due date. Communicate with me if there are extenuating circumstances that affect your academic performance.

Attendance: Arriving between 1 and 5 minutes late is considered tardy. Accruing 5 tardies will count as one absence. If you are tardy by more than 5 minutes, you will be considered absent. Only extenuating circumstances may excuse your attendance—these circumstances would include student athlete travels (documentation submitted at least one week in advance) and absences due to a sickness or emergency which must be accompanied by documentation.

You are given 2 “free” unexcused absences per semester. Beyond those 2, any unexcused/undocumented absences will affect your grade. To score your attendance/participation grade, the percentage of class periods you have attended is calculated.

General Student Expectations:

- *My classroom is a place where you will be treated with respect. In this course, each voice has something of value to contribute. Please take care to respect the different experiences, beliefs, and values expressed by students, faculty and staff. Each member of this class is expected to contribute to a respectful, welcoming, and inclusive environment for every other member of the class.
- Always use respect when discussing matters that may have varying opinions/viewpoints (both electronically and face-to-face). You may not always agree with someone else’s point of view, and differing opinions are useful in promoting productive discussions. However, just because you may not agree with someone else’s opinion, but that is no excuse to be rude or disrespectful.

- There are no cell phones allowed in class unless it is being used as a calculator. You are in a professional setting and are expected to act as such. If a cell phone is out during class time, you will be given one warning, and after that you will be asked to leave class.

Communication with classmates and teacher:

- Communication via e-mail must be done through your NMU address. The teacher will not respond to communication sent from any other e-mail addresses. Please remember that you should address me in a professional manner (i.e. Mrs. Vollenweider or Mrs. V) and sign using your full name. Please also use the class name and class time that you are in for the subject line, as I teach multiple sections and it is easier for me to access your information.
- Always remember to use professional language, spelling, and punctuation within electronic communications. No abbreviations or sarcasm. When communicating electronically, people cannot necessarily interpret sarcasm and may not know abbreviations/acronyms.

Final Exam:

- Exam dates and times can be found at <https://nmu.edu/registrar/final-examination-schedule>
- Specific exam details to follow later in semester.
- If the University were to close during the exam time/date set for this class, the exam would move online. It would be available, at minimum, the originally scheduled date and time.

Important dates:

Add: Last day to add a class is **Thursday, August 29 by 5:00 pm.**

Drop: Last day to drop a class with no course record and 100% refund is **Tuesday, September 3, 5:00 pm.** Drop procedure: <http://www.nmu.edu/records/adddropprocedure>

Withdrawals: Last day for course withdrawal is **Friday, December 6, 5:00 pm.** I recommend withdrawal for any student earning below 60%. A W grade and an F grade have the same effect on your full time status and may affect your financial aid. The difference is that an F grade affects your GPA, but a W grade does not. It always benefits you to get a W, instead of an F. Withdrawal procedure: <http://www.nmu.edu/records/node/19>

Disability needs: If you have a need for disability-related accommodations or services, please inform the Coordinator of Disability Services in the Dean of Students Office at 2001 C. B. Hedgcock Building (227-1737 or disserv@nmu.edu). Reasonable and effective accommodations and services will be provided to students if requests are made in a timely manner, with appropriate documentation, in accordance with federal, state, and University guidelines. Here is the website for disability services: <http://www.nmu.edu/disabilityservices/node/1>

Academic Integrity: Students are expected to do their own work and follow the university academic honesty policy. This policy can be found in the student handbook. See link here: <http://www.nmu.edu/dso/studenthandbook>