

*A New Course at Massasoit*

# Math Literacy for College Students



MASSASOIT  
COMMUNITY COLLEGE

Dear Colleagues,

Math Literacy for College Students is a new developmental math course at Massasoit. It is intended to provide an accelerated developmental pathway for students planning to take courses like *Introduction to Statistics* or *Topics in Mathematics I/II*.

Traditionally, Massasoit's developmental mathematics program has prepared all students as though they were going to take *College Algebra*. Yet many students never end up taking *College Algebra*; they take alternatives like *Statistics* and *Topics*. *Math Literacy* is designed with these students in mind and will provide a better preparation for these courses. Rather than focusing on algebraic techniques that have no application in *Statistics* or *Topics*, *Math Literacy* emphasizes reading about real-world situations, extracting relevant quantitative information, and using mathematics to draw conclusions. These are skills that are challenging in their own right and highly relevant in *Statistics* and *Topics*.

*Math Literacy* forms an alternative developmental pathway to *Statistics* and *Topics* that students in programs that are not highly quantitative can take instead of *Introductory Algebra* and *Intermediate Algebra*. It can be taken by students who have completed *Fundamentals of Mathematics* (or *Preparation for College Math I*) or have tested above it. Please note that *Math Literacy* also has a prerequisite of *Preparing for College Reading II* or placement above it because the course is reading intensive with a focus on word problems. Students who complete *Math Literacy* will be eligible to take *Statistics* and *Topics* along with some of the program-specific mathematics courses (see the Spring 2017 Flowchart of Mathematics Prerequisites for details).

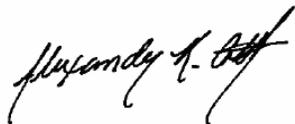
*Math Literacy* is considered an accelerated developmental pathway compared with the traditional developmental sequence. It allows students to take their first credit-bearing math course with only one or two semesters of developmental preparation, rather than the traditional two or three semesters. In other words, students electing to take the *Math Literacy* pathway will take one less developmental mathematics course, saving both time and money. This is possible because of the more focused preparation for courses like *Statistics* and *Topics*, and despite taking fewer developmental courses, these students may be better prepared to succeed in *Statistics* and *Topics*.

*Math Literacy* is not an appropriate choice for all students. It does not satisfy the prerequisite for *College Algebra*, so students in quantitative programs such as the STEM programs should not take it. There are also courses outside of the mathematics department that have mathematics prerequisites, and *Math Literacy* may not satisfy the prerequisite for these courses. For example, *General Chemistry II* requires a pre/corequisite of *College Algebra*, and so *Math Literacy* would not satisfy the requirement for this course. Please consult the Program Requirement Sheets, College Catalog, and Flowchart of Mathematics Prerequisites when determining whether *Math Literacy* is appropriate for a student.

Students do switch majors. Students who have completed *Math Literacy* and decide to change their major to a quantitative field may be eligible to take *Intermediate Algebra* or *Preparation for College Math III*. The Mathematics Department will handle this on a case-by-case basis with consideration of the particular circumstances and student proficiency. Students who fall into this category should write to the Mathematics Department Chair to set up a meeting.

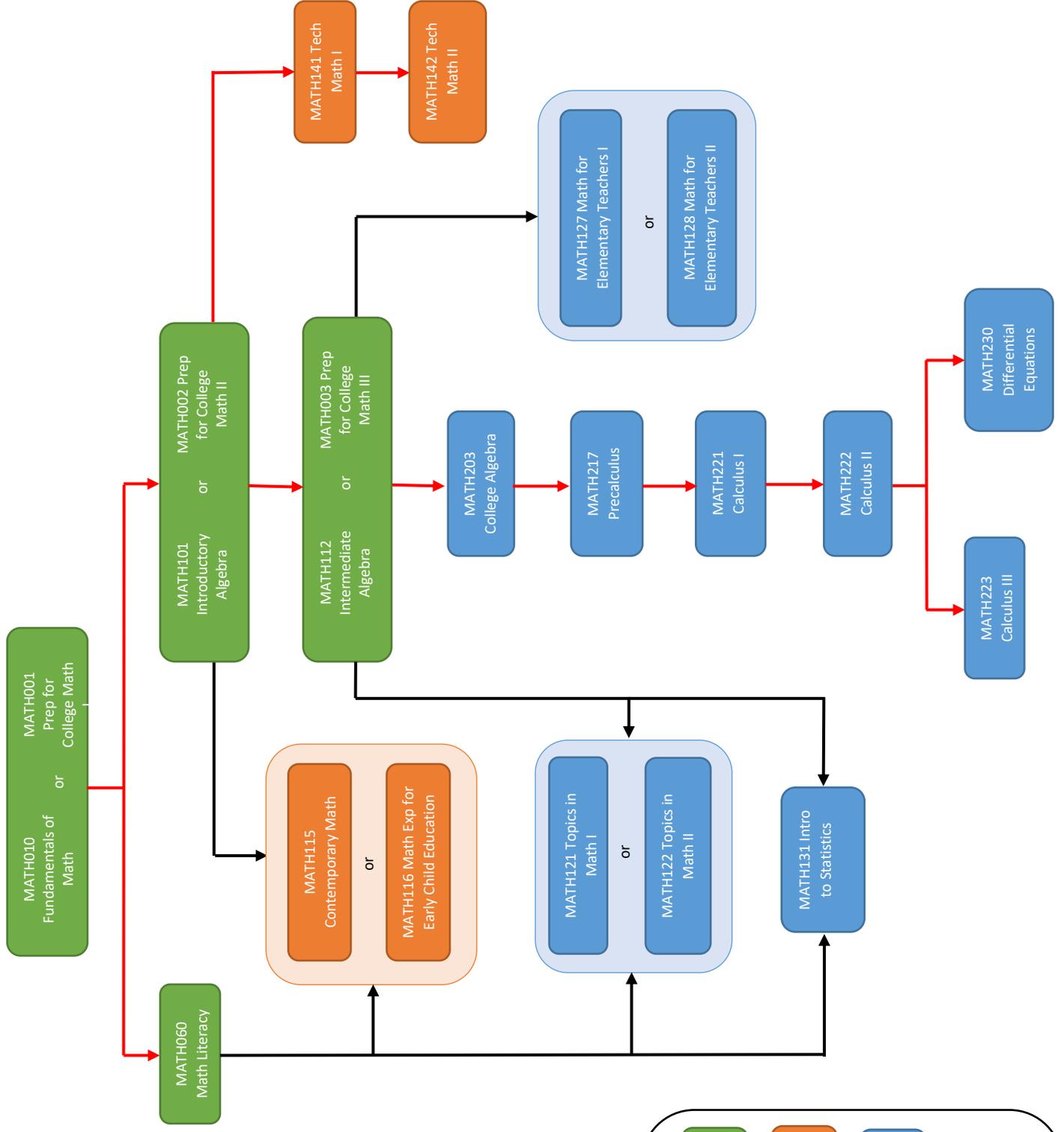
If you have any questions, please do not hesitate to ask someone in the Mathematics Department.

Sincerely,



Alex Cotter  
Chair, Mathematics Department

# Flowchart of Mathematics Prerequisites



**Color Key**

- Developmental Courses: do not earn college credit
- Career Courses: earn college credit but are not designed for transfer
- Transfer Courses: earn college credit and are designed to transfer

Minimum grade of D- required  $\blackrightarrow$   
 Minimum grade of C- required  $\color{red}\blackrightarrow$

### **Math Literacy Pathway Recommended Programs:**

It is possible to satisfy all of the requirements for these programs through the Math Literacy pathway. However, students may be excluded from some elective options because they cannot meet the mathematics prerequisite for them.

- Business Administration Careers – Accounting, General Business, Hospitality Management, Marketing, & Supervisory Management Options
- Child Care Education & Administration
- Computer Information Systems – Programming & User Support Options
- Criminal Justice Career & Transfer Programs
- Culinary Arts
- Pastry & Food Production Certificates
- Fire Science Technology
- Human Services Career & Transfer Programs
- Liberal Arts Studies
- Liberal Arts Studies – Media Communication & Theater Options
- Liberal Arts Transfer
- Liberal Arts Transfer – Social Science Option
- Liberal Arts Transfer – Psychology Option
- Radiologic Technology
- Respiratory Care
- Veterinary Technology
- Visual Arts – Art and Graphic Design & Fine Arts Options

### **Math Literacy Pathway Excluded Programs:**

The Math Literacy pathway will not allow students to complete the required courses for these programs.

- Architectural Technology
- Business Administration Transfer
- Child Care Education & Administration – Transfer
- Diesel Technology
- Electronic Technology
- Engineering Transfer – Chemical, Civil, Electrical, and Mechanical Options
- Heating, Ventilation, and Air Conditioning Technology
- Heating, Ventilation, and Air Conditioning Technology – Building Systems Energy Management Option
- Liberal Arts Transfer – Computer Science, Elementary Education, & Science Options
- LPN to Associate Degree – Full Time & Part Time Options
- Nurse Education – Full Time & Part Time Options
- Telecommunications and Networking Technology

## Math Literacy Frequently Asked Questions

**Q: What is MATH060 — Math Literacy and who should consider enrolling in it?**

A: Math Literacy is a developmental math course designed for students who are not enrolled in quantitatively intensive programs. It is intended for students planning on taking a non-algebraically based college level math course, such as Introduction to Statistics or Topics in Mathematics I/II.

**Q: Does MATH060 prepare students to take MATH203 — College Algebra?**

A: No, MATH060 is not designed to prepare students for an algebraic math track and does not satisfy the prerequisite for MATH203. Students planning on majoring in a quantitatively intense program and who need College Algebra should take MATH002/MATH101 and MATH003/MATH112.

**Q: What are the prerequisites for MATH060?**

A: MATH001 — Preparation for College Math I or MATH010 — Fundamentals of Mathematics and ENGL092 — Preparation for College Reading II.

**Q: What is the difference between MATH060 and MATH002/MATH101?**

A: MATH060 focuses heavily on integrating mathematics with real-world applications. Students will analyze real-world scenarios, extract pertinent information from these scenarios, then use mathematics to come to appropriate conclusions. These skills are critical to applied courses such as Introduction to Statistics or Topics in Math I/II. MATH002/MATH101 focuses more on building a student's algebraic skills to succeed in the more algebraically rigorous math track, starting with College Algebra.

**Q: What are the benefits of taking MATH060?**

A: Along with a more directed preparation for a non-College Algebra math course, developmental students will also benefit from an accelerated pathway. Students can enroll in a credit bearing course in one fewer semester by completing MATH060 than by continuing to MATH003/MATH112.

**Q: Will MATH003/MATH112 still satisfy the math prerequisite for MATH121, MATH122, and MATH131?**

A: Yes, students can still enroll in Topics in Math I/II and Introduction to Statistics by successfully completing MATH003/MATH112 along with other required non-math prerequisites.

**Q: Does MATH060 satisfy prerequisites for other non-math courses?**

A: Please consult the Program Requirement Sheets, College Catalog, and Flowchart of Mathematics Prerequisites when determining whether MATH060 is appropriate for a student with respect to courses in other departments. In particular, many science courses have a mathematics prerequisite that may not be met with MATH060.

**Q: Is MATH060 an easier/less challenging course for students than MATH002/MATH101?**

A: No! MATH060 is focused on applied situations, and is presented with the same level of rigor as MATH002/MATH101. It is designed to better prepare Statistics/Topics students for material covered in those courses.

**Q: Is MATH060 available in a self-paced format?**

A: At this time, MATH060 is not available as a self-paced course.

**Q: What if a student takes MATH060, but then changes programs and needs to take College Algebra?**

A: Students who decide to change programs and need College Algebra after having taken MATH060 may be eligible for MATH003/MATH112. Such circumstances will be handled on a case-by-case basis by the Chair of the Mathematics Department with consultation from the department's faculty.

**Q: Is MATH060 appropriate for students hoping to get into the Allied Health programs?**

A: MATH060 is not appropriate for students hoping to get into Massasoit's Nursing Program. Students hoping to get into Massasoit's Nursing Program need to demonstrate competency at the level of MATH003/MATH112 by either passing the course or placing above that on the Accuplacer placement test. It is appropriate for students hoping to get accepted to Massasoit's Respiratory Care and Radiologic Technology programs.

**Q: Is MATH060 appropriate for Students in Liberal Arts Studies/Liberal Arts Transfer Programs?**

A: Students can complete the LAS and LAT programs through the Math Literacy Pathway. However, if a student is planning to transfer to a four-year institution, then they may not be eligible to start as a junior in highly-quantitative programs (e.g., in the STEM fields). Also, some of the Liberal Arts Transfer program options (e.g., Liberal Arts Transfer Science) are not possible to complete through the Math Literacy Pathway.