

**STUDENTS:** When you complete Secondary Math III, we encourage you to take a **Quantitative Literacy (QL)** course that best fits your major. This course may meet the QL requirement to earn a degree from a Utah public college or university.

**MATH 1030**

*Take Intro to Quantitative Reasoning if you want to major in:*

English / Languages • Fine Arts • Humanities • Performing Arts

Covers real-world problems and helps consumers make good decisions.

**MATH 1040**

*Take Statistics if you want to major in:*

History • Nursing • Psychology • Social Sciences

Covers descriptive and statistical methods used to understand data.

**MATH 1050**

*Take College Algebra if you want to major in:*

Business • Biological & Physical Sciences • Engineering • Mathematics

Covers exploration of algebra topics including functions and equations.

**Which Concurrent Enrollment Math Course is Right for You?**

**If you still aren't sure which one is right for you, talk to your school counselor for more information!**

## FY21-22 Concurrent Enrollment (CE) Quantitative Literacy (QL) Math Advisement Document For Counselors and Teachers

**MATH III REQUIRED.** Students must complete Secondary Math I, II, and III to qualify to take any concurrent enrollment Math course. For CE Math, students may not opt out of Secondary Math III: the Utah System of Higher Education (USHE) adopted system-wide recommendations that students complete the three-course Secondary Math sequence to be ready for college level Math courses (see <https://ushe.edu/high-school-math-critical-to-completion/>).

**“C” AVERAGE IN HIGH SCHOOL MATH COURSES.** Students may enroll in CE Math courses by completing Secondary Math I, II, and III with an average grade of “C” or better in each class. Ex: if a student earns four term grades of B, B, C-, and B, the average is a B-. *Students who do not have a C or better grade in all three Secondary Math classes have options for certain CE QL Math courses:*

CE MATH	Effective FY18-19
MATH 1010*	Students must complete Secondary Math I, II, and III with a “C” or better course grade in each class. Students who do not have a “C” average grade in all three courses may be allowed to enroll based on an ACT Math or placement test score.
MATH 1030	
MATH/STAT 1040	
MATH 1050	Students must have both the “C” average grades in Secondary Math I, II, and III <b>AND</b> meet the ACT Math or placement test score** required by the institution offering the course.

\*MATH 1010 does not fulfill the QL requirement.

**MATH QUANTITATIVE LITERACY (QL) OPTIONS.** Different college majors require different QLs. For guidance in selecting a Math QL, students should speak with an advisor at the institution they plan to attend after graduation.

QL Course	Description	Appropriate for study in:
<b>MATH 1030</b> Intro to Quantitative Reasoning	This course covers mathematical topics that apply to real-world problems. Topics include reasoning and number sense, using percents and estimations, math for finance matters such as loans and investments, probability and statistics, and modeling. <i>MATH 1030 may be the <b>last</b> Math class students take in college.</i>	<ul style="list-style-type: none"> <li>• English / Languages</li> <li>• Fine Arts</li> <li>• Humanities</li> <li>• Performing Arts</li> </ul>
<b>MATH 1040/ STAT 1040</b> Intro to Statistics	This course includes collection, organization, analysis, interpretation and presentation of data. Topics include sampling design, descriptive statistics, linear regression and correlation, probability, sampling distributions, hypothesis testing, and confidence intervals. <i>MATH 1040 may be the <b>last</b> Math class students take in college.</i>	<ul style="list-style-type: none"> <li>• History</li> <li>• Nursing</li> <li>• Psychology</li> <li>• Social Sciences</li> </ul>
<b>MATH 1050</b> College Algebra	This course provides exploration of algebra to prepare students for Calculus or further math courses. Topics include polynomial, rational, exponential, and logarithmic functions; systems of equations; matrices and determinants; partial fraction decomposition; conics; and sequences and series. <i>MATH 1050 is the <b>first</b> Math class students will likely take in a math-intensive college major.</i>	<ul style="list-style-type: none"> <li>• Business</li> <li>• Biological &amp; Physical Sciences</li> <li>• Engineering</li> <li>• Computer Science</li> </ul>

### COMMON QUESTIONS ABOUT QL MATH.

- 1. A counselor is not sure which QL to recommend.** Start with what students hope to study in college OR what they are pretty sure they don't want to study. Use the Major pathways to talk about QL choices. STEM and Business fields require Calculus, so MATH 1050 is the QL. For Majors that don't require Calculus, explore MATH 1030 or 1040.
- 2. A student has no idea what s/he is going to study in college. Should that student take MATH 1050 to be safe?** Depends. Preference for certain fields of study may be the key to the best QL choice. For students who think they are likely to pursue math-intensive fields like science, math, engineering, or business in college, then MATH 1050 is the best choice. However, if students do not think these fields are in their future, MATH 1030 or 1040 may be the better choice.
- 3. Does QL credit expire?** No. QL credit is good for life. **HOWEVER**, the grade earned in a QL class can only be used as a prerequisite or for placement into a more advanced Math class for 1 to 2 years, depending in the institution. So, the CE QL course satisfies the general education requirement; however, after 1 to 2 years, students may have to take a refresher course or test to place into a higher Math course.

**ADDITIONAL RESOURCES.** Visit [utahce.org](http://utahce.org) for pdfs & slide decks on the benefits of taking QL Math in high school.

Questions? Contact your local CE Director, Cyd Grua (801-646-4768, [cgua@ushe.edu](mailto:cgua@ushe.edu)),  
or Lindsey Henderson (801-538-7794, [lindsey.henderson@schools.utah.gov](mailto:lindsey.henderson@schools.utah.gov))