

# Fall 2018 Developmental Math Co-Requisite Restructure

## Frequently Asked Questions

### How do the old courses correspond with the new courses?

We have endeavored to design a developmental math curriculum that optimizes the potential of each student to complete a credit math class that can be used to earn a degree or other credential. As a consequence, there is no simple correspondence between old and new developmental math courses. The new curriculum, which is shown graphically at the end of this document, represents more than a mere renumbering. There are in fact significant structural differences between the old math curriculum and the new one. Please keep this in mind as you read what follows.

The new developmental course structure presented below is based on a co-requisite model, whereby most students who require developmental coursework will enroll in a credit level math class with an accompanying learning support course. This model of providing “just in time” support has been adopted by many institutions nationwide and has proven an effective way to remediate students while also decreasing time and cost to completion.

In the new structure, MATH 117 and MATH 120 will exist in the course schedule as stand-alone courses and students who do not require developmental coursework should be advised to enroll in one of these sections. The course schedule will also include sections of MATH 117 and MATH 120 that will have linked co-requisite courses. Students who require developmental work should sign up for a co-requisite course (for instance, MATH 117 + MATH 017 or MATH 120 + MATH 020). The content of MATH 017 is matched specifically with the skills needed for MATH 117 and therefore MATH 017 is not offered as a stand-alone course. If a student wants to spread this over two semesters, they will be able to first enroll in MATH 092 - which serves as a pre-requisite for both MATH 117 and MATH 120. Consequently, it covers more material and is one additional billing hour. For example, MATH 117 + MATH 017 is one semester and 5 billing hours whereas MATH 092 followed by MATH 117 is two semesters and 6 total billing hours (see flowchart on the last page).

### For students who are new to MC, how do we determine course placement?

Students will be placed using our traditional placement methods, including Accuplacer scores, SAT, ACT, AP exams, IB exams and an Alternative Placement Program (APP) score, where applicable. The Accuplacer scores have been changed to reflect the new course options (see Table below). For students who place in the WD&CE range, we will provide updates about resources available in WD&CE as that information becomes available.

For students who need a general education math foundation course and require developmental coursework, they may choose either a one semester sequence (MATH 017 + MATH 117 or MATH 020 + MATH 120) or a two semester sequence (MATH 092 followed by MATH 117 or MATH 120).

For students who wish to enter STEM or education and require developmental coursework, they will take either MATH 050 or MATH 045 + MATH 050 (depending on their Accuplacer algebra score - see next page). These students should take MATH 130, MATH 165, or the appropriate course for their program in the following semester. **All students who place at credit level math may enroll in the appropriate credit level course without support.**

Arithmetic		Range	Course Placement	Advising Notes
		20-40	WD&CE  Note that this is a new Accuplacer portion that we have not offered recently. Most students will not have to take this test let alone score this low.	
Algebra		Range	Course Placement	Advising Notes
		20-62	MATH 045 with MATH 050 [6 sem hrs] or MATH 092: Foundations of Mathematical Reasoning [3 sem hrs]	Assessment Level: READ 120
			MATH 017 with MATH 117 [3 credits/5 sem hrs] or MATH 020 with MATH 120 [3 credits/5 sem hrs]	Assessment Level: ENGL 101/A, READ 120 or AELW 940 or ELAI 990
College Math		Range	Course Placement	Advising Notes
		20-44	MATH 050: Foundations of Algebra [4 sem hrs] or MATH 092: Foundations of Mathematical Reasoning [3 sem hrs]	Assessment Level: READ 120
			MATH 017 with MATH 117 [3 credits/5 sem hrs] or MATH 020 with MATH 120 [3 credits/5 sem hrs]	Assessment Level: ENGL 101/A, READ 120 or AELW 940 or ELAI 990
		45-52	MATH 117: Elements of Statistics [3 credits] or MATH 120: Survey of College Math [3 credits]	To take MATH 165, take MATH 050 Assessment Level: ENGL 101/A, READ 120 or AELW 940 or ELAI 990 SAT Math 530+/old SAT Math 500+/ACT Math 21+/PARCC ALG02 4+/APPM Test Code 80
		53-59	MATH 130: Elements of Mathematics I [4 credits]; MATH 150: Elementary Applied Calculus [4 credits] or any lower numbered course (MATH 117, MATH 120)	To take MATH 165, take MATH 098 only Assessment Level: ENGL 101/A, READ 120 or AELW 940 or ELAI 990 SAT Math 570+/old SAT Math 550+/ACT Math 24+
		60-86	MATH 165: Precalculus [4 credits/5 sem hrs] or any lower numbered course (MATH 117, MATH 120, MATH 130, or MATH 150)	Assessment Level: ENGL 101/A, READ 120 or AELW 940 or ELAI 990 SAT Math 620+/old SAT Math 600+/ACT Math 26+
		87+	MATH 170: Calculus for Life Sciences I [4 credits/5 sem hrs] or MATH 181: Calculus I [4 credits/5 sem hrs] or any lower numbered course (MATH 117, MATH 120, MATH 130, MATH 150, or MATH 165)	Assessment Level: ENGL 101/A, READ 120 or AELW 940 or ELAI 990 SAT Math 650+/ACT Math 29+

## Placement Scoring Sheet (NOTE: Subject to Change)

## **For students who have completed MATH 080, what is the process for advising them on the next course if they plan to take higher level math courses?**

These students should be encouraged to take MATH 092, MATH 093, or MATH 096 by the end of summer 2018. We will have sections of MATH 093 that begin in the second half of the current semester and will also offer MATH 092, MATH 093, and MATH 096 on all three campuses in the summer. Students who complete these courses are done with developmental math and won't be affected by the coming changes. Students who delay developmental courses will be impacted.

## **For students who did not complete MATH 080 by fall semester, what is the process for advising those students?**

As stated above, students are best off if they complete developmental math as soon as possible. Unless they qualify for MATH 080C and intend to take summer classes, students who fail to earn a grade of A, B, C, or H in MATH 080 by the end of the current spring 2018 semester should be referred to retake the Accuplacer so they can be appropriately placed in the new structure. They should then meet with a counselor to determine what course they should take on the basis of their new math scores and major.

## **How will the students in the current developmental math sequence, but who will not finish, be notified about these changes?**

It is of course difficult to ensure that all students will receive this message in a timely fashion. So the best approach is for all employees to deliver this information whenever possible. All advisors should discuss this when advising students. In addition, Math faculty will be trained to properly advise the students in their classes this semester about their next steps. John Hamman will also email students in the current developmental course sequences to communicate the need to finish developmental coursework and about the new structure.

## **For students who failed MATH 080 multiple times, what is the process of advising those students?**

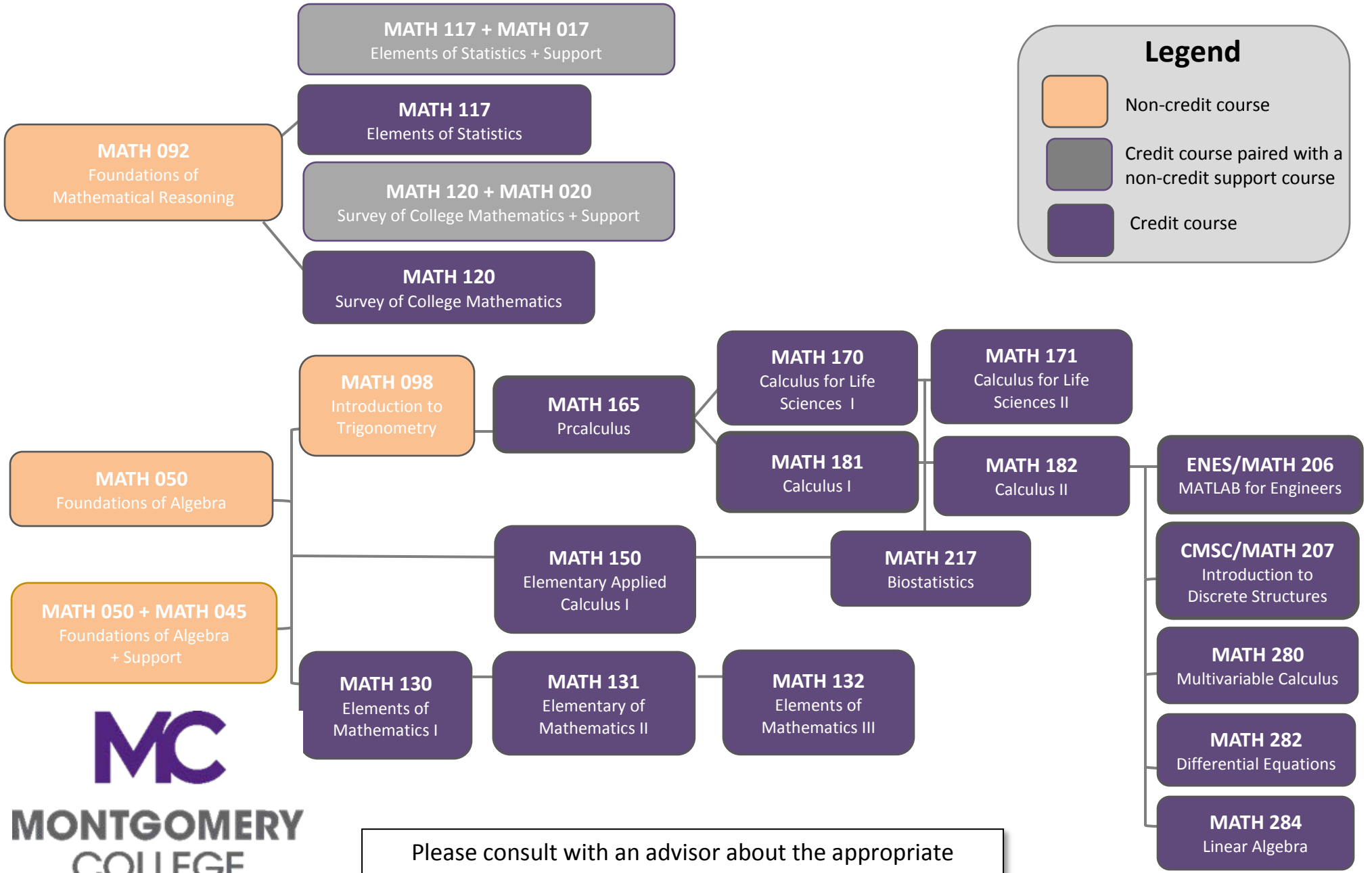
Students should be directed to retake the Accuplacer and then they will be placed in the new curriculum on the basis of their new scores. There are multiple reasons why a student might have done poorly in MATH 080. Retesting is our best way to distinguish those who have academic issues from those who have other issues that are slowing down their progress.

## **How will the new curriculum affect math assessment levels for other disciplines?**

As part of this curriculum change, all assessment levels in the catalog will be adjusted automatically. In the new curriculum, MATH 110 has been renumbered to MATH 120, so in most cases, assessment levels will read, "Assessment Level(s): MATH 117 or higher".

If the student places below college level, the answer will ultimately depend on the wishes of the discipline in question. The new corequisite courses are similar to MATH 117A in that developmental content is mastered in the same semester with credit content. Other disciplines will need to determine whether co-enrollment in assessment level courses is permissible or whether students must complete before beginning the course. Any changes will have to move through the curriculum process and be reflected in the catalog and advising documents.

# Mathematics Pathways



**Legend**

- Non-credit course
- Credit course paired with a non-credit support course
- Credit course



Please consult with an advisor about the appropriate math class for your desired major and transfer institution.