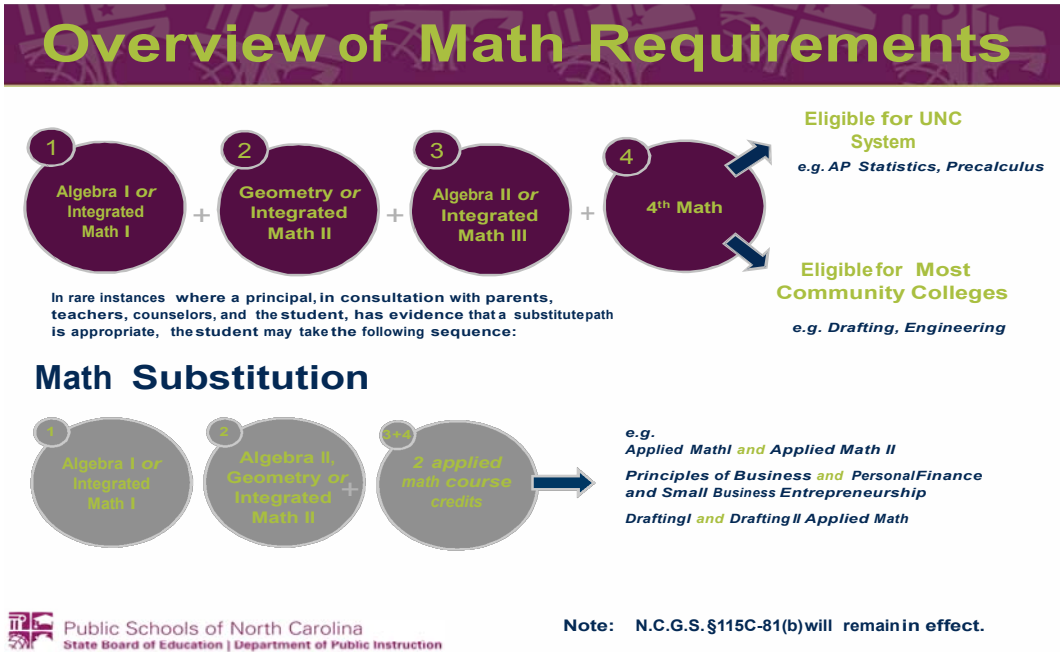
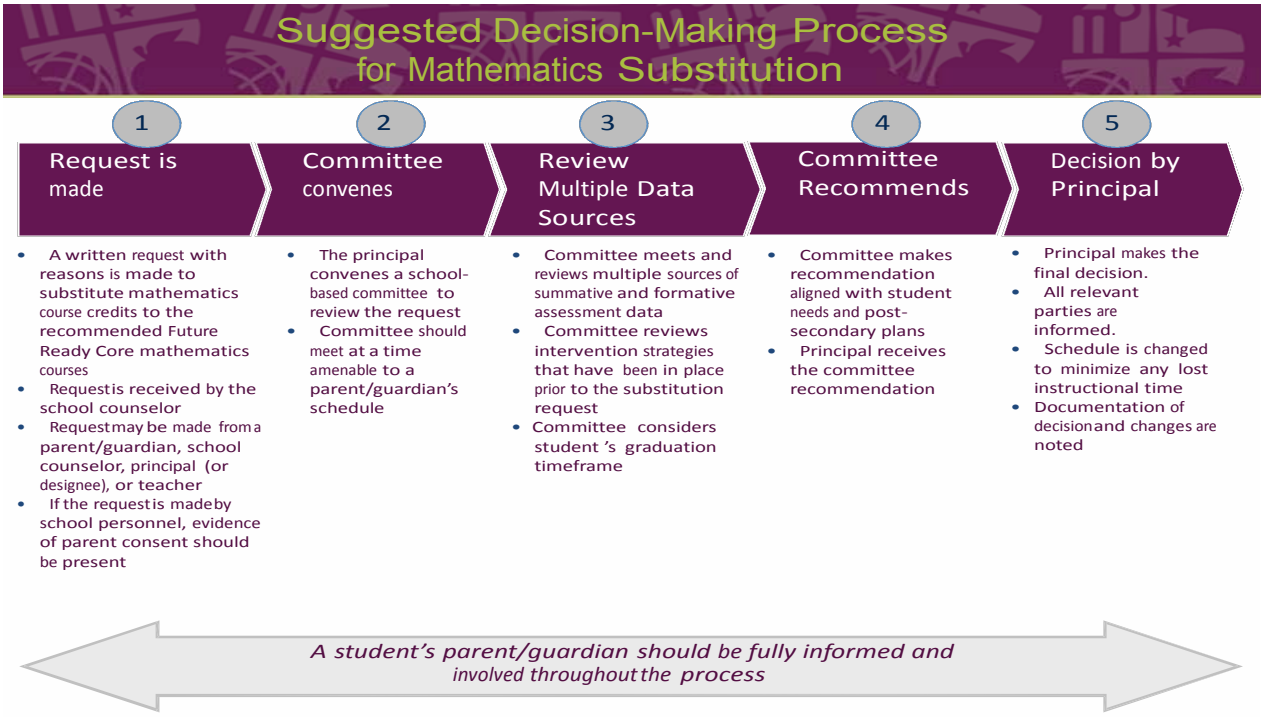
Frequently Asked Questions: Mathematics Requirement

What is the Future-Ready Core mathematics requirement?
The Future-Ready Core mathematics requirement states that students entering ninth grade for the first time in 2009-2010 and beyond must pass 4 mathematics credits which shall be either Algebra I, Geometry, Algebra II and a fourth mathematics course to be aligned with the student's post high school plans OR Integrated Mathematics I, II, and III and a fourth mathematics course to be aligned with the student's post high school plans. NOTE: Students seeking to complete the minimum application requirements for entrance to the UNC System must successfully complete four mathematics courses, which include a mathematics course with either Algebra II or Integrated Mathematics III as a pre-requisite. For a list of course options visit http://www.ncpublicschools.org/docs/gradrequirements/resources/math/optionschart.pdf



What if students are not able to successfully complete the Future-Ready Core mathematics sequence? Is there another option?
In the rare instance a principal exempts a student from the Future-Ready Core mathematics sequence, except as limited by N.C.G. S. 115C-81 (b) (see Exceptional Children Considerations FAQ), the student will be required to pass Algebra I & Geometry plus two additional math courses (either Applied Mathematics I & II or two application-based mathematics courses as determined by the LEA) OR Algebra I & II plus two additional math courses (either Applied Mathematics I & II or two application-based mathematics courses as determined by the LEA) OR Integrated Mathematics I & II plus two additional math courses (either Applied Mathematics I & II or two application-based mathematics courses as determined by the LEA). Suggested guidelines and decision making processes for students seeking an alternative to the Future-Ready Core mathematics sequence are as follows:



For more information visit
http://math.ncwiseowl.org/policy___legislation/graduation_requirements___exit_standards/substitution_guidelines/

If a student took Algebra and/or Geometry in middle school, does that count toward the four high school math courses? Yes, beginning in the 2007-2008 school year, high school math courses taken at the middle school count toward the mathematics requirement, if the student passes the class and scores a level III or above on the EOC per State Board Policy GCS-M-001. The state encourages students to continue taking progressively harder mathematics courses, even if they have satisfied the mathematics requirement for graduation.

If a student takes the Integrated Mathematics sequence, what End-of-Course (EOC) test will he/she be required to take?
Current testing policy requires that students in the Integrated Math sequence pass the Algebra I EOC after Integrated Mathematics II, and the Algebra II EOC at the end of Integrated Mathematics III.

What does "application-based" math course mean?
DPI has created two new application based math courses. These courses are called Applied Mathematics I and II. These are elective math courses that may count as "application based mathematics courses," if a student is approved to take a math substitution sequence. The goals and objectives for Applied Mathematics I and II are available for download at
http://math.ncwiseowl.org/curriculum___instruction/standard_course_of_study_2003__current_/
(Scroll down to Applied Mathematics Courses)

DPI's recommendation is that students take a credit-bearing course such as Algebra I or Integrated Mathematics I before the principal makes a substitution decision.

Which Career and Technical (CTE) courses are allowed for mathematics electives?
Please refer to http://www.ncpublicschools.org/docs/gradrequirements/resources/math/optionschart.pdf for a listing of CTE courses that are allowed for mathematics electives.

Is Introductory Mathematics (2020) going to count as a math credit under the Future-Ready Core or just a math elective?
Introductory Mathematics will not count for graduation credit unless a student goes through the substitution process from the Future-Ready Core graduation requirements in math. This practice should be highly unusual. The majority of students using math substitutions should take one of the following combinations: Algebra I and Algebra II, Algebra I and Geometry, or Integrated Mathematics I and Integrated Mathematics II, and two applied-based math courses.

What mathematics courses are accepted for UNC System admissions and which math courses are suitable for the 4th math but are not accepted by the UNC System for admission?
A list of mathematics courses and course codes accepted for UNC System admissions as well as those suitable for the 4th math but are not accepted by the UNC System can be found at http://www.ncpublicschools.org/docs/gradrequirements/resources/math/optionschart.pdf

Are Applied Mathematics I and II only for students who qualify for the mathematics substitution?
Yes, Applied Math I and II would be only for students who qualify for the mathematics substitution. For students who are taking the Future-Ready Core recommended sequence, these courses would count as electives.

Calculus and Honors Calculus (course code 2073) are not listed on the Future- Ready Core course guide as courses accepted by the UNC System. Is that correct?
This is correct. Calculus and Honors Calculus do not satisfy UNC system minimum math requirements. The UNC system expects AP Calculus AB or AP Calculus BC. UNC requirements may be found at: http://www.ncpublicschools.org/docs/gradrequirements/resources/math/optionschart.pdf

What if we wanted to adopt a Mathematics textbook that is not on the state list?
Local boards of education may select and purchase non-adopted textbooks. State textbook funds may be used for non- adopted textbooks if LEAs adhere to General Statute §115C-98. If you need additional information about the appropriate uses of textbook money, contact Charlotte Hughes, state textbook administrator, at CHUGHES@dpi.state.nc.us.

Which Integrated Mathematics courses are considered Honors level?
Integrated Mathematics II, III, and IV may be offered at the Honors level.

Can a student receive mathematics credit for both Integrated Mathematics II and Algebra I taken as separate courses?
Yes, but this should be done only when a student transitions from middle school Algebra I into Integrated Mathematics II. This sequence should not be the normal route of math sequencing. Also, an Integrated Mathematics II student should continue to Integrated Mathematics III.

How do the math requirements for Future Ready Core impact the new accountability model that the NC State Board of Education has approved in response to the "Framework for Change" document? The new accountability system has not yet been defined. When the State Board of Education (SBE) defines the new accountability model, there may be a "future-ready" calculation

based on percentage of students that complete math requirements of [Algebra I + Geometry + Algebra II] OR [Integrated Mathematics I + Integrated Mathematics II + Integrated Mathematics III]. Students given a math substitution would not be counted as meeting such a requirement. However, it is important to note that the SBE has not yet made the decision regarding this issue.

Who should I contact if I have additional questions?
For more information on mathematics requirements questions, contact Barbara Bissell, section chief, mathematics, at (919) 807-3838.