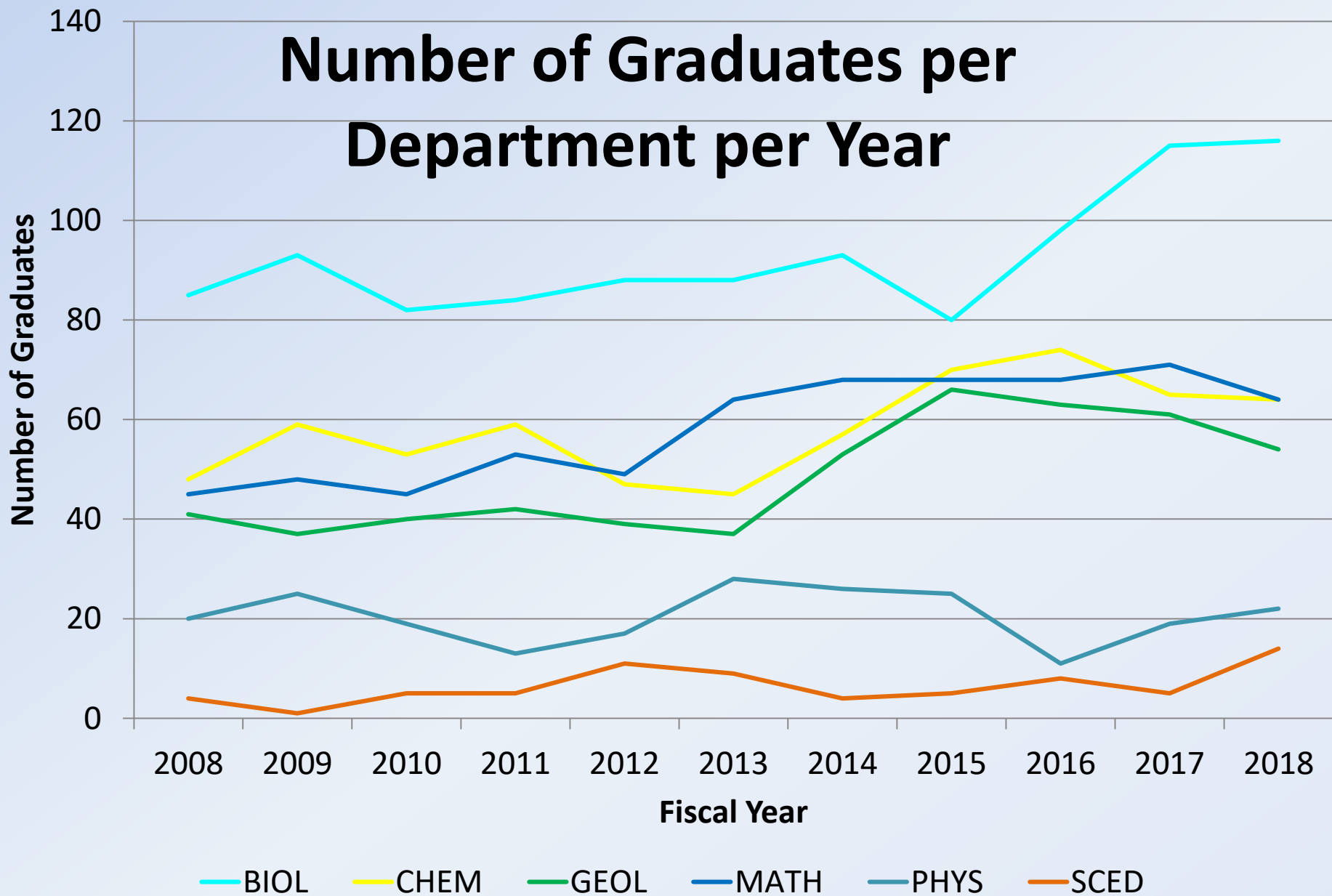
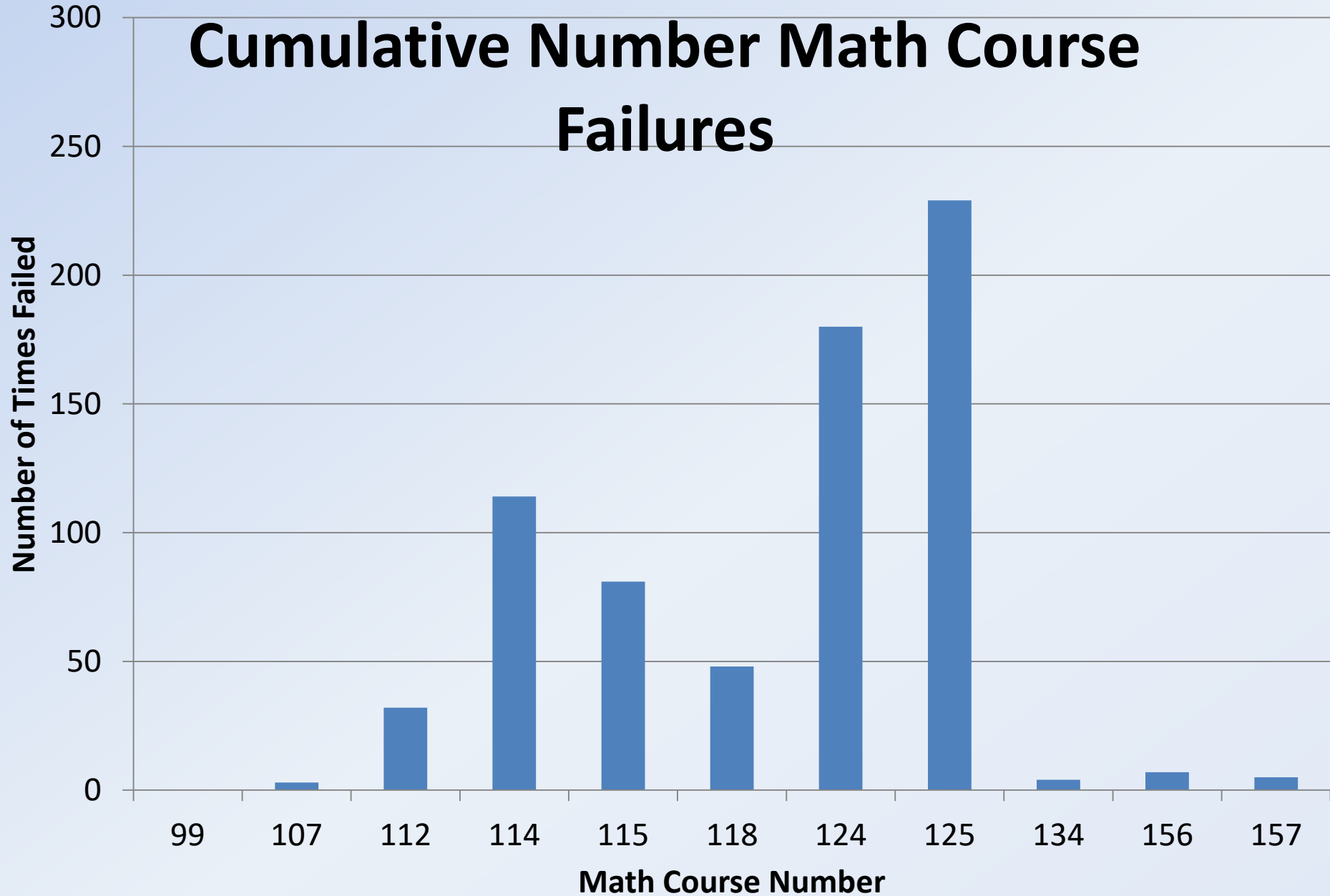


Number of Graduates per Department per Year

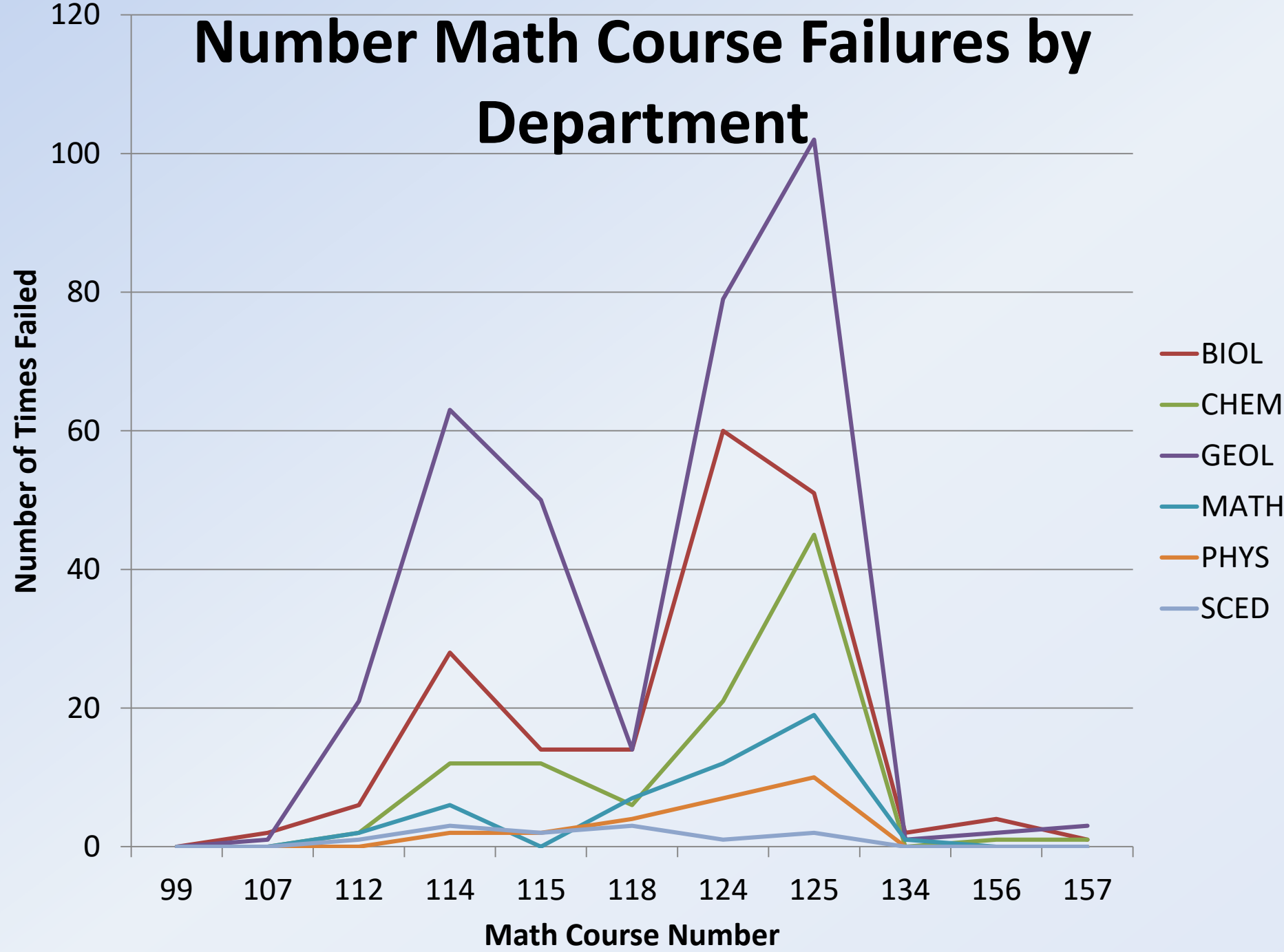


Cumulative Number Math Course Failures



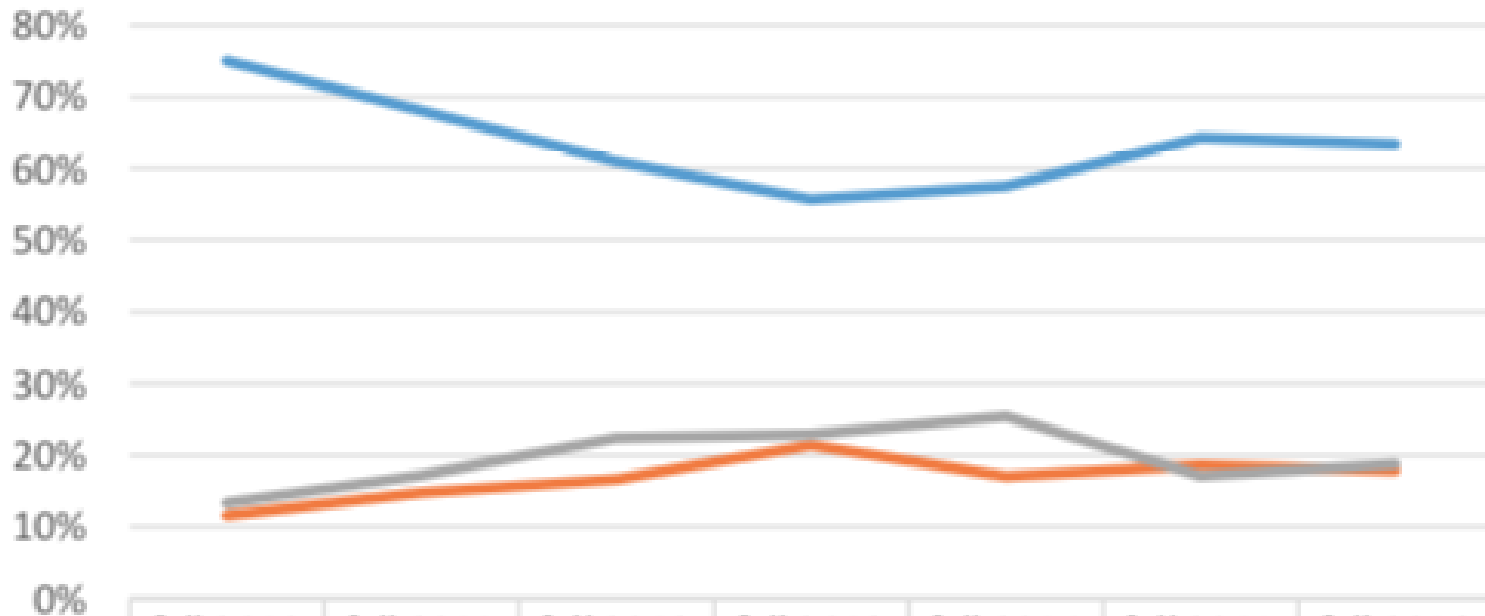
1. Failed refers to any grade below a C- or D or W or Z.

Number Math Course Failures by Department



Math 112 Grades

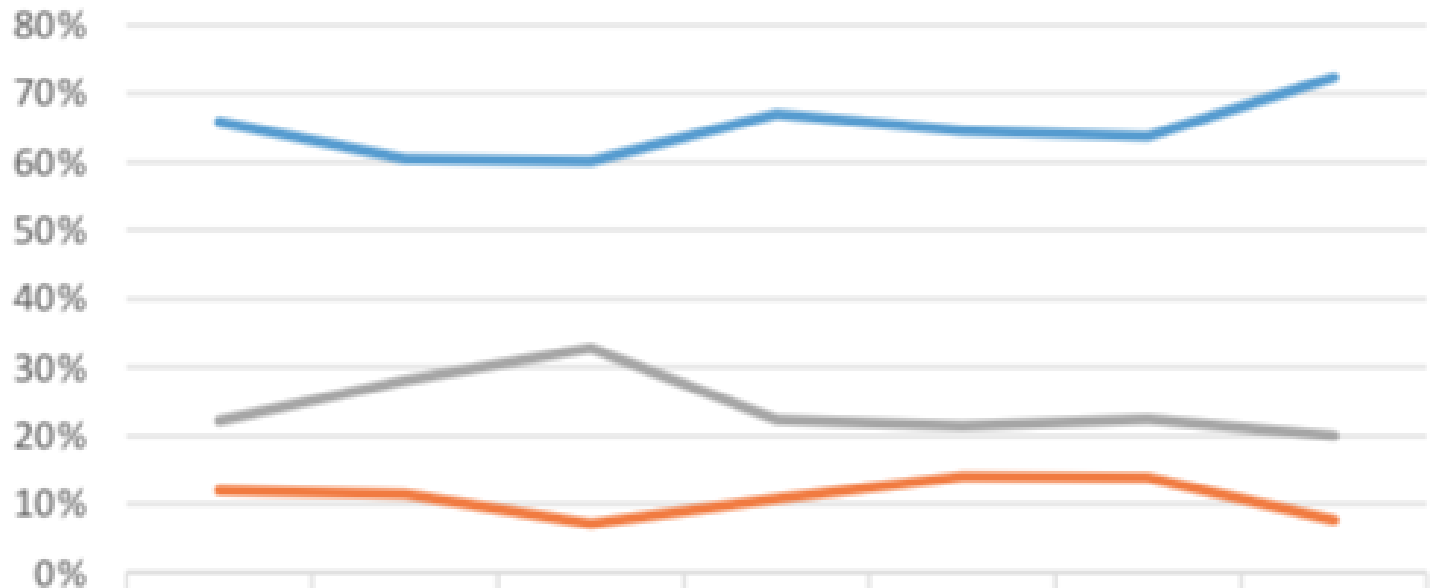
Fall Grades Received by Entering Fall Freshmen



	fall 2010	fall 2011	fall 2012	fall 2013	fall 2014	fall 2015	fall 2016
Percent C- or better	75%	68%	61%	56%	58%	64%	63%
Percent D	12%	15%	17%	21%	17%	19%	18%
Percent F,W	13%	17%	22%	23%	25%	17%	19%

Math 114 Grades

Fall Grades Received by Entering Fall Freshmen



	fall 2010	fall 2011	fall 2012	fall 2013	fall 2014	fall 2015	fall 2016
— Percent C- or better	66%	60%	60%	67%	65%	64%	72%
— Percent D	12%	11%	7%	11%	14%	14%	8%
— Percent F,W	22%	28%	33%	22%	21%	22%	20%



- Advancing Excellence and Equity in Science (AEES)
- Change at the CORE

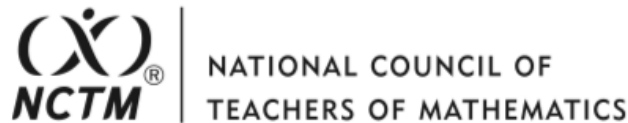
Department initiatives

- First year math PLC
- Director of first year math instruction

- The Department of Mathematics has adopted the following Student Learning Outcomes for our programs. We expect all students who complete math classes to demonstrate the ability to:
 - understand and utilize course content at an appropriate level;
 - use problem solving skills by developing a strategic overview of a mathematical situation and
 - using this overview to analyze that situation;
 - recognize that a problem can have different useful representations (graphical, numerical, or symbolic) and select the most appropriate methods and formats;
 - model real world problems mathematically and interpret the results appropriately;
 - use appropriate software and technological tools and judge when such use is helpful;
 - communicate mathematical results and arguments clearly, both orally and in writing;
 - appreciate the central role of mathematics in the sciences and the wider world.

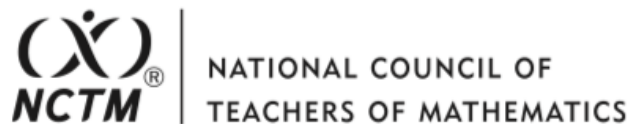
The Role of Calculus in the Transition from High School to College Mathematics, May 2016

- https://www.maa.org/sites/default/files/RoleOfCalc_rev.pdf
- 2012 Joint position statement
 - “While there is an important role for calculus in secondary school, the ultimate goal of the K–12 mathematics curriculum should not be to get into and through a course of calculus by 12th grade, but to have established the mathematical foundation that will enable students to pursue whatever course of study interests them when they get to college.”



The Calculus question

- 2012 Joint position statement
 1. Students who enroll in a calculus course in secondary school should have demonstrated mastery of algebra, geometry, trigonometry, and coordinate geometry;
 2. The calculus course offered in secondary school should have the substance of a mainstream college-level course;
 3. The college curriculum should acknowledge the ubiquity of calculus in secondary school, shape the calculus curriculum so that it is appropriate for those who have experienced introductory calculus and offer alternatives to calculus.



The Calculus question

- From the 2016 report:
 - “Too many students are moving too fast through preliminary courses so that they can get calculus onto their high school transcripts. The result is that even if they are able to pass high school calculus, they have established an inadequate foundation on which to build the mathematical knowledge required for a STEM career.”

