

Statement for Preparation for Calculus - Approved at Fall 2014 Meeting

Preparation for Calculus (Precalculus) is a key course for all students who want to pursue careers in STEM (Science, Technology, Engineering, Mathematics) fields. It bridges the typical high school mathematics curriculum to Calculus. Precalculus courses are the college level mathematics courses with the highest enrollment across the country, but student success rates in these courses are generally very low. There are many versions of precalculus courses at the high school level. Students who complete a precalculus course at the high school level may find themselves struggling with calculus not because they do not understand the calculus concepts but because they do not understand the required algebra or have gaps in trigonometry. For these reasons, the Precalculus Advisory Council was formed, consisting of faculty from the Regent's institutions, community colleges, high school teachers and mathematics consultants from the Area Education Agency and the Iowa department of Education. The first task of the Council is to prepare a list of key topics and practices that are the required foundation before students take any calculus course. The Council expects that these recommendations will lead to the planning of a 12th grade mathematics course for high schools, and well-aligned precalculus courses at the state's two and four-year colleges.