

Comparison Between Regents, AB and BC Level Calculus

	Regents	Calculus AB	Calculus BC
Overview	<p>Calculus is designed as an introductory course to differential and integral calculus and is a good preparatory course for students planning on taking college calculus.</p> <p><i>30 minutes of homework each night.</i></p>	<p>Calculus AB is an AP course in differential and integral calculus. It is designed to be taught over a full high school academic year. Students should have demonstrated mastery of material from courses covering the equivalent of four full years of high school mathematics before attempting calculus</p> <p><i>40-60 minutes of homework each night.</i></p>	<p>Calculus BC is a full-year AP course in the calculus of functions of a single variable. Calculus BC is an extension of Calculus AB; it includes all topics covered in Calculus AB plus additional topics. This course is intended to be challenging and demanding. Students should have demonstrated mastery of material from courses covering the equivalent of four full years of high school mathematics before attempting calculus. The class meets for 7.5 periods per week.</p> <p><i>40 minutes of homework each night.</i></p>
Pace	<p>Topics are covered at a pace that allows for the review of key concepts from prior courses and the remediation of any deficiencies in critical skills.</p>	<p>It is possible to spend some time on elementary functions and still cover the Calculus AB curriculum within a year. However, most of the year must be devoted to topics in differential and integral calculus</p>	<p>Progresses at a very fast pace, covering the greatest breadth and depth of topics. Students are expected to have mastered the skills and concepts covered in prior courses.</p>
Content	<p>Concepts are introduced using concrete examples. An applied approach to topics is employed, focusing on application, method and skill development.</p>	<p>The courses emphasize a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important. Through the use of the unifying themes of derivatives, integrals, limits, approximation, and applications and modeling, the course becomes a cohesive whole rather than a collection of unrelated topics. The content covered in this course is a subset of Calculus BC with the same depth</p>	<p>The courses emphasize a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations also are important. Through the use of the unifying themes of derivatives, integrals, limits, approximation, and applications and modeling, the course becomes a cohesive whole rather than a collection of unrelated topics.</p>

		given to the common topics of the two courses.	
Assessments	<p>Tests consist of multiple choice and free response questions.</p> <p>Long and Short term projects are used to explore and discover advanced mathematical concepts</p>	<p>Tests consist of AP examination level questions that require students to analyze and interpret information. Challenging free response questions require mathematical and conceptual thinking. Students are often required to take tests and quizzes without the use of calculators.</p> <p>Long and Short term projects are used to explore and discover advanced mathematical concepts. Students can earn up to one semester's credit by scoring 3 or higher on the AP Exam.</p>	<p>Tests consist of AP examination level questions that require students to analyze and interpret information. Challenging free response questions require mathematical and conceptual thinking. Students are often required to take tests and quizzes without the use of calculators.</p> <p>Long and Short term projects are used to explore and discover advanced mathematical concepts. Students can earn up to one year's credit by scoring 3 or higher on the AP Exam.</p>