

MAT203 Calculus II

<p>As a result of home and classroom study, the students at the termination of this course will demonstrate the following knowledge and skills:</p>	<p>.</p>	
OUTCOMES	ACTIVITIES	ASSESSMENT
<p>Find areas under a curve by graphical, numerical, and analytic methods</p>	<ol style="list-style-type: none"> 1. Approximate the area under a curve using upper and lower sums. 2. Evaluate definite integrals using the limit definition. 3. Use the graph of a function to find the anti-derivative of that function. 4. Approximate the value of a definite integral using the midpoint rule, the trapezoidal rule, and Simpson's rule using programs on the graphing calculator. 5. Estimate the errors in approximations. 	<ol style="list-style-type: none"> 1. Hand-in assignments. 2. In-class problems. 3. In-class tests.
<p>Find the anti-derivative of a function given by a formula</p>	<ol style="list-style-type: none"> 1. Use the Fundamental Theorem of Calculus to evaluate definite integrals and calculate area. 2. Use the power, product, quotient, and chain rules. 3. Evaluate integrals using change of variable and substitution. 4. Use integration by Parts. 	<ol style="list-style-type: none"> 1. Hand-in assignments. 2. In-class problems. 3. In-class tests.
<p>Use a table of integrals to do complicated integration</p>	<ol style="list-style-type: none"> 1. By using a table of integrals 	<ol style="list-style-type: none"> 1. Hand-in assignments. 2. In-class problems. 3. In-class tests.
<p>Find volumes of solids of revolution by integration</p>	<ol style="list-style-type: none"> 1. By slicing into simple volumes. 	<ol style="list-style-type: none"> 1. Hand-in assignments. 2. In-class problems. 3. In-class tests.