

Curricular Content	
Know	<p><i>Which Curricular Content will students learn and be assessed on this unit?</i></p> <ul style="list-style-type: none"> • integration: <ul style="list-style-type: none"> ○ definition and notation ○ definite and indefinite integrals • approximations: <ul style="list-style-type: none"> ○ Riemann sum, rectangle and trapezoidal methods • fundamental theorem of calculus • methods of integration: <ul style="list-style-type: none"> ○ antiderivatives of functions ○ substitution
	<p><i>Which activities, projects, exercises or discussions will teach this Curricular Content?</i></p> <ul style="list-style-type: none"> • Class discussion of how an antiderivative is related to the derivative, using the idea of a function machine • Explorations of the Riemann sums and approximations (videos and technology) • Discussions of the Fundamental Theorem of Calculus • Consider worked examples and analyse steps • Discussion of the basis of the substitution method of integration in chain rule

First Peoples Principles of Learning
<p><i>How will they implement the First Peoples Principles of Learning?</i></p> <p>Through class discussions, independent work and self-reflection, students will have the opportunity to reinforce the following First Peoples Principles of Learning</p> <ul style="list-style-type: none"> • Learning ultimately supports the well-being of the self, the family, the community, the land, the spirits and the ancestors. • Learning is holistic, reflexive, reflective, experimental, and relational (focused on connectedness, on reciprocal relationships, and a sense of place). • Learning is embedded in memory, history, and story. • Learning involves patience and time.

Unit Assessment		
<p><i>For Learning: Formative Assessment</i></p> <ul style="list-style-type: none"> • whiteboard work • check of specific questions from homework • participation in video conferences • online quizzes 	<p><i>As Learning: Reflection/Self-Assessment</i></p> <ul style="list-style-type: none"> • benchmarking self-assessments through Google Forms 	<p><i>Of Learning: Summative Assessment</i></p> <ul style="list-style-type: none"> • test or problem set

Required Resources
<p><i>What resources (textbooks, computer programmes, website subscriptions) will students need to complete this unit?</i></p> <ul style="list-style-type: none"> • CEMC (University of Waterloo) courseware (https://courseware.cemc.uwaterloo.ca/11) • Calculus textbook (McGraw-Hill Ryerson), sections of chapters 9-11 • Computer for video-conferencing • Notebook and calculator • Desmos