

# 2023 - 2024 COURSE EXPECTATIONS

Course Name: Multivariable Calculus

Teacher Name(s)	Email	Phone
Kim Steinbach	ksteinbach@swindsor.k12.ct.us	860-474-1113

**Course Overview:** This course extends two dimensional analysis explored in AP Calculus BC to three dimensions. Topics include the three dimensional coordinate system, vectors and analytic geometry in space, multivariable functions and their derivatives, multiple integrations, and vector valued functions. These topics are investigated using analytical, numerical, and graphical representations. A graphing calculator is required for this course.

### Vision of the Successful Student And Core Competencies:

The successful student will...

- demonstrate the ability to solve problems using correct mathematical processes.
- effectively communicate, orally and in writing, the processes and reasoning used to arrive at solutions.
- make connections and effectively apply learned material to new situations.
- identify whether or not a solution is reasonable and revise if necessary.
- use technology to enhance mathematical literacy.
- demonstrate academic integrity as outlined in the Bobcat Student Handbook.
- be a collaborative individual who learns from and contributes to the classroom environment.
- exhibit appropriate behavior for the classroom, including respect, responsibility and engagement.

#### Materials and Resources to Support Student Learning:

- Graphic calculator technology (TI-83/84) is integrated throughout the course. Students are encouraged to have access to one for use outside the classroom.
- Multivariable Calculus 11th Edition by Larson and Edwards with student solution manual.

https://www.webassign.net/ Online access for textbook

Evidence of Student Learning: Gradebook Categories			
Assessments	80%	<ul> <li>Activities that allow students to demonstrate mastery and application of taught concepts and skills</li> <li>May vary in format and occur at various points through the unit.</li> <li>Assessments may include (but are not limited to):         <ul> <li>problem sets</li> <li>quizzes</li> <li>tests</li> <li>performance tasks</li> <li>projects</li> </ul> </li> </ul>	
Learner Tasks	20%	<ul> <li>Activities that provide opportunities to practice content and skills when mastery would not yet be expected</li> <li>Accountability for timely completion and submission of assignments</li> <li>May vary in format and occur at various points through the unit.</li> <li>Learner tasks may include (but are not limited to):         <ul> <li>homework, classwork, practice problem sets</li> <li>warm-ups, check-ins, exit passes,</li> <li>work habits, engagement, readiness for class</li> </ul> </li> </ul>	

## Late Work:

- Late work is accepted up until the material is assessed (i.e. quiz, test).
- Full credit earned for homework completed on-time; reduced credit for homework submitted late; homework not submitted earns no credit.
- Students who are absent will have additional time to complete assignments without penalty as described in the Bobcat Handbook.

## Please refer to the Bobcat Student Handbook for the full academic integrity policy.