

## **MATH 2110 - Calculus III (4)**

### **(Dual Enrollment Calculus III)**

Instructor: Dr. Matthew Holmes

#### **Objectives:**

Multivariable calculus including three-dimensional analytic geometry and vectors, quadratic surfaces, arc length and curvature, limits and continuity, partial derivatives and their applications, tangent planes, optimization problems and Lagrange multipliers, multiple integrals, vector fields, line and surface integrals, Green's theorem, Stokes' theorem, the divergence theorem.

#### **Required text:**

Multi Variable Calculus – Sixth Edition by James Stewart (published by Brooks/Cole Cengage Learning)

#### **Grading Policy:**

The grading policies for the University of Memphis course and the Collierville Schools **differ**. Students will receive course grades based upon the grading scales of both Collierville Schools and the University of Memphis:

U of M grades: A 90-100, B 80 - 89, C 70 - 79, D 60 - 69, F 59 and below;

CHS grades: A 93-100, B 85-92, C 75-84, D 70-74, F 69 and below

**Your U of M grade will be based upon the average of the tests and Final Exam. They will be in various formats: multiple choice, free response, term and event identifications.**

The CHS grade will include all grades taken in the course. Only the Collierville High School grade will be shown in Powerschool.

For any additional questions, please feel free to contact me at [mholmes@colliervilleschools.org](mailto:mholmes@colliervilleschools.org)