# Brief Course Outline

**Course Title:** **Methods of calculus**

**Course Number and Section:** MATH 1225B 553

**Instructor Name(s):** Marina Palaisti

**Instructor Email(s):** mpalaist@uwo.ca

Disclaimer: Information in the brief course outline is subject to change. The syllabus posted on OWL is the official and authoritative source of information for the course.

## Course Description:

The ability to study complex problems of nonlinear relationships between cause and effect, and to model problems that depend on multiple factors, is one of the most important and marketable skills a student of business can acquire. The purpose of this course is to introduce quantitative tools to model and study multidimensional problems.

Topics include: Logarithmic, exponential and trigonometric functions; integration, area; techniques of integration, improper integrals; functions of several variables, Second Partials Test, Lagrange Multipliers; differential equations, applications of differential equations

## Learning Outcomes:

As a result of this course, students will be able to study problems of non-linear nature and apply their skills to find solutions to complex problems of integration, optimization and differential equations.

## Textbooks and Course Materials:

The course lecture notes aim to be self-contained. The textbook is  Custom Text for Maths 0110A/B, 1225A/B, 1230 , but is not required.

**Methods Of Evaluation:**

| Assignment | Due Date mm/dd/yy | Weight - % |
|---|---|---|
| Midterm 1 | TBA | 20% |
| Midterm 2 | TBA | 20% |
| Online quizzes | | 10% |
| Final exam | | 40% |
| Best between midterms and final | | 10% |

In solidarity with the Anishinaabe, Haudenosaunee, Lūnaapéewak, and Chonnonton peoples on whose traditional treaty and unceded territories this course is shared.

Monday, December 9, 2024