

Calculus for Business Course Descriptor

Course code	LMATH4201	Discipline	Math
UK Credit	15	US Credit	4
FHEQ level	4	Date approved	November 2022
Core attributes	Formal and Quantitative reasoning (FQ)		
Pre-requisites	None		
Co-requisites	None		

Course Overview

The Calculus for Business course is a calculus course intended for those studying business, economics, or other related business majors. The following topics are presented with some applications to business: functions, graphs, limits, differentiation, applications of differentiation, integration, applications of integration. Through the study of these subjects students will develop an understanding of the language of Maths and associated mathematical tools and use formal and quantitative reasoning to solve commonly occurring business problems

Learning Outcomes

On successful completion of the course, students will be able to:

Knowledge and Understanding

- K1a Solve problems using introductory calculus theory.
- K2a Use given mathematical tools to solve basic calculus problems.

Subject Specific Skills

- S1a Use the techniques of calculus to solve problems involving applications.

Transferable and Employability Skills

- T2a Identify situations that will benefit from the use of problem solving techniques.

Teaching and Learning

This course has a dedicated Virtual Learning Environment (VLE) page with a syllabus and range of additional resources (e.g. readings, question prompts, tasks, assignment briefs, discussion boards) to orientate and engage students in their studies.

The scheduled teaching and learning activities for this course are:

1. Lectures/seminars/labs/studios/workshops

40 scheduled hours - typically including induction, consolidation or revision, and assessment activity hours.

- Version 1: all sessions in the same sized group

OR

- Version 2: most of the sessions in larger groups; some of the sessions in smaller groups

Faculty hold regular 'office hours', which are opportunities for students to drop in or sign up to explore ideas, raise questions, or seek targeted guidance or feedback, individually or in small groups.

Students are to attend and participate in all the scheduled teaching and learning activities for this course and to manage their directed learning and independent study.

Indicative total learning hours for this course: 150

Assessment

Both formative and summative assessment are used as part of this course, with purely formative opportunities typically embedded within interactive teaching sessions, office hours, and/or the VLE.

Summative Assessments

AE:	Assessment Activity	Weighting (%)	Duration	Length
1	Midterm Examination	30	75 mins	
2	Final Examination	50	75 mins	
3	Set Exercises	20	3-5 hours	

Further information about the assessments can be found in the Course Syllabus.

Feedback

Students will receive formative and summative feedback in a variety of ways, written (e.g. marked up on assignments, through email or the VLE) or oral (e.g. as part of interactive teaching sessions or in office hours).

Indicative Reading

Note: Comprehensive and current reading lists are produced annually in the Course Syllabus or other documentation provided to students; the indicative reading list provided below is for a general guide and part of the approval/modification process only.

Books

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- James Stewart, Daniel K. Clegg, Saleem Watson, *Calculus: Early Transcendentals*, Metric Edition

Title: *Calculus: Early Transcendentals, Metric Edition*

Author: James Stewart, Daniel K. Clegg, Saleem Watson

Edition: 9th

ISBN-10: 0357706528

ISBN-13: 9780357706527

Indicative Topics

Note: Comprehensive and current topics for courses are produced annually in the Course Syllabus or other documentation provided to students; the indicative topics provided below is used as a general guide and part of the approval/modification process only.

- Functions and graphs
- Differentiation and applications
- Integration and applications

Title: LMATH4201 Calculus for Business Course Descriptor

Approved by: Academic Board

Location:

[academic-handbook/programme-specifications-and-handbooks/undergraduate-pro](#)

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Version number	Date approved	Date published	Owner	Proposed next review date	Modification (As per AQF4) & category number
2.0	July 2023	July 2023	Dr Marianna Koli	November 2027	Category 2 modification: Change to summative assessment.
1.0	November 2022	January 2023	Dr Marianna Koli	November 2027	