

**Welcome to**

**MAST10006 Calculus 2**

**Lecturer: Dr Anthony Morphett**

**[a.morphett@unimelb.edu.au](mailto:a.morphett@unimelb.edu.au)**

# Calculus 2 teaching team

## Lecturers:

**Dr. David Gepner**

**(9am lecture stream)**

**Dr. Anthony Morphett**

**(11am lecture stream)**

**Prof. Arun Ram**

**(1pm lecture stream)**

**Dr. Alysso Costa**

**(3:15pm lecture stream)**

## Subject co-ordinator:

**Dr. Anthony Morphett**

**[a.morphett@unimelb.edu.au](mailto:a.morphett@unimelb.edu.au)**

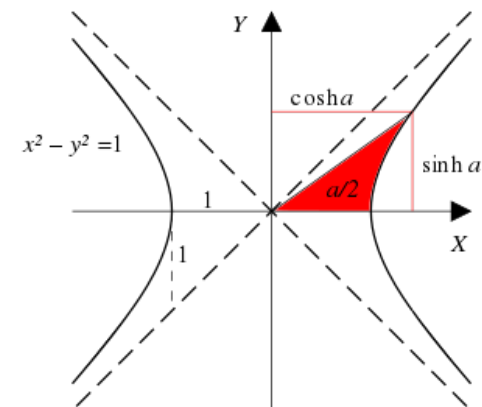
**Office: Room G43, Peter Hall building**

**Contact Anthony for any matters relating to enrolment, assessment etc**

# Calculus 2 overview

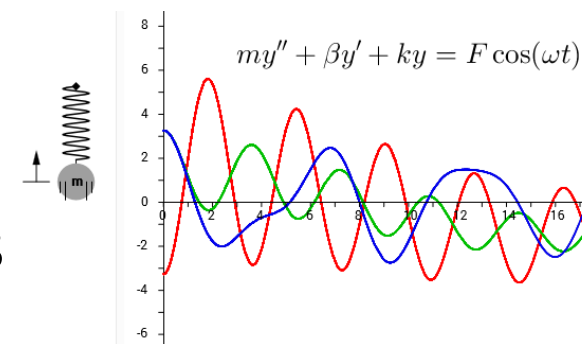
## (1) Calculus for Functions of 1 Variable (Weeks 1-5)

Extension of school calculus including hyperbolic functions, complex exponential, new methods of integration, sequences and series



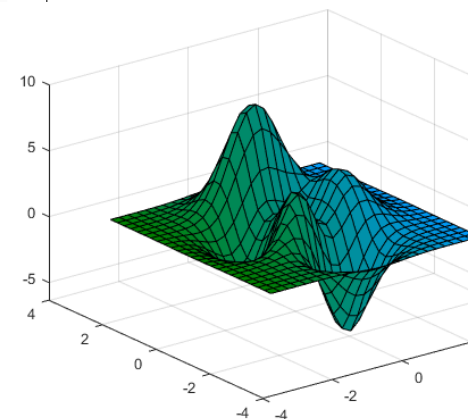
## (2) Differential Equations (Weeks 5-9)

1st and 2nd order differential equations, and applications



## (3) Calculus for Functions of 2 Variables (Weeks 10-12)

Partial derivatives, chain rule, directional derivatives, maxima & minima, double integrals



## **Lecture notes**

**Compulsory for all students**

**Buy from University Co-op bookshop (~\$11) or from LMS**

**Contain all theory, diagrams and statement of questions**

**Bring to lectures and fill in the working of examples**

## **Problem booklet**

**Exercises to work on at home**

**Answers at back**

**Ask for help in consultations**

# Practice classes (tutorials)

- Start this week
  - Questions handed out at start of class
  - Work in groups at whiteboards
  - Full solutions provided at end of class
  - Bring lecture notes & problem booklet
- 
- First practice class is revision
    - if you find any of it difficult, see LMS for revision resources or come for help...



# Getting help

## Consultations

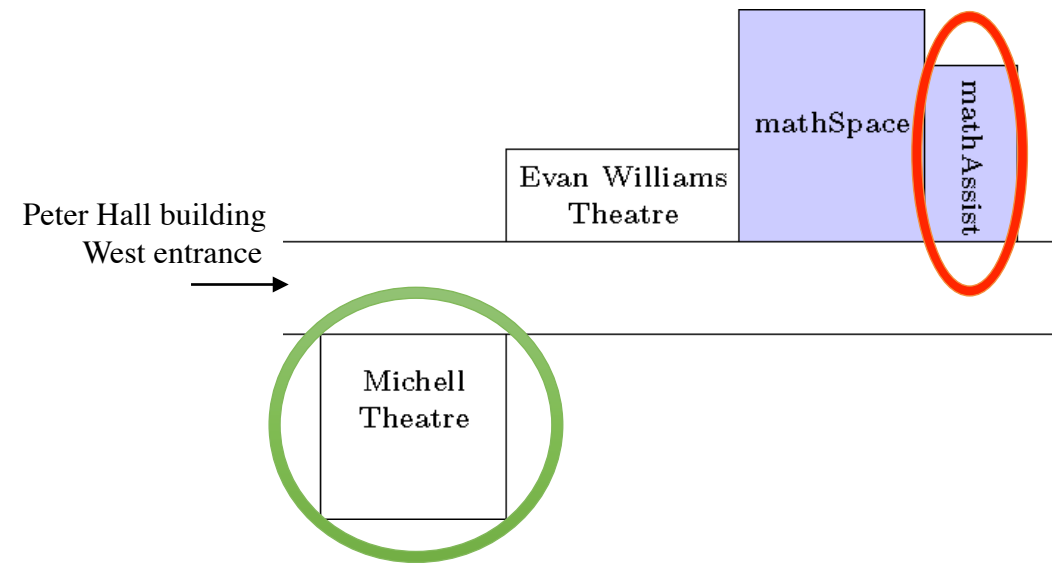
- one-on-one help from lecturer/tutor
- see LMS for times & locations

## MathAssist

- drop-in help, 12-2pm
- revision/background knowledge
- Peter Hall building, ground floor

## Café discussion forum

- student-run discussion forum
- access via LMS



# Assessment

## Assignments:

- **9 weekly assignments:** 6 written, 3 online
- Each worth 2.22% of final MAST10006 grade
- Due **3pm each Monday** from week 4 onwards (Mon 19 Aug)

## Final exam:

- Worth 80% of final MAST10006 grade
- 3 hours writing time
- No calculators
- Formula sheet in problem booklet provided in exam

# Expectations

**Attend all classes**

**Seek help when needed**

**Check your email daily for announcements**

**Complete all assignments on time**

**Work through problem booklet**

**→ aim to do all questions by swot-vac**

**~ 9 hours extra study/week outside of class**