

# MATH5765: Algebraic Geometry (2004, S2)

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**Consultation Hours:** TBA (see webpage)

Most of the information you need to know about the course can be gotten from the webpage above, including a copy of this handout.

## Assessment

The assessment will consist of two assignments each worth 20% and a final exam worth 60%. The assignments are designed to be relatively easy and you are expected to get close to full marks for them.

## Additional Assessment Policy

Click on Additional Assessment in Later Years on the webpage  
<http://www.maths.unsw.edu.au/ForStudents/index.html>.

## References

I will mainly be working through the first text by Shafarevich. My plan is to go through the first chapter (painfully) slowly to make sure you learn  $\epsilon$  of the basic material thoroughly and then to move at a moderate pace through other sections of the book.

Traditionally, algebraic geometry is taught to students who have had a course on commutative algebra. I will assume no knowledge of commutative algebra but skim lightly through the required material as we need it. You may wish to reinforce your knowledge of commutative algebra by consulting an appropriate text on the subject. Alternatively, you may wish to consult the my website where there are lecture notes on a course on commutative algebra I taught in 2003. We'll probably only need the first couple of weeks' material.

- Shafarevich, "Basic Algebraic Geometry"
- Hartshorne, "Algebraic Geometry"
- Reid, "Undergraduate Algebraic Geometry"
- Mumford, "Algebraic Geometry"
- Kirwan, "Complex Algebraic Curves"