School of Mathematics

Course 414 — Complex Analysis
(Optional JS & SS Mathematics, SS Two-subject Moderatorship )

Lecturer: Dr. Dmitri Zaitsev

Requirements/prerequisites: 221, 214

Duration: 18 weeks.

Number of lectures per week: 3

Assessment: Regular assignments.

End-of-year Examination: One 3-hour examination

Description:


5. Residues, their calculation. Residue theorem: for unions of star-shaped regions and the winding number version. Applications to calculation of integrals.


Further detailed information about the course will become available via the web site for the course at [http://www.maths.tcd.ie/~zaitsev/414.html](http://www.maths.tcd.ie/~zaitsev/414.html)

**Objectives:** This course will build on material covered in 214. Initially it will cover some familiar material in greater detail and then continue on to cover basic material in complex analysis.

**Textbooks:**


October 8, 2007