

MATH 421 COMPLEX ANALYSIS

SYLLABUS

Course Index: 338530
Instructor: Bob Vaughan
Office: 2D Thomas
Telephone: 865-3583
Email: rvaughan@math.psu.edu
Office Hours: MTWR 1:45-2:30 and otherwise by arrangement.
Class: MWF 9:05-9:55, 109 Boucke.
Text: Priestley, Introduction to Complex Analysis,
Oxford University Press, 0-198-52562-1,
Homework: Homework due Mondays or first class in the week when
Monday is a holiday, starting Wednesday 8th September.
Grading:
Homework & Quizzes 35%,
Mid-term Exams, 9:05-9:55, 109 Boucke,
Wednesday 6th October 10%,
Wednesday 10th November 20%,
Final Exam, 35%, Tuesday 14th December, 2004 at 10:10A-12:00pm in 262 Willard.

Topics

The Complex Plane and its Geometry, Topology and Analysis, Chapters 1–3,
Paths, Series, Holomorphic Functions, Multifunctions, Chapters 4–7,9,
Integration, Cauchy's theorem and formulæ, Power series, Chapters 10–14,
Zeros, Singularities, Residues, Contour Integration, Chapters 15–20,

If time some aspects of the following may be covered

Conformal Mapping: Chapter 8.

Late homework will not be accepted unless prior permission is granted. No homework will be accepted after the graded ones have been returned to the students.

No makeup exams are available except by prior arrangement in extenuating circumstances.

All Penn State Policies (see <http://www.psu.edu/ufs/policies/>) regarding ethics and honorable behavior apply to this course.