

Complex Variables

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Outline

- ▶ Homepage
- ▶ Syllabus
- ▶ Final Grade
- ▶ Resources

Homepage

- ▶ <http://cs.marlboro.edu/courses/spring2010/complex/home>
 - ▶ All details on course.
 - ▶ Links to syllabus, online resources etc.

Syllabus

- ▶ <http://cs.marlboro.edu/courses/spring2010/complex/syllabus>
- ▶ Course is basically Calculus II meets complex numbers.
- ▶ Final Grade:
 - ▶ Assignments: 40%;
 - ▶ Quizzes: 20%;
 - ▶ Final exam: 40%.

Content

► Ideas from Calculus I & II:

- Complex numbers;
- Functions;
- Limits;
- Continuity,
- Complex differentiation;
- Complex integration.

Content (cont.)

Other ideas from Calculus:

- ▶ Cauchy's Theorems;
- ▶ Cauchy Riemann equations;
- ▶ Cauchy's Integral Formulas;
- ▶ Infinite series;
- ▶ Residue theorem;
- ▶ Conformal mappings.
 - ▶ Möbius strip.

Resources

- ▶ Books:
 - ▶ **Fundamentals of Complex Analysis with applications to Engineering & Science by E. B. Saff & A. D. Snider (3rd Ed). Course Textbook.**
 - ▶ Schaum's Outlines: Complex Variables (With an Introduction to Conformal Mapping and Its Applications).
- ▶ Resources
 - ▶ <http://cs.marlboro.edu/courses/spring2010/complex/resources>

Resources (cont)

► Resources

- <http://cs.marlboro.edu/courses/spring2010/complex/resources>
 - Link to ebook.
- Wiki Page:
 - <http://cs.marlboro.edu/courses/spring2010/complex/wiki/wiki>