

MATH 322 - COMPLEX ANALYSIS

Spring 2019

www.math.drexel.edu/~tolya/322S19.html

MW 12-2, Curtis 352

INSTRUCTOR

Anatolii Grinshpan

Korman 228, tolya@math.drexel.edu, 215-895-4979

OFFICE HOURS

TR 11-2, [Math Resource center](#) (Korman 207).

OBJECTIVE

Acquire a basic understanding of the subject, as a preparation for pursuing it at a higher level or for employing it in other areas.

TEXTBOOK

Donald Sarason, [Complex Function Theory](#), AMS, 2nd edition.

HOMEWORK

I would expect you to read the textbook and to work on problems regularly and thoroughly. Weekly homework will be posted on the class page. You may find it useful to share your thoughts at the preliminary stage, but your solutions must be written up without collaboration. Two lowest homework scores will be dropped.

EXAMS

We will have two in-class midterms and a cumulative final exam.

The lower midterm score will be replaced by the final exam score if it is higher.

There will be no makeup exams.

GRADE COMPONENTS

Exams 28% each, homework 16%.

POSSIBLE SUPPLEMENTS

James Brown and Ruel Churchill, [Complex Variables and Applications](#)

Stephen Fisher, [Complex Variables](#)

Jerrold Marsden and Michael Hoffman, [Basic Complex Analysis](#)

Tristan Needham, [Visual Complex Analysis](#)

Murray Spiegel et al, [Schaum's Outline of Complex Variables](#)

ACADEMIC MATTERS

Academic integrity: www.drexel.edu/provost/policies/academic-integrity

Accommodations: www.drexel.edu/oed/disabilityResources/students

Course add/drop: www.drexel.edu/provost/policies/course-add-drop

Course withdrawal: www.drexel.edu/provost/policies/course-withdrawal

APPROXIMATE CALENDAR

| Week | Topic |
|------|---|
| 1 | Complex numbers and complex plane. |
| 2 | Complex differentiability. |
| 3 | Elementary mappings. |
| 4 | Logarithms, roots, and powers. |
| | Midterm 1 |
| 5 | Power series. |
| 6 | Complex integration. |
| 7 | Cauchy's theorem. |
| 8 | Isolated singularities and the Residue theorem. |
| | Midterm 2 |
| 9 | Properties of analytic functions. |
| 10 | Catch up/additional topic. |

This syllabus may be revised or updated during the term.