

Math 301

This page is located at <https://www.math.ubc.ca/~rfroese/math301/> and will be updated regularly throughout the term.

Announcements

Instructor information

- Instructor: [Richard Froese](#)
 - Email: rfroese@math.ubc.ca
 - Office: Math Annex 1106
 - Hours: By appointment. I might set fixed hours later in the term.
 - Office Phone: 822-3042
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Course Overview

Topics. Timings are approximate.

1. Complex integration - 1.5 weeks
2. Multivalued functions, branch points and branch cuts - 1.5 weeks
3. Integrals involving multivalued functions - 1.5 weeks
4. Conformal mappings and applications - 2.5 weeks
5. Poles and zeros of complex functions - 1 week
6. Fourier analysis - 2 weeks
7. Laplace transform - 2 weeks

Text

- *Fundamentals of Complex Analysis* by Saff and Snider (Third Edition).

You may also consult

- *Handwritten notes by Michael Ward (see below)*
- *Complex Variables, Introduction and Applications* by Ablowitz and Fokas

We may cover some material not in the textbook.

Location and Time

MWF 11:00-12:00 in [LSK 460](#)

Homework and Tests

There will be weekly homework assignments. The assignments and due dates will be posted on this page. Late homework will not be accepted. Even if you miss the deadline, its a good idea to do the problems, since this is the best way to prepare for the tests and exam. You are welcome to discuss the homework problems with your friends, but are expected to hand in your own work.

There will be two midterm tests in class on *Monday, February 2* and *Friday March 16* as well as a final exam during the April exam period. You will not be permitted to bring calculators or formula sheets to the tests and exam.

Grades

The following weightings will be used in computing your final grade:

Homework (lowest two scores dropped):	10%
Midterms:	40%
Exam:	50%

If you miss the test for a legitimate reason (e.g., illness with doctors note), the weight of the final exam will be increased.

Files

Here are a collection of handwritten notes by [Michael Ward](#) that you might find useful.

- [m301.01.integ.pdf](#)
 - [m301.02.sum.pdf](#)
 - [m305_multi.pdf](#)
 - [m305_branch.pdf](#)
 - [m301.04.imval.pdf](#)
 - [m301.05.res.pdf](#)
 - [m301.06.map1.pdf](#)
 - [m301.07.map2.pdf](#)
 - [m301.08.conf.pdf](#)
 - [m301.09.symm.pdf](#)
 - [m301.10.fluid.pdf](#)
 - [m301.11.four.pdf](#)
 - [m301.12.lapl1.pdf](#)
 - [m301.13.nyquist.pdf](#)
 - [m301.14.lapl2.pdf](#)
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