

**Overview:** Algebra of complex numbers, Cauchy-Riemann equations, complex integral, Cauchy's theorems. Taylor and Laurent series, residue theory and applications.

**Prerequisites:** MATH 314 – Advanced Calculus and MATH 243 – Analysis 2.

**Lectures:** Tue, Thu 11:30–13:00 in Burnside 1B36

**Instructor:** Bogdan Nica

**Office Hours:** Wed, Fri 10:30–12 in Burnside 1131

**Email:** bogdan.nica@mcgill.ca (use subject "Math 316: ...")

**Reference:** John M. Howie – *Complex analysis*, Springer Undergraduate Mathematics Series (Springer 2003).

**Grade:** 15% Homework, 25% Midterm, 60% Final.

**Homework:** Five assignments, approximately one every two weeks. To be submitted on the due date, at the beginning of the class.

You may collaborate with other students in the class, but your solutions must be written up individually. Looking up solutions on the internet is strongly discouraged.

**Exams:** Midterm (1.5 hours) – date and location TBA. Comprehensive final exam (3 hours) – see exam schedule for date and location.

**Advice:** Attend classes. Showing up is just a part of the process. Come prepared, take good notes, and stay focused. Keep your cell phone away. Ask questions and answer questions. Enjoy.

**University Policy:** McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures. For more information, see <http://www.mcgill.ca/students/srr/honest>.

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.

**Key dates:** Start on September 4th. End on November 29th.

Deadlines: September 18th - Add/Drop; September 25th - Withdraw with refund; October 30th - Withdraw without refund.