

FACULTY OF SCIENCE Department of Mathematics and Statistics

Mathematics 307

Complex Analysis I

(see Section 3.5C of Faculty of Science www.ucalgary.ca/pubs/calendar/current/sc-3-5.html and Course Descriptions: http://www.ucalgary.ca/pubs/calendar/current/course-main.html)

Syllabus

<u>Topics</u>	Number of Hours
Complex Numbers	3
Analytic Functions	4
Elementary Functions	3
Line Integrals	2
The Cauchy Theorem	4
The Cauchy Integral Formula	3
Taylor-Series and Laurent Series	4
Singularities	3
The Residue Theorem	3
Evaluation of Improper Real Integrals	4
Elementary Conformal Mapping, Linear Fractional Transformation	3
TOTAL HOURS	36

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2002:07:01 (as PMAT 421)

Prerequisite change: 2009:07:01 (as PMAT 421)

Name change/Description change/combined with Math 423 2012:07:01

WEC:jml