



Pure Mathematics 445

Analysis II

(see Section 3.5C of Faculty of Science [www.ucalgary.ca/pubs/calendar/current/sc-3-5.html](http://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>	<u>Number of Hours</u>
Series: convergence tests, absolute convergence, conditional convergence, rearrangements, Cauchy product.	6
Sequences and series of functions: pointwise and uniform convergence, Weierstrass M-test, power series.	6
Euclidean spaces: Basic topology, connectedness, compactness; metric spaces.	9
Functions of several variables: limits and continuity.	3
Derivative: linear transformations, differentiability, inverse function theorem, implicit function theorem.	6
Integral: Riemann integral of several variables, Fubini's theorem.	6
<b>TOTAL HOURS</b>	<b>36</b>

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97.02.06 Effective Fall 1997  
BB.jml  
Calendar prereq, coreq and note changed Fall 2009  
As of 2011:07:01 see MATH 445/447