

FACULTY OF SCIENCE Department of Mathematics and Statistics

Applied Mathematics 411

Differential Equations II

(see Course Descriptions for the applicable academic year: <u>http://www.ucalgary.ca/pubs/calendar/</u>)

Syllabus

Existence, uniqueness and continuity theorems. Singular solutions.

Comparison and Oscillation theorems.

Green's functions.

Sturm-Liouville Problems.

Systems of Differential Equations.

Linear systems. Matrix exponentiation.

Stability and Phase portraits.

Optional additional topics: Integral equations; Difference equations; Solutions of Partial Differential Equations.

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00.05.23 Prerequisite change made 03:07:02 Prerequisite change made 08:07:01 WEC.jml