



ORIGINAL COURSE IMPLEMENTATION DATE: September 1994
 REVISED COURSE IMPLEMENTATION DATE: September 2015
 COURSE TO BE REVIEWED: (six years after UEC approval) January 2021
 Course outline form version: 09/15/14

OFFICIAL UNDERGRADUATE CROSS-LISTED COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

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| Course Code and Number: ENGR 257 | Number of Credits: 3 Course credit policy (105) |
| Course Full Title: Mathematical Physics Course Short Title (if title exceeds 30 characters): | |
| Faculty: Faculty of Science | Department (or program if no department): Physics |
| Official Course Outline: This is a cross-listed course. Please refer to PHYS 381 for the official course outline. | |
| Calendar Description: Partial and ordinary differential equations. Fourier series/transforms. Legendre polynomials. Laplace transforms. Applications to heat flow and waves. Laplace's equation in 1D, 2D, 3D using Cartesian, polar, and spherical co-ordinates. Special functions including Dirac Delta, Heaviside Theta, Si, Ci, Ei, Erf, Gamma. Note: This course is offered as PHYS 381, MATH 381, and ENGR 257. Students may take only one of these for credit. | |
| Prerequisites (or NONE): | MATH 211 and (one of the following: PHYS 221 or MATH 255) and (one of the following: PHYS 112 or any other MATH course 200-level or above). |
| Corequisites (if applicable, or NONE): | NONE |
| Pre/corequisites (if applicable, or NONE): | NONE |
| Equivalent Courses (cannot be taken for additional credit) Former course code/number: n/a Cross-listed with: PHYS 381/MATH 381 Equivalent course(s): PHYS 381/MATH 381 <i>Note: Equivalent course(s) should be included in the calendar description by way of a note that students with credit for the equivalent course(s) cannot take this course for further credit.</i> | Transfer Credit Transfer credit already exists: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Transfer credit requested (OReg to submit to BCCAT): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (if yes, fill in transfer credit form) Resubmit revised outline for articulation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No To find out how this course transfers, see bctransferguide.ca . |
| Department / Program Head or Director: Derek Harnett | Date approved: Nov. 5, 2014 |
| Faculty Council approval | Date approved: Nov. 28, 2014 |
| Campus-Wide Consultation (CWC) | Date of posting: Jan. 23, 2015 |
| Dean/Associate VP: Lucy Lee | Date approved: Nov. 14, 2014 |
| Undergraduate Education Committee (UEC) approval | Date of meeting: Jan. 30, 2015 |