

**Department of Engineering Mathematics and Internetworking**  
**ENGM6612 – Methods of Applied Mathematics I**  
**Generic Course Syllabus**

**Instructor:**

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Office hours: by appointment

**Lectures:**

3 hrs

**Course description:**

Classical boundary-value problems of mathematical physics. Classical analytical solutions of boundary-value problems. Special functions. Numerical aspects of the classical analytical solutions. Integral transforms and their application to classical problems of mathematical physics.

**Textbook:**

D. G. Zill and W. S. Wright, Advanced Engineering Mathematics, Jones and Bartlett Learning, 5th or newer edition.

**Software:**

Mathematica by Wolfram Research Inc. All that is needed for the purposes of this course is the one-term student version, and it can be purchased from [www.wolfram.com](http://www.wolfram.com).

**Web resources:**

[dal.brightspace.com](http://dal.brightspace.com).

**Statements:**

**Academic Integrity:**

At Dalhousie University, we are guided in all of our work by the values of academic integrity: honesty, trust, fairness, responsibility and respect (The Center for Academic Integrity, Duke University, 1999). As a student, you are required to demonstrate these values in all of the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity

(read more: [dal.ca/dept/university\\_secretariat/academic-integrity.html](http://dal.ca/dept/university_secretariat/academic-integrity.html))

**Dalhousie Engineering Student Oath:**

*I, as one who is preparing to enter the profession of engineering, promise to conduct myself in an honorable and ethical manner, and, as such, I will not cheat, plagiarize or be involved in any other academically dishonest activities. I shall uphold the values of truth, honesty and trustworthiness. I*

*shall study diligently so that I will be able to safeguard human life, to protect the welfare of society and the environment, and to uphold the reputation of the profession. In all this I shall be concerned for the well-being of others, and not just myself.*