

Math 346 Section A01 CRN 22042
Introduction to Partial Differential Equations
Course Outline
Department of Mathematics and Statistics, UVIC
January 2015.

INSTRUCTOR

Dr. Martial Agueh (agueh@uvic.ca) SSM A440. Phone: 721-7466.
Please do not leave a message; send an e-mail instead.

OFFICE HOURS

Tuesday 10:30 - 11:30, Thursday 11:00 - 12:00; Appointments otherwise.

COURSE WEBPAGE

<http://www.math.uvic.ca/~agueh/M346Spring2015.html>

Note: Announcements and Homework Assignments will be posted on the course webpage. Please check the webpage regularly.

PREREQUISITES

Math 323, 323A, 325 or 342. Not open for credit to students with credit in Math 323B or 326.

LECTURES

Monday, Thursday: 1:00 - 2:20 pm, in Cunningham Building 146.

TEXT

Applied Partial Differential Equations

by Richard Haberman, Fifth edition, 2013. (The third and Fourth editions should be OK too!).

TOPICS

Partial differential equations in physics (wave, heat and Laplace equations), solutions by separation of variables, method of characteristics for first order partial differential equations, boundary value problems, orthogonal functions, Fourier series, transform methods (Laplace and Fourier), numerical methods.

TEXT SECTIONS

Chapter	Sections
1	all sections
2	all sections
3	1 - 5
4	1 - 4
5	1 - 8
6	1, 2, 3.1 - 3.3, 3.9
8	1 - 3
10	1 -5, 6.1 - 6.4
12	1-2
13	1, 2, 4, 5

HOMEWORK ASSIGNMENTS

Homework assignments will be given approximately every two weeks, and they will be collected and marked. There will be approximately 4 homework assignments. These marks will count for 20%

of your final numerical grades.

EXAMINATIONS AND GRADING

There will be TWO MIDTERM TESTS on **Thursday February 5** and **Thursday March 19**, and A FINAL EXAMINATION scheduled by the university (during April 07 - 22, 2011).

If you have a legitimate reason for missing a midterm (*with documentation*), then your performance on the rest of the term's work, not included the final exam, will be used to compute a numerical score for the missed midterm. There will be NO make-up midterms.

After the midterm exams are marked, they will be returned in class or may be claimed during office hours. If you have questions or concerns about your mark, you must notify me within one week of the date when the exam is returned in class.

Any term work that is not collected by the end of the term will be recycled.

Off-scheduled final examinations (i.e., deferred examinations) are given only in accordance with the university policy outlined in the Calendar.

The only acceptable calculators for all the examinations are the Sharp EL-510R or Sharp EL-510NB.

Your final numerical grades will be determined as follows:

- [1] Homework Assignments: 20%
- [2] Midterm Exams: 40% (i.e., 20% each).
- [3] Final Examination: 40%.

UNDERGRADUATE LINK

You **MUST READ** the following information, which outlines the University-wide grading table, academic integrity, attendance, calculators, Assistance Centre, and other important topics:

<http://www.uvic.ca/science/math-statistics/undergraduate/course-policies/index.php>

COURSE EVALUATION SURVEY

I value your feedback on this course. Towards the end of term, as in all other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience (CES). The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future. When it is time for you to complete the survey you will receive an email inviting you to do so. You will need to use your UVic netlink ID to access the survey, which can be done on your laptop, tablet, or mobile device. I will remind you and provide you with more detailed information nearer the time but please be thinking about this important activity during the course.

RECOMMENDATIONS WITH REGARDS TO USE OF EMAIL

"I (and most of your other instructors) have many students from other courses, which makes managing emails a serious challenge. To reduce unnecessary emails, make sure that your question is not answered in the course outline or other course materials. Also make sure that email is the most appropriate medium for your question: for example, detailed mathematical questions are difficult to typeset and therefore should be asked in office hours instead. Email is also not the appropriate medium for grade disputes."

"Finally, do not expect immediate replies to emails, as I might keep very different hours than you do. You might get a faster reply to your questions by asking them in person if you have a chance to speak to me in person, either during office hours or after class.