



REVISED AMENDMENT TO EXISTING SYLLABUS FOR MATH 300

Date Revision Shared with Students: 27 March 2020

In response to the 2020 COVID-19 global pandemic, all courses at the University of Alberta moved to remote delivery, effective March 17, 2020. Subsequently, a decision was made to adjust the grading scheme for all University of Alberta courses for the Winter 2020 term to award one of the following grades: CR (credit) or NC (no credit) as indicated in the *University Calendar*.

The changes were put in place to ensure equity among students, preserve academic integrity in extraordinary circumstances, and to manage the issues presented by an uncertain future, including the impact on our students and human resources.

To ensure clarity for students, all Winter 2020 course outlines for both undergraduate and graduate courses are to be updated using this template to outline changes to exams, assessments and grading and shared with students.

Course Code: MATH 300

Course Title: Advanced Boundary Value Problems I

Instructor Name: Arno Berger

Instructor Contact Information:

berger@ualberta.ca

Revised course assessment plan (Please list all assessed assignments and weighting below)

Changes to the original course information document:

Grade evaluation:

Weight and date of each course component remain unchanged from the original document. However, Quiz II will be administered through eClass, and the Final Exam will be a 24hr take-home exam, administered through Crowdmark. Details will be announced to students via ualberta email, as appropriate. In accordance with the University's decision on grades (see above), no letter grades will be assigned. An overall mark of 50% or more guarantees a grade of CR.

Assignments:

Assignments 4 and 5 are being administered through Crowdmark. Details are announced to students via ualberta email, as appropriate.

Missed Final Examination:

Date and time of deferred examinations, as specified in the original document, are obsolete. Pertinent information, if applicable, will be provided as it becomes available.

IMPORTANT NOTES:

- If students require alterations in their approved accommodations, please contact arrec@ualberta.ca.
- The changes with respect to the mode of delivery of instruction and assessment and the changes to grading regulations do not constitute grounds for an appeal under academic appeal policies (i.e. grade or academic standing appeals may not be advanced on the grounds of these changes).
- When Incomplete (IN) status is assigned instructors are required to communicate with students about the mechanisms and requirements that will be implemented to determine the student final grade of CR or NC. For more information, including the time to complete the remaining course work see the [University Calendar](#).

University of Alberta
Department of Mathematical & Statistical Sciences

MATH 300 (Q1) – Advanced Boundary Value Problems I – Winter 2020

Instructor: Dr. Arno BERGER
Office: CAB 683
E-mail: berger@ualberta.ca
Office Hours: TR 3:00 – 5:00 pm, or by appointment
Lecture Room & Time: SAB 325, TR 12:30 – 1:50 pm

Course Web Page

www.math.ualberta.ca/~aberger/courses/math300_20w/math300_20w.html

(also accessible via MATH 300 eClass)

Please make a habit of visiting this site regularly.

Course Description

Derivation of the classical partial differential equations of applied mathematics, solutions using separation of variables. Fourier expansions and their applications to boundary value problems. Introduction to Fourier Transforms. Emphasis on building an appropriate mathematical model from a physical problem, solving the mathematical problem, and carefully interpreting the mathematical results in the context of the original physical problem.

Course Pre-/Corequisites

MATH 201 and 209.

Notes: (1) Open only to students in Engineering, Specialization Physics, and Specialization Geophysics. (2) Credit can be obtained in at most one of MATH 300 and 337.

Recommended textbook

Partial Differential Equations – Theory and Completely Solved Problems by T. Hillen, I.E. Leonard, and H. van Roessel, 2nd Edition, FriesenPress, 2019.

Syllabus

This course offers an introduction to partial differential equations and boundary value problems, covering selected topics from chapters 1– 6,8, and 9 of the textbook.

Grade Evaluation

The course mark is to be calculated as follows:

Course Component	Weight of Total Mark	Date
Assignments	12%	due Tuesday at 5 pm , see below
Quiz I	12%	4 February 2020 , in class

Midterm	26%	5 March 2020 , in class
Quiz II	12%	31 March 2020 , in class
Final Exam	38%	16 April 2020, 9 am , venue TBA

Note: The date of the final examination is set by the Registrar and takes precedence over the final examination date reported in this document. Students must verify this date on BearTracks when the Final Exam Schedule is posted.

The final letter grade is determined from the course mark as follows: An overall mark of 50% or more guarantees a passing grade of at least D; an overall course mark of 90% or more guarantees a grade of at least A-. Grades are unofficial until approved by the Department and/or Faculty offering the course.

Assignments

There will be a total of **five** assignments during the term, each of equal weight. Problems, due dates, and submission details will be posted on eClass, and provided in class, as appropriate. Unless announced otherwise, assignments are due on **Tuesday**, at **5 pm**. Please deposit your work into the MATH 300 assignment box on the third floor in CAB. Please make sure all pages of your submission are stapled together and your name is clearly written on the front page. **Late submissions will not be accepted!** Your final mark will be determined by your best **four** assignments, i.e., you can miss one assignment without affecting your mark. Beyond that, no excused absence for assignments will be considered.

Exam Format and Aids

All exams are closed-book and may have a multiple-choice component. No individual formula sheets, calculators and any other electronic aids are permitted during examinations.

Representative Evaluative Material

You are encouraged to have a look at old MATH 300 tests and exams (available from various engineering undergraduate societies). Sample exams may also be made available prior to examinations.

Excused Absence Where the Cause is Religious Belief

For an excused absence where the cause is religious belief, the student must contact the instructor within **two weeks** of the start of Winter classes to request accommodation for the term (including the final exam). Instructors may request adequate documentation to substantiate the student request.

Missed Midterm Exam

There will be **no deferred midterm exam**. If you cannot write the midterm due to incapacitating illness, severe domestic affliction or other compelling reasons you can apply for an excused absence. In order to do so, you must present supporting documentation pertaining to the absence to the instructor within two working days following the scheduled date of the missed midterm, or as soon as you are able, having regard to the circumstances underlying the absence. In all cases, instructors may request adequate documentation to substantiate the reason for the absence at their discretion. If the reason for your absence is deemed valid, the weight of the missed midterm will be transferred to the Final Exam.

Note: An excused absence is a privilege and not a right; there is no guarantee that an absence will be excused. Misrepresentation of Facts to gain an excused absence is a serious breach of the *Code of Student Behaviour*.

Missed Final Examination

A student who cannot write the final examination due to incapacitating illness, severe domestic affliction or other compelling reasons can apply for a deferred final examination. Such an application must be made to the student's Faculty office within two working days of the missed examination and must be supported by a Statutory Declaration or other appropriate documentation (Calendar section 23.5.6). Deferred examinations are a privilege and not a right; there is no guarantee that a deferred examination will be granted. Students who failed at the start of term to request exam accommodations for religious beliefs are expected to follow the normal deferred final examination process. Misrepresentation of Facts to gain a deferred examination is a serious breach of the *Code of Student Behaviour*. Any deferred final examinations are scheduled for **9 May 2020 at 9 am** (register at **8:30 am** in **CAB 357**).

Reexamination

There will be no reexaminations for this course.

STUDENT RESPONSIBILITIES

Academic Integrity

The University of Alberta is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect. Students are particularly urged to familiarize themselves with the provisions of the *Code of Student Behaviour* (online at www.governance.ualberta.ca) and avoid any behaviour which could potentially result in suspicions of cheating, plagiarism, misrepresentation of facts and/or participation in an offence. Academic dishonesty is a serious offence and can result in suspension or expulsion from the University.

All forms of dishonesty are unacceptable at the University. Any offense will be reported to the Senior Associate Dean of Science who will determine the disciplinary action to be taken. Cheating, plagiarism and misrepresentation of facts are serious offenses. Anyone who engages in these practices will receive at minimum a grade of zero for the exam or paper in question, and no opportunity will be given to replace the grade or redistribute the weights. As well, in the Faculty of Science the sanction for **cheating** on any examination will include **a disciplinary failing grade** (no exceptions) and senior students should expect a period of suspension or expulsion from the University of Alberta.

Exams

Your student photo I.D. is required at exams to verify your identity. Students will not be allowed to begin an examination after it has been in progress for 30 minutes. Students must remain in the exam room until at least 30 minutes have elapsed. During exams students are not allowed to use textbooks, notes, calculators, cell phones, or any other electronic equipment.

Recording and/or Distribution of Course Materials

Audio or video recording, digital or otherwise, of lectures, labs, seminars or any other teaching environment by students is allowed only with the prior written consent of the instructor or as a part of an approved accommodation plan. Student or instructor content, digital or otherwise, created and/or used within the context of the course is to be used solely for personal study, and is not to be used or distributed for any other purpose without prior written consent from the content author(s).

Students eligible for accessibility-related accommodations (students registered with Accessibility Resources)

Eligible students have both rights and responsibilities with regard to accessibility-related accommodations. Consequently, scheduling exam accommodations in accordance with Accessibility Resources deadlines and procedures is essential. Please note that adherence to procedures and deadlines is required for U of A to provide accommodations. Please contact AR (www.ssds.ualberta.ca) for further information.

Student Success Centre

Students who want to improve their learning and academic capacity (such as better time management, study skills or examination skills) are encouraged to contact the Student Success Centre (2-300 Students' Union Building).

Decima Robinson Support Centre for Mathematical & Statistical Sciences

Students who require additional help with assignments or have questions about the course material in general are encouraged to visit the Decima Robinson Support Centre (CAB 528). Graduate students will be available to provide one-on-one help. In order to get maximum help during each visit, students are asked to be specific about the problem with which they are seeking help. The centre is open Monday to Friday, 9:00 am – 3:00 pm.

Disclaimer:

Any typographical errors in this Course Outline are subject to change; corrections will be announced in class.

A policy about course outlines can be found in §23.4(2) of the University Calendar.
