

Mathematics 3113/3133

Partial Differential Equations II/Methods of Mathematical Physics II

Winter 2025-2026

PREREQUISITES: Math 3111 or Math 3131

INSTRUCTOR: T. Miao **OFFICE:** RB 2013 **PHONE:** 346-7722
E-MAIL: tmiao@lakeheadu.ca

LECTURES: 3 hours per week
Tuesday & Thursday 10:00AM-11:30AM RB-2026

TEXT: Mathematical Methods for Physics and Engineering, 3rd edition by Riley, Hobson, and Bence. Recommended but not required.

COURSE OUTLINE: The topics to be covered are, tentatively, the following:
Chapters 20—22, and eventually 28, 29 of the text book.

OFFICE HOURS: Tuesday 1:00 pm - 2:00 pm

If these hours do not fit your schedule you are welcome to consult with me whenever you find me in my office. You may also make appointments through the Secretary of the Department of Mathematical Sciences in RB 2012; the phone number is 343-8469.

MARK DISTRIBUTION:

Your mark for the course will be calculated according to the following formula:

40% from the mid-term test and 60% from the final exam. The final exam may cover both the first half and the second half of the course. The mid-term test will be from 10:00 am to 11:10 am on Thursday, February 26, 2026. **Note this date is subject to change.**

Assignment problems will be periodically posted on myCourselink during the term. Such problems will have answers, but will not be graded, nor they count toward the final grade.

RE-EVALUATION OF TEST:

If you want to have any of the questions in your mid-term test re-evaluated, it is important that you follow the following procedure:

(a) **DO NOT MAKE ANY CHANGES TO YOUR TEST PAPER.** If you do, then I am obliged to report this to the Dean, who shall then seek a severe penalty consistent with the offense, up to and including expulsion from the University.

(b) This instruction must be followed strictly. On a **SEPARATE** piece of paper note what is wrong with the way your test is marked. Attached it to your test paper and hand it to me. **DO NOT WRITE ANYTHING ON THE TEST PAPER.**

(c) No mark changes will be considered after seven days from the day the test is handed back.

Note that in any re-evaluation of your marks, while there is a potential for your mark to increase, there is also the possibility for your mark to decrease as well.