**Math 3050WA/WB** -- **Numerical Analysis and Computing -- Winter 2020**

**Math 3351WA/WB -- Applied Numerical Methods -- Winter 2020**

**Instructor:**Dr. Liping Liu, RB 2001, Phone: 343-8427, lipingli@lakeheadu.ca

**Course Web:**https://mycourselink.lakeheadu.ca/

**Office hour:**          2:30pm-3:30pm, Thursday, RB 2001, or by appointment

**Classes:** Math 3050WA: 12:30pm-2:30pm, Thursday, AT1003
             Math 3050WB: 10:30am-12:30pm, Tuesday, AT3002
             Math 3351WA: 10:30am-12:30pm, Tuesday, AT3002
 Math 3351WB: 12:30pm-2:30pm, Thursday, AT1003

**Labs:**  Math 3050L-W1: 12:30pm-2:30pm, Friday, AT3002
           Math 3050L-W2: 2:30pm-4:30pm, Wednesday, AT3002
           Math 3050L-W3: 12:30am-2:30pm, Wednesday, AT3002
            Math 3050L-W4: 8:30am-10:30am, Tuesday, AT3002
           Math 3351L-W1: 8:30am-10:30pm, Tuesday, AT3002

**Textbook:**Applied Numerical Methods with Matlab for Engineers and Scientists

 4rd Edition, by Steven C. Chapra

**Course Content:** An introduction to various numerical techniques for finding roots of nonlinear equations in one variable, approximating functions, solving systems of linear equations, approximating integrals and solving differential equations.

**Assignments:**       Assignments will be posted on the course website. Solutions will be posted on the course website or talked about in the Labs after due date. In fairness to everyone, answers for overdue assignments will not be accepted.

**Exams:**                 There will be a midterm during the term. No make-up midterm will be provided for students who miss writing the midterm at the scheduled time. If there is a legitimate (documented) excuse, the final mark will be calculated based on the final exam. Otherwise, a grade of 0% for the missed midterm will be averaged with other grades. **A three-hour final examination will be scheduled at the end of the term.**

**Grading Scheme:** Assignments ……...…...……………………. 25%

 Midterm ……...…...………………………… 25%

 Final Exam .............................................….… 50%

***If you are having difficulty, or have questions, please ask me for help!***