Instructor
Name: Dr. C. F. Lange
Phone: 492-6714  E-mail: carlos.lange@ualberta.ca
Office: Room 5-8H  Office Hours: Tue, Thu 1100–1200 or by appointment

Teaching Assistants

<table>
<thead>
<tr>
<th>Name</th>
<th>K.-C. (Rocky) Chen</th>
<th>Amanda Kotchon</th>
<th>Ming-Zhao Jin</th>
<th>Kevin Breton</th>
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<tbody>
<tr>
<td>E-mail</td>
<td><a href="mailto:kuanchih@ualberta.ca">kuanchih@ualberta.ca</a></td>
<td><a href="mailto:akotchon@ualberta.ca">akotchon@ualberta.ca</a></td>
<td><a href="mailto:mingzhao@ualberta.ca">mingzhao@ualberta.ca</a></td>
<td><a href="mailto:breton@ualberta.ca">breton@ualberta.ca</a></td>
</tr>
<tr>
<td>Office Hours</td>
<td>Main Th 17-18</td>
<td>Mon 13-14</td>
<td>Wed 13-14</td>
<td>Mon 12-13</td>
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<td>Lab room</td>
<td>Marker 3-3</td>
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Prerequisites
MATH 102, MATH 201

Texts

Homepage
eClass: https://eclass.srv.ualberta.ca/my/ (use your CCID login and password)

Schedule
Lectures: Tue, Thu 0800–0920 (ETLE 1-017)
Labs: Mon 1300–1350 (MecE 3-3); Wed 1300–1350 (MecE 3-3); Wed 1300–1350 (MecE 4-19); Thu 1700–1750 (MecE 3-3) (starting Sep. 10, 12, 13)

Course Objectives
- Understand basic numerical methods and their approximate nature (errors, convergence, etc), their weaknesses, and strengths.
- Practise programming and debugging in MATLAB.

Course Outline
1. Introduction
2. Errors and Uncertainties in Numerical Calculations
3. Roots of Equations
4. Solution of Simultaneous Nonlinear and Linear Equations
5. Curve Fitting and Interpolation
6. Numerical Integration and Differentiation
7. Numerical Integration of ODEs

Mark Distribution
Assignments: 25% (10, posted Mondays)
Midterm Exam: 25% (Thu., Oct. 18, 0800–0920, in class)
Final Exam: 50% (Mon., Dec. 17, 0900–1100, room TBD)

Exam Policy
Missed midterm exams will have their marks transferred to the final exam. Final grades will be based on the distribution of the weighted averages with a minimum average of 50/100 required for passing. No calculators are permitted in the exams.

Assignments are very important! There will be questions about them on the exams. Recording in class and labs is permitted only with the prior written consent of the professor.
The U of A considers plagiarism, cheating, misrepresentation of facts and participation in an offence to be serious academic offences. Plagiarism, cheating, misrepresentation of facts and participation in an offence can be avoided if students are told what these offences are and if possible sanctions are made clear at the outset. Instructors should understand that the principles embodied in the Code are essential to our academic purpose. For this reason, instructors will be fully supported by Departments, Faculties and the University in their endeavours to rightfully discover and pursue cases of academic dishonesty in accordance with the Code.

At the beginning of each term, we ask you to review with your students the definitions of plagiarism and cheating. We ask you now also asking you to review with your students the definition of Misrepresentation of Facts and Participation in an Offence. Your co-operation and assistance in this matter are much appreciated.

### 30.3.2(1) Plagiarism

No Student shall submit the words, ideas, images or data of another person as the Student’s own in any academic writing, essay, thesis, project, assignment, presentation or poster in a course or program of study.

### 30.3.2(2) Cheating

30.3.2.2a. No Student shall in the course of an examination or other similar activity, obtain or attempt to obtain information from another Student or other unauthorized source, give or attempt to give information to another Student, or use, attempt to use or possess for the purposes of use any unauthorized material.

30.3.2.2b. No Student shall represent or attempt to represent him or herself as another or have or attempt to have himself or herself represented by another in the taking of an examination, preparation of a paper or other similar activity. See also misrepresentation in 30.3.6(4).

### 30.3.2(3) Participation in an Offence

No Student shall encourage or knowingly aid or assist, directly or indirectly, another person in the commission of any offence under this Code.

### Procedures for Instructors Regarding Plagiarism, Cheating, Misrepresentation of Facts and Participation in an Offence

The following procedures are drawn from the Code of Student Behaviour as approved by GFC and the Board of Governors. The guidelines summarize what instructors must do when they have reason to believe that a student has plagiarized, cheated, misrepresented facts or participated in an offence. If you have questions about these guidelines, or about the policies, please talk with the senior administrator in your Faculty responsible for dealing with student discipline—usually an Associate Dean, or the Appeals and Compliance Officer (Appeals Coordinator), University Governance (2-2655).

### 30.4.1(1) When an Instructor believes that a Student may have committed an Inappropriate Academic Behaviour Offence

30.4.1(1) When an Instructor believes that a Student may have committed an Inappropriate Academic Behaviour Offence [30.3.2] or that there has been Misrepresentation of Facts [30.3.6(4)] or Participation in an Offence [30.3.6(5)] in cases respecting Inappropriate Academic Behaviour in the course that he or she instructs, the Instructor will meet with the Student. Before such a meeting, the Instructor shall inform the Student of the purpose of the meeting. In the event the Student refuses or fails to meet with the Instructor within a reasonable period of time specified by the Instructor, the Instructor shall, taking into account the available information, decide whether a report to the Dean is warranted. (CLRC 30 MAY 2002) (EXEC 7 APR 2003) (CLRC 27 NOV 2003)

### 30.4.1(2) If the Instructor believes there has been a violation of the Code

If the Instructor believes there has been a violation of the Code, the Instructor shall, as soon as possible after the event occurred, report that violation to the Dean and provide a written statement of the details of the case. The Instructor may also include a recommendation for sanction. (CLRC 27 NOV 2003)

### Possible Sanctions

One or more of the following sanctions given in 30.4.3 (2) and (3) of the Code are commonly used for plagiarism, cheating, participation in an offence, and misrepresentation of facts:

- A mark reduction or a mark of 0 on any term work or examination for reason of Inappropriate Academic Behaviour or an Applicant is found to have committed an offence under the Code of Applicant Behaviour or an Applicant is found to have committed an offence under the Code of Applicant Behaviour (GFC 24 SEP 2007)
- Reduction of a grade in a course
- A grade of F for a course
- A remark on a transcript of 8 (or 9 for failing graduate student grades), indicating Inappropriate Academic Behaviour in addition to 30.4.3(2)a.i. a mark reduction or a mark of 0 on any term work or examination for reason of Inappropriate Academic Behaviour (GFC 24 SEP 2007)
- Suspension of a Degree already awarded
- Suspension of a Degree in progress
- Expulsion
- Rescission of a Degree already awarded
- Rescission of a Degree in progress

### 30.6.1 Initiation of an Appeal

30.6.1(1) When a Student has been found to have committed an offence under the Code of Student Behaviour or an Applicant is found to have committed an offence under the Code of Applicant Behaviour (Section 11.8 of the GFC Policy Manual), whether or not that Student or Applicant has been given a sanction, the Student or Applicant may appeal that decision, except in the case of a decision of the Discipline Officer under 30.5.6(2)a.i. which remains final and is not subject to appeal. In cases where a severe sanction has been recommended to the Discipline Officer, the student can appeal the decisions of both Dean and the Discipline Officer at the same time. The written appeal must be presented to the Appeals Coordinator in the University Governance within 15 Working Days of the deemed receipt of the decision by the Student or Applicant. The finding that an offence has been committed, the sanction imposed or both may form the basis of appeal. The written appeal must also state the full grounds of appeal and be signed by the Appellant. The appeal shall be heard by the UAB. (CLRC 30 MAY 2002) (CLRC 25 SEP 2003) (EXEC 01 MAY 2006) (GFC 24 SEP 2007) (BEAC 17 OCT 2007)

### NOTICE TO INSTRUCTORS REGARDING PLAGIARISM, CHEATING, MISREPRESENTATION OF FACTS AND PARTICIPATION IN AN OFFENCE

The Truth In Education (T*E*I*E) project is a campus wide educational campaign on Academic Honesty. This program was created to let people know the limits and consequences of inappropriate academic behaviour. There are helpful tips for Instructors and Students. Please take the time to visit the website at: http://www.ualberta.ca/tie

### EXCERPTS FROM THE CODE OF STUDENT BEHAVIOUR

**For Review with Each Class at the Beginning of Every Term**

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**PROFESSOR STEVEN PENNEY**
**CHAIR, CAMPUS LAW REVIEW COMMITTEE**

* The Campus Law Review Committee is a standing committee of General Faculties Council (GFC) responsible for the review of the Code of Student Behaviour and of student disciplinary procedures.

**DR MARTIN FERGUSON-PELL**
**ACTING PROVOST AND VICE-PRESIDENT (ACADEMIC)**