

COURSE OUTLINE

1. **Course:** Applied Mathematics 415, Mathematical Methods, Winter 2014 (January 8 – April 14, 2014).

Lecture Sections: L01: MWF, 14:00-14:50, ST 147

Tutorial Sections: T01, T02, T03: Tues, 12:00-12:50, MS 515, MS 521, MS 571, resp.

Instructor: Prof. Edward S. Krebs / Office: ES 230 / Telephone: 403-220-5028 / e-mail address: krebs@ucalgary.ca / Office Hours: anytime when in office and door is open. Or make an appointment.

The course D2L site will be used to post course assignments, information, documents, etc.

Department of Mathematics and Statistics Main Office: MS 476 / Telephone: 402-220-5210

2. **Prerequisites:** One of Applied Mathematics 307, 309, 311, Mathematics 331, 353, 381. See also <http://www.ucalgary.ca/pubs/calendar/current/applied-mathematics.html>.

3. **Grading:** The University policy on grading and related matters is described sections F.1 and F.2 of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Assignments (5)	40%
Midterm Test (1)	20% (In class, Friday, Feb. 28, 2013)
Final Examination	40% (To be scheduled by the Registrar)

A grade of 30% or higher is required on the final examination in order to pass the course as a whole.

Each piece of work (assignment, midterm test, final examination) submitted by the student will be assigned a percentage score. The student's average percentage score for the various components listed above will be combined with the indicated weights to produce an overall percentage for the course, which will be used to determine the course letter grade (bearing in mind that an F grade will result if the student's final examination mark is below 30%, regardless of the assignment or midterm test grades). The conversion between course percentage and letter grade is given below. The lower number P in each percent range (except for the A+ and F ranges) can be determined from the formula $P = 10 \cdot \text{GPV} + 40$, where GPV is the grade point value of the letter grade.

Letter Grade	GPV	Percent (%)	Letter Grade	GPV	Percent (%)
A+	4.0	90-100	C+	2.3	63-67
A	4.0	80-90	C	2.0	60-63
A-	3.7	77-80	C-	1.7	57-60
B+	3.3	73-77	D+	1.3	53-57
B	3.0	70-73	D	1.0	50-53
B-	2.7	67-70	F	0.0	0-50

Scores within 0.5% of the upper boundary of a Percent range (e.g., 76.5%) may or may not be rounded up at the discretion of the instructor (a decision will be made based on the student's performance in the course). For percent grades on a boundary, the higher grade will be chosen (e.g., 70% is a B, not a B-).

4. **Missed Components of Term Work:** The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in Section 3.6. It is the student's responsibility to familiarize himself/herself with these regulations. See also Section E.3 of the University Calendar.

5. **Scheduled out-of-class activities:** None.

REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY. If you have a clash with this out-of-class-time-activity, please inform your instructor as soon as possible so that alternative arrangements may be made for you.

6. Course Materials:

Text (required): "Understanding Digital Signal Processing", third edition, by Richard G. Lyons, Publisher: Prentice-Hall – sold in the *University Bookstore*.

Text (recommended): "Advanced Mathematics for Engineers and Scientists (Schaum's Outline Series)", by Murray R. Spiegel, Publisher: McGraw-Hill. – sold in the *University Bookstore*.

7. Examination Policy: Closed-book. No calculators or any other electronic devices are allowed, unless informed otherwise. Students should also read the Calendar, Section G, on Examinations.

8. Approved Mandatory and Optional Course Supplemental Fees: None.

9. Writing across the curriculum statement: In this course, the quality of the student's writing in laboratory reports and exams will be a factor in the evaluation of those reports. See also Section E.2 of the University Calendar.

10. Human studies statement: not relevant.

11. OTHER IMPORTANT INFORMATION FOR STUDENTS:

(a) Academic Misconduct: (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under Section K. Student Misconduct to inform yourself of definitions, processes and penalties

(b) Assembly Points: In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on assembly points.

(c) Academic Accommodation Policy: Students with documentable disabilities are referred to the following links: Calendar entry on students with disabilities and Student Accessibility Services MSC452 Phone: 220-8237.

(d) Safewalk: Campus Security will escort individuals day or night (<http://www.ucalgary.ca/security/safewalk/>). Call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.

(e) Freedom of Information and Privacy: This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). As one consequence, students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information see also <http://www.ucalgary.ca/secretariat/privacy>.

(f) Student Union Information: VP Academic Phone: 220-3911 Email: suvpaca@ucalgary.ca.
SU Faculty Rep. Phone: 220-3913 Email: sciencerep@su.ucalgary.ca
Student Ombudsman Phone: 220-6420 Email: ombuds@ucalgary.ca

(g) Internet and Electronic Device Information: You can assume that in all classes that you attend, your cell phone should be turned off unless instructed otherwise. Also, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor. If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.

(h) At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses (www.ucalgary.ca/usri). Your responses make a difference - please participate in USRI Surveys.