



COURSE OUTLINE
ELEC 400 / 504 – Random Signals
4A / Graduate Course / Summer 2005

Instructor:

Dr. Michael McGuire
Phone: 721-8684
E-mail: mmcguire@ece.uvic.ca

Office Hours:

Days: Wednesdays and Fridays
Time: 3:00-4:00 PM
Location: EOW 229

Lectures:

Section(s): K01
Days: TWF
Time: 11:30-12:30
Location: DSB C116

Required Text:

Title: *Probability, Random Variables, and Random Signal Principles*, 4th Ed.
Author: P.Z. Peebles, Jr.
Publisher: The McGraw-Hill Companies, Inc.
Year: 2001

References:

Title: *Probability, Random Variables, and Stochastic Processes*, 4th Ed.
Authors: A. Papoulis, S.U. Pillai
Publisher: The McGraw-Hill Companies, Inc.
Year: 2002, 4th ed.

Assessment:

ELEC 400:

Assignments: 10 %
Mid-terms 40 %
Final 50 %

Date: June 3 and July 8

ELEC 504:

Assignments: 10 %
Project: 20 %
Mid-terms 20 %
Final 50 %

Due on August 12
Date: June 3 and July 8

Due dates for assignments:

There will be five assignments which must be submitted before 4:30 PM on the due date.

The final grade obtained from the above marking scheme will be based on the following percentage-to-grade point conversion:

90 ≤	A+ ≤	100
85 ≤	A <	90
80 ≤	A- <	85
75 ≤	B+ <	80
70 ≤	B <	75
65 ≤	B- <	70
60 ≤	C+ <	65
55 ≤	C <	60
50 ≤	D <	55
35 ≤	E <	50
	F <	35
	N	

Fail, conditional supplemental exam* - for undergraduate courses only.

Fail, no supplemental exam.

Fail, did not write examination or otherwise complete course requirements by the end of the term or session; no supplemental exam.

* The rules for supplemental examinations are found on page 73 of the current 2004/05 Calendar.

For courses taken in	Application Deadline for Supplemental Exam	Supplemental Exam Date
January – April	June 30	First week of classes in September-December term
May – August	October 30	First week of classes in January-April term
September – December	February 28	First week of classes in May-August term

Deferred examination schedules use the same dates as supplementals in the table above.

Syllabus

Random processes, continuous and discrete auto- and cross-power and energy spectral densities, auto- and crosscorrelation and covariance functions and their measurements and estimation with numerical computations; stationarity, ergodicity; white noise, narrowband noise, pseudo-random noise, input-output crosscorrelation, optimum filters for detection and estimation and their software implementations; characteristic functions, sum of random variables.

Posting of Grades

The Department of Electrical and Computer Engineering will no longer post grades. Students may access their grades via the Internet at <http://www.uvic.ca/reco/> and selecting WebView (Student Records On-Line).

Guidelines on Religious Observances

1. Where classes or examinations are scheduled on the holy days of a religion, students may notify their instructors, at least two weeks in advance, of their intention to observe the holy day(s) by absenting themselves from classes or examinations.
2. Instructors will provide reasonable opportunities for such students to make up work or missed examinations.
3. Students will cooperate by accepting the provision of reasonable opportunities for making up work or missed examinations.
4. The University Secretary's Office will distribute a multi-faith calendar to each academic unit annually.

Commitment to Inclusivity and Diversity

The University of Victoria is committed to promoting, providing and protecting a positive, supportive and safe learning and working environment for all its members.

Standards of Professional Behaviour

You are advised to read the Faculty of Engineering document Standards for Professional Behaviour at <http://www.engr.uvic.ca/policy/professional-behaviour.html> which contains important information regarding conduct in courses, labs, and in the general use of facilities.

Cheating, plagiarism and other forms of academic fraud are taken very seriously by both the University and the Department. You should consult <http://web.uvic.ca/calendar2004/FACS/UnPr/UARe/PoAcI.html> for the UVic policy on academic integrity.