**UVic** Department of Electrical and Computer Engineering

# COURSE OUTLINE
# ELEC 484 – Audio Signal Processing
# Summer 2005

**Instructor:**

    Dr. P.F. Driessen
    Phone: 8688
    E-mail: peter@ece.uvic.ca

**Office Hours:**

    Days:      Mon
    Time:      2-3
    Location:   EOW435

**Lectures:**

    Section(s): K01
    Days:     Mon-Thur
    Time:     10:00-11:15
    Location:  DSB C126

**Labs:**         **Location: ELW**

| Section(s) | Days | Time |
|---|---|---|

N/A

**Required Text:**

    Title: Digital Audio Signal Processing
    Author: U. Zolzer
    Publisher: Wiley
    Year: 2002

**Optional Text:**

    Title: Real Sound Synthesis for Interactive …
    Author: P. Cook
    Publisher:  AK Peters
    Year:      2002

**<u>References:</u>**

**Assessment:**

    Assignments:    35   %
    Mid-term exam  35   %       Date: 14 July 2005
    Final Project    30   %

<u>Note</u>: Failure to complete all assignments will result in a grade of N being awarded for the course.

**Due dates for assignments:**

tbd

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     Fail, conditional supplemental exam - for undergraduate courses only.
       F   <  35     Fail, no supplemental exam.
       N                Fail, did not write examination or otherwise complete course requirements by
                        the end of the term or session; no supplemental exam.
```

## Syllabus

Fundamentals: A/D, oversampling converters, jitter, dither, spectral analysis. Formats: CD, DVD, SACD. Perceptual coding: MP3, AAC. Sound synthesis: modal, additive, subband vocoder, subtractive, LPC, non-linear, FM, physical modelling, granular. Spatial audio, surround sound. Noise reduction. Systems and applications.

## 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.