



PAPER OUTLINE 2014

Paper Code & Title: CMPO 381 Interface Design for Live Electronics

Trimester: 2 Year: 2014

CRN: 19772 Campus: NZSM - VUW Kelburn

Points: 20

Prerequisites: CMPO 281 Corequisites: None Restrictions: PERF 345

Important dates: Trimester dates: 14 July–16 November 2014

Teaching dates: 14 July–17 October 2014
Mid-trimester break: 25 August–7 September 2014

Last assessment item due: 4 November 2014

Study week: 20-24 October 2014

Examination/Assessment Period: 24 October–15 November 2014

(where applicable) NB: For courses with exams, students must be available to

attend the exam at any time during this period.

Withdrawal date: 25 July 2014

Refer to www.victoria.ac.nz/students/study/withdrawals-refunds
If you cannot complete an assignment, or sit a test or

examination, refer to

www.victoria.ac.nz/students/study/exams/aegrotats

Class times & location: Thursday, 3:10pm-6:00pm (Room MS112: Sonic Arts Lab)

Tutorial times & locations: TBA in the first week of class.

Tutorials commence in the second week of the trimester. Groups will be posted on Blackboard and/or on the noticeboard outside the office on the NZSM Kelburn Campus at the start of Week 2.

NAMES AND CONTACT DETAILS

Course Coordinators: Ajay Kapur, Jim Murphy

Contact phone: TBA Email: ajay.kapur@nzsm.ac.nz

murphyjame@myvuw.ac.nz

Office located at: Room TBA, Kelburn Campus

Office hours: TBA

Tutors: Jon He Email: hejing@myvuw.ac.nz

Bridget Johnson **Email:** johnsobrid@myvuw.ac.nz Diana Siwiak **Email:** siwiakdian@myvuw.ac.nz

Programme Administrator: Fiona Steedman Email: fiona.steedman@nzsm.ac.nz

COMMUNICATION OF ADDITIONAL INFORMATION

Official notices issued after the paper has commenced will be posted on the board outside the NZSM office on the Kelburn Campus. Notices concerning a number of papers will also be posted on Blackboard. The Course Coordinator will specify if Blackboard will be used.

PRESCRIPTION

Designing and building a custom digital interface for musical expression. No prior experience in electronic engineering is expected.

PAPER LEARNING OUTCOMES

Students successfully completing this paper will be able to:

- 1. demonstrate an understanding of the context and history of live electronics
- 2. plan, design, and implement a custom digital interface for musical expression
- 3. give a performance using the custom digital interface.

These learning outcomes contribute to the NZSM Graduate Attributes. For a full list, please see www.nzsm.ac.nz/study-here/graduate-attributes

TEACHING FORMAT

This course comprises one 3-hour lecture per week, and one 1-hour tutorial per week.

See attached course syllabus for more information.

MANDATORY PAPER REQUIREMENTS

In addition to achieving an overall pass mark of 50%, students must:

- a) complete each item of assessment worth at least 10% specified for this course (subject to penalties for late submission of work)
- b) attend at least 80% of lectures and 80% of tutorials (if relevant) related to this course.

WORKLOAD

A 20-point one-trimester paper should require at least 200 hours' work (including class time). This means that in term time, the midterm break and study week you should be prepared to spend, on average, 13 hours per week involved in activities such as attending classes, reading, listening to recommended recordings and preparing assignments.

Workload breakdown (approximate):

Class time: 36 hours

Reading history and reference materials, and listening to historical reference audio: 12 hours

Completing assignments: 152 hours

ASSESSMENT

Approved assessment regime

The following assessment regime for this paper has been approved by the NZSM Academic Committee:

There are 6 items of assessment:

- 1. In-class presentation. Related to Learning Outcome 1. (10%)
- 2. Online review. Related to Learning Outcome 1. (10%)
- 3. Project proposal. Related to Learning Outcome 2. (10%)
- 4. Between 3 and 6 minor assignments. Related to Learning Outcome 2. (30%)
- 5. Short performance project. Related to Learning Outcome 3. (20%)
- 6. Project report. Related to Learning Outcome 2. (20%)

Assessment details for this offering

Assessment items	Word length / duration	Learning outcome(s)	Due date	%
In-class presentation: History of NIME/Controllers	10-minute in-class presentation	1	24 July 2014	10
6 Short assignments: 3 computer programming compositions, and 3 assignments with circuits and sensors.	30 seconds each	2	24 July 2014 31 July 2014 7 Aug 2014 14 Aug 2014 21 Aug 2014 11 Sep 2014	30
Project Proposal	5-minute in-class presentation	2	21 Aug 2014	10
Online Review: Interview/Review/ Progress Report	5-minute interview 5-minute review 5-minute progress report	1	11 Sep 2014 18 Sep 2014 25 Sep 2014	10
Short Performance Project	3–5 minutes	3	9 Oct 2014	20
Project Report	4–6 pages + Video	2	4 Nov 2014	20

SUBMISSION AND RETURN OF WORK

Assignments should be submitted via Blackboard.

Marked assignments will be returned via Blackboard.

Assignments will normally be marked and returned as soon as possible, within three weeks of the date of submission.

EXTENSIONS AND PENALTIES

Assignments must be submitted by the due dates. In fairness to other students, unless a medical certificate is produced, assessment submitted after 5:00pm on the due date will be subject to a 5% demerit on your grade, increasing by 5% each further working day it is overdue.

Students, who for exceptional reasons can justify an extension for an item of assessment, must apply to the Course Coordinator *before* the due date. Please note that no extensions can be granted for tutorial assignments.

ASSIGNMENT PRESENTATION

Written work should be presented according to the NZSM Guidelines for Academic Work, which can be downloaded from www.nzsm.ac.nz/student-zone/student-guides. Five percent (5%) will be deducted for written work that does not conform to these standards.

Sonic Arts work should be submitted as a clearly labelled Audio CD, or, for multimedia works, as a DVD or as a QuickTime data file on a data CD-ROM.

SCALING OF GRADES

To obtain a fair distribution of marks relative to assignment difficulty, scaling may be employed on some or all assessment items, in accordance with guidelines set out in the VUW Assessment Handbook 2014: www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf

MATERIALS AND EQUIPMENT AND/OR ADDITIONAL EXPENSES

Every student should have a computer to do this paper. You will need to download free software, which will happen on the first day of class. It is possible to use the computers in EMS 2 or the Sonic Arts Lab, in order to do assignments, if you do not have your own computer.

Each student will also need to buy custom electronic parts to build their own Digital Musical Instrument. The average cost for this is around 200-300 NZD, based on what you plan to build for yourself.

RECOMMENDED READING

O"Sullivan, D. and Igoe, T. *Physical Computing*. Boston: Thomson Course Technology, 2004. (DO NOT BUY: In the VUW Central Library.)

Martin Evans, Joshua Noble, Jordan Hochenbaum. Arduino In Action. Manning Publications, 2013.

Kapur, A. Digitizing North Indian Music: Preservation and Extension using Multimodal Sensor Systems, Machine Learning and Robotics. VDM Verlag Dr. Müller, Germany, 2008. (DO NOT BUY: In the VUW Central Library.) Kapur, A.

Collins, Nick. *Introduction to Computer Music*. Wiley, March 2010. (DO NOT BUY: In the VUW Central Library.) Collins, Nick.

Selected Articles from Proceedings of New Interfaces for Musical Expression (NIME).

Selected Articles from CreativeApplications.Net.

CLASS REPRESENTATIVE

Class representatives for the NZSM are elected in the first week of the trimester, and their names and contact details will be available to VUWSA and/or MaWSA, the Course Coordinator and to each class. You can find out more information on Class Representatives on the VUWSA website (www.vuwsa.org.nz) or MaWSA website (www.mawsa.org.nz).

Students may like to write the Class Rep's name and details in this box:				

STUDENT FEEDBACK

Enhancements made to this course, based on the feedback of previous students, will be covered during the course.

Student feedback on University courses may be found at www.cad.vuw.ac.nz/feedback/feedback_display.php

HUMAN ETHICS GUIDELINES

Any student assessment or project at any level that involves human subjects (including the documenting, interviewing and recording of information from people) must follow ethics guidelines. For courses in Music Therapy, students must follow Massey University Ethics guidelines. For all other courses, students must follow VUW Ethics Guidelines. For information and assistance as it relates to your course, consult first with your Course Coordinator. Guidelines are given at:

- www.victoria.ac.nz/research/support/research-office/ethics-approval/human-ethics
- www.massey.ac.nz/massey/research/research-ethics/human-ethics

OTHER IMPORTANT INFORMATION

The information above is specific to this course. There is other important information that students must familiarise themselves with, including:

- Academic Integrity and Plagiarism: <u>www.victoria.ac.nz/students/study/exams/integrity-plagiarism</u>. Find out more about plagiarism, how to avoid it, and penalties on the NZSM website: <u>www.nzsm.ac.nz/student-zone/student-guides</u>
- Aegrotats: www.victoria.ac.nz/students/study/exams/aegrotats
- Academic Progress (including restrictions and non-engagement):
 www.victoria.ac.nz/students/study/progress/academic-progress
- Dates and deadlines: www.victoria.ac.nz/students/study/dates
- FHSS Student and Academic Services Office: www.victoria.ac.nz/fhss/student-admin
- Grades: www.victoria.ac.nz/students/study/progress/grades
- Resolving academic issues:
 - www.victoria.ac.nz/about/governance/dvc-academic/publications
- Special passes: <u>www.victoria.ac.nz/about/governance/dvc-academic/publications</u>
- Statutes and policies, including the Student Conduct Statute: www.victoria.ac.nz/about/governance/strategy
- Student support: <u>www.victoria.ac.nz/students/support</u>
- Students with disabilities: <u>www.victoria.ac.nz/st_services/disability</u> OR <u>www.massey.ac.nz/massey/student-life/services-and-resources/disability-services/disability-services home.cfm</u>
- Student Charter: www.victoria.ac.nz/study/apply-enrol/terms-conditions/student-charter
- Student Contract: <u>www.victoria.ac.nz/study/apply-enrol/terms-conditions/student-contract</u>
- Subject Librarians: <u>library.victoria.ac.nz/library-v2/find-your-subject-librarian</u> AND www.massey.ac.nz/massey/research/library/about-us/addresses-andstaff/sections/information-research-services.cfm
- Turnitin: www.cad.vuw.ac.nz/wiki/index.php/Turnitin
- University structure: <u>www.victoria.ac.nz/about/governance/structure</u> OR <u>www.massey.ac.nz/massey/home.cfm</u>
- NZSM Student Handbook: www.nzsm.ac.nz/student-zone/student-guides
- Scholarships and prizes relevant to NZSM students: www.nzsm.ac.nz/student-zone/scholarships-and-prizes
- Your grades, academic profile, timetable, etc.: my.vuw.ac.nz

GENERAL NZSM POLICIES AND STATUTES

Students should familiarise themselves with the NZSM's policies and statutes, especially those regarding Personal Courses of Study, Academic Grievances, Staff and Student Conduct. Please see www.nzsm.ac.nz/student-zone/student-quides

For any statutes relating to the particular qualifications being studied, see either the Massey University Calendar or the Victoria University of Wellington Calendar.

Information about Student Services, including Academic Mentoring for Māori and Pasifika Students, and support for Students with Disabilities, is to be found in the NZSM Student Handbook (available at www.nzsm.ac.nz/student-zone/student-guides or in hard copy from the NZSM offices on each campus).

EVENTS

Regular events are held during trimesters 1 & 2 at all NZSM campuses. These events are for the benefit of all students, and include performances, masterclasses, special lectures and workshops given by staff, students and visiting artists. All students are expected to keep time free to attend the weekly lunchtime concert on Friday at 12:10pm, along with other events as required.

Students should sign up to the **Dawn Chorus**, the NZSM's events e-newsletter, by emailing <u>events @nzsm.ac.nz</u> with 'subscribe dawn chorus' in the subject line.

Events & Marketing Coordinator: Stephen Gibbs

Phone: (04) 463 4766 Email: stephen.gibbs@nzsm.ac.nz

Website: <u>www.nzsm.ac.nz/events</u>