



## NEW ZEALAND SCHOOL OF MUSIC

### CMPO 281 *Computer Music Programming for Live Electronics* **15 POINTS**

**TRIMESTER 1 2015**

#### **Important dates**

**Trimester dates:** 2 March to 1 July 2015

**Teaching dates:** 2 March to 5 June 2015

**Easter/Mid-trimester break:** 3 to 19 April 2015

**Last assessment item due:** 19 June 2015

**Study period:** 8 to 12 June 2015

**Examination/Assessment Period:** 12 June to 1 July 2015

#### **Withdrawal dates:**

Refer to [www.victoria.ac.nz/students/study/withdrawals-refunds](http://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](http://www.victoria.ac.nz/students/study/exams/aegrotats).

#### **Class times and locations**

Monday, 2:10pm–3:00pm (Room MS112)

Friday, 1:10pm–3:00pm (Room MS112)

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 Coordinator:** Jim Murphy

**Contact phone:** 463 9562

**Email:** [jim.murphy@vuw.ac.nz](mailto:jim.murphy@vuw.ac.nz)

**Office located at:** Room 202, 92 Fairlie Terrace, Kelburn Campus

**Office hours:** Monday, 10:00am–11:00am, or by appointment

**Tutor:** Diana Siwiak

**Email:** [diana.siwiak@ecs.vuw.ac.nz](mailto:diana.siwiak@ecs.vuw.ac.nz)

**Tutor:** Mo H. Zareei

**Email:** [mohammadhossein.zareei@ecs.vuw.ac.nz](mailto:mohammadhossein.zareei@ecs.vuw.ac.nz)

**Tutor:** Jon He

**Email:** [jingyin.he@ecs.vuw.ac.nz](mailto:jingyin.he@ecs.vuw.ac.nz)

**Programme Administrator:** Fiona Steedman

**Email:** [fiona.steedman@nzsm.ac.nz](mailto:fiona.steedman@nzsm.ac.nz)

## Communication of additional information

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

## Prescription

A study of object-oriented computer music programming languages, including general programming concepts, synthesis, analysis and real-time systems, and their use in music technology-based creative practice.

## Course learning objectives (CLOs)

Students who successfully complete this course will be able to:

1. demonstrate competency in basic programming skills for live electronics
2. demonstrate an understanding of the concepts of object orientation, concurrency and multi-threading in a sonic/musical context
3. build a system for real-time control of musical sound.

These learning objectives contribute to the NZSM Graduate Attributes. For a full list, please see [www.nzsm.ac.nz/study-careers/graduate-attributes](http://www.nzsm.ac.nz/study-careers/graduate-attributes)

## Teaching format

This course comprises one 2-hour lecture and one 1-hour lecture per week, and one 1-hour tutorial per week. During tutorials, a graduate tutor will guide students in discussion of course readings and/or set works, or assist with/give feedback on work in progress, where appropriate.

*See attached course syllabus for more information.*

## Mandatory course requirements

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

- a) complete each item of assessment worth at least 10%. Where the item contains multiple subcomponents (e.g., a portfolio of journal entries, or similar), students must complete at least 50% of those subcomponents
- b) attend at least 80% of lectures, tutorials and workshops related to this course, unless absence is due to verified medical reasons, or advance permission for absence has been given by the lecturer.

## Workload

A 15-point one-trimester course should require at least 150 hours' work (including class time). This means that during the trimester, the mid-trimester break and study week you should be prepared to spend, on average, 10 hours per week involved in activities such as attending classes, reading, listening to recommended recordings and preparing assignments.

## Assessment

### Approved assessment regime

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

*There are 3 items of assessment:*

1. *Between 5 and 10 minor assignments. Related to learning objectives 1 & 2. (60%)*
2. *Two in-class tests. Related to learning objectives 1 & 2. (20%)*
3. *Short creative project. Related to learning objectives 1–3. (20%)*

### Assessment details for this offering

<b>Assessment items and workload per item</b>	<b>Word Length / Duration</b>	<b>CLO(s)</b>	<b>Due Date</b>	<b>%</b>
<i>Assignment 1 (5 hours)</i>	<i>30 Seconds</i>	<i>1</i>	<i>9 March, 2015</i>	<i>6%</i>
<i>Assignment 2 (5 hours)</i>	<i>30 Seconds</i>	<i>1</i>	<i>16 March, 2015</i>	<i>6%</i>
<i>Assignment 3 (5 hours)</i>	<i>30 Seconds</i>	<i>1</i>	<i>23 March, 2015</i>	<i>6%</i>
<i>Assignment 4 (5 hours)</i>	<i>30 Seconds</i>	<i>1</i>	<i>30 March, 2015</i>	<i>6%</i>
<i>Assignment 5 (5 hours)</i>	<i>30 Seconds</i>	<i>1, 2</i>	<i>20 April, 2015</i>	<i>6%</i>
<i>Test 1 (In Class) (20 hours' prep)</i>	<i>4 Pages, Closed Book, 40 minutes</i>	<i>1</i>	<i>24 April, 2015</i>	<i>10%</i>
<i>Assignment 6 (5 hours)</i>	<i>30 Seconds</i>	<i>1, 2</i>	<i>24 April, 2015</i>	<i>6%</i>
<i>Assignment 7 (5 hours)</i>	<i>30 Seconds</i>	<i>1, 2</i>	<i>4 May, 2015</i>	<i>6%</i>
<i>Assignment 8 (5 hours)</i>	<i>30 Seconds</i>	<i>1, 2</i>	<i>11 May, 2015</i>	<i>6%</i>
<i>Assignment 9 (5 hours)</i>	<i>30 Seconds</i>	<i>1, 2</i>	<i>18 May, 2015</i>	<i>6%</i>
<i>Test 2 (In Class) (20 hours' prep)</i>	<i>4 Pages, Closed Book, 40 minutes</i>	<i>1, 2</i>	<i>25 May, 2015</i>	<i>10%</i>
<i>Assignment 10 (5 hours)</i>	<i>30 Seconds</i>	<i>1, 2</i>	<i>25 May, 2015</i>	<i>6%</i>
<i>Short Creative Project (27 hours)</i>	<i>30 Seconds</i>	<i>1, 2, 3</i>	<i>19 June, 2015</i>	<i>20%</i>

## Submission and return of work

Assignments should be uploaded to Blackboard or deposited in Jim Murphy's mailbox, opposite Kelburn Reception. Marked assignments will be returned to the student pigeonholes or uploaded to Blackboard. Which policy applies will be specified separately for each assignment.

ChuckK assignments submitted via Blackboard should be labelled in the following format:

lastname\_assignment#.ck. Audio files submitted via Blackboard should be saved as mp3 files and labelled lastname\_assignment#.mp3.

## Extensions and penalties

### Extensions

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.

### 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.

### Set texts

*Programming for Musicians and Digital Artists: Creating Music with ChuckK.* Ajay Kapur, Perry Cook, Spencer Salazar, Ge Wang (Manning Publications, 2014).

*An electronic edition of this text is available from <http://manning.com/kapur>*

## Recommended reading

ChuckK Documentation: <http://chuck.cs.princeton.edu/doc>

ChuckK Examples: <http://chuck.cs.princeton.edu/doc/examples>

## Class representative

The class representative provides a useful way to communicate feedback to the teaching staff during the course. A class representative will be selected at the first lecture of the course. Students may like to write the Class Rep's name and details in this box:

Class Rep name and contact details:
-------------------------------------

## 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](http://www.cad.vuw.ac.nz/feedback/feedback_display.php).

## 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: [www.victoria.ac.nz/students/study/exams/integrity-plagiarism](http://www.victoria.ac.nz/students/study/exams/integrity-plagiarism)
- Aegrotats: [www.victoria.ac.nz/students/study/exams/aegrotats](http://www.victoria.ac.nz/students/study/exams/aegrotats)
- Academic Progress: [www.victoria.ac.nz/students/study/progress/academic-progress](http://www.victoria.ac.nz/students/study/progress/academic-progress) (including restrictions and non-engagement)
- Dates and deadlines: [www.victoria.ac.nz/students/study/dates](http://www.victoria.ac.nz/students/study/dates)
- FHSS Student and Academic Services Office: [www.victoria.ac.nz/fhss/student-admin](http://www.victoria.ac.nz/fhss/student-admin)
- Grades: [www.victoria.ac.nz/students/study/progress/grades](http://www.victoria.ac.nz/students/study/progress/grades)
- Resolving academic issues: [www.victoria.ac.nz/about/governance/dvc-academic/publications](http://www.victoria.ac.nz/about/governance/dvc-academic/publications)
- Special passes: [www.victoria.ac.nz/about/governance/dvc-academic/publications](http://www.victoria.ac.nz/about/governance/dvc-academic/publications)
- Statutes and policies including the Student Conduct Statute: [www.victoria.ac.nz/about/governance/strategy](http://www.victoria.ac.nz/about/governance/strategy)
- Student support: [www.victoria.ac.nz/students/support](http://www.victoria.ac.nz/students/support)
- Students with disabilities: [www.victoria.ac.nz/st\\_services/disability](http://www.victoria.ac.nz/st_services/disability)
- Student Charter: [www.victoria.ac.nz/learning-teaching/learning-partnerships/student-charter](http://www.victoria.ac.nz/learning-teaching/learning-partnerships/student-charter)
- Student Contract: [www.victoria.ac.nz/study/apply-enrol/terms-conditions/student-contract](http://www.victoria.ac.nz/study/apply-enrol/terms-conditions/student-contract)
- Subject Librarians: <http://library.victoria.ac.nz/library-v2/find-your-subject-librarian>
- Turnitin: [www.cad.vuw.ac.nz/wiki/index.php/Turnitin](http://www.cad.vuw.ac.nz/wiki/index.php/Turnitin)
- University structure: [www.victoria.ac.nz/about/governance/structure](http://www.victoria.ac.nz/about/governance/structure)
- Victoria graduate profile: [www.victoria.ac.nz/learning-teaching/learning-partnerships/graduate-profile](http://www.victoria.ac.nz/learning-teaching/learning-partnerships/graduate-profile)
- VUWSA: [www.vuwsa.org.nz](http://www.vuwsa.org.nz)
- NZSM Statutes and Policies, and the NZSM Student Handbook: [www.nzsm.ac.nz/student-zone/student-guides](http://www.nzsm.ac.nz/student-zone/student-guides)
- Scholarships and prizes relevant to NZSM students: [www.nzsm.ac.nz/study-careers/scholarships-and-prizes](http://www.nzsm.ac.nz/study-careers/scholarships-and-prizes)

## 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 [events@nzsm.ac.nz](mailto:events@nzsm.ac.nz) with 'subscribe dawn chorus' in the subject line.

**Website:** [www.nzsm.ac.nz/events](http://www.nzsm.ac.nz/events)