

**The University of Western Ontario
Faculty of Information and Media Studies**

**MIT 2550B – Digital Music: An Introduction
Course Outline – Winter 2019**

Instructor Information

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Course Information

Lectures: Mondays 12:30-2:30 (FNB 2240)
Labs: Thursdays 12:30-2:30 (FNB 2070)

Prerequisite

All students must be enrolled in second year FIMS or later. Students from other departments must have Dean and Instructor approval.

Unless you have either the prerequisites for this course or written special permission from your Dean to enrol in it, you will be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

Course Syllabus

1. Course Description

The course emphasizes the development and manipulation of sound sources, especially music, within a mixed media context. Students will be introduced to music-specific technologies and concepts that can be applied to a multimedia environment. Previous music experience is not required; however, students will acquire some musical skills and study certain musical concepts.

2. Lecture Topics & Discussion

Unit 1: Music Technology and Culture
Unit 2: Basics of Sound and Digital Audio
Unit 3: Technological Design (interface) on Music Culture
Unit 4: Subtractive Synthesis / Software Synthesis
Unit 5: Intro to Audio Mixing, EQ, and Compression
Unit 6: Intro to Time-based Processing
Unit 7: MIDI
Unit 8: The Culture of Sampling/Recycled Culture and Copyright
Unit 9: Computer and A.I. Music
Unit 10: Technology's Influence on Modern Recorded Audio/Music Production
Unit 11: The Future of Music and Audio Production and Delivery Formats
Unit 12: Academic Technology Research vs. Popular Culture
Unit 13: Circuit Bending
Unit order and topics are subject to change based on trending topics and lecture progression.

3. Other Possible Lecture Topics

Technology Borders
Trends in Music and Audio Technology
Music Technology Economy and Culture
How Music Technology Influences Culture and Vice Versa

4. Lab Topics

Intro to macOS

Intro to Audacity and REAPER

Intro to digital audio editing and processing

Creating basic MIDI tracks and compositions

Basic handling of multi-track recordings using software

Creating mashups

Creating sound effects with software synthesis

Some assignments/labs may require students to find their own resources, such as commercial music for editing.

Preparation: Students may have to use unsupervised lab time to prepare for class and assignments. For lab availability and conditions of use, please visit <http://www.fims.uwo.ca/2070>.

Course Materials

1. Assigned readings in the form of articles, textbook chapters, and glossaries (all provided by instructor).
2. Assigned listening for discussion in lectures and labs.
3. USB Hard Drive or USB Flash Drive (8 GB or larger) for storing/backing up and submitting digital projects. Storing backups on cloud storage is recommended as well (see below).
4. Headphones (non-earbud). Students require a professional set of headphones such as AKG 240, Audio-Technica ATH-M20x, OneOdio Pro-10, or another approved set of headphones.

There is no required textbook for this course. Materials will be provided by the instructor, most of which can be accessed online via the links provided in the listening, reading, and terminology list attached to the back of this syllabus. Students are required to have assigned listening and/or readings prepared ahead of lectures and labs.

It is important that students have reliable physical and digital backups of their work. University students are given access to OneDrive, which offers 1 TB of online storage. Because the assigned coursework is digital in nature, students should *always* make sure that they have backups of their work. OneDrive can be accessed at myoffice.uwo.ca.

Optional Materials

It is suggested that students, if desired, install the following software on their own computers to work on digital projects. Note that installation of either software is not required as all assignments can be completed in the lab during the student's own time.

1. Installation of Audacity (www.audacityteam.org). This program is free to use.
2. Purchase and installation of Reaper DAW (www.reaper.fm). This program offers a free 60-day trial.

Methods of Evaluation

Assignments are due at the beginning of class. Late assignments will only be accepted at the discretion of the instructor and only if extenuating circumstances prevail; otherwise, late assignments will not be graded. Homework must be completed independently (see section on "Plagiarism" in the Notes from the FIMS Dean's Office below) and neatly, as sloppy assignments will not be graded.

Occasionally, there will be in-class lab assessments. These assessments are brief and can only be completed during the lab. No makeups or extensions will be offered.

The relationship between attendance and achievement is well documented. Therefore, it is very important that students attend lectures and labs.

Students will receive graded work worth no less than 15% at least 3 days prior to the deadline for withdrawal without academic penalty. This year, the date by which students are to have received at least 15% of their grade in a first semester course is March 4, 2019. Students can find details about this academic policy here:

http://www.uwo.ca/univsec/pdf/academic_policies/exam/evaluation_undergrad.pdf. Please note, students are responsible for ensuring that they are aware of the grades they have received in their courses.

Assignments:	20%
Assignment 1, due Jan. 24:	3%
Assignment 2, due Feb. 7:	7%
Assignment 3, due Feb. 28:	10%
Term Project, due Apr. 4:	25%
Midterm, Feb. 11:	20%
In-class Lab Assessments:	5%
Attendance & Participation:	5%
Final Exam, date TBA:	25%
(Examination period: Apr. 11-30)	

Testing material will be based on content from lectures, labs, assigned readings, and possibly assigned listening.

Note: Due to unforeseen circumstances, assignments, tests, and deadlines may require modification. Such changes are positive, for they allow the dynamic of the class to have a direct bearing on topics covered, and the depth to which we may pursue certain developing threads.

Learning Outcomes

Students can expect to:

1. Have a better understanding of music and audio production using technology.
2. Gain an understanding of the basic practical, theoretical, cultural, and historical aspects of music and audio production using technology.

Statement on Use of Electronic Devices

Students are expected to use electronic devices in a respectful manner. Please turn off your phone during class time, and leave the room to use it in emergencies only. Our time together is valuable, so it is very important to minimize distractions.

Audio/video recording of course lectures, labs, or individual meetings is not permitted.

Land Acknowledgement

Western University is situated on the traditional territories of the Anishinaabeg, Haudenosaunee, Lunaapeewak and Attawandaron peoples who have longstanding relationships to the land and region of southwestern Ontario and the City of London. The local First Nation communities of this area include Chippewas of the Thames First Nation, Oneida Nation of the Thames, and Munsee Delaware Nation. In the region, there are eleven First Nation communities and a growing Indigenous urban population. Western values the significant historical and contemporary contributions of local and regional First Nations and all of the Original peoples of Turtle Island (North America).

MIT 2550B – Listening, Reading, and Terminology List

Listening and reading items are necessary for participating in lectures, completing assignments, and preparing for tests. Scholarly articles can be accessed online by visiting JSTOR (www.jstor.org.proxy1.lib.uwo.ca) either on or off campus. Other materials can be accessed on OWL once the instructor has provided them.

Note that the instructor may add items to this list at a later time.

Listening

Throughout the term, the instructor may assign listening items for discussion in lecture and/or labs, which may include items suggested by students. Depending on how deeply listening items are discussed, they may be used as testing material.

Readings

- Adams, Tim. "David Cope: 'You pushed the button and out came hundreds and thousands of sonatas'." *The Observer*, July 11, 2010. <https://www.theguardian.com/technology/2010/jul/11/david-cope-computer-composer> (accessed November 5, 2018).
- Barnett, Kyle, and Eric Harvey. "Recording industries, technologies and cultures in flux." *Creative Industries Journal* 8, no. 2 (2015): 103-105. doi:10.1080/17510694.2015.1090221
- Bayer, Douglas L. "Real-Time Software for a Digital Music Synthesizer." *Computer Music Journal* 1, no. 4 (1977): 22-23. <http://www.jstor.org/stable/40731296>.
- Botstein, Leon. "Music, Technology, and the Public." *The Musical Quarterly* 78, no. 2 (1994): 177-88. <http://www.jstor.org/stable/742538>.
- Brown, Chris, John Bischoff, and Tim Perkis. "Bringing Digital Music to Life." *Computer Music Journal* 20, no. 2 (1996): 28-32. doi:10.2307/3681328.
- Cope, David. "An Expert System for Computer-Assisted Composition." *Computer Music Journal* 11, no. 4 (1987): 30-46. doi:10.2307/3680238.
- . "Facing the Music: Perspectives on Machine-Composed Music." *Leonardo Music Journal* 9 (1999): 79-87. <http://www.jstor.org/stable/1513481>.
- Fuchs, Mathias. "Music Is Duty-Free: Sending Sounds across Borders." *Leonardo* 24, no. 2 (1991): 145-46. doi:10.2307/1575284.
- Luque, Sergio. "The Stochastic Synthesis of Iannis Xenakis." *Leonardo Music Journal* 19 (2009): 77-84. <http://www.jstor.org/stable/40926355>.
- Marshall, Lee. "For and against the Record Industry: An Introduction to Bootleg Collectors and Tape Traders." *Popular Music* 22, no. 1 (2003): 57-72. <http://www.jstor.org/stable/853556>.
- . "'Let's keep music special. F—Spotify': on-demand streaming and the controversy over artist royalties." *Creative Industries Journal* 8, no. 2 (2015): 177-189. doi:10.1080/17510694.2015.1096618.
- Rumsey, Francis, and Tim McCormick. *Sound and Recording: Applications and Theory*, Seventh Edition. Burlington, MA: Focal Press, 2014.
- Saunders, Steve. "Improved FM Audio Synthesis Methods for Real-Time Digital Music Generation." *Computer Music Journal* 1, no. 1 (1977): 53-55. <http://www.jstor.org/stable/23320128>.

Terminology

“Tech stuff – Digital Audio/Video – Glossary.” *Zytrax.info*. <http://www.zytrax.com/tech/audio/glossary.html>.

“Minimoog Voyager XL User’s Manual.” *Moog Music*: 96-99.

https://www.moogmusic.com/sites/default/files/voyager_xl_manual.pdf

Certain readings on concepts and topics discussed in class can be found on *Oxford Music Online*

(www.oxfordmusiconline.com.proxy1.lib.uwo.ca). The instructor may assign readings from this resource as needed.

NOTES FROM THE FIMS DEAN'S OFFICE

Winter 2019

Rights and Responsibilities

The conditions governing a student's ability to pursue their undergraduate education at Western are ratified by Senate and can be found on the Academic Policies section of the University Secretariat:

http://www.uwo.ca/univsec/academic_policies/rights_responsibilities.html

Statement on Academic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

Plagiarism

Students must write their essays and assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence.

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software Turnitin under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system.

Accommodation Policies

Students with disabilities work with Services for Students with Disabilities (SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_disabilities.pdf

Medical Consideration

Students seeking academic consideration on medical grounds for any missed tests, exams, participation components and/or assignments worth **10% or more of their final grade** must apply to the Academic Counselling

office of their home Faculty and provide documentation in the form of a [Student Medical Certificate](#). It will be the Dean's Office that will determine if consideration is warranted.

For work worth **less than 10% of the final grade**, the instructor will consider requests for academic consideration on medical grounds made in a timely manner in writing or by appointment in office hours. Such requests need not be accompanied by documentation. The instructor may decide to require documentation be submitted to the appropriate Academic Counselling office.

Students should also note that individual instructors are not permitted to receive documentation directly from a student, whether in support of an application for consideration on medical grounds, or for other reasons. **All documentation must be submitted to the Academic Counselling office of a student's home Faculty.**

For Western University policy on consideration for medical illness, see: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_illness.pdf and for the Student Medical Certificate (SMC), see:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf

Compassionate Accommodation

Academic accommodation (extensions, makeup tests and exams, additional assignments etc.) may be given to students on compassionate grounds. The situations for which compassionate accommodation can be given must be serious, including significant events such as death in the immediate family, trauma (fire, robbery, harassment, muggings, car accidents, etc.) or emergency situations. Documentation is required.

If a member of your immediate family is seriously ill, obtain a medical certificate from the family member's physician and submit the documentation to your Academic Counsellor. If you have been involved in a severe accident, fire or some other exceptional crisis, obtain a copy of the police report or be prepared to provide the necessary documentation upon request. Generally, for deaths within a student's immediate family (parents, guardians, caregivers, siblings, spouses), bereavement leave is granted, upon provision of documentation. For deaths within a student's extended family, academic accommodation is given for one to three days, upon provision of documentation. Students seeking additional bereavement leave should contact their Academic Counsellors with valid documentation.

Religious Accommodation

Students should consult the University's list of recognized religious holidays, and should give reasonable notice in writing, prior to the holiday, to the Instructor and an Academic Counsellor if their course requirements will be affected by a religious observance. Additional information is given in the [Western Academic Calendar](#).

FIMS Undergraduate Grading Policy

The MIT, MPI and MTP programs now have the following class average policy:

- Normally, first year courses required for entry into an MIT or MPI module (MIT 1020E and MIT 1025F/G) are expected to have a course average between 68-72%.
- Normally, second year required courses (MIT 2000, 2100, 2200, 2500) are expected to have a course average between 70 and 75%.
- Normally, third year required courses (MIT 3000, 3100) are expected to have a course average between 72 and 77%.

Elective courses and 4th year seminars have no recommended course averages.

Support Services

Students who are in emotional/mental distress should refer to Mental Health@Western for a complete list of options about how to obtain help. <http://www.uwo.ca/uwocom/mentalhealth/>

SUPPORT SERVICES – LINKS

Office of the Registrar:

www.registrar.uwo.ca

Student Development Centre:

www.sdc.uwo.ca

Psychological Services:

www.sdc.uwo.ca/psych

Services for Students with Disabilities:

www.sdc.uwo.ca/ssd

Accessibility Information:

www.accessibility.uwo.ca/

Writing Support Centre:

www.sdc.uwo.ca/writing

Learning Skills Services:

www.sdc.uwo.ca/learning

Indigenous Services:

<http://indigenous.uwo.ca/>

International and Exchange Student

Centre: www.sdc.uwo.ca/int

Career Centre at Western:

www.success.uwo.ca/careers/

Appendix A: Suggested Grade Ranges in MIT, MPI and MTP

Guidelines to the MIT Grade Range

These guidelines are benchmarks, and are not to be followed as rigid regulations. They will be adjusted as appropriate to take into account the level of the course and any specific instructions given by a professor. As well, competency in English language usage (including spelling and grammar) may be taken into account in the assignment of grades by individual instructors. Note that the 70-79 grade range is broken into two divisions, as this is the grade range into which a large number of students fall.

90-100 (Outstanding, A+)

The report shows sparkling originality and exhibits a high degree of critical analysis of the topic. Sophisticated synthesis and analysis of the theoretical and conceptual dimensions of the topic are demonstrated. Mastery of complex material and ideas is immediately evident. The topic is treated with sensitivity and subtlety of thought. The quality of the writing and background research is exemplary.

80-89 (Excellent, A)

The report shows originality and exhibits a high degree of critical analysis of the topic; it gets to the heart of the matter with comments and/or questions. It is clearly focused and logically organized. The quality of writing makes the report immediately understandable. Mastery of complex material and ideas is demonstrated. The report is of appropriate length, while preserving the priorities and emphasis of the material, so that the result is meaningful, not simplistic.

75-79 (Very Good, B+)

The report shows above average analysis, critical thinking and independent thought. Claims are supported by ample evidence and the components of the topic are well-researched and presented. The topic is addressed in reasonable depth and/or breadth and covers material appropriate to the course. The analysis is organized around focal points and the argument is easily followed. The report demonstrates an above average ability to write in an intelligible style and to condense material meaningfully and with a concern for priorities of that material.

70-74 (Good, B)

The report shows an attempt at analysis and critical thinking. Claims are supported by reasonable evidence. The topic is addressed in some depth and/or breadth, with references to the appropriate literature and course material. The analysis is organized around focal points. The report is generally well written and well argued.

60-69 (Competent, C)

The report demonstrates adequate comprehension of the topic. The report is on topic and is a reasonable summary of material covered in the course, but goes no further. Facts are stated accurately; the quality of writing is sufficiently intelligible with enough elaboration and enough connections made between ideas to permit a reader to understand the point of the report.

50-59 (Marginal, D)

The report shows less than adequate comprehension of the topic and of the material covered by the course. The report is a less than adequate summary of sources and/or is considerably off-topic. Facts are stated inaccurately or ambiguously; the writing style is difficult to follow; there is insufficient elaboration to permit reader's comprehension of relations among ideas; little judgment is shown in selecting detail for inclusion in the report.

Below 50 (Unacceptable, F)

The report demonstrates a failure to comprehend the topic. The material is disorganized and unintelligible. The report clearly does not meet the minimal requirements of the assignment.

Appendix B: Guidelines of Academic Appeals for FIMS Students

Grounds for Appeal:

The Faculty of Information and Media Studies does not view the appeals process as an opportunity for students to solicit a second opinion on a grade assigned to a particular piece of work. Appeals must pertain to the final grade in a course, and will only be entertained if sufficient grounds for appeal can be met, including: medical or compassionate circumstances, a defect in the evaluation process, bias, inaccuracy or unfairness.

Stages in the Appeals Process:

The first stage of the process is a discussion of the disputed grade with the appropriate Teaching Assistant (if applicable), and subsequently, the course Instructor. For grades assigned to individual assignments, essays, lab reports, projects and tests completed throughout the term, the student first must appeal to the Teaching Assistant or Instructor of the course, within three weeks of the date on which the Instructor or Teaching Assistant returned the assignments to the class. The Appeals Committee will not hear any further appeals about the final grade in any course unless this first step has been taken.

If completion of the first stage has not resolved the matter, the student may appeal the final grade in the course to the FIMS Appeals Committee. Appeals of final grades must be **within the time frame indicated in the Undergraduate Calendar.** It is the student's responsibility to ensure that the appeal is submitted within the deadline. The student shall submit a formal letter to the FIMS Appeals Committee outlining the grounds for the appeal, the remedy sought and relevant materials including the information about when and with whom (Teaching Assistant and/or Instructor) the student met, as described in Stage 1. If the appeal involves a request for work to be regraded, the original marked work and a clean copy (if possible) must be included. If the appeal is commenced once the deadline has passed, it will not be considered either by the Appeals Committee or by the Associate Dean.

The FIMS Appeals Committee has the discretion to determine whether the grounds for appeal have been met.

If the Committee deems that the reasons for the appeal are not legitimate, the Associate Dean will be informed. The appeal will be terminated and the student will be informed.

If the Committee decides that the grounds for appeal have been met, the following steps will be taken:

1. the course Instructor will be shown the appeal letter and offered an opportunity to make a written response;
2. if work is to be regraded, a reader will be appointed who is competent in the area in question and was not involved in the assignment of the original mark. The reader will consider the work in question and will arrive at an independent evaluation. If there is a large discrepancy between the original mark and the regraded mark, a second reader may be appointed by the Committee. **If the appointed reader(s) arrive at a grade within five marks of the original, the original grade will stand.**

The FIMS Appeals Committee will review the evidence and will make a recommendation on the case to the Associate Dean Undergraduate.

The Associate Dean Undergraduate will consider the recommendation from the Appeals Committee, and will make a decision. The student and the instructor will be notified promptly and in writing by the Associate Dean of the decision and of the change in grade, if any. Within the Faculty of Information and Media Studies, the Associate Dean's decision on the matter is final.

Further appeals are possible under certain circumstances to the Senate Review Board Academic (for Undergraduate students) or to the Faculty of Graduate Studies (for Graduate students) but the student should carefully consult the guidelines regarding such Appeals.