

Music Technology in Music Education

Course No. M9553

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MIDI, digital audio recorders, music notation software, electronic instruments, and mobile apps are but a few of the technological tools that teachers can use to support music learning. However, technologies alone don't develop students' musicianship. Engaging learning activities, purposefully selected to effect desired outcomes, are essential. To become well-rounded musicians, students need to have meaningful experiences as composers, improvisers, performers, and listeners while also developing their cognitive understanding of music. Experiences designed to align music content with well-selected learning activities and supporting technologies can assist students' meaningful music learning.

Bauer, W.I., Hofer, M., & Harris, J. (2012). Grounded tech integration using K – 12 music learning activity. *Learning & Leading with Technology*, 30 – 32.

This course explores aspects of technology-based music instruction through writings on technology in education and through direct experience with some of the representative technologies. While there are a multitude of possible perspectives from which to consider the issue of technology in music education, this course focuses on its use in a creativity-based approach to music learning. You will have an opportunity to consider a range of pedagogical issues related specifically to technology-based music instruction. As well, you will examine the use of technology in a school setting from the perspective of the technological culture of our students. Direct experience with a range of useful technologies will be project-based and will involve a mix of individual and group activities.

Learning Strategies

The course will involve seminars, as well as technical sessions in the Interdisciplinary Media Centre. The IMC is a digital arts education and research centre operated collaboratively by the Faculties of Arts and Humanities, Information and Media Studies, and Music. The multi-media lab is equipped with 25 student workstations, each hosting a wide range of computer software. The workstations support video, sound and music, and website design and authoring activities.

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
17	18 9:00 – 12noon Introduction and course overview Tour of IMC Lab 6:30 – 9:30 pm Digital Audio Audacity Introduction	19 2:00 – 5:00 Digital Audio Audacity remix Multitrack Music Production Applications GarageBand Overview	20 9:00 – 12noon Seminar: The Big Picture 6:30 – 9:30 pm Multitrack Music Production Applications GarageBand	21 2:00 – 5:00 Screencasting	22	23

			Soundtrack			
24	25 9:00 – 12noon Seminar: The Pedagogy 6:30 – 9:30 pm Music Education in the Cloud	26 2:00 – 5:00 Music Notation	27 9:00 – 12noon Seminar: The Student 6:30 – 9:30 pm Online resources	28 2:00 – 5:00 Conclusion	29	30

Evaluation:

1. Class Attendance and Participation 35%
You will be expected to prepare for classes by undertaking assigned readings, completing project work initiated during lab sessions, and conducting independent research and reflecting on the issues raised as they relate to music education and your own experiences and practices. Groups of students will be assigned to lead one of two seminars (see below). Each group will be expected to give a presentation on the topic which is based on the assigned readings, and to direct the ensuing discussion. Lab sessions will involve compositional and other creative activities.
2. Paper Due: August 25 35%
3000 words. Topic: Integrating Music Technology in the Music Classroom. Discuss the topic from your own teaching perspective. Pros. Cons. Strategies. While the focus in this course will be creativity-based music instruction, you are welcome to discuss the topic from other technological perspectives (e.g., Web 2.0, new media).
3. Projects 30%
Lab activities will include a number of creative activities, most which will relate to three projects: production of a music remix, a movie soundtrack, and a screencast. Details concerning submission of projects will be provided during the first lab session.

Required Text

There is no required text. However, a number of books, including the following, will be on reserve in the Music Library.

Watson, S. (2011). *Using technology to unlock musical creativity*. New York: Oxford University Press.

Dorfman, J. (2013). *Theory and practice of technology-based music instruction*. New York: Oxford University Press.

Bauer, W.I. (2014). *Music learning today: Digital pedagogy for creating, performing, and responding to music*. New York: Oxford University Press.

Randles. C. (Ed.) (2015). *Music education: Navigating the future*. New York: Routledge.

Seminars and Assigned Readings

With the exception of chapters from the Dorfman text (see The Pedagogy), readings are available online and/or on the OWL Resources page. The Dorfman text will be on reserve in the Music Library.

Seminar 1: The Big Picture (R.Wood)

Savage, J. (2012). Driving forward technology's imprint on music education. In G.E. McPherson & G.F. Welch (Eds.), *The Oxford handbook of music education* (Vol. 2, pp. 492 - 512). New York: Oxford University Press.

Himonides, E., & Purves, R. (2010). The role of technology. In S. Hallam, & A. Creech (Eds.), *Music Education in the 21st century in the United Kingdom: Achievements, analysis and aspirations* (pp. 123 – 140). London: Institute of Education.

Himonides, E. (2012). The misunderstanding of music-technology-education: A meta perspective. In G.E. McPherson & G.F. Welch (Eds.), *The Oxford handbook of music education* (Vol. 2, pp. 433 - 456). New York: Oxford University Press.

Purves, R. (2012). Technology and the educator. In G.E. McPherson & G.F. Welch (Eds.), *The Oxford handbook of music education* (Vol. 2, pp. 457 - 475). New York: Oxford University Press.

Ruthmann, A., Tobias, E., Randles, C., & Thibeault, M. (2014). Is it technology? Challenging technological determinism in music education. In C. Randles (Ed.), *Navigating the future* (Pre-publication draft). New York: Routledge.

Webster, P. R. (2011). Key research in music technology and music teaching and learning. *Journal of Music, Technology & Education*, 4 (2/3), 115-130.

Leong, S. (2011). Navigating the emerging futures in music education. *Journal of Music, Technology & Education*, 4 (2/3), 233-243.

TPACK

Mishra, P., & Koehler, M. J. (2006). **Technological Pedagogical Content Knowledge: A new framework for teacher knowledge**. *Teachers College Record* 108 (6), 1017-1054.

RAT

Hughes, J., Thomas, R., & Scharber, C. (2006). Assessing technology integration: The RAT – replacement, amplification, and transformation – framework. *Proceedings of the Society for Information Technology and Teacher Education*, 1616 – 1620.

SAMR

Introduction to the SAMR model

<https://www.commonsemmedia.org/videos/introduction-to-the-samr-model>

Eight examples of transforming lessons through the SAMR model

<http://www.emergingedtech.com/2015/04/examples-of-transforming-lessons-through-samr/>

The SAMR ladder: Questions and transitions

http://www.hippasus.com/rrpweblog/archives/2013/10/26/SAMRLadder_Questions.pdf

Additional Readings (This material has not been added to the Resource page)

Burnard, P. (2011). Educational leadership, musical creativities and digital technology in education. *Journal of Music, Technology & Education*, 4 (2/3), 157-171.

Himonides, E. (2012). Commentary: Music learning and teaching through technology. In G.E. McPherson & G.F. Welch (Eds.), *The Oxford handbook of music education* (Vol. 2, pp. 429 - 433). New York: Oxford University Press.

King, A. (2012). The student prince: Music-making with technology. In G.E. McPherson & G.F. Welch (Eds.), *The Oxford handbook of music education* (Vol. 2, pp. 476 - 491). New York: Oxford University Press.

Landy, L. (2011). Discovered whilst entering a new millennium: A technological revolution that will radically influence both music making and music education. *Journal of Music, Technology & Education*, 4 (2/3), 181-188.

Rees, F. J. (2011). Redefining Music Technology in the United States. *Journal of Music, Technology & Education*, 4 (2/3), 149-155.

Thibeault, M.D. (2012). Music education in the postperformance world. In G.E. McPherson & G.F. Welch (Eds.), *The Oxford handbook of music education* (Vol. 2, pp. 517 - 529). New York: Oxford University Press.

Waldron, J. (2011). Conceptual frameworks, theoretical models and the role of YouTube: Investigating informal music learning and teaching in online music community. *Journal of Music, Technology & Education*, 4 (2/3), 189-200.

Seminar 2: The Pedagogy (Student Presentation)

Ruthmann, A. (2007). The composers' workshop: An approach to composing in the classroom. *Music Educators Journal*, 93 (4), 38 – 43.

Ruthmann, S. A. (2013). Exploring new media musically and creatively. In P. Burnard & R. Murphy, *Teaching Music Creatively* (pp. 85-97). London: Routledge. ISBN: 978041565606.

Wong, M. (2014). Integrating technology into the music classroom to encourage student creativity. (Master's research paper). Available from TSpace Repository/OISE/Master of Teaching Research Projects (<http://hdl.handle.net/1807/67068>).

Dammers, R. (no date). Suggestions for designing technology-based music classes. Unpublished manuscript, Rowan University.

Dammers, R.J. (2010). A case study of the creation of a technology-based music course. *Bulletin of the Council for Research in Music Education*, 186, 55 – 65.

Dorfman, J. (2013). *Theory and practice of technology-based music instruction*. New York: Oxford University Press.
Chapters 1 – 3, 5 – 7

Seminar 3: The Student (Student Presentation)

Students and Technology

Rosen, L.D. (2011). Teaching the iGeneration, *Educational Leadership*, 68(5), 10-15.

Dr. Larry Rosen website <http://drlarryrosen.com>

Music Technology and Students

Ruthmann, S.A., & Dillon, S.C. (2012). Technology in the lives and schools of adolescents. In G.E. McPherson & G.F. Welch (Eds.), *The Oxford handbook of music education* (Vol. 2, pp. 529 - 550). New York: Oxford University Press.

Ruthmann, A. (2012). Engaging adolescents with music technology. In S.L. Burton (Ed.), *Engaging Musical Practices: A Sourcebook for Middle School General Music*. Lanham, Md.: Rowman & Littlefield Education.

Ruthmann, A. (2008). Whose agency matters? Negotiating pedagogical and creative intent during composing experiences. *Research Studies in Music Education*, 30 (1), 43 – 58.

Nicholas, Arlene, "Preferred Learning Methods of the Millennial Generation" (2008). Faculty and Staff - Articles & Papers. Paper 18. http://digitalcommons.salve.edu/fac_staff_pub/18

The Non-Traditional Music Student

Williams, D. B. (2011). The non-traditional music student in secondary schools of the United States: Engaging non-participant students in creative music activities through technology. *Journal of Music, Technology & Education*, 4 (2/3), 131-147.

Savage, J. (2011). Tom's story: Developing music education with technology. *Journal of Music, Technology & Education*, 4 (2/3), 217-226.

Important Information

Statement on Academic Offences

Plagiarism is a major scholastic offence. Students must write assignments in their own words. Whenever a student takes an idea, or a passage from another author, they must acknowledge their debt by using quotation marks where appropriate and by proper referencing in APA style. All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software 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. Use of the service is subject to the licensing agreement currently between the University of Western Ontario and Turnitin.com. www.turnitin.com
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/handbook/appeals/scholastic_discipline_grad.pdf

University Policy on Accommodation for Medical Illness.

This can be found at: <https://studentservices.uwo.ca/secure/index.cfm> As of May 2008, the University has a new policy on Accommodation for Medical Illness, www.uwo.ca/univsec/handbook/appeals/accommodation_medical.pdf, which states that *“in order to ensure fairness and consistency for all students, academic accommodation for work representing 10% or more of the student’s overall grade in the course shall be granted only in those cases where there is documentation indicating that the student was seriously affected by illness and could not reasonably be expected to meet his/her academic responsibilities. Documentation shall be submitted, as soon as possible, to the appropriate Dean’s office...”* (In Music, this means the Associate Dean, Graduate). Students with special learning needs or circumstances are asked to inform the instructor as soon as possible so that necessary accommodations can be made.

Support Services

Student support is available from the Office of the Registrar (<http://www.registrar.uwo.ca>), Student Support Services (including the services provided by the USC (<http://westernusc.ca/services/>) and the Student Development Services (<http://www.sdc.uwo.ca>).

Mental/Emotional distress

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

Instructor’s Policy on Illness and Attendance.

Full attendance at all classes is expected and medical documentation is required unless you have the permission of the instructor. If you are ill or some problem occurs that prevents you from attending class on a given day you must notify the instructor to that effect either before or immediately after class. Unexplained absences will result in a reduction of three (3) points in your attendance/participation grade for each. Students with medical documentation or an acceptable excuse for an absence will not be penalised. Late written assignments will only be accepted and graded if permission has been granted by the instructor in advance of the deadline.