Course Syllabus
MUCP 4910-001 and MUCP 5910-001
From Pong to Procedural Audio: Sound and Music in Video Games

Course Overview
The course will give students a broad and in-depth understanding of the art, craft and business of video game audio, including music, foley, sound design, and voice-over. It will cover topics such as evolution of game audio, procedural audio, middleware solutions and compositional techniques specific to video game music, as well as related topics in the video game industry.

This course may be used to fulfill advanced composition credits for undergraduate composition majors and master's students with a major or related field in composition.

Basic Information
Instructor: Panayiotis Kokoras (Office: MU 2004)
Time and place: Tuesday and Thursday 9:30 - 10:50 pm, MEIT (MU 1001)
Email: Panayiotis.Kokoras@unt.edu
Phone: 1(940) 565-4651
Office hours: Tuesday 1-3 p.m. or by appointment.

Grading
Final grades will be based upon composition or research projects, supplementary assignments, presentation and attendance/class participation distributed as follows:

• Final Composition/Research project (40%):
• Class participation (60%):
  - Assignments: 20%
  - Presentation: 15%
  - Attendance: 25%

Final Project
The final project will consist of one of the following: 1) a video game score of 3-7 minutes duration or 2) an analysis of a video game (5-10 pages) or 3) a research paper (5-10 pages) investigating related issues.

Attendance / Participation
Class attendance is expected of all students. Participation and interaction with others is a critical component of an overall quality learning experience. For each seminar session students are expected to complete reading, listening, and score analysis assignments prior to the dates listed on the schedule below.

Course Materials
Shared only to registered students through GoogleDrive, folder name: MUCP4910-5910
<table>
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<tr>
<th>DATES</th>
<th>TOPICS</th>
<th>ASSIGNMENT/FORMATIVE/CHALLENGE</th>
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<tr>
<td>01b</td>
<td>Aug 29</td>
<td>Intro: overview</td>
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<tr>
<td>02a</td>
<td>Sep 03</td>
<td>Intro: sound and music in video games</td>
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<td>02b</td>
<td>Sep 05</td>
<td>History: Evolution of Games</td>
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<td>03a</td>
<td>Sep 10</td>
<td>History: Technology</td>
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<td>03b</td>
<td>Sep 12</td>
<td>Guest</td>
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<td>04a</td>
<td>Sep 17</td>
<td>Genres: Types of music</td>
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<td>04b</td>
<td>Sep 19</td>
<td>Looping: Layering</td>
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<td>05a</td>
<td>Sep 24</td>
<td>Looping: Tensions, Stingers</td>
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<td>05b</td>
<td>Sep 26</td>
<td>Industry: Sound/ Music in Video games</td>
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<td>06a</td>
<td>Oct 01</td>
<td>Sfx: Sound Design</td>
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<td>06b</td>
<td>Oct 03</td>
<td>Sfx: Foley</td>
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<td>07a</td>
<td>Oct 08</td>
<td>Generative: Music, Tools, Techniques</td>
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<td>07b</td>
<td>Oct 10</td>
<td>Dynamic: Music, Types, Definition</td>
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<td>08a</td>
<td>Oct 15</td>
<td>Interactive: Music, Tools, Techniques</td>
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<td>Oct 17</td>
<td>Adaptive: Music, Tools, Techniques</td>
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<td>09a</td>
<td>Oct 22</td>
<td>Soundscape: Sound, Tools, Techniques</td>
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<td>09b</td>
<td>Oct 24</td>
<td>Scoring: Side Scroller Game</td>
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<td>10a</td>
<td>Oct 29</td>
<td>Scoring: Epic Scoring, Ostinato, hits</td>
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<td>10b</td>
<td>Oct 31</td>
<td>Middleware: Fmod - Unity</td>
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<td>11a</td>
<td>Nov 05</td>
<td>Middleware: Wwise</td>
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<td>11b</td>
<td>Nov 07</td>
<td>Procedural: Sound, Tools, Techniques</td>
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<td>12a</td>
<td>Nov 12</td>
<td>Student Sort Presentations</td>
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<td>12b</td>
<td>Nov 14</td>
<td>Student Sort Presentations</td>
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<td>13a</td>
<td>Nov 19</td>
<td>Voice Over: lip syncing</td>
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<td>13b</td>
<td>Nov 21</td>
<td>Game Analysis: Scoring Limbo with Wwise</td>
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<td>14a</td>
<td>Nov 26</td>
<td>Game Analysis: Music and Sound</td>
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<td>14b</td>
<td>Nov 28</td>
<td>Thanks Giving Break (no class)</td>
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<td>15a</td>
<td>Dec 03</td>
<td>Music: Game Music in Concert Halls</td>
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<td>15b</td>
<td>Dec 05</td>
<td>Conclusion</td>
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<td>16a</td>
<td>Dec 10</td>
<td>Final Examinations</td>
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Recommended Readings

### Audio for Video Games

**G.W Childs (2006)** *Creating Music and Sound for Games*. Cengage Learning PTR.


**Martin D. Wilde (2004)** *Audio Programming for Interactive Games*. Focal Press


**Karen Collins (2008)** *From Pac-Man to Pop Music*. Ashgate.


**Rob Bridgett (2010)** *From the Shadows of Film Sound: Cinematic Production & Creative Process in Video Game Audio*. Blurb


**Ben Long** *Game Audio 101: Mobile – The Insiders Guide to Music & Sound for Mobile Games*  


**Lucien King (2002)** *Game On; The History and Culture of Videogames*. London: Laurence King Publishing Ltd.

### Sound Design


**Andy Farnell (2001)** *Designing Sound*. The MIT Press.

**Vanessa Theme Ament (2009)** *The Foley Grail: The Art of Performing Sound for Film, Games, and Animation*. Focal Press.


**Film Music**


Elisabeth Weis and John Belton (1985) Film Sound: Theory & Practice. Columbia University Press.


**Video Game Music**
See pdf handouts

**Software**

Audiokinetic
https://www.audiokinetic.com/

FMOD
http://www.fmod.org/

Unity3d
http://unity3d.com/

**Links**

http://gamesound.org/
http://www.filmsound.org/
http://www.gamasutra.com/
http://www.audiogang.org/
http://captivatingsound.com/
http://www.gameaudiodesign.com/
http://videogameaudio.com/

**Course Policies**

**Office of Disability Accommodation**
The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the Office of Disability Accommodation website at [http://www.unt.edu/oda](http://www.unt.edu/oda). You may also contact them by phone at 940.565.4323.
**Financial Aid Satisfactory Academic Progress (Graduates)**

A student must maintain Satisfactory Academic Progress (SAP) to continue to receive financial aid. Students must maintain a minimum 3.0 cumulative GPA in addition to successfully completing a required number of credit hours based on total registered hours per term. Students cannot exceed maximum timeframes established based on the published length of the graduate program. If a student does not maintain the required standards, the student may lose their financial aid eligibility.

If at any point you consider dropping this or any other course, please be advised that the decision to do so may have the potential to affect your current and future financial aid eligibility. Please visit [http://financialaid.unt.edu/satisfactory-academic-progress-requirements](http://financialaid.unt.edu/satisfactory-academic-progress-requirements) for more information about financial aid Satisfactory Academic Progress. It may be wise for you to schedule a meeting with an academic advisor in your college or visit the Student Financial Aid and Scholarships office to discuss dropping a course being doing so.

**Academic Integrity**

Academic Integrity is defined in the UNT Policy on Student Standards for Academic Integrity. Any suspected case of Academic Dishonesty will be handled in accordance with the University Policy and procedures. Possible academic penalties range from a verbal or written admonition to a grade of “F” in the course. Further sanctions may apply to incidents involving major violations. You will find the policy and procedures at: [http://vpaa.unt.edu/academic-integrity.htm](http://vpaa.unt.edu/academic-integrity.htm).

**Student Behavior in the Classroom**

Student behavior that interferes with an instructor’s ability to conduct a class or other students’ opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Center for Student Rights and Responsibilities to consider whether the student’s conduct violated the Code of Student Conduct. The university’s expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at: [www.unt.edu/csrr](http://www.unt.edu/csrr).

**Student Evaluation of Teaching Effectiveness**

The Student Evaluation of Teaching Effectiveness (SETE) is a requirement for all organized classes at UNT. This short survey will be made available to students at the end of the semester, providing a chance to evaluate this course; further instructions will be provided at that time. You are strongly encouraged to complete this online survey prior to the end of the semester. For the Spring 2013 semester, the SETE will be open between November 19-December 8. To learn more about SETE, please visit the website at [http://sete.unt.edu](http://sete.unt.edu)