GAME 367
Sound and music for games

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Course Information: GAME 367

3 Credit Hours  Prerequisite: GAME 250  Instructor: Matt Nolan

| Classroom:AB 2002 | Office:Art & Design 1014 | Office Hours: Thursday 2-4 (1014) or by appointment |

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Objective

The main objective of GAME 367 is to ensure the student understands the principles of sound design for video games. This includes planning, production, implementation, and scripting of: sound effects, voice acting, music, ambience, etc. The student will understand the basic principles of non-linear sound design and player driven musical events, signal processing, and sound effects. The student will be able to create their own soundscapes for games. The student will get an experience of a production pipeline and project management in Unity.

Goals

To create a portfolio of original sound fx, music, voice acting, games, and written work. To manage your time and group time properly. To get a better understanding of game engines and how they handle sound. To learn about what third party software can be used to help.
Solution

Through a series of listening assignments, followed by “lab” assignments, students will get a better understanding and more experience composing music for games. Students will get hands on with sound design and create sound effects from scratch. Students will manage a team and learn problem solving and time management.

Project Outline

In order to build the skills necessary for this field, it is important for the student to build up confidence. This series of assignments will help to engage in this process:

• Musical Listening and Description
• Studio Technology Review
• Spoken Word Audio Editing in Audacity
• Sound Libraries
• Audio Recording
• Mobile tools for music composition
• Beat Making-From 8bit and beyond, beepbox.co, trackers, Reason, Garage band/Logic
• Unity Sound Toy- Introduction to scripting for audio
• Working with someone else’s project and assets for the Midterm Project- Bumper Engine and Sonopedia with original music

• Unity Game Engine
  Advanced Audio features- Mixer Groups, Snapshots, Effects Processors, Dynamic control
• Unity Reverb Zones

Syllabus, Page 3
• Final Project-Original Game with Original Audio in Unity

• Portfolio with about 40-50 original sound effects, 3-10 Music compositions, All Homework written and otherwise, All projects including play through videos, all notes from class, written readme file to explain contents of the folders and give informal feedback to the professor.

MORE INFORMATION ON ASSIGNMENTS, DUE DATES, AND DETAILED INSTRUCTIONS CAN BE FOUND ON YOUR BLACKBOARD PAGE.

Technology Requirements for this class: Instead of buying a textbook, I would like for you to buy a pair of studio monitor headphones. We will be discussing this in the first week or two of class, but you should bring these headphones with you to class and the lab.
Participation means:

- Come to Class Every Week (See Attendance Policy for more Details)
- Prepare for and actively engage in class discussion (e.g., demonstrate active listening, not distracted by electronics or peers)
- Thoughtfully engage in in-class assignments and activities
- Constructively participate in group activities.
- Participate in class discussion by raising informed discussion points; connecting discussion to reading material, news, and relevant experiences; Asking questions; Listening to other perspectives;
- Sharing the floor with others; and posting thoughtfully to course discussion boards.

<table>
<thead>
<tr>
<th>Final Grade</th>
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<tbody>
<tr>
<td>A</td>
<td>90%</td>
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<td>B</td>
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<td>C</td>
<td>70%</td>
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<td>D</td>
<td>60%</td>
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<tr>
<td>F</td>
<td>Lower than 60%</td>
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# Portfolio Rubric

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong># of Sound FX</strong></td>
<td>75+</td>
<td>45</td>
<td>30</td>
<td>15-29</td>
<td>Less than that</td>
</tr>
<tr>
<td><strong># of Songs</strong></td>
<td>10+</td>
<td>7</td>
<td>5</td>
<td>1-4</td>
<td>Less than that</td>
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<tr>
<td><strong># of voice recordings</strong></td>
<td>20+</td>
<td>15</td>
<td>10</td>
<td>3-9</td>
<td>Less than that</td>
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<tr>
<td><strong>Written Assignments</strong></td>
<td>ALL including class notes</td>
<td>ALL including class notes</td>
<td>4</td>
<td>1-3</td>
<td>Less than that</td>
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<tr>
<td><strong>Midterm Project</strong></td>
<td>All Assets, build, and play through video</td>
<td>All Assets, build, and play through video</td>
<td>Build, and play through video</td>
<td>May be missing component(s) or assets all together</td>
<td>Less than that</td>
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<tr>
<td><strong>Final Project</strong></td>
<td>All Assets, build, and play through video</td>
<td>All Assets, build, and play through video</td>
<td>Build, and play through video</td>
<td>May be missing component(s) or assets all together</td>
<td>Less than that</td>
</tr>
<tr>
<td><strong>readme.txt</strong></td>
<td>✔️ w/ feedback</td>
<td>✔️</td>
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Students are expected to build and maintain a portfolio of original sound effects and music. Students are expected to have these sounds saved on a physical drive (USB) named with their first initial and last name. Files should be well organized into categories to facilitate easy review and access to files when working on projects. You should bring this with you every time you come to class. The Portfolio is due one week before your final exam. NO LATE PORTFOLIO WILL BE ACCEPTED!
Disability Services at George Mason University is committed to providing equitable access to learning opportunities for all students by upholding the laws that ensure equal treatment of people with disabilities. If you are seeking accommodations for this class, please first visit http://ds.gmu.edu/ for detailed information about the Disability Services registration process. Then please discuss your approved accommodations with me. Disability Services is located in Student Union Building I (SUB I), Suite 2500. Email: ods@gmu.edu | Phone: (703) 993-2474

**Attendance Policy**: Please arrive to class on time. If you are chronically late you will be marked absent. You are allowed ONE unexcused absence. Your second and following unexcused absences will lower your final grade by one letter grade. 5 unexcused absences will result in a final grade of “F”.

**Honor Code Statement**: The integrity of the University community is affected by the individual choices made by each of us. Mason has an Honor Code with clear guidelines regarding academic integrity. Three fundamental and rather simple principles to follow at all times are that: (1) all work submitted be your own; (2) when using the work or ideas of others, including fellow students, give full credit through accurate citations; and (3) if you are uncertain about the ground rules on a particular assignment, ask for clarification. No grade is important enough to justify academic misconduct. Plagiarism means using the exact words, opinions, or factual information from another person without giving the person credit. Writers give credit through accepted documentation styles, such as parenthetical citation, footnotes, or endnotes. Paraphrased material must also be cited, using MLA or APA format. A simple listing of books or articles is not sufficient. Plagiarism is the equivalent of intellectual robbery and cannot be tolerated in the academic setting.

For this class in particular it is important to be aware that it is against the honor code to download someone else’s recordings and put them in your game, unless specifically directed to do so.

If you have any doubts about what constitutes plagiarism, please see me.