Virtual Worlds for Education Course Template

<table>
<thead>
<tr>
<th>Discipline: Computer Science</th>
<th>Sub-discipline:</th>
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<tbody>
<tr>
<td>General Course Title:</td>
<td>Min. Units 3</td>
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**Virtual Worlds for Education**

This course will examine the history, theory, and practice of pedagogy in virtual environments such as:

- **Second Life**
- **Open Simulator**
- **Open Wonderland**
- **Alice**
- **Scratch**
- **Historical text-based virtual worlds (such as MUDs/MOOs)**
- **Interactive Fiction systems (such as Inform 7)**
- **Other commercial and open source gaming/simulation packages**

Students will read research literature, participate in online discussions through the Moodle course management system, and engage in real-time activities in several types of virtual world. The project component of the course requires students to develop educational artifacts in virtual worlds and perform peer review of artifacts developed by other students. Projects will support some aspect of learning or teaching in the students' own workplace, and will incorporate multimedia, web, and other networked resources.

**Required Prerequisites or Co-Requisites**

Prerequisite: None

**Advisories/Recommended Preparation**

**Course Content:**

1. Foundations
2. Scratch
3. Text-based Virtual Worlds
4. Machinima
5. Alice I
6. Alice II
7. Metaverse I
8. Metaverse II

**Course Objectives:** *At the conclusion of this course, the student should be able to:*

1. Examine and discuss the psychologies of pedagogy, cognition, identity construction, and social interaction in virtual worlds.
2. They will read and discuss research literature related to virtual worlds and human cognition in enhanced multimedia settings.
3. After completing the course, students will have a thorough understanding of the theory &
pedagogy of virtual worlds for education. They will also have hands-on experience in designing and constructing significant learning artifacts in virtual worlds, including:

- Scripted teaching and learning objects
- Educational machinima ("films "created using virtual world software"

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<tr>
<th>Methods of Evaluation:</th>
<th>May include any or all of</th>
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<tbody>
<tr>
<td>Exams</td>
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<td>Quizzes</td>
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<td>Programming Projects</td>
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<td>Discussions</td>
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<td>Class Presentations</td>
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Sample Textbooks, Manuals, or Other Support Materials


- Getting Started with Scratch.


- Schlager, M., & Fusco, J. (2004). Teacher professional development, technology, and communities of practice: Are we putting the cart before the horse?

- In S. Barab, R. Kling, & J. Gray (Eds.), Designing for virtual communities in the service of


In Proceedings of the SIGCHI conference on Human factors in computing systems (pp. 1455-1464). San Jose, California, USA: ACM.


