EDU210

Introduction to Educational Technology

3 Credits

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Reviewer: Kelly Mutter
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Introduction to Educational Technology

Calendar Description

This course provides undergraduate Education students with the framework and skills to effectively consider, plan, and adopt an instructional practice that meaningfully uses technology to strengthen a student’s learning experience. Students examine the many different facets of learning and teaching through the lens of digital technology including digital content, online resources and tools, mobile apps, a variety of digital devices, and other potential technologies to provide personalized learning experiences for students. Students may not receive credit for both EDU 210 and EDIT 202.

Rationale

The reality of 21st century learning is that education and technology are merging to fundamentally change the nature of schools and learning environments. The goal of this course is to challenge prospective educators to explore limitless ways of how current and emerging technologies can be infused into curriculum and learning environments in meaningful ways. An examination of current frameworks, trends, technologies, and issues facing education along with hands-on experiential activities using various technologies serve to have elementary and secondary students develop their initial teaching philosophy.

Students should keep in mind this is an introductory course and requires little in the way of prerequisite technical knowledge. That being said, students enter this course with a variety of skill levels. For example, some students have just recently started working with computer technology while other students are more comfortable, having used computer technology extensively. This wide cross section of students' abilities, while posing an instructional challenge, is reflective of the situation in the teaching field today and across faculties of education.

Prerequisites

English 30-1 or equivalent. Basic digital competencies including word processing, e-mail, and use of a Web browser.
Co-Requisites

None

Course Learning Outcomes

Upon successful completion of this course, students will be able to

1. communicate the skills and knowledge needed by teaching professionals.
2. explore and demonstrate the use of technologies that support teaching and learning.
3. identify means of integrating digital technology into the curriculum.
4. demonstrate a satisfactory level of proficiency in using a variety of technology tools.
5. develop an initial philosophy of teaching with technology.
6. communicate and model the key concepts and responsibilities of digital citizenship including digital literacy, safety, and ethics.

Resource Materials


Conduct of Course

This course requires 3 hours of lecture and 3 hours of hands on experience using technology (laboratory work) per week. Laboratory assignments provide applied learning opportunities for students to form strategies for integrating technology into the school curriculum. These learning activities form a significant portion of the course grade and the instructor provides a course schedule with lab assignment due dates and the estimated time required for completing the work. The student should be prepared to spend additional non-scheduled time on lab activities and course readings.

Evaluation Procedures

The following scheme and distribution of weights are used:

- Labs: 50%
- Midterm Examination: 20%
- Final Examination: 30%
- Total: 100%
Grade Equivalents and Course Pass Requirements

A minimum grade of D (50%) (1.00) is required to pass this course.

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<thead>
<tr>
<th>Letter</th>
<th>F</th>
<th>D</th>
<th>D+</th>
<th>C-</th>
<th>C</th>
<th>C+</th>
<th>B-</th>
<th>B</th>
<th>B+</th>
<th>A-</th>
<th>A</th>
<th>A+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Range</td>
<td>0-49</td>
<td>50-52</td>
<td>53-56</td>
<td>57-59</td>
<td>60-64</td>
<td>65-69</td>
<td>70-74</td>
<td>75-79</td>
<td>80-84</td>
<td>85-89</td>
<td>90-94</td>
<td>95-100</td>
</tr>
<tr>
<td>Points</td>
<td>0.00</td>
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<td>1.30</td>
<td>1.70</td>
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<td>3.30</td>
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Students must maintain a cumulative grade of C (GPA - Grade Point Average of 2.00) in order to qualify to graduate.

Attendance

Regular attendance is essential for success in any course. Absence for any reason does not relieve a student of the responsibility of completing course work and assignments to the satisfaction of the instructor. Poor attendance may result in the termination of a student from a course(s).

If you do not meet the established attendance requirements, your instructor will recommend that the Registrar withdraw you from the course. A failing grade of RW (Required to Withdraw) will appear on your transcript.

In cases of repeated absences due to illness, the student may be requested to submit a medical certificate.

Instructors have the authority to require attendance at classes.

Course Units/Topics

I. Introduction to Technology in Education
   • Strategies for becoming a technology using Teacher
   • Understanding Educational Technology and Trends
   • Considerations for Technology Use in Education
   • Educational Technology Standards (Alberta Education: Learning and Technology Policy Framework)
   • Teaching Philosophies
   • Professional Learning Networks

II. Learning and Instruction with Technology
   • Learning Theory: Behaviourism vs. Constructivism
   • Transformational Learning
   • Technology Theories and Frameworks (TPACK, SAMR, etc.)
- Designing Lessons and Developing Curriculum with Technology
- Engaging Teachers and Students in Learning and Self Reflection

III. Engaging Learners with Digital Tools
- Teaching Information Literacy and Digital Citizenship
- Fostering Online Learning with Educational Websites and App
- Active Engagement & Collaboration using Technology
- Problem solving with Software, Apps, and Games
- Expressing Creativity with Multimedia Technologies
- Adaptive & Assistive Technologies
- Feedback using Technology

IV. Future Opportunities
- Growing and Leading with Technology

Lab Activities/Assignments

<table>
<thead>
<tr>
<th>Lab #</th>
<th>Lab Title</th>
<th>Course Unit/Topic</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction to the Learning and Technology Policy Framework</td>
<td>Introduction to Technology in Education/Educational Technology Standards</td>
</tr>
<tr>
<td>2</td>
<td>Create an ePortfolio</td>
<td>Introduction to Technology in Education/Teaching Philosophies</td>
</tr>
<tr>
<td>3</td>
<td>Explore and create a PLN</td>
<td>Introduction to Technology in Education/Professional Learning Networks</td>
</tr>
<tr>
<td>4</td>
<td>Designing a Lesson Plan using Technology (application of TPACK)</td>
<td>Learning and Instruction with Technology/Designing Lessons with Technology</td>
</tr>
<tr>
<td>5</td>
<td>Designing Learning Activities using Web 2.0 Tools and Collaborative Cloud Environments</td>
<td>Engaging Learners with Digital Tools/Active Engagement &amp; Collaboration using Technology</td>
</tr>
<tr>
<td>6</td>
<td>Creating an Infographic on a Digital Citizenship topic</td>
<td>Engaging Learners with Digital Tools/Digital Citizenship</td>
</tr>
<tr>
<td>7</td>
<td>Exploration of Mobile Learning</td>
<td>Engaging Learners with Digital Tools/Active Engagement &amp; Collaboration using Technology</td>
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<tr>
<td>8</td>
<td>Interactive Whiteboards/Displays</td>
<td>Engaging Learners with Digital Tools</td>
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<tr>
<td>9</td>
<td>Digital Story-telling using Multimedia</td>
<td>Engaging Learners with Digital Tools/Expressing Creativity with Multimedia Technologies</td>
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