An International Joint Certificate in IT Administration: Opportunities and Challenges

Dr. Peter Wolcott
Associate Professor
College of Information Science & Technology
University of Nebraska at Omaha
pwolcott@unomaha.edu

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Overview

- Collaboration between
  - University of Nebraska at Omaha (USA)
  - University of Agder (Norway)

- IT Administration Certificate
  - Completely on-line
  - approximately 14 credit hours

- Target population: undergraduate students

Motivation

- Build on successful existing partnership
- Fill resource gaps via synergy
- Pedagogical and technological innovation
- Provide international experience to students
- Demand for IT Administration certificate
  - Bureau of Labor Statistics: 30% growth 2008-2018
  - Student survey: 80% interested

IT Administration Content Areas

- System Admin
- IS-209
  - Systems Admin with Free Software

- IS-203
  - Advanced Database Systems

- IS-204
  - IT Resource Mgmt

- CIST 4350
  - Technical Systems Admin

- CIST 4370
  - Security Admin

Class Implementation

On-line Virtual Lab – Systems Administration Course

- Multiple virtual machines per student
- Virtual private network for remote access
- TightVNC used for remote control of virtual machines
- Instructor can log in and observe student screens
Amazon Cloud - Distributed Technology Course

• Purpose
  – Experience with cloud computing
  – Use of multiple pre-configured machines to experience distributed computing practices

• Amazon Web Services
  • Preconfigured LAMP system for each student
  • $100 credit per student per semester from Amazon.com
  • http://aws.amazon.com/education/

First Experiences

Instructor Permission?
Access to systems
Grade reporting

permission? in person
SMS
Diff. calendar
Fin Aid req's

Access to systems
Grade reporting

access in + 3
SMS
“backwards”

First Experiences

Admission
Access to systems
Payment

Non-degree transcripts
“How?? Two usernames?”
“Pre-enrollment health requirement form”

In person
SMS

+3 weeks
+4 weeks

Access to systems
Grade reporting

How?? Two usernames?

Certificate Approval Process

Coordinating Commission for Post Secondary Education

Chancellor’s Cabinet
Deans’ Council
Educational Policy Advisory Committee
Faculty Senate

Process Improvements

• Fast instructor approval
• Fast on-line application
• Initial login credentials via e-mail
• Initial “read” access pending formal registration

Lessons

• The technology is not the major challenge
• Each institution is weird in its own way
• Delay has a silver lining
• Be willing to take risks and experiment
• Be willing to hold hands
• Be willing to take one for the team