William Paterson University  
College of Education  
Department of Elementary and Early Childhood Education

Theme: Preparing Inquiring educators: Knowledge, Understanding, and Application

Course of Study

1. **Course Title and Number of Credits:** ELCL 605, Learning Technology Operations and Concepts  
(3 graduate credits)

2. **Course Description:** This introductory course will help students become proficient in basic technology skills and concepts including hardware, standard software applications and networking fundamentals as well as looking at newer technologies. Students will become familiar with current and emerging standards and mandates for technological literacy as well as the social and legal issues that surround the use of technology in education. In addition students will explore the use of technology resources for their own professional development. Students will be expected to pass the ISTE National Educational Technology Standards for Teachers (NETS-T) by the end of this course.

3. **Prerequisites:** none

4. **Course Objectives:** This course focuses primarily on the following ISTE/NCATE Technology Facilitation Standards:
   - V. (TF-V) Productivity and Professional Practice. "Educational technology facilitators apply technology to enhance and improve personal productivity and professional practice."
   - VI. (TF-VI) Social, Ethical, Legal, and Human Issues. "Educational technology facilitators understand the social, ethical, legal, and human issues surrounding the use of technology in P-12 schools and assist teachers in applying that understanding in their practice."

It enables students to:
1. Gain the knowledge, skills, and understanding of concepts related to computer hardware, software and networking technology
2. Stay abreast of current and emerging technologies
3. Use technology resources for ongoing professional development and lifelong learning
4. Make informed decisions regarding the use of technology in support of student learning
5. Use technology to increase their own productivity
6. Use technology to communicate and collaborate with all appropriate members of their educational community to best support students' learning
7. Recognize the social, ethical, legal, and human issues surrounding the use of technology in their school districts

5. **Student Learning Outcomes:** (Aligned to ISTE/NCATE Technology Facilitator -
http://cnets.iste.org/ncate/n_fac-stands.html and to New Jersey Teaching Standards (NJTS - http://www.nj.gov/njded/profdev/profstand/standards.pdf.) Students will be able to:

1. Demonstrate knowledge, skills and understanding of technology concepts by creating a troubleshooting/technology help guide. (ISTE: TF-I.B.1; V.C.1; V.C.8; VII.A.1; VII.A.2; VII.A.3; VII.A.5; VII.A.6; VII.A.7; VII.A.8; VII.B.3; NJTS: 10)

2. Demonstrate the ability to stay appraised of technology developments and to identify and evaluate new technology resources by creating a PowerPoint presentation that describes a new or emerging technology, including potential uses for it in the classroom (ISTE: TF-I.A.2; I.B.1; II.C.1; VII.B.7; NJTS: 6)

3. Assist others in identifying educational technology resources by creating a web site with links to sites addressing community and school resources, general educational technology issues, new educational technology advances, federal/state/local technology guidelines, international/national/state educational organizations and other teacher resources (ISTE: TF-I.A.1; V.A.1; V.A.2; V.D.3; V.D.4; NJTS: 8, 10)

4. Research and engage in online discussions of social and legal issues such as the digital equity, copyright, special needs populations, first amendment & filtering, privacy and security issues, etc. (ISTE: TF-VI.A.1; VI.A.2; VI.C.1; VI.D.1; VLE.1; NJTS: 6, 10)

6. Course Content:
1. Using e-mail, Blackboard and the web for lifelong learning
2. Discussion of contemporary computer/technology issues
3. Hardware, software and network basics
4. Use of general purpose office applications including presentation and word editing software
5. Appropriate use of technology in the classroom
6. Evaluation of educational software and new technologies
7. Evaluation and use of educational web sites
8. Beginning an electronic portfolio based on the ISTE "Technology Facilitator" standards

7. Teaching/Learning Methods:
1. Lecture with whole group and small group discussions (both in-class and on-line)
2. Computer demonstration
3. Computer lab participation
4. Assigned readings
5. Multi-media presentations

8. Assessment (performance based): Student evaluation will be based on:
1. Trouble-shooting/technology help guide*
2. New technologies presentation*
3. Educational technologies resource web site, working in small groups*
4. Contribution to online discussion of contemporary issues*
5. Class participation and attendance
6. Proof of NETS*T proficiency, for example, the PBS TeacherLine ISTE NETS*T Certificate of Proficiency at http://teacherline.pbs.org/teacherline/

* The trouble-shooting guide (1), new technologies presentation (2), technologies resource web site (3) and personal responses to the online contemporary issues discussion (4) are all recommended
artifacts for the 'technology facilitator' electronic portfolios for students in the Learning Technologies program.

9. Recommended Texts/Readings:


10. Preparer's Names and Date:

11. Department Approval Date:

12. Reviser's Name and Date: Dr. Hilary Wilder, November 19, 2008

13. Department Revision Approval Date:

14. Bibliography:

Books


Englewood Cliffs, NJ: Merrill/Prentice Hall.


Learning Technology Journals:
Converge - http://www.convergemag.com/
Distance Educator - http://www.distance-educator.com/
eLearn - http://www.elearnmag.org/index.cfm
eSchool News - http://www.eschoolnews.com/
technLearning - http://www.techlearning.com/content/

Organizations:
Association for Educational Communications and Technology - http://aect.org/
Association for the Advancement of Computing in Education - http://www.aace.org/
International Society for Technology in Education - http://www.iste.org/
New Jersey Association for Educational Technology - http://www.njaet.org/

Internet Resources
Cyber-ethics
A Visit to Copyright Bay - http://www.stfrancis.edu/cid/copyrightbay/
CERIAS K-12 Teacher Resources - http://www.cerias.purdue.edu/k-12/teachers/material_details.php
CyberSmart! Home - http://www.cybersmart.org/home/
Safe and Ethical Use of Computers - http://www.state.nj.us/njded/techno/htcrime/aup.htm

Software
Edmark.com - http://www.edmark.com/
Knowledge Adventure Studio Game Index - http://www.vugames.com/vug/studio_index.do?studioId=5
Riverdeep For Teachers - http://www.riverdeep.net/for_teachers/for_teachers.jhtml
Scholastic Teachers - http://teacher.scholastic.com/
Welcome to Learning Company Online Store - http://www.learningco.com

**Teaching Resource Sites**

America's Library - http://www.americaslibrary.gov/cgi-bin/page.cgi
BBC - Schools - Homepage - http://www.bbc.co.uk/schools/
Busy Teachers' Web site - http://www.ceismc.gatech.edu/busyt/homepg.html
Casa de Joanna French Resources - http://members.aol.com/jporvin/cs_fren.htm
EDSITEment - http://edsitement.neh.gov/
education.com - http://www.education.com/home/index.jsp
eduScapes A Site for Life-long Learners - http://eduscapes.com/
Field Trips Site - http://www.field-trips.org/
Finding Information on the Internet Table of Contents - http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/FindInfo.html
HICE Palm Pages - http://www.handheld.hice-dev.org/
iEARN Homepage - http://www.iearn.org/
IPL Kidspace Culture Quest - http://www.ipl.org/div/kidspace/cquest/
K12Handhelds - http://www.k12handhelds.com/
LEARNWEB at Project Zero - http://learnweb.harvard.edu/
MarcoPolo Internet Content for the Classroom, providing professional development and lesson plans based on K-12 curriculum - http://marcopolo.worldcom.com/
Memory.Loc.Gov - http://memory.loc.gov/
New Jersey Department of Education New Jersey Core Curriculum Content Standards - http://www.state.nj.us/njded/cccs/
NJ PEP - http://www.njpep.org/
PBS TeacherSource - http://www.pbs.org/teachersource/
PrimaryGames.com - The Fun Place to Learn! - http://www.primarygames.com/
ProTeacher! The Web's Little Secret For Elementary School Teachers - http://www.proteacher.com/
SBC Pacific Bell Knowledge Network Explorer Online Learning Blue Web'n Homepage - http://www.kn.pacbell.com/wired/bluewedbn/
Teacher Created Materials Free Stuff - http://www.teachercreated.com/free/
Teachers Network - http://www.teachersnetwork.org/
The Mailbox - http://www.theeducationcenter.com/cgi-bin/tec/guest.jsp
The Teacher Channel offers lesson plans, teaching worksheets and free stuff for teachers - http://school.discovery.com/teachers/
Think.com - http://www.think.com/
Welcome to AOL@SCHOOL - http://school.aol.com/
The WebQuest Page at San Diego State University - http://webquest.sdsu.edu/
WebQuests - http://sesd.sk.ca/teacherresource/webquest/webquest.htm