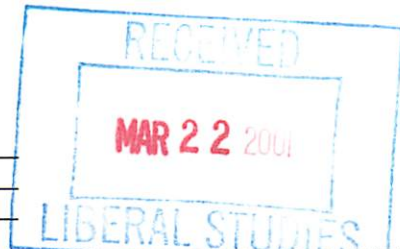


LSC Use Only
Number: _____
Submission Date: _____
Action Date: _____



UWUCC USE Only
Number: 00-62
Submission Date: _____
Action Date: UWUCC App 4/17/01
Senate App 5/1/01

CURRICULUM PROPOSAL COVER SHEET
University-Wide Undergraduate Curriculum Committee

I. CONTACT

Contact Person Dr. Kanyarusoke Phone 357-3773
Department Department of Communications

II. PROPOSAL TYPE (Check All Appropriate Lines)

☒ **COURSE** Instructional Technology
Suggested 20 character title

_____ New Course* _____
Course Number and Full Title

☒ **Course Revision** COMM 103 Digital Instructional Technology
Course Number and Full Title

_____ Liberal Studies Approval + _____
for new or existing course Course Number and Full Title

_____ Course Deletion _____
Course Number and Full Title

☒ **Number and/or Title Change** COMM 301 Technology for Learning and Instruction
Old Number and/or Full Old Title

COMM 103 Digital Instructional Technology
New Number and/or Full New Title

☒ **Course or Catalog Description Change** _____
Course Number and Full Title

_____ **PROGRAM:** _____ Major _____ Minor _____ Track

_____ New Program* _____
Program Name

_____ Program Revision* _____
Program Name

_____ Program Deletion* _____
Program Name

_____ Title Change _____
Old Program Name

_____ New Program Name

III. Approvals (signatures and date)

B. Kanyarusoke 3/21/01
Department Curriculum Committee

Joseph Domaracki
College Curriculum Committee

[Signature]
Department Chair

[Signature]
College Dean

+ Director of Liberal Studies (where applicable)

*Provost (where applicable)

I. Catalog Description

COMM 103 Digital Instructional Technology

(3c-01-3sh)

3 class hours

0 lab hours

3 semester hours

Prerequisites: Education major

This course introduces freshmen pre-service teachers to the ever-changing world of digital instructional technology. Learners will be exposed to computer based “tools of the trade” used by teachers in the delivery and management of instruction. Does not count towards semester hours needed for Communications Media major.

II. Course Objectives

Upon successful completion of the course, freshmen pre-service teachers will be able to:

1. Explore and discuss the importance of computers in schools, industry and society;
2. Explore, through discussion, classroom issues of legality, equity, ethics, etc., and their implications to the use of computer based technology;
3. Articulate the components of a multimedia computing system and demonstrate competence in its basic operation;
4. Demonstrate the use of peripheral input equipment as used in classrooms such as scanners, digital cameras, microphones, telephone and other data lines, audio and video playback;
5. Run applications for spread sheet analysis and database management that are appropriate for classroom use (electronic grade book, attendance, and academic and discipline records);
6. Set and administer self-scoring online examinations;
7. Identify and locate online resources for enhancing subject matter and instructional strategy;
8. Use concept mapping software to systematically map instructional concepts;
9. Design and execute a short term WebQuest;
10. Identify and locate computer-based devices and resources for use with and by students with special needs;
11. Communicate via electronic mail, chat rooms, list serves, and online bulletin boards;
12. Design and post a teacher web site;

- 13.Design and manage an electronic portfolio appropriate to ones teaching specialty;
- 14.Participate in a live videoconference, preferably with peers at a school in a different cultural setting;
- 15.Design and deliver a presentation utilizing an operational mix of multimedia technologies; including text, sound and motion;

III. Course Outline

- Week 1:** Orientation
Course objectives
Requirements and procedures
Screening pretest
- Week 2:** Role of technology in teaching and learning
Components of a multimedia computer system
Adapting computer systems to learners with special needs
- Week 3:** Computer operation
Folder and file management
Basic Windows procedures
Customizing system settings
- Week 4:** Text processing
Importing Educational charts, drawings, photographs and sound bites
Digital image capture and processing
Digital image formats
Using a digital scanner
Using a digital camera
Processing digital images
- Week 5:** Electronic mail procedures
Setting up an individual, free e-mail account
Subscribing to online Educational discussion groups
Subscribing to Educational Newsgroups
Participating in a chat sessions where an Education issue is discussed
- Week 6:** Web-based, online instruction
(Instructor may use WebCT or similar package)
Participating in streaming and threaded discussions
- Week 7:** Concept mapping, idea mapping, webbing and storyboarding
(Instructor may use Inspiration or similar software)

- Week 8: Class database set up and management
Class spreadsheet set up and analysis
Setting up and using an electronic grade book
- Week 9: The Internet
Locating instructional and classroom resources
Designing and executing a WebQuest
- Week 10: Designing a personal web site appropriate to one's educational specialty
Using an HTML editor
Setting up a home page
Searching for free hosting sites
- Week 11: Designing personal web sites (continued)
Creating and saving html files
Identifying targets within a file
Creating hyperlinks
Searching for and incorporating free graphics
- Week 12: Designing electronic portfolios appropriate to one's educational specialty
Software packages in common use for electronic portfolios
File Transfer Protocol
- Week 13: Instructional multimedia
Planning a multimedia presentation
Microsoft PowerPoint or similar presentation software
Incorporating sound, still images, animated images and video
- Week 14: Videoconferencing
Participation in a live videoconference
Current issues in educational computing
Social, legal and ethical issues regarding education
Copyright law and the teacher
Computer crime.
Submit the U.R.L. to your web site where your final project is Hosted.

IV. Evaluation Methods

The final grade in the course will be determined as follows:

- 50% **Assignments.** There will be assignments to be completed and submitted by the due dates specified by the instructor. Details on the nature of the assignments are given in appendix I.
 - 25% **Final Project.** Each student will complete a multimedia final project, based on a topic of instruction. (see details in appendix I).
 - 25% **Final examination.** There will be a comprehensive examination at the end of the semester. The exam will be computer administered and scored.
- Grades will be computed in accordance with the grading scale in force at IUP

V. Required Textbooks, supplemental books and readings

Textbooks:

Pool, Bernard J. Education for an Information Age: Teaching in the Computerized Classroom. Boston: McGraw-Hill, 1999.

Sharp, Vicki. Computer Education for Teachers. Boston: McGraw-Hill, 1999.

VI. Special Resource Requirements

Each student will be required to supply his/her own computer disks and an audio headset.

VII Bibliography

Apple Computer, Inc. (1990). *The impact of computers on K-12 education: A resource for decision-makers*. Computer Software.

Blake, C. (July/August 1991). Piracy: everyone loses. *Aldus Magazine*.

Brown, J. M. (March 1997). Technology and ethics. *Learning and Leading with Technology* 24 (6).

Bradner, S. (September 27, 1993). The internet: Why now? *Network World* 10 (39).

Bruder, I. May/June 1992(b). School reform: Why you need technology to get there. *Electronic Learning*. (Special Edition).

Bullough, R. V., & Beatty, F. L. (1992). *Classroom applications of microcomputers*. New York, NY.: Maxwell Macmillan International Publishing Company.

Caftori, N. (August 1994). Educational effectiveness of computer software. *THE Journal*.

Gregg, B. (1999). *Computers and teaching*. New York, NY.: West Publishing Company.

Groner, J. (June 1992). Swatting back at software pirates. *Legal Times*.

ISTE. (1992). *Curriculum guidelines for accreditation of educational computing and technology programs*. Eugene, Ore.: The International Society For Technology in Education..

Johnson, D. G., & Snapper, J. W. (1995). *Ethical issues in the use of computers*. Belmont, Ca.: Wadsworth Publishing Company.

Kinnaman, D. E. (March 1990). What's the research telling us? *Classroom Computer Learning* 10 (6).

Kurshan, B. & Dawson, T. (January 1994). The global classroom: Reaching beyond the walls of the school building. *Technology & Learning* 12 (4).

Leeds, M. (November 1994.). Desktop videoconferencing. *MacWorld*.

McCoy, L. P. (Summer 1996). Computer-based mathematics learning. *Journal of Research on Computing in Education* 28 (4).

Reed, W. M. (Summer 1996). Assessing the impact of computer-based writing instruction. *Journal of Research on Computing in Education* 28.

Pool, B. J. (1999). *Education for an information age: Teaching in the computerized classroom*. Boston: McGraw-Hill.

Rothfeder, J. (August 1992). Taking a byte out of privacy. *USA Weekend*, 28 – 30.

Sharp, V. (1999). *Computer education for teachers*. Boston: McGraw-Hill.

Van Horn, R. (1991). *Advanced technology in education*. Pacific Grove, CA: Brooks/Cole Publishing Company.

Submitting of Proposed Changes

1. Number change from COMM 301 to COMM 103.
2. Title change from “Technology for Learning and Instruction” to “Digital Instructional Technology”.
3. Prerequisite change from EDSP 202 to No Prerequisite.
4. Course content change.

Rational for the course revision:

During the past year, the Teacher Education Coordinators Council (TECC) and the University Senate approved a major revision of the policy governing teacher education (now known as the three-step process). That revision work provided an opportunity to rethink evolutionary changes that have taken place during the last decade in state and national certification requirements and standards. This course is being moved earlier in the teacher education curriculum as well as two other courses that have been similarly approved by the TECC, Educational Psychology and Foundations of Education. These changes were designed to support the opportunity for our teacher education students to complete the full curriculum in four years and to make further use of these basic courses as they continue through the rest of the program.

This course was then redesigned in order to provide educational technology skills to teacher education students earlier in their program so as to provide a basis for faculty in the teacher education disciplines to provide for further integration of its content into their courses and field experiences. The ultimate goal is to produce a graduate who is very comfortable in using educational technology in the classroom setting.

Course Syllabus

I. Catalog Description

CM 301 Technology for Learning and Instruction

(3c-01-3sh)

3 class hours

Prerequisites: EDSP 202 or permission

0 lab hours

3 semester hours

Preservice teachers gain competencies in selection, evaluation, and utilization of various instructional technologies. Application of new technologies to teaching and learning will be emphasized, along with performance-based activities in instructional design. A major portion of the course is devoted to the integration of computer-based instructional activities in the school curriculum. Does not count towards credits needed for Communications Media major.

II. Course Objectives

Students should be able to:

1. Articulate the role of media as technology applied to instructional situations.
2. Describe an instructional event using a model of human communication as a framework
3. List general and specific characteristics of a given group of learners.
4. Write learning and performance objectives in different domains for a specified audience.
5. Construct criterion referenced test items based on specified objectives
6. Apply a given strategy to prescribe appropriate technology for teaching a specified topic of instruction, to a specified group of learners.
7. Use a computerized library database to locate existing technologies for use in teaching a specified topic to a specified audience.
8. Prepare classroom environment for delivery of technology.
9. Integrate appropriate technologies into a teaching strategy.
10. Reinforce main concepts of an instructional event and

CLASS SCHEDULE

Tue Jan 19: **Orientation**
Competency project samples

Thu Jan 21: **Class meets in computer classroom, Davis B-29**
Role of technology in Learning and Teaching

Tue Jan 26: **Class meets in Stouffer**
Visual literacy
Visual instructional materials
Factors affecting learning from visual materials

Thu Jan 28: **Class meets in Stouffer**
Mounting and preserving visuals
Assignment 1: Dry mounting, due Thu Feb 11.

Tue Feb 02: **Bring computer diskettes**
Introduction to COE computer classroom
Disk utilities
Mouse exercise

Thu Feb 04: **Components of a computer system**
Attributes of the computer

Tue Feb 09: **Computer Based Instruction**
Modes of Computer Based Instruction
COE instructional software collection

Thu Feb 11: **Submit assignment 1.**
 Features of a computer based instructional module
 Evaluating CBI materials

Tue Feb 16: **Class meets in Stouffer**
 Attributes of video media
 Video shots and camera moves

Thu Feb 18: **Planning an instructional video production**
 Storyboarding and scripting
 Assignment 2: Instructional Video: due Thu Mar 4.

Tue Feb 23: **Introduction to Linkway: Folders, objects, buttons**
Thu Feb 25: **Introduction to Linkway: Planning Linkway Modules**
Tue Mar 02: **Introduction to Linkway: Linkway exercise**
Thu Mar 04: **Submit assignment 2.**
 Introduction to Linkway: Linkway exercise
 Assignment 3: CBI module: due final exam week

Tue Mar 09: **Computer generated instructional visuals**
 Using a paint program

Thu Mar 11: **Attributes of overhead transparencies**
 Computer generated overhead transparencies
 Assignment 4: Overhead transparency, due Thu Mar 25.

Tue Mar 16: **Bring sketch for overhead transparency**
 Start working on assignment 4.

Thu Mar 18: **The ASSURE model**
 Work individually through module on ASSURE model
 Assignment 5: ASSURE model, due at end of class.

Tue Mar 23:	Bring index cards and material for your CBI module Planning CBI modules
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Thu Mar 25:	Submit assignment 4 Work on CBI modules
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Tue Mar 30:	Class meets in Stouffer Attributes of slides Planning instructional slide programs Storyboarding/scripting for instructional slide programs.
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Thu Apr 01:	Audio mixing and recording Slide-sound synchronization Assignment 6: slide program, due Thu Apr 22
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Tue Apr 06:	Electronic record keeping Using an electronic gradebook
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Thu Apr 08:	Bring your CBI project/cards Individual help with CBI modules
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Tue Apr 13:	No class, Monday-Tuesday switch
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Thu Apr 15:	Complete slide project during class
Tue Apr 20:	Complete slide project during class

Thu Apr 22: Presentation of slide projects

Tue Apr 27: Complete CBI module

Thu Apr 29: Complete CBI module

Tue May 04: Last day to work on CBI module.

ASSIGNMENTS

1. Dry mounting: due Thursday, February 11. (10 points)

Obtain a picture from a magazine, any picture will do. It must be at least 8"x10". Mount the picture on crescent illustration board using a dry mounting press. The board must be 11" x 14". Your work will be graded on technique, absence of bubbles, and neatness.

2. * Instructional Video: due Thursday, March 4 (30 points)

Plan and produce a 10 minute instructional video program on a topic of your team's choice. The video must include clear, behavioral objectives, lists of steps, ingredients, etc. where applicable, plus review sequences.

3. Computer-based instructional module: due during scheduled exam time for CM 301 (30 points)

Using Linkway authoring software, write a computer-based tutorial module on a topic of your choice. Obtain approval of your topic from Dr. Kanyarusoke before you proceed. Storyboard your topic on cards, working out all the logic. Then keyboar your card stack. You must include clear directions for the learner, clear objectives and means of verifying their attainability. The module must be self-paced and menu driven.

4. Computer-generated overhead transparency:
disks due Thursday, March 25 (10 points)

Using the Paintbrush accessory in Windows, design a multicolor overhead transparency with 1 overlay, on a topic of your choice. The transparency will be graded on adherence to legibility criteria outlined and demonstrated in class, plus criteria for effective instructional visuals discussed under visual literacy. Use the last 6 digits of your Student Id, plus a 1 for the base and a 2 for the overlay as the file name for your transparency.

example:

base: 6028211 overlay: 6028212

5. ASSURE model: due during class of Thursday, March 18 (20 points)

Access the folders ASSURE and ASSURE2 from drive N: Take your time reading through the module, then answer the questions given on the ASSURE model.

6. * Slide-sound synchronization: due April 22 (30 points)

Prepare a storyboard and script for an instructional slide-sound program on a topic of your team's choice. Maximum length 10 minutes, minimum 8 minutes. Produce the program for automated presentation.

Music will be required at the beginning and end of narration.

On the day of presentation, your team must submit a storyboard/script for the program.

* Project to be done in teams.

Grading policy

Your final grade in the course will be derived from the total of all points scored in all assignments.

117 and above	A
104 to 116	B
91 to 103	C
78 to 90	D
77 ⁸⁹ and below	F

MATERIALS AND TOOLS TO PURCHASE

- 5 **High Density**, 3.5" computer disks
- 1 sheet dry mounting tissue, minimum size 8"x10"
(**do not buy laminating film**)
- 1 crescent illustration board, minimum size 11"x14"
- 1 metal ruler
- 1 heavy duty utility knife
- 1 overhead transparency frame (**do not buy transparency film**)
- 1 good quality audio cassette, minimum playing time 30 minutes
- 1 good quality video cassette

IMPORTANT: ALL DUE DATES ARE FINAL!