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LOCK HAVEN UNIVERSITY OF PENNSYLVANIA
LOCK HAVEN, PENNSYLVANIA

College of Education and Human Services

Syllabus

**Advanced Instructional Design and Development
EDTL 602**

I. Introductory Information

- A. Department Name:** Graduate Studies
- B. Departmental Catalogue Number:** EDTL 602
- C. Course Title:** Advanced Instructional Design and Development
- D. Credit/Semester Hours:** 3
- E. Clock Hours Per Week:** 3
- F. Restrictions Upon Student Registration:**
Graduate course provisions apply.

II. A. Description of the Course:

The purpose of this course is to provide graduate students understanding and experience with various models of instructional design and development. Students will identify topics, analyze learners, generate objectives and assessments as well as developing content outlines and learning activities. Learners will develop a personal instructional design model reflecting their educational philosophy and approach.

B. Comprehensive Description:

This course provides advanced instructional design experiences for professionals responsible for teaching and learning (classroom teachers, other educational professionals, and/or individuals involved with training and professional development). It provides opportunities to identify instructional problems, assess the needs and develop solutions to the problems that will meet the needs of those involved. In accordance with NCATE standards, the five core propositions of the National Board for Professional Teaching Standards, and the ISTE National Educational Technology Standards for Teachers (NETS-T), graduate students will explore learning theory relating to

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instructional design theory and practices and while developing an instructional design project will articulate, analyze and document their personal model of instructional design.

The course addresses the following National Board for Professional Teaching Standards Propositions (NBPTS):

NBPTS Proposition 1

Teachings are committed to students and their learning.

- Teachers recognize individual differences in their students and adjust their practice accordingly.
- Teachers have an understanding of how students develop and learn.

NBPTS Proposition 2

Teachers know the subjects they teach and how to teach those subjects to students.

- Teachers appreciate how knowledge in their subjects is created, organized and linked to other disciplines.
- Teachers command specialized knowledge of how to convey a subject to students.
- Teachers generate multiple paths to knowledge.

NBPTS Proposition 3

Teachers are responsible for managing and monitoring student learning.

- Teachers call on multiple methods to meet their goals.
- Teachers place a premium on student engagement.
- Teachers regularly assess student progress.
- Teachers are mindful of their principal objectives.

NBPTS Proposition 4

Teachers think systematically about their practice and learn from experience.

- Teachers are continually making difficult choices that test their judgment.
- Teachers seek the advice of others and draw on education research and scholarship to improve their practice.

NBPTS Proposition 5

Teachers are members of learning communities.

- Teachers work collaboratively with parents.
- Teachers take advantage of community resources.

The course addresses the following ISTE National Educational Technology Standards for Teachers (NETS-T):

I. Technology Operations and Concepts

Teachers demonstrate a sound understanding of technology operations and concepts. Teachers:

- A. demonstrate introductory knowledge, skills, and understanding of concepts related to technology.
- B. demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

II. Planning and Designing Learning Environments and Experiences

Teachers plan and design effective learning environments and experiences supported by technology. Teachers:

- A. design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- B. identify and locate technology resources and evaluate them for accuracy and suitability.
- C. plan strategies to manage student learning in a technology-enhanced environment.

III. Teaching, Learning , and the Curriculum

Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers:

- A. facilitate technology-enhanced experiences that address content standards and student technology standards.
- B. use technology to support learner-centered strategies that address the divers needs of students.
- C. manage student learning activities in a technology-enhanced environments.

IV. Assessment and Evaluation

Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies. Teachers:

- A. use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.

V. Productivity and Professional Practice

Teachers use technology to enhance their productivity and professional practice. Teachers:

- A. use technology resources to engage in ongoing professional development and lifelong learning.
- B. use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

VI. Social, Ethical, Legal, and Human Issues

Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in the PK-12 schools and apply those principles in practice. Teachers:

- A. apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.

III. Exposition

A. Objectives

The Graduate Student will be able to:

1. access and navigate course delivery technologies including, but not limited to all course tools, email, audio and video conferencing and PowerPoint software.
2. define, discuss and differentiate instructional design and instructional development.
3. describe the components of a generic instructional design/development model.
4. identify and discuss various prominent instructional design theories and models.
5. generate a front-end analysis focused at a specific instructional topic and audience.
6. generate instructional objectives based on front-end analysis and acceptable performance objectives criteria.
7. generate an instructional design solution/s focused at the needs identified during the front-end analysis.
8. develop formative and summative evaluation procedures and processes in support of and validation of the instructional experiences produced from the instructional design.
9. develop, trial run and evaluate learning activities based at the instructional design.
10. generate, describe and discuss a reflective personal instructional design model synthesizing effective educational philosophy and practice.
11. generate, organize, present and evaluate a complete instructional design project.

B. Activities and Requirements

1. Readings and web-based research activities
2. Participation in daily/weekly discussion groups sharing ideas, insights, discoveries and projects.
3. Conduct a front-end analysis of a specific instructional need or problem, generate and present the analysis in the form of an instructional solution proposal.
4. Utilizing the front-end analysis, generate a set of instructional objectives and assessments focused at the identified need or problem.
5. Design and Develop an instructional package to accomplish the objectives and needs identified in the front-end analysis.
6. Develop, execute and report the results of formative and summative evaluations designed to support and validate the instructional design.
7. Develop and present a personalized instructional model reflective of educational philosophy and practice.

C. Major Units and Time Allotted

Introduction to Instructional Design and Development	1 week
Models of Instructional Design	2 weeks
Conducting the Front-end Analysis	3 weeks
The Instructional Objective: Why and How	1 week
Formative and Summative Evaluation Processes	2 weeks
Designing Effective Instruction	5 weeks
Personalizing Instructional Design	1 week

D. Materials and Bibliography

Bigge, M. L., & Shermis, S. S., (2003). *Learning theories for teachers (6th ed.)*. Columbus, Ohio: Allyn & Bacon.

Reigeluth, Charles, & Carr-Chellman, Alison, (2009). *Instructional –design theories and models, volume III*. New York, New York: Routledge, Taylor & Francis Group.

Gagne, R. M., Wagner, W. W., Golas, K. K. & John M., (2004). *Principles of instructional design*. Belmont, California: Wadsworth Publishing.

Smith, P. L. & Ragan, T. J. (2004). *Instructional design*. Somerset, New Jersey: Wiley/Jossey-Bass.

Dick, W. O., Carey, L. & Carey, J. O. (2004). *Systematic design of instruction, (6th ed.)*. Columbus, Ohio: Allyn & Bacon.

Collaborative/cooperative learning

http://www.cat.ilstu.edu/teaching_tips/collab.shtml.

Peterson, C. (2003). Bringing ADDIE to life: Instructional design at its best. *Journal of Educational Media and Hypermedia*, 12, 227-241.

Principles of instructional design and adult learning

<http://www.fbe.unsw.edu.au/Learning/instructionaldesign/>.

Jonassen, D. H. (2007). *Learning to solve problems: An instructional design guide*. San Francisco, California: Pfeiffer & Company.

Teaching and learning methods and strategies

<http://www.u.arizona.edu/ic/edtech/strategy.html>.

Iverson, B. K., Ph.D. (2001) Transformation of teaching and learning through technology: Its about the teaching, not the tools.

http://nexus.colum.edu/user/iverson/fipse/for%20printing/to_print.pdf .

Spector, J. M., Ohrazda, C., Schaack, A. V. & Wiley, D. A. (2005). *Innovations in instructional technology: Essays in honor of M. David Merrill*. New York, New York: Routledge, Taylor & Francis Group.

IV. Standards

All grades will be assigned in accordance with university policy and based on criteria to include participation, completion of assignments relating to front-end analysis, instructional design and development practices including the development of formative and summative evaluation procedures. Emphasis will be placed on effective application of instructional design principles and practices in the classroom as evidenced by the development and evaluation of appropriate instructional experiences.

Assessment:

Assignments and rubrics will be used to assess objectives
2,3,4,5,6,7,8,9,10,11.

Other assessment tools may be developed and used by the instructor.

V. Rationale and Impact

This course will be one of the core requirements for the Master of Education Program in Curriculum and Instruction. The course will be offered each semester as well as summer to insure appropriate time to completion scheduling. The course will be an online offering making it accessible regardless of location.

The course is open to all graduate students including non-degree students.

The course is designed to provide an in depth and practical study and application of the principles, processes and practices of all phases of instructional design and development. The course is specifically designed for in-service teachers and will provide skills and knowledge applicable to becoming a National Board for Professional Teaching Standards certified teacher. However, the concepts and practices of instructional design are also meaningful in training and development for business and industry thus making this course significant for anyone responsible for or interested in the learning process.

The outcomes of this course will have direct application to existing classroom responsibilities at all levels and all disciplines. The course will enhance the in-service teachers ability to focus on individual learning needs and improve student performance.

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VI. Cost and Staff Analysis:

This course will utilize existing faculty in the Master of Education Program, but may also be available, on a needs basis, for other faculty.

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Syllabus

EDTL 602 Advanced Instructional Design and Development

approved

not approved

Dr. Keith T. Miller, President
Lock Haven University of PA

Date _____