

**Southern Illinois University**  
**College of Education and Human Services**  
Department of Workforce Education and Development

**Curriculum Foundations for Work Education**  
**WED 584**

Spring Semester 2009

**Course Description:**

Acquaint students with different factors that influence, direct, and shape curriculum as it pertains to education for work.

**Course Goals:**

- 1) Define curriculum and instruction.
- 2) Encourage research in curriculum for work education
- 3) Review philosophy of education.
- 4) Present the historical and political foundations of education for work.
- 5) Present concepts and models of organization and management of curriculum.
- 6) Facilitate a discussion of contextual teaching and learning.
- 7) Present real-world curriculum problems involving education for work and to foster development of integrated knowledge and skills to enable their solution.
- 8) Explore the availability of materials needed for work education and curriculum development.
- 9) Encourage the development of performance-based curriculum.

**Required Text:** None

**Required Reading:**

Barrows H. & Kelson A. (1996) *Problem-based learning :A total approach to education.* Southern Illinois University School of Medicine, Department of Medical Education-MC9622, P.O. Box 19622, Springfield IL

Barrows H. (1998) *The Tutorial Process.* Southern Illinois University School of Medicine, Springfield, IL

Mager R. & Beach K. (1967) *Developing vocational instruction.* Belmont CA, Pitman Learning Inc. (Morris Library electronic reserve)

Tyler R. (1949) *Basic principles of curriculum and instruction.* Chicago IL, The University of Chicago Press.

Finch C. & Crunkilton J. (1979) *Curriculum development in vocational and technical education*. Boston, Allyn and Bacon.

## **Emergency Procedures:**

Southern Illinois University Carbondale is committed to providing a safe and healthy environment for study and work. Because some health and safety circumstances are beyond our control, we ask that you become familiar with the SIUC Emergency Response Plan and Building Emergency Response Team (BERT) program. Emergency response information is available on posters in buildings on campus, available on the BERT's website at [www.bert.siu.edu](http://www.bert.siu.edu), Department of Public Safety's website [www.dps.siu.edu](http://www.dps.siu.edu) (disaster drop down) and in the Emergency Response Guidelines pamphlet. Know how to respond to each type of emergency.

Instructors will provide guidance and direction to students in the classroom in the event of an emergency affecting your location. **It is important that you follow these instructions and stay with your instructor during an evacuation or sheltering emergency.** The Building Emergency Response Team will provide assistance to your instructor in evacuating the building or sheltering within the facility.

## **UNITS:**

### Unit 1: Foundations of Education for Work

- 1.1 Curriculum and Instruction
- 1.2 Research in education for work
- 1.3 Historical and political foundations of education for work
- 1.4 Philosophy of education
- 1.5 Models of organization and management of curriculum and instruction
- 1.6 Peer reviewed journals in education and training for work

### Evaluation:

- 1 Find and summarize one journal article regarding education for work for each of the following kinds of research: Quantitative, qualitative, historical, and philosophical. Journals may be on-line or hard copy. Observe APA guidelines for the report. Prepare a very brief report, including visuals, for presentation in class.
2. Submit a publishable paper to a peer reviewed journal.
3. Referee 2 other papers for publication

### Unit 2: Contextual Teaching and Learning

- 2.1 Definition and approaches of contextual teaching and learning

- 2.2 Problem solving
- 2.3 Curriculum and instructional modeling
- 2.4 Assessment and evaluation; rubrics and templates
- 2.5 Using 'standards' in curriculum development

**Evaluation:**

- 1. Develop graphical models of Tyler's, Mager's and Finch's approach to instructional development for presentation in class. Write a comparison of the three, and apply each to a specific problem.
- 2. Develop a contextual lesson based upon defined industry or educational standards. Develop a rubric to assess student learning.
- 3. Solve an assigned contextual problem.

**Unit 3: Problem-Based Learning (PBL)**

- 3.1 Introduction to Problem-based Learning.
- 3.2 Developing PBL problems.
- 3.3 Evaluating PBL problems using rubrics.

**Evaluation:**

- 1. Using Barrows' process of problem-based learning, develop a graphic model for developing problem-based lessons.
- 2. Develop a unit template of problem-based instruction. The unit must include a minimum of three problems and should not have more than ten. Develop a rubric to evaluate the unit.
- 3. Using Barrows' process and template for problem development, Develop at least three of the problems you have planned and rubrics for evaluation.

**Course Products:**

- 1. Publishable paper
- 2. Referee two papers for publication
- 3. Report of journal research
- 4. Graphic model development and report
- 5. Contextual lesson development and evaluation
- 6. PBL unit, problems and rubrics development

**Grading:**

- 1. Participation 200 points
- 2. Publishable paper 200 points
- 3. Journal research report 100 points
- 4. Contextual lesson development and evaluation 100 points
- 5. Problem-based unit development 200 points
- 6. Review two manuscripts 100 points
- 7. Graphic model development and report 100 points

Total 1000 points

Scale: 900 – 1000 = A  
800 – 899 = B  
700 – 799 = C

**Instructor:**

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Tuesday from 2 until 5 pm, Wednesday from 2 until 6 pm, and by appointment

**References**

- Amos, E. & White, M. J. (1998). Problem-based learning. *Nurse Educator*, 23(2),11-14.
- Andrews, M. & Jones, P. R. (1996). Problem-based learning in an undergraduate nursing program – a case study. *Journal of Advanced Nursing* 23 (2) pp. 357-365.
- Barrows, H. S. (1994). *Practice-based learning: Problem-based learning applied to medical education*. Springfield, IL: Southern Illinois University School of Medicine, Department of Medical Education – MC 9622, P.O. Box 19622, Springfield, IL).
- Bransford, J. D. & Stein, B. S. (1984). *The ideal problem solver: A guide for improving thinking, learning, and creativity*. New York: W. H. Freeman and Company.
- Brooker, R. (2000). *Interdisciplinary Problem Solving* [Online], Available: <http://tic.ai.org/lessons/probslp.htm>
- Boser, R. A. (1993). The development of problem solving capabilities in pre-service technology teacher education. *Journal of Technology Teaching* 4, (2).
- Brown, B. L. (1998). *Using problem solving approaches in vocational education*. Eric Clearinghouse [Online], Available: <http://www.ericacve.org/docs/prob-pab.htm>
- Carvin, A. (2000). John Dewey and Lev Vygotsky. *Exploring Technology and School Reform*. [Online], Available: <http://edweb.gsn.org/constructivism.dewey.html>

- Cellier, F. E. (2000). *Teaching physical system modeling at the University of Arizona, Department of Electrical and Computer Engineering*. Abstract. [Online], Available: <http://www.ece.arizona.edu/~cellier/education.html>
- Department of Information Science, University of Bergen, Norway (1999). *Constructivism*. CSCL [Online], Available: <http://www.uib.no/People/sinia/CSCL/web-struktur-836.htm>
- Creedy, D. & Hand, B. (1994). The implementation of problem-based learning: Changing pedagogy in nurse education. *Journal of Advanced Nursing*, 20 (4), 696-702.
- Contextual Learning* (1996). [Online], Available: <http://www.stw.ed.gov>. The National School-to-Work Learning and Information Center.
- Contextual Teaching and Learning. (1999). *Web-based model for the professional development of teachers in contextual teaching and learning* [Brochure]. Bowling Green State University. Project Web Site: [www.bgsu.edu/ctl](http://www.bgsu.edu/ctl)
- Emch, A., F., *Long-range planning for colleges and universities*. Presentation of Study, Management Consultants. Chicago, Illinois.
- Fields, J. C. (1993). *Total quality for schools: A suggestion for American education*. Milwaukee, WI: ASQC Quality Press.
- Flanagan, F. M. (1994). *John Dewey*. [Online], Available: <http://www.ul.ie/~philos/voll/dewey.html>
- Goals and Objectives of Problem-Based Learning (PBL)*. (1997). [Online], Available: <http://www.gsn.org/web/reform/pbl/teacherp.htm#pbld>
- Harris, R. (1998). *Introduction to problem solving*. Vanguard University of Southern California [Online], Available: <http://www.sccu.edu/Rharris/crebook3.htm>
- Jackson, L. W. (Ed.) (1992). *Handbook of research on curriculum*, New York: Simon & Schuster.
- Kneller, G. F. (1971). *Introduction to the Philosophy of Education*, New York, John Wiley & Sons.
- McAllister, H. C. (2000). *Problem Solving and Learning*. [Online], Available: <http://www.hpcc.astro.washington.edu/mirrors/suremath/leaml.html>

- Mississippi State University (2000). Module D: Teaching to promote thinking. *Unit I Modules*. [Online], Available: <http://www.ais.msstate.edu/TALs/unitI/ImoduleD.html>
- Office of Vocational and Adult Education and the National School-to-Work Office. (1999). *Preparing teachers to use contextual teaching and learning strategies*. ACTE Conference (pp. 1-12). Orlando: U. S. Department of Education.
- Penker, M. (1998). *The unified modeling language*. BoldSoft [Online], Available: <http://www.boldsoft.com/news/columns/column1998july.htm>
- PetriTheory (1962). *Introduction to the modeling system*. [Online], Available: <http://prosy.changwon.ac.krr/doc/petrinet/I.htm>
- Plucker, J. & Nowark, J. (1999). Problems as possibilities: Problem based learning for K-12 education. *Review of the book Problems of possibilities: Problem-based learning for K-12 education*. Roper Review, 22(1),69.
- Predmore, S. (2005) Putting it into Context. *Techniques*, 80 (1) pp.22-25.
- Sternberg, R. J. (1998). Robert J. Sternberg: Triarchic model for teaching and thinking. *The Building Tool Room*. [Online], Available: <http://www.newhorizons.org/trmsternberg.html>
- Taba, H. (1962) *Curriculum development: Theory and practice*. New York: Harcourt, Brace and World.
- Urbina, C., Hess, D., Andrews, R., Hammond, R., & Hansbarger, C. (1997). Problem based learning in an interdisciplinary setting. *Family and Community Health*, 20, (1) 16.