

APPROVED

RECEIVED

APR 10 2012

COLLEGE OF GRADUATE STUDIES

The University Of Toledo

New Graduate Course Proposal

* denotes required fields

1. College*:

Department*:

2. Contact Person*: Phone: (xxx-xxxx) Email: Please input the correct Contact Person. Please input phone number in this format: xxx-xxxx. Please input the correct Email Address.

3. Alpha/Numeric Code (Subject area - number)*: - Please input 2-4 characters for Item 3 Subject Area. Please input the 4-digit numeric code for Item 3.

4. Proposed title*: Character not allowed.

Proposed effective term*: (e.g. 201140 for 2011 Fall) Please input the 6-digit numeric code for term.

5. Is the course cross-listed with another academic unit? Yes No

Approval of other academic unit (signature and title)

Is the course offered at more than one level? Yes No

If yes, an undergraduate course proposal form must also be submitted. If the undergraduate course is new, complete the New Undergraduate Course Proposal; if the undergraduate course is existing, submit an Undergraduate Course Modification Proposal.

6. Credit hours*: Fixed: or Variable: to Please Enter Only Numbers for Fixed Credit Hours Please Enter Only Numbers for variable Credit Hours From Please Enter Only Numbers for variable Credit Hours To

7. Delivery Mode: Primary* Secondary Tertiary
a. Activity Type *

b. Minimum Credit Hours * Please Enter Only Numbers Please Enter Only Numbers Please Enter Only Numbers
Maximum Credit Hours * Please Enter Only Numbers Please Enter Only Numbers Please Enter Only Numbers

c. Weekly Contact Hours *

8. Terms offered: Fall Spring Summer

Years offered: Every Year Alternate Years

9. Are students permitted to register for more than one section during a term? No Yes

May the courses be repeated for credit? No Yes Maximum Hours

10. Grading System*:

- Normal Grading (A-F, PS/NC, PR, I)
- Passing Grade/No Credit (A-C, NC)
- Credit/No Credit
- Grade Only (A-F, PR, I)
- Audit Only
- No Grade

11. Prerequisites (must be taken **before**): i.e. C or higher in (BIOE 4500 or BIOE 5500) and C or higher in MATH 4200

100 Max.

PIN (Permission From Instructor) PDP (Permission From Department)

Co-requisites (must be taken **together**):

100 Max.

12. Catalog Description* (75 words Maximum)

A critical analysis of the research literature in language arts, mathematics, science, or social studies education. Students examine educational research regarding ideas about learning and teaching, ideas that influence research, finding primary sources, reading and critiquing research, and organizing and writing a literature review.

13. Attach a syllabus and an electronic copy of a complete outline of the major topics covered. Click [here](#) for template.

Syllabus: * File type not allowed.

Additional Attachment 1: File type not allowed.

Additional Attachment 2: File type not allowed.

Course Approval:

Department Curriculum Authority: Rebecca Schreier Date 3-16-12

Department Chairperson: Joey Chiribella Date 3/16/12

College Curriculum Authority or Chair: Rebecca Schreier Date 4-9-12

College Dean: Barbara Bay Date 4.9.12

Graduate Council: [Signature] Date 5-17-2012

Dean of Graduate Studies: [Signature] Date 5-17-2012

Office of the Provost : [Signature] Date []

Administrative Use Only

[] (YYYY/MM/DD)

[]

[]

[]

[]

CI 6890 Theory and Research in Learning and Teaching Content

Instructor: Dr. Rebecca Schneider

Email: Rebecca.Schneider@utoledo.edu

Phone: 530-2504

Office Hours (fall): Monday 3-4, Wednesday 1 - 5

Office: 2000KK Gillham Hall

Instructor: Dr. Jenny Denyer

Email: Jenny.Denyer@utoledo.edu

Phone: 530-2472

Office Hours: Monday 1 – 4, Wednesday 2 – 4:30

Office: 2000BB Gillham Hall

Webpage: <http://alcot.utoledo.edu>

Overview

Designed for individuals beginning the thesis, project, or seminar paper phase of their graduate program, this course explores both theory and research in language arts, mathematics, science, or social studies education. We will begin with broad areas of interest and develop these into focused questions that can guide a review and critical analysis of the research literature in your specific discipline. We will examine several aspects of educational research including: ideas about how people learn, ideas about teachers and teaching, ideas that have influenced research, finding primary sources, how to read and critique research, and how to organize and write a literature review.

Prerequisites

Must be admitted to the University of Toledo as a graduate level student and have graduate level writing skills.

Objectives

During the semester, emphasis will be placed on exploring what we know, how we know it, and what we do not know, in language arts, mathematics, science, or social studies education. The major course goal is to guide you through the process of raising important questions, reviewing literature, refining your ideas, and writing a literature review. Doing a literature review is the first step to completing your seminar paper.

As the result of the course, you will gain experiences in:

- ideas that guide research and practice in language arts, mathematics, science, or social studies education,
- reading, interpreting, and critiquing professional writing in language arts, mathematics, science, or social studies education, and
- refining and communicating your ideas in writing and orally.

Activities and evaluation

Your performance will be evaluated on the following tasks.

Question and reading plan

Each student will define their review question and outline a reading plan for the review paper indicating major topics, subtopics, and the order of presentation. A review question can be answered by reading the current theory and research in science education. The question (in the form of a question) will be described in one paragraph and the reading plan will be in outline form.

Problem statement

This is a written statement describing the question or problem area you have chosen for your study this semester and possibly your seminar paper. In this short paper you will argue for the importance of this question and topic for language arts, mathematics, science, or social studies education and propose an approach to address this question or problem. (Argue for the question not the answer.) This statement will be approximately 3 pages and must explore a topic in language arts, mathematics, science, or social studies education. This paper will be peer reviewed for use of current ideas in language arts, mathematics, science, or social studies education, importance, clarity, style, and structure.

Peer reviews

Each student will formally review another student's problem statement paper and professional talk. This will be a written critique describing strong points and areas for improvement with suggestions. Reviews are usually one-page, three-paragraphs including descriptions of strengths, suggestions for improvements, and a wrap-up with positive tone that highlights the potential of the paper.

Literature review

Each student will prepare a literature review based on their problem statement. This will be done in several steps. The first step will be to define the review question and reading plan for the paper indicating major topics, subtopics, and the order of presentation (above). Second will be a three page problem statement that will serve as the draft of your introduction (above). Third will be a professional talk using PowerPoint that will be peer reviewed. Here you will present ideas you will discuss in your final paper. Finally, you will turn in a literature review paper that includes an introduction, body, conclusion, and reference section. This paper will be in APA format, be about 25 pages (not including the title page or reference section), and will include a reference section with about 15 references.

Preparation and response

Each student will have an online journal and blog. The journal will be informal responses to questions posed by the instructor and the blog will be more formal responses shared with the class. You will also participate in the class online discussion board and in class discussions. These are also informal but will be based on assigned readings or other homework.

Assessment Scheme: Assignments are due on the dates noted below. All work must be turned in on due date. Grades on assignments will be lowered by one letter grade for each day an assignment is late. The requirements are subject to change and adaptation at the discretion of the professor. You must submit an assignment on time in order to participate in the revision option. A grade of PR will be given only under extreme conditions and with agreement of the instructor. **Students must earn a grade of C or better on each assignment in order to earn a passing grade for the course.**

Assignment	Percent of Grade	Due Date
Preparation and response (fall) Journal, blog, and discussion online In class writing and discussion	15	Ongoing
Preparation and response (spring) Journal, blog, and discussion online In class writing and discussion	15	Ongoing
Question and reading plan Revision (optional)	10	December 16 January 16
Problem statement	15	January 23
Peer review of... A problem statement A professional talk	10 10	January 27 May 7
Literature review Professional talk Paper with references	10 15	May 4 May 18

Reading

Perrin, R. (2007). *Pocket guide to APA style*. Boston: Houghton Mifflin Company.

National Research Council. (2005). *How students learn*. Washington, D. C.: National Academy Press. Chapter One

Berliner, D.C. (2002). Education research: The hardest science of all. *Educational Researcher*, 31 (8), pp. 18-20.

Maxwell, J. A. (2004). Causal explanation, qualitative research, and scientific inquiry in education. *Educational Researcher*, 33 (2), pp. 3-11.

Science

National Research Council. (2005). *How students learn*. Washington, D. C.: National Academy Press. Chapters 9, 11, and 12

National Research Council. (2007). *Taking science to school*. Washington, D. C.: National Academy Press. http://www.nap.edu/catalog.php?record_id=11625#toc Chapters 2, 4, 5, 6, and 7 (mostly 2 and 7)

Rhoton, J. & Shane, P. (Eds.). (2006). *Teaching science in the 21st century*. Washington, D. C.: NSTA Press.

Mathematics

National Research Council. (2005). *How students learn*. Washington, D. C.: National Academy Press. Chapters 5, 7, and 8

National Research Council. (2001). *Adding it up*. Washington, D. C.: National Academy Press. <http://www.nap.edu/catalog/9822.html>

NCTM. (2000). *Principles and standards for school mathematics*. Washington, D. C.: NCTM. Chapters 1 and 2

Ball, D.L. & Bass, H. (2003). Making Mathematics Reasonable in School. In J. Kilpatrick (Ed.), *A research companion to principles and standards for school mathematics* (pp. 27-44). Washington, D. C.: NCTM. Chapter 3

Hiebert, J. & Lefevre, P. (1986). Conceptual and procedural knowledge in mathematics: An introductory analysis. In J. Hiebert (Ed.) *Conceptual and procedural knowledge: The case of mathematics* (pp.1-27). Hillsdale, NJ: Lawrence Erlbaum.

Language Arts

Alexander, P.A. & Jetton, T.L. (2000). Learning from text: A multidimensional and developmental perspective. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.), *Handbook of reading research, Volume III*, (pp.285-310). Mahwah, New Jersey: Lawrence Erlbaum Associates.

Guthrie, J.T., & Wigfield, A. (2000). Engagement and motivation in reading. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.), *Handbook of reading research, Volume III*, (pp.285-310). Mahwah, New Jersey: Lawrence Erlbaum Associates.

Marshall, J. (2000). Research on response to literature. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.), *Handbook of reading research, Volume III*, (pp.285-310). Mahwah, New Jersey: Lawrence Erlbaum Associates.

Grossman, P.L. & Shulman, L.S. (1994). Knowing, believing, and the teaching of English. In T. Shanahan (Ed.), *Teachers thinking teachers knowing: Reflections on literacy and language education* (pp. 1-22). Urbana, Illinois: National Conference on Research in English and National Council of Teachers of English.

Shanahan, T. (2002). What reading research says: The promises and limitations of applying research to reading education. In A.E. Farstrup & S.J. Samuels (Eds.), *What research has to about reading instruction* (pp. 8-24). Newark, Delaware: International Reading Association.

Wilkinson, L. C. & Silliman, E.R. (2000). Classroom language and literacy learning. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.), *Handbook of reading research, Volume III*, (pp.285-310). Mahwah, New Jersey: Lawrence Erlbaum Associates.

Social Studies

- National Research Council. (2005). *How students learn*. Washington, D. C.: National Academy Press. Chapters 2, 3, and 4
- Hess, D. Controversial issues and democratic discourse. In L.S. Levistik & C.A. Tyson (Eds.), *Handbook of research in social studies education*, pp.124-136. New York: Routledge, Taylor & Francis Group.
- Levistik, L.S. (2008). What happens in social studies classrooms? Research on K-12 social studies. In L.S. Levistik & C.A. Tyson (Eds.), *Handbook of research in social studies education*, pp.50-62. New York: Routledge, Taylor & Francis Group.
- Parker, W.C. (2008). Knowing and doing in democratic citizenship education. In L.S. Levistik & C.A. Tyson (Eds.), *Handbook of research in social studies education*, pp.65-80. New York: Routledge, Taylor & Francis Group.
- Saxe, D. W. (January 01, 1992). Framing a theory for social studies foundations. *Review of Educational Research*, 62, 3, 259-277.
- Thornton, S. J. (January 01, 1994). Chapter 5: The Social Studies Near Century's End: Reconsidering Patterns of Curriculum and Instruction. *Review of Research in Education*, 20, 1, 223-254.

Recommended Materials

- Strunk, W. (1999). Elements of style <http://www.bartleby.com/141/>
- American Psychological Association. (2010). *Publication Manual (6th ed.)*. Washington DC: American Psychological Association.
- Berliner, D. C. (November 01, 2002). Educational Research: The Hardest Science of All. *Educational Researcher*, 31, 8, 18-20.

Science

- Gabel, S. K.. & Lederman, N. G. (Eds.). (2007). *Handbook of Research on Science Education*. Mahwah, NJ: Lawrence Erlbaum.
- Driver, R., Squires, A., Rushworth, P., & Wood-Robinson, V. (1994). *Making sense of secondary science: Research into children's ideas*. Routledge (ISBN 0415097657)