Science Education 513 Curriculum in the K-12 Schools
Winter 2008

Professor: George Nelson, Ph.D.
Office: SL 250D SMATE
Western Washington University
Bellingham, WA 98225
Email: george.nelson@wwu.edu
Phone: 360-650-3637

Class Schedule: Initial meeting will be:
Wednesday January 09 5:00-7:30pm, SMATE Rm 260.
We will continue to meet on Wednesdays

NOTE: RESOURCES FOR THIS COURSE CAN BE ACCESSED THROUGH:
http://courses.wwu.edu/?bbatt=Y

Course Description
This quarter we will focus on three aspects of curriculum that are relevant to your work as teachers and leaders in your classrooms, buildings, and districts: 1) Understanding the process and politics of curriculum selection and adoption, 2) Assessing the potential of curriculum materials to help teachers teach and students learn, and 3) Exploring the design, assembly, and implementation of a coherent K-12 curriculum.

Course Outcomes:
Students will gain an appreciation for curriculum adoption processes.
Students will understand the purpose and mechanics of a rigorous instructional materials evaluation procedure through evaluation of the content alignment and instructional quality of a material of their choosing.
Students will become critical consumers of instructional materials.
Students will increase their knowledge and skills related to science curriculum development and implementation, K-12.

Assignments
Assigned readings for each of the major topics are described in the schedule below. The readings will either be handed out in class or posted on the course Blackboard site.
One short reflection piece will be required as described in the schedule below.
Two larger papers/projects will be assigned around topics 2) and 3) above.
First, you will choose a unit from your classroom, or one that interests you, and use the AAAS Project 2061 procedure to perform an analysis of content alignment with a single learning goal (GLE or Benchmark) and the instructional support provided by the material

for the same learning goal. The analysis should be written up following the model on the Project 2061 website and will be presented to the class.
Second, you will research the science curriculum in your building, assess its coherence with respect to addressing the state's science education goals (at the topic/GLE level), and generate a plan for how the district might revise the curriculum and implement the revisions to help students meet the goals. This research will result in a paper and a class presentation.

Expectations:
All papers should be typed, grammatically correct, mostly error-free, and conform to APA Standards for attribution and referencing. Assignments will be graded on content as well as clarity and quality of writing.

Grading:
Standard grading percentages will be used:
93% and above = A
90-92% = A-
87-89% = B+
83-86% = B
80-82% = B-

Schedule

Week	**Date**	**Readings (BB=Blackboard, HO=Handout) Readings are to be done before class**	**Assignment Due**
1	**Jan 09**	***The Sabertooth Curriculum***	
2	**Jan 16**	***Designs for Science Literacy*** **Ch. 1 and 2 AAAS, BB**	
3	**Jan 23**	***A Conspiracy of Good Intentions*** **Harriet Tyson-Bernstein, HO**	**First Reflection Paper**
4	**Jan 30**	**Project 2061 Analysis Procedure and Examples, BB**	**Choose Curriculum Unit for Analysis**
5	**Feb 06**	**Project 2061 Analysis Procedure and Examples, BB**	
6	**Feb 13**	**Classroom Presentations**	**Curriculum Analysis Paper due**
7	**Feb 20**	***Designing Mathematics or Science Curriculum Programs,*** **NRC, BB**	
8	**Feb 27**	***Designs for Science Literacy*** **Ch. 6,7 AAAS**	
9	**Mar 05**	***Designs for Science Literacy*** **Ch. 8 AAAS**	
10	**Mar 12**	**Classroom Presentations**	**Curriculum Planning Paper due Mar 19**