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Brown, Fletcher, "C&I 544.01: Supervision and Teaching of Science" (2003). *University of Montana Course Syllabi*. 3653.

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SYLLABUS

C&I 544 Supervision/Tching of Science Spring 2003

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Textbook/Readings

Making Sense of Secondary Science, by Driver
Designing and Implementing an integrated Curriculum, by Clark
Selected Handouts

Course Overview

This course involves three different but related foci under the theme of science education: curriculum development, program development, and science curriculum evaluation. Through a series of discussions, activities, guest speakers, and presentations students will be actively involved in characterizing, evaluating, and developing science education curriculum. To accomplish this aim the class will be organized around three sets of activities; class discussions, presentation/lectures, and guest speakers and/or activities. In most cases classes will begin with a discussion of the readings and the previous weeks lecture/speakers/activities with focus questions leading the discussions. This will be followed by a more formal introduction to the topics and concepts in a presentation format. Following the presentations will be either guest speakers or activities that will elaborate on the lecture materials presented. In some cases the order of activities will vary depending on the time restraints on speakers and activities presented. In addition to classroom based activities students will also be involved in an applied project in curriculum or program development. This project will begin after the first month of class and be completed by the end of class.

Required Assignments

You will be required to complete six different assignments for evaluation in the course. These include the following:

Journalizing: You will be expected to make one journal entry a week for the first seven weeks. This entry should reflect your understanding of the reading and impressions of the discussions in class. You are also required to respond to other students journal entries briefly each week.

Curriculum Evaluation: You will write a review of a science education curriculum which should be suitable for submission to a professional journal. In addition you will present your evaluation in front of the class in an informal and hands-on manor.

Curriculum Assessment: You will be required to evaluate a school or science center curriculum using criteria identified in class.

Curriculum Development:: You will be required to develop a curriculum framework for a school or science center. Ideally this will be developed along with an existing local or regional school or science center.

Discussion Leader : You will be responsible to lead a 50 minute discussion about a particular area of interest in the area of science curriculum. This includes the identification of the readings one week prior to the discussion and organizing/leading the discussion period. More details for each assignment will be given in class prior to the beginning of the assignment.

Class Participation: You will be expected to attend all class meeting times and actively participate in discussion. You are also expected to complete several evaluations of the presentations and projects described above.

Evaluation

Each assignment will have a certain number of factors which will be assessed using a set of criteria (See sample below for an example of criteria used). The number of factors measured in each assignment are as follows: Journalizing 4; Curriculum Evaluation 4; Curriculum Assessment 2; Curriculum Development 6; Discussion Leader 2; Participation 2 (1 for Attendance, 1 for student evaluation) Total: 20. The specific factors measured will be assigned prior to the assignment being initiated and often times developed by the students in class.

Your final grade will be determined by the following. A number score will be given to each criteria (4-excellent, 3-good, 2-needs work, 1 lacking) and summed for all 20 factors. Grades will be based on the following:

70-80 - A
60-70 - B
50-60 - C
40-50 - D

To keep track of your work and evaluations, an assessment portfolio will be kept by each student. This portfolio will have six sections, one representing each area being evaluated listed above. In each section there will be three parts; the assignment requirements, evidence collected for the assignment, and the evaluation given for the assignment. At the completion of the semester you will be asked to hand in the assessment portfolio and a grade will be given to each student based on the above grading scale accompanied with a written narrative summarizing the students work throughout the semester.

This should be a fun and full semester and I look forward to our exploration of the world of science curriculum together. Please feel free to come to me with any questions or comments so you can get the experience that best matches your needs in this class. Welcome.

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Syllabus

<u>WEEK</u>	<u>TOPIC</u>
1/28	Introduction to Curriculum and Science Educational Reform
2/4	History and Definitions of School Curriculum
2/11	History and Approaches to Incorporating Science Educational Reform Efforts into School Curriculum
2/18	Curriculum Models
2/25	Curriculum Evaluation and Assessment
3/4	Curriculum Evaluation and Assessment
3/11	Politics of Curriculum Reform
3/18	Future Directions in Curriculum Reform
4/1	Technology Impact of Curriculum
4/8	Student Selected Topics
4/16	Student Selected Topics
4/22	Student Selected Topics
5/29	Project Presentation
5/6	Project Presentations
5/12	Final Meeting Time