Course Goals

The goal of this course is to help you learn the philosophical, historical, and social influences that come into play in the construction of curriculum. Our emphasis will be on science education curriculum, present and future. How did it evolve? What’s in store for the future? We will consider trends currently influencing science curriculum (both in the United States and in other countries) and relate them to our own experiences. We will develop a foundation to reflect on our own past curriculum work and a framework for future work. To reach this goal, you will need to read, learn, ponder conflicting opinions, and integrate information.

In the course we will emphasize science curricula. I know that most of you taking the course are middle and high school science teachers. I have taught middle school science for over 30 years and have a doctorate degree in curriculum and instruction. I also know that you are primarily interested in studying and learning things that will help you in your day to day school work. To that end, you will have a final project that challenges you to reflect on your current science curriculum and "rethink" it in light of what we have discovered through this course. Don’t worry, you are not being asked to write a complete science curriculum, only to examine and rework a portion of an existing curriculum.

Character of the Course

In this course we will study some general functions of curriculum in schools, including theories about developing, aligning and auditing curriculum. Keep in mind that the course will not be comprehensive in coverage, but rather is an overview with frequent side-trips to consider some topics in greater depth.

In the historical and theoretical portion of the course, you may feel overwhelmed by names and facts. Remember our purpose is to understand how these earlier beliefs and practices have shaped what we do in schools. We want to learn from previous efforts and understand the present context of science education curriculum. An effort will be made to consider emerging issues influencing science education, including, but not limited to the TIMSS Study and The Next Generation Science Standards.

The Textbooks

*There are no required textbooks. All resources will be made available online.*

Each week specific reading assignments will be assigned. You are not expected to remember everything you read, but should still familiarize yourself with the material. These reading assignments should help you build a framework for future curriculum
work. All assignments to be graded will be "open book" assignments. In addition, there may be resources you will download and read using Adobe Acrobat Reader. On other occasions you may be asked to search out some resources on your own on the Internet.

Grading

Grades will be determined by your performance as summarized below.

A. Weekly assignments. There will be some type of reading assignment nearly every week. In several cases, these assignments will be reflective pieces or reaction papers where there is clearly no right or wrong answer. Each weekly written assignment will be worth 100 points and will be scored using the rubrics below. There is a content component and a writing component to each assignment. Scores will depend on the thoughtfulness of your response--the depth of analysis. In several cases the assignment will involve the analysis of readings or the evaluation of materials found on a web site. There will be clear deadlines for each assignment. Every attempt will be made to return graded assignments promptly (within a week). Since this is a short six-week summer session, I will be strict about deadlines.

B. On-line participation. Here YOU will evaluate the quality and quantity of your on-line contributions--questions posed; contribution to reaching conclusions; making others aware of current news about curriculum issues; and uncovering sources of information about curriculum, especially on-line sources. Each week you will be given guidelines for participation in the weekly discussion folder. Each self-assessment rubric is worth 30 points.

C. Final Project. The last two weeks of the course will be devoted to the construction of a "reformed curriculum" piece. You will be synthesizing the contents of the course by reviewing an aspect of the science curriculum you currently teach and "reforming" your curriculum to reflect your new understanding of curricular issues. The "reformed curriculum" will be worth 500 points. A rubric for the final project is provided.

Since you will be evaluated primarily on writing, please adhere to the WRITING EXPECTATIONS in the Help Pages. We don't have time in online courses to teach writing. As a graduate student, you are expected to adhere to proper writing standards at all times.

Grades will be updated often. You can access your grades on the Grades link in the course menu bar. The rubrics posted on the Help Pages in the Content link will be used to score your homework and discussion assignments. Since learning is our utmost concern, in cases where you did not score full rubric points, you may resubmit the assignment for additional credit. This will NOT be possible for the weekly on-line discussion topics, however.

Course Grading Scale
Maintaining Intellectual Integrity (Plagiarism)

Paraphrasing or quoting another’s work without citing the source is a form of academic misconduct. Even inadvertent or unintentional misuse or appropriation of another's work (such as relying heavily on source material that is not expressly acknowledged) is considered plagiarism. All sources of information that are not your original thoughts need to be cited. This includes, but is not limited to, journal articles, and online resources. Adapted from MSU Syllabus language page: http://www.montana.edu/teachlearn/TLResources/SyllabusLanguage.html

The Dropbox of D2L has a plagiarism checking feature attached to it called Turnitin. It will be activated for all submitted assignments.

When You are Absent from the Course

I know that some of you are planning to be gone for some portion of the course (me included). In order to allow you to plan and prepare ahead of time, the following are the requirements for those who will not be able to participate "in person" for any week of the course:

• Complete the weekly assignment as given. Let me know your anticipated due date to assist me in planning.

• Since you will not be participating in the Weekly Discussion, your assignment will be to summarize the discussions of one of the discussion groups AFTER you return from being away. The summary should be a narrative paper that includes additional research on the discussion topic. At least 2 additional sources must be used, cited and incorporated in your summary. The Discussion Summary should be about 2-3 pages in length.

• Please do NOT mix and match this assignment with the regular assignments. In other words, you must choose to do either the "absent" assignment OR participate during the week, but not both or any combination.
Submitting Assignments

When submitting assignments, please save your file as a Microsoft Word document. Please name your file with your name FIRST and the assignment included. For example, Assignment 1 might be saved as "graveswk1". That really helps make sure that you work doesn't get "lost" in cyberspace...and it's good file saving practice. Files are placed in the Dropbox for the appropriate assignment. Be sure to use the Writing Expectations guidelines on the Help Pages for specific writing questions.

Re-doing Assignments

You are welcome to re-do an assignment if you did not receive a score acceptable to you. You must re-submit the assignment in its entirety, having made the appropriate corrections or additions. Leave the original submission intact and then ADD your corrections in bold or in color. If you are using Microsoft Word, make the corrections in a type and/or font other than you used for the original assignment. That makes it easy for us to see the exact changes you made. It is assumed that the revised work will be of "exemplary" quality and your score will be changed to reflect your extra effort and work. Resubmissions will be awarded a maximum of 90%. Please complete these in a timely fashion.

Late Work

Assignments are due by midnight, Montana time, on the date posted. Submissions received AFTER that time will receive a late penalty of 10%. If you know you are going to be late with an assignment, please let JOHN know and you will be exempt from the late penalty as long as you have a compelling reason for the lateness and you provide a reasonable, timely due date. A phone message on Sunday night informing John of an internet connection problem and that you hope to be able to submit by noon on Tuesday is an acceptable reason to receive an exemption from the late penalty. I realize that we are all busy and situations will arise that are beyond our control. The request is that you be responsible with both communication and completion of the required work.

STUDENT CONDUCT:

Montana State University expects all students to conduct themselves as honest, responsible and law-abiding members of the academic community and to respect the rights of other students, members of the faculty and staff and the public to use, enjoy and participate in the University programs and facilities. For additional information reference see

www2.montana.edu/policy/student_conduct/student_conduct-code_2008-2009.htm

Collaboration:

University policy states that, unless otherwise specified, students may not collaborate on
graded material. Any exceptions to this policy will be stated explicitly for individual assignments. If you have any questions about the limits of collaboration, you are expected to ask for clarification.

Academic Misconduct:

Section 420 of the Student Conduct Code describes academic misconduct as including but not limited to plagiarism, cheating, multiple submissions, or facilitating others’ misconduct. Possible sanctions for academic misconduct range from an oral reprimand to expulsion from the university.

Academic Expectations:

Section 310.00 in the MSU Conduct Guidelines states that students must:

A. be prompt and regular in attending classes;
B. be well prepared for classes;
C. submit required assignments in a timely manner;
D. take exams when scheduled;
E. act in a respectful manner toward other students and the instructor and in a way that does not detract from the learning experience; and
F. make and keep appointments when necessary to meet with the instructor.

In addition to the above items, students are expected to meet any additional course and behavioral standards as defined by the instructor.