

EDCI 788V: Increasing Science Reading Comprehension, Spring 2007

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Email me at holliday@umd.edu, or Telephone (number provided in class) me at home in emergencies. (My practice is to always return phone calls.)

Leave messages and your telephone number.

Email or phone me and leave a message before 10:30 AM on class meeting days, that you anticipate being absent or late.

A. General Course Information

Assignments must be presented on time and in a professional manner, and written in your own words. They must be verbally coherent, precise, concise, convincing and consistent with the guidelines specified in class. Each paper should be written at the graduate level of university competency in terms of the teachings of this course. University of Maryland policies apply to student conduct.

You must submit all assignments in non-electronic paper form (except where noted in this document or as arranged), on time and in reasonable condition to receive a passing course grade. Exceptions with prior notification and approval will be considered. If late assignments are accepted and graded, students will not have an opportunity to rework their assignment and will receive lower assignment grades because of the fairness issue to other students submitting papers on time. Generally, late assignments are not accepted beyond seven days, 4:30 PM, schedule Monday class. No paper or other assignment is accepted after the last day of class. Deadlines for assignments will be presented in class.

In compliance with and in the spirit of the Americans With Disabilities Act (ADA), I would like to work with you if you have a documented disability that is relevant to your work in this course. If you wish to discuss academic accommodations, you need to contact me by the end of the second class period.

Your participation is a vital aspect of this course. Please bring to my attention weeks ahead of time any conflict between class meeting times and other University recognized commitments (e.g., religious observations), so that additional arrangements can be made. In this regard, you need to contact me by the end of the second class period in order to make such arrangements.

Teachers in their reporting to the class and instructor will not divulge private information about their students or other persons in accordance with the policies and regulations of the University of Maryland.

I will provide feedback at intervals throughout the course based on the quality of your contributions in class and the thoughtfulness of your written work. I will also take into account when assessing your achievement your own assessment of your professional development as it relates to this course.

Grades are calculated using points in the following manner, and in accordance to University of Maryland policy. Grades generally are calculated as follows: A = 100 to 90, B = 89 to 80, C = 79 to 70, D = 69 to 60, F = 59 and below.

B. Course goals

Science teachers will develop and implement during the semester a small program embedded in each of their current school science courses (grades, 6-16)--a program that focuses on increasing their students' science reading comprehension.

The course will focus on mechanisms useful in assessing science reading comprehension, emphasize cognitive strategies in reading, use a student-centered approach to incorporating reading skills and strategies into an applied research-based program, and draw on intrinsic and extrinsic knowledge from the motivation-achievement research literature.

In this course we will build individually designed, reading-support programs for each science teacher that is sensible and useful. These programs--both practical and helpful in improving science reading comprehension--will be tailor-made for each teacher's students, who vary in their abilities to read and study specific science information.

Each teacher-developed program will contain

- reading-strategy comprehension instructions for their students (showing students how to comprehend their text and other readings leading to higher achievement including understanding),
- some word-decoding instructions (how to pronounce words) for their students (providing a mixture of decoding-by-phonetics and decoding-by-analogy instruction linked to important science vocabulary development),
- devices found useful by practicing teachers in motivating students to increase their comprehension
- some science informational writing instructions (because of the need to link informational writing and reading in science teaching).

C. Course materials

Required textbook: Pressley, M. (ISBN # 1-59385-228-2) 2006. *Reading Instruction that Works*. New York: Guilford Press; and *Motivation for Achievement* by M. Kay Alderman (ISBN # 0-8058-4309-4), 2004, Erlbaum publishers.

Special readings selected for this course will be distributed in class.

D. Course Assignments:

1. Assessing Students' School Science Reading Abilities

Teachers early and later in the semester will assess each of their students' general abilities to read and comprehend a sampling of science textbook and other materials actually used in their science courses.

Each teacher will prepare a paper which describes their assessments including the results, a rationale for why their approach to assessing their students is valid considering their limited classroom resources and a description of practical ways of increasing their students' performances.

Assessment here means teachers will select a portion of their upcoming science materials ordinarily covered in class later in each of their courses and use this text material as a base for constructing an assessment of each student's abilities. The emphasis in this University of Maryland course will be on comprehension because science teachers cannot spend inordinate amounts of time teaching decoding skills to student who are poor readers with differential deficiencies in their abilities to pronounce words. This assignment will constitute 30% of the course grade.

2. Discussions of Teachers' Practices, Students' Progress and Links to Course Readings

Teachers will discuss in class and provide artifacts and daily logs on how they are grappling with decoding and comprehending problems experienced by their students, citing individual examples. In addition, findings from the motivation-achievement literature will be incorporated into this assignment. Contributing to these course discussions represents a valued portion of the course and will be reflected in the course grade. Included in these discussions will be frank conversations about how to motivate different kinds of reluctant learners to increase their abilities to comprehend science, and how to coach different kinds of students, resulting in some measurable progress in their reading fluency, and to a lesser degree their science writing and vocabulary building. Evidence of practical, reasonable efforts on teachers' parts and a paper linking their efforts to course readings will constitute 50% of the course grade.

3. Action Research Project

Teachers later in the semester will develop a small action research project conducted during this semester in their science classrooms which includes the teaching and assessment of selected students' abilities to comprehend, decode, read fluently, write and/or build a science vocabulary. Teachers will present their results in class and write a short paper. This assignment will constitute 20% of the course grade.

This action research will be embedded in teachers' science courses. One-page proposals must be submitted by March. The research must be complete and ready for presentation by April. Each member of the class will present an action research paper in class followed by a stimulating class discussion. A short paper will be due at 4:30 PM on the last day of class. Presentation- and discussion-time requirements will be described in class. This portion of the course will be graded by the instructor with student peers listening and interacting with presenters. Students in the class will complete a form assessing each presentation, in terms of the following criteria: apparent preparation, and presentation effectiveness. All data including the paper will be considered by the instructor. The instructor will determine the grade for this assignment.