

University of Minnesota Duluth

Summer 2010 Course Syllabus

Educ 5570 Section 245

Exemplary Models in Science Education: 13th Annual Minnesota Minerals Education Workshop- Conference on the Geology and Mineral Resources of the Twin Cities Area

Professional Development for K-12 Educators and Other Professionals

Instructor of Record: James D. Miller, Jr.

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Dates: August 3-5, 2010

Location: Macalester College, St. Paul, MN

2010 Course:

Educ 5570 Section 245 Exemplary Models in Science Education: 13th Annual Minnesota Minerals Education Workshop - Conference on the Geology and Mineral Resources of the Twin Cities Area for two UMD collegiate graduate or undergraduate credits at \$95.73 per credit (includes UMD basic computer network access).

Agenda: The agenda will be distributed to participants at the workshop.

Required Readings and Resources: Readings and classroom resources will be provided to participants at the workshop.

URLs: <http://www.mmew.org>

Learning Outcomes

Upon completion of the workshop, participants will be able to:

- Identify ways to integrate hands-on classroom exercises and field experiences, which emphasize Minnesota geology and mineral resources, into earth science curriculum at all levels of K-12 education.
- Understand ways that local (and global) geology and mineral resources affect our daily lives.
- Develop strategies for using local geological sites to explain and illustrate general geologic concepts and processes.
- Identify Minnesota minerals, fossils, and mineland reclamation procedures.
- Become familiar with the local geologic picture and minerals industry and identify the local professionals who can provide outreach assistance to educators.

Presenters: regional geologists, educators, and minerals and mining industry professionals.

Required Components for UMD Collegiate Graduate Credit: Credit participants are expected to attend all sessions, complete all onsite class assignments, and submit a 4-6 page, double-spaced, 12-point font, age-specific lesson plan that emphasizes some aspect of Minnesota's geology or mineral resources and is submitted by the due date.

Required Components for UMD Undergraduate Credit: Credit participants are expected to attend all sessions, complete all onsite class assignments, and submit a 2-3 page, double-spaced, 12-point font, age-specific lesson plan that emphasizes some aspect of Minnesota's geology or mineral resources and is submitted by the due date.

Deadline for completion of credit components: Summer 2010 assignments are due on September 24, 2010. Grades will be submitted per UMD guidelines.

To obtain your UMD grade/UMD transcript:

To request a transcript with your grade, logon to:

<http://www.d.umn.edu/registrar/transcripts.html> and select the PDF version or the online version (requires major credit card payment). UMD official transcripts cost \$5.00 per copy.

For additional assistance, please call Mary Jean Menzel at: 218/726-6938 or e-mail: mmenzel@umn.edu.

If you require special accommodations, please contact the instructor.

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