

COURSE SYLLABUS — SPRING 2013
CI 5540: Life Discovery Education Conference
(1 credit hour)

INSTRUCTORS

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College of Education & Human Development Mission Statement

The new College of Education and Human Development is a world leader in discovering, creating, sharing, and applying principles and practices of multiculturalism and multidisciplinary scholarship to advance teaching and learning and to enhance the psychological, physical, and social development of children, youth, and adults across the lifespan in families, organizations, and communities.

Department Mission Statement

In adhering to the Land Grant mission of the university, the Department of Curriculum and Instruction fosters an intellectual community of nationally and internationally-recognized scholars who:

- advance understanding of teaching and learning through research and other scholarly endeavors, including the scholarship of teaching and the scholarship of public engagement,
- support the preparation and development of scholars and educators who are leaders in their disciplines, schools, and community settings, and who are able to collaborate across disciplines to benefit those they serve,
- engage in multidisciplinary pursuits with partners in P-16 schools, communities, professional associations, and other educational institutions to improve the quality of education for all learners,
- address the cultural, linguistic, social, political, technological, and economic factors that influence teaching, learning, and research, and
- foster educational practice that leads to a more democratic and just society.

COURSE DESCRIPTION

This conference will highlight the leading science, curriculum design and implementation and data exploration in a research-rich biology education for grades K-16. Researchers and educators interested in K-16 organismal and environmental biology education are strongly encouraged to attend. Each formal workshop and presentation will include a demonstration, and/or a hands-on experience, and/or follow-up discussion with participants.

Objectives:

COURSE GOALS & OBJECTIVES

The major goal of the conference is to foster communities of practice and encourage the sharing of best practices in biology education across grades. Objectives:

- * Highlight evidence-based research for 21st century biology education
- * Promote the use of digital resources and new technologies for scientific literacy, with attention to underrepresented audiences

- * Foster communities of practice and partnerships among scientists and educators
- * Promote a culture of publishing in education through the sharing of classroom-friendly resources in LifeDiscoveryEd Digital Library (to be launched in the fall 2012)
- * Inform educators about strategies for promoting careers in organismal and environmental biology

LOGISTICS

Meeting Times

Friday - Saturday. 8:00 AM – 5:30 PM; March 15th – 16th, 2013.

Location

Continuing Education & Conference Center, St. Paul Campus.

Course Materials

N/A

GRADING

Pass/Fail based on attendance and participation. Participants are expected to attend the entire two-day conference and participate in each of the six presentation/workshop sessions and the keynote speeches.

UNIVERSITY POLICIES

Diversity

It is the University Policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities that may affect their ability to participate in course activities or to meet course requirements. Students with disabilities are encouraged to contact me when possible to discuss their individual needs for accommodations.

Student Conduct Code:

The University seeks an environment that promotes academic achievement and integrity, that is protective of free inquiry, and that serves the educational mission of the University. Similarly, the University seeks a community that is free from violence, threats, and intimidation; that is respectful of the rights, opportunities, and welfare of students, faculty, staff, and guests of the University; and that does not threaten the physical or mental health or safety of members of the University community.

As a student at the University you are expected adhere to Board of Regents Policy: *Student Conduct Code*. To review the Student Conduct Code, please see:

http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.html.

Note that the conduct code specifically addresses disruptive classroom conduct, which means "engaging in behavior that substantially or repeatedly interrupts either the instructor's ability to teach or student learning. The classroom extends to any setting where a student is engaged in work toward academic credit or satisfaction of program-based requirements or related activities."

Use of Personal Electronic Devices in the Classroom:

Using personal electronic devices in the classroom setting can hinder instruction and learning, not only for the student using the device but also for other students in the class. To this end, the

University establishes the right of each faculty member to determine if and how personal electronic devices are allowed to be used in the classroom. For complete information, please reference: <http://policy.umn.edu/Policies/Education/Education/CLASSROOMPED.html>.

Scholastic Dishonesty:

You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis. (Student Conduct Code:

http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.html) If it is determined that a student has cheated, he or she may be given an "F" or an "N" for the course, and may face additional sanctions from the University. For additional information, please see: <http://policy.umn.edu/Policies/Education/Education/INSTRUCTORRESP.html>.

The Office for Student Conduct and Academic Integrity has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty:

<http://www1.umn.edu/oscai/integrity/student/index.html>. If you have additional questions, please clarify with your instructor for the course. Your instructor can respond to your specific questions regarding what would constitute scholastic dishonesty in the context of a particular class-e.g., whether collaboration on assignments is permitted, requirements and methods for citing sources, if electronic aids are permitted or prohibited during an exam

Makeup Work for Legitimate Absences:

Students will not be penalized for absence during the semester due to unavoidable or legitimate circumstances. Such circumstances include verified illness, participation in intercollegiate athletic events, subpoenas, jury duty, military service, bereavement, and religious observances. Such circumstances do not include voting in local, state, or national elections. For complete information, please see:

<http://policy.umn.edu/Policies/Education/Education/MAKEUPWORK.html>.

Appropriate Student Use of Class Notes and Course Materials:

Taking notes is a means of recording information but more importantly of personally absorbing and integrating the educational experience. However, broadly disseminating class notes beyond the classroom community or accepting compensation for taking and distributing classroom notes undermines instructor interests in their intellectual work product while not substantially furthering instructor and student interests in effective learning. Such actions violate shared norms and standards of the academic community. For additional information, please see:

<http://policy.umn.edu/Policies/Education/Education/CLASSNOTESSTUDENTS.html>.

Grading and Transcripts:

The University utilizes plus and minus grading on a 4.000 cumulative grade point scale in accordance with the following:

- A 4.000 - Represents achievement that is outstanding relative to the level necessary to meet course requirements

- A- 3.667
- B+ 3.333
- B 3.000 - Represents achievement that is significantly above the level necessary to meet course requirements
- B- 2.667
- C+ 2.333
- C 2.000 - Represents achievement that meets the course requirements in every respect
- C- 1.667
- D+ 1.333
- D 1.000 - Represents achievement that is worthy of credit even though it fails to meet fully the course requirements
- S Represents achievement that is satisfactory, which is equivalent to a C- or better.

For additional information, please refer to:

<http://policy.umn.edu/Policies/Education/Education/GRADINGTRANSCRIPTS.html>.

Sexual Harassment

"Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature. Such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. Such behavior is not acceptable in the University setting. For additional information, please consult Board of Regents Policy:

<http://www1.umn.edu/regents/policies/humanresources/SexHarassment.html>

Equity, Diversity, Equal Opportunity, and Affirmative Action:

The University will provide equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. For more information, please consult Board of Regents Policy:

http://www1.umn.edu/regents/policies/administrative/Equity_Diversity_EO_AA.html.

Disability Accommodations:

The University is committed to providing quality education to all students regardless of ability. Determining appropriate disability accommodations is a collaborative process. You as a student must register with Disability Services and provide documentation of your disability. The course instructor must provide information regarding a course's content, methods, and essential components. The combination of this information will be used by Disability Services to determine appropriate accommodations for a particular student in a particular course. For more information, please reference Disability Services: <http://ds.umn.edu/student-services.html>.

Mental Health and Stress Management:

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance and may reduce your ability to participate in daily activities. University of Minnesota services are available to assist you. You can learn more about

the broad range of confidential mental health services available on campus via the Student Mental Health Website: <http://www.mentalhealth.umn.edu>.

Academic Freedom and Responsibility: *for courses that do not involve students in research*

Academic freedom is a cornerstone of the University. Within the scope and content of the course as defined by the instructor, it includes the freedom to discuss relevant matters in the classroom. Along with this freedom comes responsibility. Students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Students are free to take reasoned exception to the views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled.*

Reports of concerns about academic freedom are taken seriously, and there are individuals and offices available for help. Contact the instructor, the Department Chair, your adviser, the associate dean of the college, or the Vice Provost for Faculty and Academic Affairs in the Office of the Provost. [*Customize with names and contact information as appropriate for the course/college/campus.*]

** Language adapted from the American Association of University Professors "Joint Statement on Rights and Freedoms of Students".*

COURSE SCHEDULE — SPRING 2013
CI 5540: Life Science Education Conference

Friday, March 15, 2013 – Conference events

7:30 AM Registration opens

8:00 AM Breakfast Networking

8:30 AM **Morning Announcements & Keynote Address ‘Building Partnerships with Scientists & Educators’ Jay Labov**, Senior Advisor for Education and Communication for the National Academy of Sciences (NAS) and the National Research Council (NRC)

9:45 AM Break

10:00 AM Workshops, Presentations & Roundtables: Sessions 1

11:30 AM Lunch

12:30 PM Exhibit Hall Opening, Program & Careers Information & Technology Demonstrations

1:15 PM Workshops, Presentations & Roundtables: Sessions 2

2:45 PM Break

3:00 PM Workshops, Presentations & Roundtables: Sessions 3

4:30 PM

Keynote Panel: Digital Resources and Learning for the Future

What are the emerging opportunities for digital resources to support 21st Century Biology teaching and learning?

What are some innovative uses of digital technologies inside or outside of the biology classroom that can engage diverse learners?

How can data-enriched digital resources in organismal and environmental biology prepare students to participate in decision making on environmental challenges?

Panelists: **Sam Donovan**, University of Pittsburgh; Other panelists TBD.

5:45 PM Dinner

7:15 PM Evening Social Events

Saturday, March 16, 2013 – Conference events

7:30 AM Registration opens

8:00 AM Breakfast Networking

8:35 AM Morning Announcements

Keynote Panel: Building Pathways and Partnerships between K12 and College

What are barriers and opportunities to the of pathways between K12 and college?

What curriculum already works and changes are needed?

What types of teacher and faculty professional development are needed?

Panelists: **Jim MaKinster** Hobart and William Smith Colleges; **Kara Butterworth**, Clear Creek High School, CO; **Gillian Roehrig**, University of Minnesota

9:45 AM Break

10:00 AM Workshops, Presentations & Roundtables: Sessions 4

11:30 AM Lunch

12:30 PM Exhibit Hall Opening, Program & Careers Information & Technology Demonstrations

1:15 PM Workshops, Presentations & Roundtables: Sessions 5

2:45 PM Break

3:00 PM Workshops, Presentations & Roundtables: Sessions 6

4:30 PM **Keynote Address: ‘Science of Life in a Changing World’ Carlos Boteros**, North Carolina State University

5:45 PM Closing Reception