

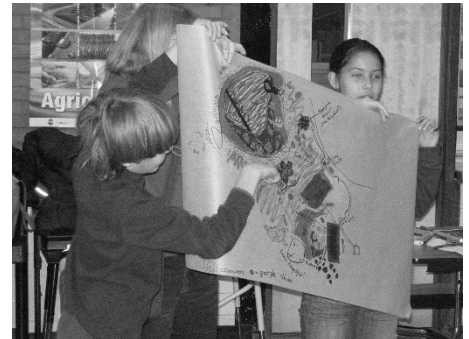
Sustainable Design Practice | Designing for and with Schools

ENVD 4363 – Course Syllabus – Spring 2016

Mondays at ENVD 213, 10:00-11:20 am

Wednesdays at Casey, 9:55-11:25 am

“The principle goal of education is to create men who are capable of doing new things, not simply repeating what other generations have done - men who are creative, inventive, and discoverers.”
- Jean Piaget



Instructor

Tori Derr, PhD

Email: victoria.derr@colorado.edu (best way to contact me)

Office Hours: Tuesday and Thursday, 12-1 pm or by appointment; ENVD 146

Course Description

This interdisciplinary course will investigate aspects of sustainable school design including food and energy systems, adaptive reuse and resourced materials, and participatory planning and design. The students enrolled in this course will have opportunities to explore their individual areas of interest in greater depth and to share their passions and expertise with middle school children through collaborative design activities. The course content areas will be woven into a cohesive, hands-on design process in collaboration with the students, faculty, and staff at Casey Middle School in the Boulder Valley School District. Through this course students will experience design processes “in the real world” as they put theory into action with the creation and delivery of participatory design activities at Casey Middle School.

Student Learning Objectives

Upon successful completion of the course, students will be able to:

- Define and articulate a personal philosophy regarding the role of the environmental design professions of architecture, landscape, and planning to effect positive social, ecological, and cultural change in educational environments for children.
- Understand the opportunities and limitations of participatory design and successfully apply participatory strategies in collaborative design projects with children.

- Incorporate key principles of sustainable design including healthy schoolyards, social equity, cradle to cradle, biophilia, and stewardship into hands-on design activities for middle school students
- Apply strategies of action research through the conception, design, implementation and evaluation of design-based learning activities

Logistics

This class will meet on Monday and Wednesday mornings from 9:55/10:00-11:20. Regularly scheduled classes will meet in ENVD 213. On assigned Wednesdays during the semester, the class will meet at Casey Middle School or other designated location. Students should plan to arrive a few minutes early and be ready to engage with the Casey students at 9:55 on these Wednesdays, and the class will finish at 11:25. **Casey Middle School is located at 1301 High Street one block east of Broadway and a few blocks north of the Pearl Street Mall.**

Students are responsible for providing their own transportation to Casey. Parking at Casey is limited. The SKIP RTD bus travels between campus and the school along Broadway every 10 minutes or so. Use of alternative transportation is encouraged.

Materials

With advanced planning and communication, some materials needed for design projects can be purchased through Casey Middle School and ENVD budgets. You may need to contribute some design materials and resources, but no more than a standard design course.

All students will need a dropbox.com account for file sharing. You do not need to pay for this service but can use the free service, which provides limited storage capacity.

All students will need to bring one 2-liter bottle to class on Wednesday, January 27th. These should be clear plastic bottles with caps.

Reading Materials

The Third Teacher by O'Donnell, Wicklund, Pigozzi, and Peterson is a required text. It is available from the CU Bookstore or on-line sellers.

All other readings will be assigned via Desire2Learn (D2L). Course reading materials from selected books and academic journals will provide the theoretical and practical underpinnings for in-class discussions, writing assignments, and activities at Casey Middle School. Fully engaged participation is expected of every student, every class period. This requires remaining current with readings and concurrent writing assignments. The writing assignments and class discussions provide structure to the critical analysis and construction of knowledge, and prepare students for the application of that knowledge with younger students. Students in the course will put theory into action through the creation and delivery of participatory design activities at Casey Middle School. Regular reflection upon these activities, through writing and discussion, will complete the cycle, allowing students to become "reflective practitioners."

Background Screening

Effective January 6, 2011, all adult volunteers in schools in the Boulder Valley School District must complete an online background screening at their own cost. The fee for the screening is approximately \$20.00. You must complete this screening prior to participating in any activities with the students at Casey Middle School. The online screening may be accessed at www.tclogiq.com/bvsdv. You will need your social security number and driver's license to complete

the screening application. Please print the confirmation page and bring it to class as proof that you have completed the screening.

Course Requirements and Assessments

Students enrolled in the course are expected to:

- Prompt and regular attendance. Active, respectful participation
- Read assigned readings and prepare for thoughtful engagement in class discussions
- Support their fellow students by completing assignments and being prepared for Casey work
- Navigate the Desire2Learn (D2L) website to access course readings, assignments and resources and monitor grades. NOTE: Deadline and assignment deadlines are firm; readings and topics may shift and will be noted on D2L. It is the students' responsibility to follow any changes to the syllabus as noted on D2L.
- Follow the university's policies (noted at end of syllabus)
- Communicate with the instructor via office hours or email: victoria.derr@colorado.edu

Grades will be posted on Desire2Learn as they are assigned throughout the semester.

Attendance & Participation	20%
Education Timelines	10%
Reflection Papers (5 @ 5% each)	25%
Design Module 1 (energy)	15%
Design Module 2 (growing)	15%
Final Paper	15%

Weekly Schedule & Assignments

This is a community-based learning course. All assignments and readings are subject to change due to the collaborative and somewhat unpredictable nature of the course. Please check D2L and your email often for any changes to the schedule. Major assignments and reflection paper dates will likely not change, and if they do, assignments will be pushed back only, with discussion in class prior to this decision.

Week	Date	Topic	Notes and Assignments
1	Mon, Jan 11	Introduction	Read <i>The Third Teacher</i> , 1-20
1	Wed, Jan 13	In Class Film: <i>If You Build It</i>	Read <i>The Third Teacher</i> , 21-40
2	Mon, Jan 18	No Class: Martin Luther King, Jr. Day	Read <i>The Third Teacher</i> , 41-79
2	Wed, Jan 20	At Casey icebreakers, City as Play method	Class at Casey
3	Mon, Jan 25	At ENVD	Personal Education Timelines Due. Bring Print Copy to Pin Up.
3	Wed, Jan 27	At Casey: bottle biology; biotic and abiotic systems	Bring a 2-liter bottle to Casey Read <i>Bottle Biology</i> and be prepared to facilitate activity

4	Mon, Feb 1	At ENVD	Reflection #1 Due Read <i>Green Schools</i> article + <i>Why Do I Like You</i>
4	Wed, Feb 3	At Casey: Guest speaker, learn about LEED and do building tour. Take notes for infographic	
5	Mon, Feb 8	At ENVD	Reflection #2 Due Read Cole, <i>Teaching Green School Building</i> + Read Hulleman and Harackiewicz, <i>Promoting Interest in HS Science</i>
5	Wed, Feb 10	At Casey: Infographics about Casey's sustainability features	
6	Mon, Feb 15	At ENVD	Read <i>Design Thinking Toolkit</i> + Find one innovative energy design using simple tools
,6	Wed, Feb 17	At Casey: energy model creations	
7	Mon, Feb 22	At ENVD	Reflection #3 Due Read <i>Ecology and Democracy as if Children Mattered</i> + <i>A City for All Citizens</i>
7	Wed, Feb 24	At Casey: energy/climate talk with City of Boulder	
8	Mon, Feb 29	At ENVD	Design Module 1 Report Due
8	Wed, Mar 2	At Casey: Field trip to Growing Gardens	
9	Mon, Mar 7	At ENVD	Reflection #4 Due Read Astbury: <i>Interactive Urban Landscapes</i>
9	Wed, Mar 9	At Casey: Indoor food production, design	
10	Mon, Mar 14	At ENVD	Read Lozanovska and Xu: <i>Children and university</i>

architecture students working together.

10	Wed, Mar 16	At Casey: ReSource field trip	
11	Mon, Mar 21	Spring Break	
11	Wed, Mar 23	Spring Break	
12	Mon, Mar 28	At ENVD	Reflection #5 Due Read Wake, <i>Designed for Learning</i>
12	Wed, Mar 30	At Casey: Indoor food systems	
13	Mon, Apr 4	At ENVD	
13	Wed, Apr 6	At Casey: Indoor food systems	
14	Mon, Apr 11	At ENVD	Design Module 2 Report Due
14	Wed, Apr 13	At Casey: Sustainability mural + video	
15	Mon, Apr 18	At ENVD	
15	Wed, Apr 20	At Casey: Sustainability mural + video	
16	Mon, Apr 25	At ENVD	
16	Wed, Apr 27	At Casey: Finish and hang sustainability mural + video	
17	Scheduled Final Exam Period (TBD)		Final Report Due

COURSE POLICIES

Attendance & Participation

On-going active involvement in all discussions and class activities will comprise ½ the participation grade. Attendance will be taken and will constitute ½ of the participation grade. Because of the critical importance of attendance on days when we are at Casey Middle School, unexcused absences on these days will count as two absences.

Deadlines

Written assignments are due at the beginning of class by hard copy and electronically via Desire2Learn just prior to the start of class. Late assignments will be accepted with written documentation from a doctor or other authority that you were incapable of meeting the deadline. All assignments must be submitted through D2L and a hard copy provided in class for written assignments. Plagiarism checkers will be used through D2L. Students are responsible for monitoring the posting of grades for assignments that they have handed in and should notify the professor immediately of missing or incorrect grades. The deadline for bringing missing grades to the professor's attention is April 29, 2016.

Class Conduct

Students are expected to behave in a professional and respectful manner in class. No use of electronic devices (phones, tablets, laptops, etc.) is permitted during the class period. Students who use these devices will be considered absent for that day. Respectful and professional participation is expected in all classes. This is particularly important in representing our program and the university at Casey Middle School.

Final Grade Calculation

Grades will be based on the following scale:

A	95-100%	B-	80-83%	D+	67-69%
A-	90-94%	C+	77-79%	D	64-66%
B+	87-89%	C	74-76%	D-	60-63%
B	84-86%	C-	70-73%	F	59% or lower

University Policies

1. **Disabilities** – If you qualify for accommodations because of a disability, please submit a letter to the instructor from Disability Services in a timely manner (for exam accommodation, provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at [303-492-8671](tel:303-492-8671) or by e-mail at dsinfo@colorado.edu. If you have a temporary medical condition or injury, see Temporary Medical Conditions: Injuries, Surgeries, and Illnesses guidelines under Quick Links at Disability Services website and discuss your needs with your professor.

2. **Religious Observance** – Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. Please inform your professor in a timely manner so that any necessary alternative arrangements may be made. See policy details at http://www.colorado.edu/policies/fac_relig.html.

3. Learning environment – Students and faculty each have responsibility for maintaining an appropriate learning environment. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, color, culture, religion, creed, politics, veteran's status, sexual orientation, gender, gender identity and gender expression, age, disability, and nationalities. Class rosters are provided to the instructor with the student's legal name. I will gladly honor your request to address you by an alternate name or gender pronoun. Please advise me of this preference early in the semester so that I may make appropriate changes to my records. See policies at <http://www.colorado.edu/policies/classbehavior.html> and at http://www.colorado.edu/studentaffairs/judicialaffairs/code.html#student_code.

The University of Colorado Boulder (CU-Boulder) is committed to maintaining a positive learning, working, and living environment. The University of Colorado does not discriminate on the basis of race, color, national origin, sex, age, disability, creed, religion, sexual orientation, or veteran status in admission and access to, and treatment and employment in, its educational programs and activities. (Regent Law, Article 10, amended 11/8/2001). CU-Boulder will not tolerate acts of discrimination or harassment based upon Protected Classes or related retaliation against or by any employee or student. For purposes of this CU-Boulder policy, "Protected Classes" refers to race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, or veteran status. Individuals who believe they have been discriminated against should contact the Office of Discrimination and Harassment (ODH) at [303-492-2127](tel:303-492-2127) or the Office of Student Conduct (OSC) at [303-492-5550](tel:303-492-5550). Information about the ODH, the above referenced policies, and the campus resources available to assist individuals regarding discrimination or harassment can be obtained at <http://www.colorado.edu/odh>.

4. Academic honesty & plagiarism – All students of the University of Colorado at Boulder are responsible for knowing and adhering to the academic integrity policy of this institution. Violations of this policy may include: cheating, plagiarism, aid of academic dishonesty, fabrication, lying, bribery, and threatening behavior. All incidents of academic misconduct shall be reported to the Honor Code Council (honor@colorado.edu; [303-735-2273](tel:303-735-2273)). Students who are found to be in violation of the academic integrity policy will be subject to both academic sanctions from the faculty member and non-academic sanctions (including but not limited to university probation, suspension, or expulsion). Other information on the Honor Code can be found at <http://www.colorado.edu/policies/honor.html> and at <http://www.colorado.edu/academics/honorcode/>.