

SYLLABUS
ISE 870: Teaching College Science
SPRING Semester 2020, NORTH KEDZIE N125, Mon 11:30am-1:20pm
Dr. Julie Libarkin; libarkin@msu.edu

Please see me as soon as possible if you will be traveling out of town or if you need any accommodation/adaptation for this course. This includes enhancing access for people with disabilities, using preferred pronouns, accommodating family needs, identifying resources for non-academic needs (such as housing or food), etc. The earlier we discuss your needs, the more likely I will be able to accommodate/adapt to them and/or help you find resources. With the right resources, everyone can succeed. See the last page of the syllabus for more details.

DESCRIPTION

This course will introduce students to the theory and practice of teaching in higher education, with a specific focus on science. Students will be able to use an understanding of how people learn, the basics of curriculum design, and a range of teaching and assessment strategies and instructional technology to plan for, teach, and analyze effective science teaching. In addition, students will discuss the roles and responsibilities of teaching within the university setting. Abstract concepts will be applied in hands-on activities and research.

COURSE OBJECTIVES

Students will:

1. Become familiar with theories of learning, teaching, and student development;
2. Understand the wide range of teaching approaches;
3. Incorporate concepts of bias and equity into thinking about teaching;
4. Work collaboratively to examine course concepts and review each other's work.
5. Synthesize learning through creation of a teaching portfolio.

WEEKLY FORMAT

Course work will be split into five areas each week:

1. Reading or Writing – to be done prior to class
2. Discussion – led online and in class by that week's discussion leader(s)
3. Lecture – kept as brief as possible
4. Activity – done in class; individual, in small groups, or as a whole class
5. Teaching Portfolio – primarily done out of class

ASSIGNMENTS

All assignments for this course build toward one final product: a teaching portfolio. Unless otherwise noted, all assignments will be: 1) due by 11:59 PM on Fridays and 2) turned in though D2L.

Grading:

All assignments will be graded on a 10-point scale, with the relative contribution of different assignments to your final grade broken out below. I understand that for most of you this will be your first time working on a course portfolio. Your best effort will always earn you 10/10.

1. Weekly assignments: 30%
2. In-class discussion & leadership: 30%
3. Submitted Teaching Portfolio: 40%

Specific Expectations:

- Do your best to produce high-quality work, although you are not expected to “know” how to teach. Simply try!
- Consider this course an opportunity to learn how to collaborate with your colleagues, by providing the sort of feedback on their portfolios that you hope to get for yours.
- When “drafts” of portfolio sections or reviews of other portfolios are due, consider this a “final draft.” A final draft is your best effort, free of grammatical and formatting errors. This doesn’t mean you can’t revise these for your final product, of course! You will then be well on your way to a final teaching portfolio.

TEXT

All readings will be made available on D2L.

IN-CLASS DISCUSSION & LEADERSHIP

Class time will primarily consist of discussion and interactive group work, with very little formal lecturing. As a result, more emphasis is placed on you to prepare for and participate in online and in-class discussions. Successful teaching portfolios – particularly in a form useful for job applications – require each member to both participate and contribute. Each week one student will serve as a discussion leader. Discussion leaders are responsible for guiding the online and in-class discussion based on the week’s topic and readings, including encouraging full participation of other students.

GENERAL COURSE POLICIES

Let Me Know Who You Are: I have a course list that the registrar has provided. This list contains your official names. We will all introduce ourselves at the beginning of the semester. Please let the class know how you prefer to be addressed as well as anything else you think it is important to know about you.

Attendance Policy: Attendance is not required. However, the course will move quickly over a broad range of topics and missing class may leave you unprepared for the assignments and lead to a lower in-class discussion and leadership grade. As we will spend a portion of class collaboratively working on your teaching portfolios, your absence may impact your overall progress towards your submitted materials. That being said, traveling to present at a conference or conduct research is a necessary part of advanced undergraduate and graduate school. If you are going out of town or need to miss a class, please let me know as soon as possible.

Late Policy: Assignments in this class should be treated as deadlines, where missing one deadline creates additional complications in meeting the next deadline. Do not miss a deadline. Mark deadlines on your calendar at the beginning of the semester and plan ahead.

Academic Honesty: **The university policy on academic honesty will be followed when dealing with integrity issues in class.** I encourage you to work with the other students in the class as you read the assigned articles and search the literature. However, your assignments must be written in your own words. Copying material from any source (online or otherwise) without citation will be considered plagiarism. Students (and faculty!) often misunderstand plagiarism; therefore, please refresh your understanding before doing any writing for this course. See this site for MSU guidance: <https://msu.edu/unit/ombud/academic-integrity/plagiarism-policy.html>

TENTATIVE CLASS SCHEDULE

*All readings are available in D2L and are tentative as listed

*Weekly online discussion posts and engagement as well as assignments are due on due date

*All assignments are due to D2L at **11:59 PM** on **FRIDAYS**

DATE (Mon.)	TOPIC	OBJECTIVES (students will...) and LABS (brief description)	ASSIGNMENTS	DUE DATE (Fri)
Jan. 6	<i>Class 1. Introductions, Overview of Teaching in Higher Education</i>	<ul style="list-style-type: none"> Learn about course participants Understand course objectives and expectations Recognize theories of learning/teaching and student development 	No assignment	none
Jan. 13	<i>Class 2. Learning/Teaching, Student Development Theories</i>	<ul style="list-style-type: none"> Become familiar with theories LAB: Theory activity	READ/DISCUSS: Long, 2012; Berkeley - Learning Theories	1/10
Jan. 20	<i>NO CLASS – Martin Luther King Holiday</i>			
Jan. 27	<i>Class 3. Backward Design</i>	<ul style="list-style-type: none"> Analyze, write affect/behavior/cognition objectives Outline assessments/instruction targeting objectives LAB: Aligning objectives-assessments-lessons	READ/DISCUSS: Social Psychology; Wiggins & McTighe	1/24
Feb. 3	<i>Class 4. Conceptions, Beliefs/Attitudes, Behavior</i>	<ul style="list-style-type: none"> Reflect on own knowledge, beliefs, behaviors Practice unpacking student thinking LAB: Identifying student ideas	READ/DISCUSS: <u>Knowing What Students Know</u> Ch 2.	1/31
Feb. 10	<i>Class 5. Instructor-Centered and Student-Centered Teaching</i>	<ul style="list-style-type: none"> Understand range of instructional approaches Identify approaches that fit your style LAB: Teaching Statements	READ/DISCUSS: Teach.com Teaching Methods; Vanderbilt Teaching Statements	2/7
Feb. 17	<i>Class 6. Looking at Teaching</i>	<ul style="list-style-type: none"> Evaluate different teaching spaces (class, lab, field, technological) LAB: Observing a Course	READ/DISCUSS: Claiborne et al.; Vahala & Winston, 1994	2/14
Feb. 24	<i>Class 7. Inclusive Teaching and Effective Communication</i>	<ul style="list-style-type: none"> Recognize importance of inclusivity in “teaching for all” Identify approaches that fit your style LAB: Case Studies	READ/DISCUSS: Sathy and Hogan, 2019; Prozesky, 2000 DUE: Sample Syllabus	2/21
Mar. 2	<i>NO CLASS – SPRING BREAK</i>			
Mar. 9	<i>Class 8. Practicing Teaching</i>	<ul style="list-style-type: none"> Generate and present a sample lesson Analyze your colleagues’ lessons LAB: Teaching Practicum	READ: University of Buffalo DUE: Sample Lesson	3/6
Mar. 16	<i>Class 9. Systemic Bias in Higher Education and Faculty Responsibilities</i>	<ul style="list-style-type: none"> Evaluate individual bias and bias in higher education system Recognize responsibilities LAB: TBA	READ/DISCUSS: TBA DUE: Draft Teaching Statement	3/13
Mar. 23	<i>Class 10. Teaching Panel Q&A</i>	<ul style="list-style-type: none"> Interact with experts in teaching-centered, student-centered, and online teaching 	READ/DISCUSS: NAS, 1997 (supplement) DUE: 3 Questions for Panel	3/20
Mar. 30	<i>Class 11. Class Choice – You Decide!</i>	<ul style="list-style-type: none"> TBA – class decides! 	READ/DISCUSS: TBA DUE: Portfolios	3/27
Apr. 6	<i>Class 12. Portfolio Critiques</i>	<ul style="list-style-type: none"> Present and evaluate teaching portfolios 	READ: Portfolios DUE: Portfolio Reviews	4/3
Apr. 13	<i>Class 13. Portfolio Critiques; LAST CLASS</i>	<ul style="list-style-type: none"> Present and evaluate teaching portfolios 	READ: Portfolios DUE: Portfolio Reviews	4/10
Apr. 20	<i>No Final</i>	<ul style="list-style-type: none"> Incorporate reviews into revised teaching portfolios 	DUE: Revised Portfolios	4/19