



# LOYOLA UNIVERSITY CHICAGO

*Preparing people to lead extraordinary lives*

## **TLSC 450: Teaching and Learning in Secondary Science Sequence 6: Integrating Content, Cultures and Communities**

*Teaching, Learning, and Leading with Schools and Communities*

School of Education, Loyola University Chicago

Academic Year: Fall Semester 2017

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### **Instructor Information**

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Office hours: Before and after class or by appointment

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### **Module Information**

- Dates: October 16 – November 10, 2017
  - Days: Monday, Wednesday, Friday
  - Time: 8am – 12pm
  - On Campus Location: Cudahy Science 314
  - School Site: Nicholas Senn High School, 5900 N Glenwood Ave, Chicago, IL 60660
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### **Module Description**

Teacher candidates further develop their understanding and application of designing instruction in area of specialization. Teacher candidates observe classrooms that utilize UbD and interview a cooperating teacher educator about his/her use of UbD as a framework for teaching. Candidates focus on connecting content to students' lives and interview two to three students to ascertain how they make meaning out of context in connection with their lives. Teacher candidates then observe how teachers include reading, writing, listening, speaking, and viewing in their instruction of content and how they differentiate instruction using suggested strategies in the UDL guidelines checklist. Teacher candidates develop a five lesson content unit and assessment plan.

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## Module Goals

### Essential Questions:

- How does backward design facilitate deep learning of content and skills?
- How do students most effectively acquire skills within a specific content area?
- How can the use of data facilitate students' acquisition of content and skills?
- How can students utilize technology to support and deepen their learning in a particular content area?
- How do students use their literacy skills to acquire knowledge and skills within a content area?
- How do students become actively engaged in learning and self-assessment?

### As a part of this module, candidates will understand that effective educators:

- Use research and evidence based practices to design instruction that included the alignment of goals, objectives, assessments and instructional strategies to meet the individual needs of students.
- Use data to drive instruction and assess teaching and learning effectiveness.
- Apply deep understanding of both content and pedagogy to provide the developmentally appropriate instruction to all students.
- Explicitly integrate the teaching of reading, writing, communication and technology across content areas.

### As a part of this module, candidates will:

- Incorporate research and evidence based practices into the design of instruction (e.g. UbD, IB, SIOP, and UDL). (5S;9A) (IB)
- Use standards based curriculum maps (e.g. UbD) to design units and lessons to meet the needs of diverse learners. (3Q; 3I) (IB)
- Design a standards based instructional unit that uses backward design (e.g. UbD) to align objectives and assessments and instructional practices based on high expectations for each students' learning and behavior. (3H; 3I) (IB)
- Select relevant instructional content, materials, resources and strategies for differentiated and universally designed instruction. (3Q;5O) (IB)
- Use assessment strategies and devices that are non-discriminatory, and take into consideration the impact of disabilities, methods of communication, cultural background, and primary language on measuring knowledge and performance of students. (7R) (IB)
- Use data to differentiate assessments to meet the needs of diverse learners. (1H;3J;5P) (IB)
- Monitors and adjusts strategies in response to qualitative feedback from students and student performance. (3M;5J;5P) (IB)
- Analyze and use student information to design instruction that meets the diverse needs of students and leads to ongoing growth and achievement. (1H) (IB)
- Use data to plan for differentiated instruction to allow for variations in individual learning needs. (3J) (IB)
- Make data driven decisions using assessment results to adjust practices to meet the needs of each student (5P) (IB)

- Use assessment data, student work samples, and observations from continuous monitoring of student progress to plan and evaluate effective content area reading, writing, and oral communication instruction. (6H)
- Utilize a variety of technological tools and skills to support literacy instruction and personal communication skills, including but not limited to computers, cameras, interactive web sites, blogs, online research. (2F;2L;2O;5N;5O;9S;9T)

## IDEA Objectives

As a part of this experience, candidates will:

- Gain factual knowledge (methods)
- Learn to apply course materials
- Develop specific skills, competencies and points of view needed by professionals in the field.

## Conceptual Framework and Conceptual Framework Standards

The Loyola School of Education Conceptual Framework states that: Our mission is social justice, but our responsibility is social action through education. The following Conceptual Framework Standards (CFS) are assessed in this course:

- CFS1: Candidates critically evaluate current bodies of knowledge in their field.

This course module focuses on current bodies of knowledge in the field of Science Education. Candidates must demonstrate understanding of the Framework for K-12 Science Education and the Next Generation Science Standards, as well as current literature. They will also critically evaluate curriculum and instructional practices in a variety of classroom and community settings, with a focus on equity.

## Dispositions Assessment

Each course in the school of education focuses on one or more professional dispositions. Students are offered opportunities to receive feedback on their dispositional growth. The following rubric is used to assess dispositional growth in the areas listed:

	Target (0 pt)	Acceptable (0 pt)	Unacceptable (0 pt)
Demonstrating professionalism through personal responsibility and accountability related to attendance, participation and communication. (1.000, 100%) IL-LUC-DISP.1	Candidates report to class or field sites early, are dressed in professional attire, and are prepared for course activities. Candidates proactively communicate to faculty and others directly impacted about potential issues of attendance, participation or assignments, and provide solutions to address the issue or attempt to resolve the issue independently. Candidates use appropriate tone, word choice, and etiquette when interacting with faculty, co-teachers, peers, and students.	Candidates report to class or field sites on time, are dressed in professional attire, and are prepared for the activities of the course as described in the syllabus. Candidates initiate communication with faculty and others directly impacted when an issue of attendance, participation or assignments arises, accept constructive feedback and initiate changes to improve performance. Candidates use appropriate tone, word choice, and etiquette when interacting with faculty, co-teachers, peers, and students.	Candidates repeatedly report to class or field sites late, or fail to make up absences, are dressed unprofessionally, or are repeatedly unprepared for class activities. Candidates do not respond to faculty communication concerning issues of attendance, participation or assignments within 48 hours, and/or use inappropriate tone, word choice and etiquette when interacting with faculty, co-teachers, peers, or students.
Demonstrating that teaching is a complex	Candidates contribute to and support school-wide efforts to change	Candidates question inequities in classroom practices and adopt practices	Candidates only communicate that teaching requires them to take both

practice with inherently political and ethical implications IL-LUC-DISP.2	ineffective or unjust practices	that creates opportunities for all students and use the ethical guidelines of conduct matching	ethical and political stances in their practice, but fail to take action
Engaging in advocacy efforts grounded in ethical convictions that promote social justice and affect policy design and implementation IL-LUC-DISP.2	Candidates make efforts to contribute to and support school-wide efforts to change ineffective or unjust practices	Candidates question inequities in classroom practices and adopt practices that creates opportunities for all students	Candidates only communicate that teachers must advocate for and act upon convictions to promote social justice
Valuing diversity and advocating for all students, particularly those from populations that are historically disenfranchised, underserved and/or overrepresented (including, but not limited to race, ethnicity, culture, language, SES, immigration status, exceptionality, ability, sexual orientation, gender, gender identity). IL-LUC-DISP.3	Candidates contribute to and support school-wide efforts to promote diversity and advocate for populations who are underserved and/or overrepresented	Candidates engage in practices that emphasize the strengths of diverse populations	Candidates only communicate that teachers need to value student diversity or only focus on student deficits
Valuing and promoting curiosity, creativity, and life-long learning in students IL-LUC-DISP.3	Candidates subscribe to the philosophy that creativity and curiosity facilitates learning and assume responsibility for facilitating instructional activities that foster students' creativity and curiosity	Candidates consider creativity and curiosity to be important learning outcomes and employ instructional opportunities that guide students in developing a curiosity in learning and endorse students' creativity	Candidates recognize that creativity and curiosity play a role in learning, but fail to develop instructional opportunities that allow for curiosity and creativity
Demonstrating the critical importance and need for teacher leadership in and across classrooms, schools, districts, communities, and in local, national and international educational organizations IL-LUC-DISP.1	Candidates aid in developing an effort to enhance the education profession	Candidates join in opportunities that contribute to the education profession (i.e. engage in school change efforts, community programs, participate in professional organizations)	Candidates communicate in writing or orally the importance of teachers' perspectives in the profession of education, but fail to engage in opportunities to contribute to the profession

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## Attendance

- Candidates are expected to attend every module session for the scheduled duration as to maintain consistency for students and school professionals. Ask your professor and cooperating classroom teachers(s) how they wish to be contacted regarding any special circumstances. Make arrangements and notify everyone involved before a scheduled absence.
  - Inform your professor and classroom teachers(s) ahead of time by phone message or e-mail if you must be absent. If there is an emergency, contact your professor as soon as reasonably possible afterward.
  - Assignments are due on the dates listed on the course calendar unless permission to hand them in late is granted. Be sure to follow the policies of your specific professor of each module as it related to policies on assignments. Technology glitches are not an excuse for late work, so please plan ahead.
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## Participation

Candidates are expected to attend all classes, demonstrate a professional attitude and demeanor, arrive promptly to learning sites, come prepared for class with assignments and required class materials, contribute constructively to the class, integrate readings into class assignments and activities, listen respectfully and incorporate and build from others' ideas. Participation will make up 10% of your final grade for each module and be determined using the rubric in LiveText.

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## Required Readings/Texts

- Wiggins, G. & McTighe, J. (2004). *Understanding by Design Professional Development Workbook*: Alexandria, VA; Association for Supervision and Curriculum Development.
  - Other required readings and resources will be posted on the Sakai site for the course.
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## LiveText

All students, except those who are non-degree, must have access to LiveText to complete the benchmark assessments aligned to the Conceptual Framework Standards and all other accreditation, school-wide and/or program-wide related assessments. You can access more information on LiveText here: [LiveText](#)

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## Module Assignments:

*More information will be posted on the Course Calendar and in Sakai. These are subject to change.*

## Content Specific, Standards-Aligned Curriculum Unit – 30% of Final Grade

Candidates will develop a standards-based unit using the *Understanding by Design* framework. The unit must include a three-week learning plan that outlines the schedule of topics and learning activities. This unit will be constructed gradually over the course module.

## Science Assessment Plan: 30% of Final Grade

You will create a comprehensive formative assessment plan focused on eliciting student ideas about scientific phenomena, engaging in authentic disciplinary discourse, and building deep understanding. The assessment plan should monitor student progress toward the UBD unit's learning goals(s). Candidates should utilize learning goals/enduring understandings as a guide. Student learning should be assessed before, during, and after instruction.

## Closing Thoughts/ Reflective Journals - 20% of Final Grade

Candidates will complete closing thoughts at the end of each class session. Candidates will also complete weekly reflective journals based on their experiences in the classroom. Journal entries should be 500 words or more in length. Journal entries should make specific reference to site observations as well as meaningful connections to course readings and discussions.

### **Module Participation – 10% Final Grade**

Candidates are expected to consistently and actively participate in all class activities and discussions. Since much of this module takes place in schools, candidates are expected to dress and act professionally. They must arrive on time and stay for the duration of the class session. Class sessions will build directly on assigned readings; candidates must come to class having read *and taken notes on* all assigned texts and articles.

### **Sequence Summative Assessment – 10% of Final Grade**

After completing the modules in this sequence, teacher candidates will apply their understanding of the research and practice in their area of specialization to design a year-long curriculum plan for a specific age or grade-level or course within a particular content area that includes interdisciplinary connections and the integration of technology. The curriculum plan will include a description of the content and skill focus, required materials including text and technology resources, classroom expectations, a comprehensive assessment plan and a full description of the overall course summative assessment(s). The plan will also include a year-long calendar with unit descriptions, unit standards, and descriptions of unit summative assessments.

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### **REQUIREMENTS FOR ALL WRITTEN ASSIGNMENTS**

- Unless otherwise instructed, all written assignments completed outside of class must be double spaced, with one inch margins, word-processed in Times New Roman, 12 point font, and saved electronically.
- Unless otherwise noted, all assignments should be submitted via LiveText.
- Uploaded files must be named using the following format: **LastName\_AssignmentName**
- When quoting or paraphrasing course readings, please use in-text citations, also known as parenthetical citations (Author, Date, Page). You will not need a full reference list, since these are course readings.
- Other references should be cited where applicable, following American Psychological Association style guidelines (APA – 6th edition). Please access the APA style manual through Loyola libraries or online at <http://www.apastyle.org>
- Written assignments will be graded for accurate mechanics and English grammar usage as well as thoughtful, pertinent, and clear content. Please take advantage of the Loyola Writing Center for assistance. <http://www.luc.edu/writing/>

***Assignments must be submitted on time. You will be penalized for any late work. If an emergency situation arises you must e-mail me before the assignment is due. Technology issues, however, are not an excuse for late work.***

## Grading Policy and Scale

The final grade is based upon the completion of course requirements, as weighted below and following this scale:

93% - 100%	A	87% - 89%	B+	77% - 79%	C+	67% - 69%	D+
90% - 92%	A-	83% - 86%	B	73% - 76%	C	63% - 66%	D
		80% - 82%	B-	70% - 72%	C-	62% and Below	F

### Loyola University Chicago School of Education Syllabus Addendum

#### **IDEA Course Evaluation Link for Students**

Each course you take in the School of Education is evaluated through the IDEA Campus Labs system. We ask that when you receive an email alerting you that the evaluation is available that you promptly complete it. To learn more about IDEA or to access the website directly to complete your course evaluation go to: <http://luc.edu/idea/> and click on **STUDENT IDEA LOGIN** on the left hand side of the page.

#### **Dispositions**

All students are assessed on one or more dispositional areas of growth across our programs: **Professionalism, Inquiry, and Social Justice**. The instructor in your course will identify the dispositions assessed in this course and you can find the rubrics related to these dispositions in LiveText. *For those students in non-degree programs, the rubric for dispositions may be available through Sakai, TaskStream or another platform.* Disposition data is reviewed by program faculty on a regular basis. This allows faculty to work with students to develop throughout their program and address any issues as they arise.

#### **LiveText**

All students, *except those who are non-degree*, must have access to LiveText to complete the benchmark assessments aligned to the Conceptual Framework Standards and all other accreditation, school-wide and/or program-wide related assessments. You can access more information on LiveText here: [LiveText](#).

#### **Syllabus Addendum Link**

- [www.luc.edu/education/syllabus-addendum/](http://www.luc.edu/education/syllabus-addendum/)

This link directs students to statements on essential policies regarding *academic honesty, accessibility, ethics line reporting* and *electronic communication policies and guidelines*. We ask that you read each policy carefully.

This link will also bring you to the full text of our conceptual framework that guides the work of the School of Education – **Social Action through Education**.