



*Department of Curriculum and Pedagogy*

## **EDUC 451B 305 (3): Inquiry Seminar II: Design and Technology Education Winter 2 2016**

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**WWW:** <http://blogs.ubc.ca/dandt>

### **COURSE DESCRIPTION**

Inquiry is understood as a deliberate, sustained and systematic process—beyond the everyday reflection required in teaching. Professionals explore what they do and how they do it; it involves sharing one's inquiries with colleagues. It involves classroom teachers, individually and collectively, in a cycle of action, reflection, sharing and adaptation. Teachers are given opportunities for practice, and to address challenges and issues that arise through discussion and reflection, try out new or revised practices, and evaluate the results. The cycle then begins anew based on the outcomes, responses, and possibilities emerging from the inquiry.

### **EDUC 450, 451, 452: Inquiry Seminars**

The inquiry process across the BEd (Secondary) program consists of:

1. Teacher inquiry & support, preparation towards project (EDUC 450 – Inquiry I)
2. Refining and sharing the inquiry project; links to practice (EDUC 451 – Inquiry II)
3. Reflecting, links to practice, ongoing questions and learning over the year (EDUC 452 – Inquiry III)

### **COURSE OBJECTIVES**

Upon completion of this course, the student should have developed:

1. an anticipation of the new BC curriculum; specifically, the Applied Design, Skills, and Technologies curriculum.
2. knowledge and skills necessary to preparing and planning curriculum (i.e., unit + lesson plans for the Practicum).
3. knowledge and skills relevant to teacher inquiry (i.e., resolution of an inquiry project).

### **Texts for EDUC 451B:**

**Required:** Petrina, S. (2007). *Advanced teaching methods for the technology classroom*. Hershey, PA: Information Science Publishing. <http://blogs.ubc.ca/dandt/files/2014/07/Petrina2007.pdf>

**Resources & Readings:** Download at <http://blogs.ubc.ca/dandt>

## ASSESSMENT AND MARKS / ASSIGNMENTS (see details below):

Assignment	Due Date:	Percentage
1. Class participation (in-class)	Ongoing	15%
2. e-Portfolio / blog	Ongoing	15%
3. Unit & Lesson Planning for Practicum	January 27	35%
4. Inquiry Project	January 27	35%

### PASS/ FAIL:

<b>Pass</b>	From average to outstanding in all aspects of course. Average to excellent coverage of requirements for assignments. The assignments are coherent and comprehensive. Average to great examples are used to supplement ideas. Communication, demonstrations and presentations are of a high standard— the assignments look professional and are clean (nearly free of typos, few desk-top publishing problems, etc.). The formats followed adhere to the formats provided.
<b>Fail</b>	An inadequate and incomplete performance. Patchy coverage of criteria with omissions in certain areas. No attempt at meeting requirements. Little attempt at being comprehensive. Minimal effort following formats. Poor communication, demonstrations and presentations.

### POLICIES

Policies regarding attendance and missed or late assignments follows those recommended by the University and the Faculty of Education.

- **Attendance policy:** If you must miss a class, notify your instructor immediately. The nature of the Teacher Education Program is participatory. Teacher candidates who miss a significant amount of class time (i.e., more than 15% of course hours) are normally required to repeat the course. Teacher candidates are not able to proceed to practicum until all prior courses are successfully completed. See <http://teach.educ.ubc.ca/students/policies-and-guides/>
- **Academic Honesty and Standards, and Academic Freedom:** Please refer to *UBC Calendar 2015/2016* Policies and Regulations (Selected): <http://www.students.ubc.ca/calendar>
- **Academic Accommodation for Students with Disabilities:** Students with a disability who wish to have an academic accommodation should contact the Disability Resource Centre without delay (see UBC Policy #73, <http://www.universitycounsel.ubc.ca/files/2010/08/policy73.pdf>).

## COURSE OUTLINE

<b>Topic</b>	<b>Introduction and Updates (Jan 4)</b>
Guiding Questions	<ul style="list-style-type: none"> <li>What is this course about?</li> <li>What are the emphases?</li> </ul>
Activities	<ol style="list-style-type: none"> <li>Introduce syllabus               <ol style="list-style-type: none"> <li>Assignments and emphases</li> </ol> </li> <li>Review inquiry topics</li> </ol>
<b>Topic</b>	<b>Review and Planning (Jan 5)</b>
Guiding Questions	<ul style="list-style-type: none"> <li>What is the status of my planning for Practicum and the Inquiry Project?</li> </ul>
Activities	<ol style="list-style-type: none"> <li>Unit planning group activity</li> <li>Review blog &amp; e-Portfolio progress</li> </ol>
<b>Topic</b>	<b>Initial Inquiry planning and reporting (Jan 6)</b>
Guiding Questions	<ul style="list-style-type: none"> <li>What are the emphases of my inquiry?</li> <li>How shall I go about planning for my inquiry</li> </ul>
Activities	<ol style="list-style-type: none"> <li>Clarification of assignments</li> <li>Inquiry planning group activity</li> <li>Inquiry meetings with instructors</li> </ol>
<b>Topic</b>	<b>Refining Unit and Lesson Plans (Jan 7)</b>
Guiding Questions	<ul style="list-style-type: none"> <li>What resources are available for unit and lesson planning in technology education?</li> <li>How can we support each other as a community of technology educators?</li> </ul>
Activities	<ol style="list-style-type: none"> <li>Blogs and e-Portfolios cont'd (blogs.ubc.ca)</li> <li>Building shared database of unit and lesson plans</li> </ol>
<b>Topic</b>	<b>Working through the new BC curriculum part 1 (Jan 11)</b>
Guiding Questions:	<ul style="list-style-type: none"> <li>How does my inquiry relate to the new BC curriculum?</li> </ul>
Readings	<ol style="list-style-type: none"> <li>New draft curriculum: <a href="https://curriculum.gov.bc.ca/">https://curriculum.gov.bc.ca/</a></li> <li>BC Applied Design, Skills and Technologies Draft Framework: <a href="https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/pdf/applied-skills.pdf">https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/pdf/applied-skills.pdf</a></li> </ol>
Activities	<ol style="list-style-type: none"> <li>Inquiry cont'd</li> <li>Unit and lesson plans cont'd</li> </ol>
<b>Topic</b>	<b>Inquiry reflection part 1 (Jan 12)</b>
Guiding Questions:	<ul style="list-style-type: none"> <li>Why did I choose my inquiry topic?</li> <li>Why is my inquiry important?</li> </ul>
Activities	<ol style="list-style-type: none"> <li>Inquiry group brainstorming and feedback</li> </ol>
<b>Topic</b>	<b>Inquiry reflection part 2 (Jan 13)</b>
Guiding Questions	<ol style="list-style-type: none"> <li>Who is the potential audience or participants that will likely gain from my inquiry?</li> <li>What are several initial findings from research?</li> </ol>
<b>Activities / Assignment</b>	<b>Microteaching on Inquiry</b>
<b>Practicum Visit</b>	<b>Practicum School Visit: No Class (Jan 14) NO CLASS</b>
<b>Inquiry Day</b>	<b>Inquiry Day (Jan 18) Independent Inquiry</b>
<b>Topic</b>	<b>Working through the new BC curriculum part 2 (Jan 19)</b>
Guiding Questions	<ul style="list-style-type: none"> <li>What does collaborative design look like in the classroom?</li> <li>How can I infuse my unit plan with overarching themes and “Big Ideas”?</li> </ul>
Readings	<ol style="list-style-type: none"> <li>EmbARC Summer Design Academy: <a href="http://news.berkeley.edu/2015/07/30/building-better-bird-houses/">http://news.berkeley.edu/2015/07/30/building-better-bird-houses/</a></li> </ol>
Activities	<ol style="list-style-type: none"> <li>Identifying and connecting activity</li> <li>Questioning the unit plan</li> <li>Inquiry connections activity</li> </ol>

<b>Topic</b>	<b>Creating connections through design (Jan 20)</b>
Guiding Questions	<ul style="list-style-type: none"> <li>How does the design of my unit plan incorporate the motivations of the new BC curriculum?</li> </ul>
Activities	<ol style="list-style-type: none"> <li>Designing connections activity</li> <li>Inquiry cont'd</li> <li>Unit and lesson plans cont'd</li> </ol>
<b>Topic</b>	<b>How to teach and present your findings (Jan 21)</b>
Guiding Questions	<ul style="list-style-type: none"> <li>What are the performative aspects of teaching in front of a classroom?</li> <li>How to utilize design and technology to best teach or conduct a presentation?</li> </ul>
Activities	<ul style="list-style-type: none"> <li>Presentation seminar</li> </ul>
<b>Inquiry Day</b>	<b>Inquiry Day (Jan 25) Independent Inquiry</b>
<b>Topic</b>	<b>Final work session 1 (Jan 26)</b>
Activities	<ol style="list-style-type: none"> <li>Work on inquiry project</li> <li>Work on e-portfolios</li> </ol>
<b>Inquiry Presentations</b>	<b>Inquiry presentations (Jan 27)</b>
Activities	<ol style="list-style-type: none"> <li>Class presentations of Inquiry Project</li> </ol>
<b>Inquiry Presentations</b>	<b>Inquiry presentations (Jan 28) Last Day of Class + Final Planning for Practicum</b>
Activities	<ol style="list-style-type: none"> <li>Class presentations on Inquiry Project</li> <li><b>Final Planning for Practicum</b></li> </ol>

### Participation (Ongoing)

Participation is valued at 20% of your final grade. Participation is interdependent with **preparation** for each class, which involves **reading** (highlighting, pagination post-its, margin notes, comments & questions, etc.), **writing** and **speaking** (discussing, corresponding with peers, chat, etc.), **blogging** and **commenting** on classmates' blogs. **Challenges** also are expected to be completed and participated in on their due dates; presentations and assignments should be polished, **creative**, **unique**, and informative. (20%)

### Participation (15%)

Low-----Avg-----High  Appropriately and accurately participates in readings discussions, reflection, etc. F-----P  Level of participation in activities and group work is high quality and professional, etc. F-----P  Total: P / F
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### Blog and e-Portfolio [Due: Ongoing]

This assignment involves creating your own website using wordpress on <http://blogs.ubc.ca>. In this way, you may have a virtual classroom to store your resources (lesson plans, tutorials, CV, etc) that may then be used right away when you are teaching in the classroom environments. The e-portfolio also serves to document your participation in class, your progress and growth as a teacher, technological exemplar to be used for teaching students, and as portfolio to showcase to potential employers. You are expected to build and use the e-portfolio throughout the year. Your final and completed e-portfolio will be presented in Inquiry III during the summer term. The e-portfolio will include:

### e-Portfolio (15%)

Low-----Avg-----High

#### Is it Professional ?

Appropriate design – utilize various functions for professional presentation

F-----P

Personal Profile Page – short biography and teaching experiences

F-----P

Reflective practitioners – reflect back on inquiry class experiences; analyze own learning

F-----P

Total: P / F

#### **Inquiry Project [Due: 27 January]**

The inquiry project is driven by the teacher candidate's own questions, developing areas of interest or identified areas of need. The Inquiry Project should reflect an emerging ability to:

- engage substantively with a topic as reflected in careful reading of the literature and an understanding of significant issues, perspectives and assumptions,
- position oneself in relation to ideas discussed,
- consider educational issues critically,
- relate one's learning to curriculum and pedagogy.

Sharing one's inquiry project in a public forum, e.g., with colleagues, allows one to crystalize one's ideas, synthesize what has been learned through one's review of the literature, reflections and consultations as well as to situate oneself as a teacher candidate. The formats in which projects may be shared are varied. See the *EDUC 451 Inquiry Project Guide* for details.

#### **Practicum Unit Plan [Due: 27 January]**

Develop unit plans for two courses of units you will be teaching on Practicum.

**Format:** Customize the format provided in the Ministry's *Board/Authority Authorized Courses: Requirements and Procedures* (see example given). Download template from [http://www.bced.gov.bc.ca/graduation/board\\_authority\\_courses.htm](http://www.bced.gov.bc.ca/graduation/board_authority_courses.htm). MS Word format can be downloaded from [http://www2.gov.bc.ca/assets/gov/education/kindergarten-to-grade-12/support/baa\\_framework\\_template.doc](http://www2.gov.bc.ca/assets/gov/education/kindergarten-to-grade-12/support/baa_framework_template.doc).

1. Content Outline / Scope and Sequence + Planning Grid
  - a. What is the Content of the Course or Unit? Provide a scope and sequence of the content with a planning grid (see sample below)
2. PLOs + Big Ideas
  - a. What are the day-to-day PLOs? What are the big ideas? These can be incorporated into the planning grid.
3. Lesson Plans + PowerPoint slides, videos, etc.
  - a. How can I best organize my lessons and demonstrations? What media will I use to help present and demonstrate the lessons? Provide lesson plans for each formal demonstration, etc. Provide the slides that will be used to reinforce the lessons.
4. Activities, Projects, Procedures, etc. (Handouts / Downloads)
  - a. What activities and projects will be introduced? Provide the handouts or downloads that students will use.
5. Assessment (Rubrics, etc.)

- a. How will I assess quality participation and work? Provide the rubrics or other forms of assessment that will be used.
- 6. Learning Resources (List)
  - a. What resources will we draw from? List resources that are essential to the course or unit.

Sample Planning Grid:

<b>Grade 11</b>	<b>CAD</b>	<b>10 Hrs (Week 1-2)</b>
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Topic and Time	PLOs + Big Ideas	Activity	Assessment	Resources
Intro to CAD (1 Hour)	Students will: appreciate the precision and uses of CAD. Describe a CAD system.	Sample drawing manipulation	Observations	PowerPoint Intro
CAD file manipulation (1 Hour)	Open, close and save files	Simple CAD drawing exercise	Observations	CAD file handout
Etc.				

**Practicum Unit Plan**

Fail-----Pass

Content Outline / Scope and Sequence + Planning Grid

F-----P

PLOs + Big Ideas

F-----P

Lesson Plans + PowerPoint slides, videos, etc.

F-----P

Activities, Projects, Procedures, etc. (Handouts / Downloads)

F-----P

Assessment (Rubrics, etc.)

F-----P

Learning Resources (List)

F-----P

Is it Professional?

F-----P

Total: F / P