Course ID:	Course Title:		Fall 2017
CDPD 401	Design Thinking in the Elementary Classroom	Prerequisite:	
		Credits:	3

Class Information		Instructor Information		Important Dates	
Days:	M	Instructor:	Master in Education (minimum) PhD/EdD (preferred)	First day of classes:	
Time:	5:30-8:30	Email:		Last day to add/drop, or change to audit:	
Room:		Phone:		Last day to request revised exam:	
Lab/ Tutorial:		Office:		Last day to withdraw from course:	
		Office Hours:		Last day to apply for coursework extension:	
Final Exam:				Last day of classes:	

Course Description

An introduction to the theory and practical application of design thinking - interpretation, ideation, experimentation, research, and evolution of thinking - to creative instructional practice. Participants will consider the potential of design thinking strategies to foster student inquiry, Instruction will provide concrete, collaborative strategies for the application of design thinking stages resulting in the creation of classroom inquiries and tasks.

Expected Learning Outcomes

By the end of this course, students will be able to
- *Recognize* opportunities to foster authentic creativity in teaching practices and learner outcomes
- Develop an *understanding* of the application of design thinking and design method across disciplines
- Engage in heuristic *contrast* of design thinking language with teacher-centered language to *consider* the impact of each on task design, interpretation and construction
- *Explore* and practice the processes of problem finding - develop a discipline of noticing
- *Consider* opportunities to embrace responsiveness in teaching practices and learner engagement as a process of design thinking
- *Apply* design thinking to educational design, including instruction and assessment design
- *Create* learning tasks that support the outcomes in the program of studies as well as provincial and district learner competencies
- *Collaborate* with peers to create units of inquiry or learning tasks using design thinking principles
- C*onstruct* a prototype using the design thinking method to an education setting

Textbooks
Articles, online resources as assigned

Course Schedule
Topic 1:
What are Design Thinking and Design Thinking Mindsets?

What is design thinking?

What characteristics/mindsets do design thinkers embrace?

IDEO Design Thinking Mindsets

Embracing "plussing" as a mindset and framework for possibilities

How does research support Design Thinking?

Topic 2:
Designing Thinking in Education

IDEO Design Thinking for Educators Toolkit

What attributes do you already embrace?

What does it mean to be an innovator in education?

Case Studies of design thinking in the education field (CBE, RVS, WRSD, High Tech High, etc,)

Topic 3:
Design Thinking for Spatial Relationships in Learning Environments

Exploring how spatial relationships in classrooms foster or inhibit collaboration, creativity, and innovation

Identifying instructional tools, classroom structure and organization principles that encourage collaborative design

Evaluating principles of student work displays to promote a design thinking culture

Topic 4:
Design Thinking for ELA

Fostering a creative and innovative curriculum for ELA

Being a 'language maker' as a design thinking educator

Building student confidence through brainstorming, collaboration, noticing, prototyping and iterating

Topic 5:
Design Thinking for Math Literacy

Connecting math thinking to design principles - using math as a language through design thinking

Using real world problems to explore innovative solutions through math skills

Develop student confidence in math by embracing brainstorming, collaboration, prototyping and iteration methods

Topic 6:
Design Thinking and Interdisciplinary Design

Developing interdisciplinary units of inquiry through design thinking principles: human-centred problem solving, brainstorming, collaboration, consulting experts, prototyping and iterating

Topic 7:
Design Thinking and Differentiation

Exploring how design thinking models support differentiation and inclusion for student learning in classrooms

Identifying connections between iterations, prototyping and planning for multiple entry points

Exploring connections between Design Thinking (human-centred design) and designing for multiple entry points for learning (differentiation)

Topic 8:
Design Thinking and Assessment of Learning

Evaluating assessment language and conventional assessment tools and their validity for evaluating creativity and innovation in students
Collaborative creation of assessment tools that align with design thinking principles
Exploring strategies for fostering a mindset for innovation, creativity and process over product

Topic 9:
Developing your Innovative PLN
Twitter, Linked In leaders
Leaders in the world of Design Thinking
Schools currently using Design Thinking

Requirements:
Design Thinking Assessment:

1.   Students will be expected to keep a bi-weekly, reflective journal documenting their thinking and understanding of the topics in class. These reflections should demonstrate design thinking mindsets such as creativity, innovation, embracing ambiguity and embracing people-centred solutions. These will be submitted electronically weekly.
Weighing: 20% each for a total of 40%

2.   Design Plan: Students will develop a learning unit in their chosen grade that incorporates design thinking to classroom layout, mid-range planning, task design and assessment of grade-level student and teacher reflection and learning. Evidence of student-centred planning, opportunity for iterations, engagement with experts and evidence of research-informed decisions will inform their learning unit. Students will present their learning unit using an electronic platform of their choosing.
Weighing: 50%

3.   Participation: Students will be expected to actively participate in class discussions and activities, embodying a design thinking mindset of encouraging collaboration and solution-finding.
Weighing: 10%

Attendance:
Due to the interactive nature of the course, students need to be in attendance. Those who are unable will be able to contribute to the topic in their portfolio.

Grade Summary:

The available letters for course grades are as follows:

Letter Grade	Description
A+	
A	Excellent
A-	
B+	
B	Good
B-	
C+	
C	Satisfactory
C-	
D+	
D	Minimal Pass
F	Failure

If you will be using percentages, please provide a scale which indicates how percentages in your class will be translated to letter grades. These equivalencies are at the discretion of the instructor, but MUST be stated in the syllabus. You can just cut and paste your scale into this space (removing what is here).

Because of the nature of the Alpha 4.00 system, there can be no uniform University-wide conversion scale. The relationship between raw scores (e.g. percentages) and the resultant letter grade will depend on the nature of the course and the instructor's assessment of the level of each class, compared to similar classes taught previously.

Please note that final grades will be available on student registration system. Printed grade sheets are not mailed out.

Ambrose University Academic Policies:

Communication
All students have received an Ambrose e-mail account upon registration. It is the student's responsibility to check this account regularly as the Ambrose email system will be the professor's instrument for notifying students of important matters (cancelled class sessions, extensions, requested appointments, etc.) between class sessions. If students do not wish to use their Ambrose accounts, they will need to forward all messages from the Ambrose account to another personal account.

Registration
During the **Registration Revision Period** students may enter a course without permission, change the designation of any class from credit to audit and /or voluntary withdraw from a course without financial or academic penalty or record. Courses should be added or dropped on the student portal by the deadline date; please consult the List of Important Dates. After that date, the original status remains and the student is responsible for related fees.

Students intending to withdraw from a course after the Registration Revision Period must apply to the Office of the Registrar by submitting a "Request to Withdraw from a Course" form or by sending an email to the Registrar's Office by the **Withdrawal Deadline;** please consult the List of Important Dates on the my.ambrose.edu website. Students will not receive a tuition refund for courses from which they withdraw after the Registration Revision period. A grade of "W" will appear on their transcript.

Students wishing to withdraw from a course, but who fail to do so by the applicable date, will receive the grade earned in accordance with the course syllabus. A student obliged to withdraw from a course after the Withdrawal Deadline because of health or other reasons may apply to the Registrar for special consideration.

Exam Scheduling
Students, who find a conflict in their exam schedule must submit a Revised Examination Request form to the Registrar's Office by the deadline date; please consult the List of Important Dates. Requests will be considered for the following reasons only: 1) the scheduled final examination slot conflicts with another exam; 2) the student has three final exams within three consecutive exam time blocks; 3) the scheduled final exam slot conflicts with an exam at another institution; 4) extenuating circumstances. Travel is not considered a valid excuse for re-scheduling or missing a final exam.

Electronic Etiquette
Students are expected to treat their instructor, guest speakers, and fellow students with respect. It is disruptive to the learning goals of a course or seminar and disrespectful to fellow students and the instructor to use electronics for purposes unrelated to the course during a class session. Turn off all cell phones and other electronic devices during class. Laptops should be used for class-related purposes only. Do not use iPods, MP3 players, or headphones. Do not text, read, or send personal emails, go on Facebook or other social networks, search the internet, or play computer games during class. Some professors will not allow the use of any electronic devises in class. The professor has the right to disallow the student to use a laptop in future lectures and/or to ask a student to withdraw from the session if s/he does not comply with this policy. Repeat offenders will be directed to the Dean. If you are expecting communication due to an emergency, please speak with the professor before the class begins.

Academic Policies
It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Academic Calendar. Personal information (information about an individual that may be used to identify that individual) may be required as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

Extensions
Although extensions to coursework in the semester are at the discretion of the instructor, students may not turn in coursework for evaluation after the last day of the scheduled final examination period unless they have received permission for a course Extension from the Registrar's Office. Requests for course extensions or alternative examination time must be submitted to the Registrar's Office by the deadline date; please consult the List of Important Dates. Course extensions are only granted for serious issues that arise "due to circumstances beyond the student's control."

Appeal of Grade
An appeal for change of grade on any course work must be made to the course instructor within one week of receiving notification of the grade. An appeal for change of final grade must be submitted to the Registrar's Office in writing and providing the basis for appeal within 30 days of receiving notification of the final grade, providing the basis for appeal. A review fee of $50.00 must accompany the appeal. If the appeal is sustained, the fee will be refunded.

Academic Integrity
We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Academic dishonesty is taken seriously at Ambrose University as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to acknowledge to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university college. Students are expected to be familiar with the policies in the current Academic Calendar that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

Note: Students are strongly advised to retain this syllabus for their records.