

## **COURSE SECTION INFORMATION**

## **SCHOOL OF DESIGN**

## **DESIGN THINKING**

## **BACHELOR OF DIGITAL EXPERIENCE DESIGN**

Professor's Name: Dr. Dave Colangelo Course Number: BDES1200

Email: Course Section CRN: 45382

david.colangelo@georgebrown.ca

Room Number: WFD 261

Academic Year: 2019-20

Office: WFD 326

Out of Class Assistance: By

Appointment Only Date and Time: Weds, 12-3pm

FOR OFFICE USE ONLY

ORIGINATOR: January 2, 2020

**SIGNATURE** 

DATE December 9, 2019

CHAIR: December 9, 201
SIGNATURE DATE

**DATE OF REVISION: January 2020** 

Phone: 416-415-5000 x3755

## **Other Specific Course Information**

## **PROFESSOR BIO:**

Dave Colangelo is an artist, educator, and researcher based in Toronto, Canada. He is a founding member of <u>Public Visualization Studio</u>. His writing, research, and practice uses media architecture (urban screens, LED façades, and public projection) as a means to support critical and creative engagements with the city, public art, and information. More info at: <a href="http://davecolangelo.com">http://davecolangelo.com</a>.

## **COURSE DESCRIPTION:**

In this course students learn about the design process and various research methods and rationales, historical and contemporary, that are used in design disciplines. Students study, distinguish between, engage with, and argue for the relative merits of the various stages of the design process through written reflections, activities, and a summative proposal, all with

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respect to a contemporary design challenge. Students also experience the way design teams are managed to determine their efficacy and usefulness for various design problems.

# **COURSE OUTCOMES (KSA - Knowledge, Skills, and Attitudes):**

Upon successful completion of this course the students will have demonstrated the ability to:

- 1. Distinguish between different design rationales of importance to the field to guide the basis for critique. (K, S, A)
- 2. Compare and contrast processes, models and methods to determine the best approach to design thinking, creativity, and problem-solving. (K, S)
- 3. Differentiate aesthetic and functional requirements of human-centred design. (K, S)
- 4. Communicate rationales for processes, models and methods both orally and in written and graphical form as required to peers and collaborators. (K, S, A)

# **EVALUATION CRITERIA (assignments, projects, tests, quizzes, exams, etc.):**

Evaluation Tool & Description	Date/Week:	% of Final Grade:	Instructions/Rubric to be Provided? (Yes/No)	Links to Course Outcomes
Reflections	2(x2), 3, 4, 6, 9,	35	Yes	1, 2, 3, 4
(x7)	10	(5 each)		
Activities (x6)	4, 5, 6, 7, 10, 11	25 (5 each, lowest dropped)	Yes	2, 4
Progress Report	9	10	Yes	4
Final Proposal	13-15	20	Yes	1, 2, 3, 4
Self-	15	10	Yes	4
Assessment				

## Reflections (x7) – Weeks 2(x2), 3, 4, 6, 9, 10 – 40% (5% each)

You will be asked to write short in-class and take-home reflections based on the week's materials. More instructions and a rubric will be provided in class during week 1 and throughout the course. This work is to be completed individually.

# Activities (x5) - Weeks 4, 5, 6, 7, 10, 11 - 25% (5% each, lowest dropped)

A number of activities related to lecture material will help to animate the various stages of the design process and contribute to your design proposal. More details to be and rubrics to be provided throughout the course. This work is to be completed in groups assigned in week 1.

## **Progress Report - Week 9 - 10%**

A summary of your work-to-date. More details to be provided in class.

## Final Proposal - Week 13-15 - 20%

A final proposal, containing all of the elements required as outlined in the Design Exchange challenge, will be due, along with a short presentation. Your final proposal grade will also be based on your preparation of your material for the year-end show.

## Self-Assessment – Week 15 – 10%

You will assign yourself a grade for the course (5%), and for each of your group members (5% - average of all scored). More details to be provided in class.

## **TESTING AND ASSIGNMENT POLICY:**

Late assignments are subject to a 10% penalty on your project grade, which can heavily affect your course grade depending on the percentage of your final grade the project is worth.

Projects submitted more than five days late may not be accepted. If you need an extension on a project deadline, speak with me as early as possible to discuss your options.

## **REQUIRED MATERIALS:**

A notebook, lined or unlined, whatever your preference is. A pen/pencil/etc... something to write with. Bring these with you to class every day.

## Available on Blackboard and/or Online (check weekly schedule):

Please PRINT readings and materials as needed and bring them with you to class.

Ambrose, G. & Paul Harris. 2010. "Design Thinking: The Act or Practice of Using Your Mind to Consider Design." Lusanne, Switzerland: AVA Publishing. (Excerpts available on Blackboard)

Dam, R. & Teo Siang. 2018. "5 Stages in the Design Thinking Process." Interaction Design Foundation. <a href="https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process">https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process</a>

Universities Canada, IDeA Competition Guidelines. <a href="https://www.univcan.ca/programs-and-scholarships/innovative-designs-accessibility-competition/#a\_6">https://www.univcan.ca/programs-and-scholarships/innovative-designs-accessibility-competition/#a\_6</a> and <a href="https://www.univcan.ca/wp-content/uploads/2019/11/2020-IDeA-Guidelines1.pdf">https://www.univcan.ca/programs-and-scholarships/innovative-designs-accessibility-competition/#a\_6</a> and <a href="https://www.univcan.ca/wp-content/uploads/2019/11/2020-IDeA-Guidelines1.pdf">https://www.univcan.ca/wp-content/uploads/2019/11/2020-IDeA-Guidelines1.pdf</a>

Government of Ontario. n.d. "Accessibility Laws." <a href="https://www.ontario.ca/page/accessibility-laws">https://www.ontario.ca/page/accessibility-laws</a>." <a href="https://www.ontario.ca/page/accessibility-laws">https://www.ontario.ca/page/accessibility-laws</a>." <a href="https://www.ontario.ca/page/accessibility-laws">https://www.ontario.ca/page/accessibility-laws</a>." <a href="https://www.ontario.ca/page/accessibility-laws">https://www.ontario.ca/page/accessibility-laws</a>." <a href="https://www.ontario.ca/page/accessibility-laws">https://www.ontario.ca/page/accessibility-laws</a>.

#### AND

"A Guide to the Integrated Accessibility Standards Regulation" https://dr6j45jk9xcmk.cloudfront.net/documents/4845/guidelines-to-iasr-english.pdf

## Inclusive Design Frameworks:

- IDEO Inclusive Design Kit: http://www.designkit.org/human-centered-design
- Floe Inclusive Design Handbook: <a href="https://handbook.floeproject.org/">https://handbook.floeproject.org/</a>
- Microsoft Inclusive Design Toolkit: <a href="https://www.microsoft.com/design/inclusive/">https://www.microsoft.com/design/inclusive/</a>
- Making accessible videos: <a href="https://medium.com/@krisrivenburgh/youtube-accessibility-how-to-makeaccessible-videos-with-closed-captions-2208acf17eeb">https://medium.com/@krisrivenburgh/youtube-accessibility-how-to-makeaccessible-videos-with-closed-captions-2208acf17eeb</a>
- Making accessible PDFs: <a href="https://helpx.adobe.com/ca/acrobat/using/create-verify-pdf-accessibility.html">https://helpx.adobe.com/ca/acrobat/using/create-verify-pdf-accessibility.html</a>
- Making accessible web pages: <a href="https://www.dreamhost.com/blog/make-your-website-accessible/">https://www.dreamhost.com/blog/make-your-website-accessible/</a>

IDEO. 2015. *The Field Guide to Human-Centered Design*. DesignKit. <a href="http://www.designkit.org/resources/1">http://www.designkit.org/resources/1</a>

Plattner, H. 2010. "An Introduction to Design Thinking: Process Guide." Institute of Design at Stanford. <a href="https://dschool-public/acapathes/arabas/ar

 $\underline{old.stanford.edu/sandbox/groups/designresources/wiki/36873/attachments/74b3d/ModeGuideBOOTCAMP2010L.pdf}$ 

More materials to be provided as needed in class and on blackboard.

# Learning Schedule / Topical Outline (subject to change with notification)

# Overview

Week 1	Intro								
Week 2	1111110								
Week 3		Empathize							
Week 4		Lilipatilize							
Week 5			Define						
Week 6				Ideate					
Week 7				ideate					
Week 8									
Week 9					Progress Report	Prototype			
Week 10							Test		
Week 11								Submission	
Week 12								Preparation	
SUBMISSION									
Week 13									Presentation
Week 14									and Reflection +
Week 15									Year End Show

Week	Topic / Task	Content / Activities	Resources	Reflection #1 - Design Thinking (in- class)  Reflection #2 - Design Process  Reflection #2 - Accessibility Laws (in-class)	
1 Jan 8 <sup>th</sup>	Introduction	Introduction to course  Syllabus Overview  Lecture: Design Thinking Overview  Group Formation  Reflection #1 (In-class work)	Dam & Teo, Plattner, and IDEO		
2 Jan 15 <sup>th</sup>	Introduction: Design Challenge	Reflection #1 Due  Take-up Reflection #1  Guest Lecture from Universities Canada  Design Challenge Presentation  Reflection #2 Due (Inclass)	Universities Canada, Government of Ontario, Inclusive Design Frameworks		
3 Jan 22 <sup>rd</sup>	Empathize	Reflection #3 Due  Lecture: Empathy Methods  - Activity #1  Interviews  In-Class Group Work	Plattner (Empathy Phase)	Reflection #3  - Empathy Phase	
4 Jan 29 <sup>th</sup>	Empathize/Define	Reflection #4 Due Activity #1 Due	Plattner (Define Phase)	Reflection #4 - Define Phase	

Week	Topic / Task	Content / Activities	Resources	Assessment		
		Discussion and Critique of Activity #1  Journey Maps		Activity #1 - Empathy Methods		
		Personas Empathy Map				
		In-Class Group Work				
		Lecture: Define, and creating an Insight Report - Activity #2				
5 Feb 5 <sup>th</sup>	Define	Activity #2 Due		Activity #2 – Insight Report		
		Discussion and Critique of Activity #2				
		Lecture: Problem Statement – Activity #3				
		In-Class Group Work				
6 Feb 12 <sup>th</sup>	Define/Ideate	Reflection #5 Due	Plattner (Ideation	Reflection #5 - Ideation		
10012		Discussion and Critique of Activity #3	Phase)	Phase		
		Lecture: Ideation – Activity #4		Activity #3 – Problem Statement		
		Brainstorming Bodystorming Prototyping Mindmapping				
		In-Class Group Work				
7 Feb 19 <sup>th</sup>	Ideate	Discussion and Critique of Activity #4		Activity #4 - Ideation		
		Lecture: Summarizing, Selecting, and Moving Forward – Progress Report				
		In-Class Group Work				
8	INTERSESSION: Note this course should cons	: Students who have a concern wi ult their instructor.	ith their academ	ic standing in		
	refer to the following fo	drawing from this course without r important academic dates: vn.ca/registernow/important-date		ty, please		
9 March 4 <sup>th</sup>	Progress Report + Prototyping	Progress Report Due	Plattner (Prototyping	Progress Report		
. 101011		Reflection #6 Due	Phase)	Reflection #6 -		
		Lecture: Experience Map, Mockups, and other methods – Activity #5		Prototyping		
		In-Class Group Work				
10 March 11 <sup>th</sup>	Testing	Discussion and Critique of Activity #5  Reflection #7 Due	Plattner (Testing Phase)	Activity #5 – Prototyping (experience map and other		
				methods)		
		Lecture: testing and incorporating feedback – Activity #6		Reflection #7 – Testing Phase		

Week	Topic / Task	Content / Activities	Resources	Assessment
		In-Class Group Work		
11	Testing	Discussion and Critique of		Activity #6 -
March 18 <sup>th</sup>		Activity #6		Testing
		Lecture: preparing final		
		submission material		
		In-Class Group Work		
12	Reporting	Discussion and Critique of		Final
March 25 <sup>th</sup>		final submission material		Submission Materials
		In-Class Group Work		Materials
APRIL 1st	IDeA Submission	DEADLINE	DUE	ONLINE
13 April 1st	NO CLASS	Reflection Exercises		Reflection Exercises to be
·				completed on
				your own time
14	Presentation and	Final Proposals and		Final Proposals
April 8 <sup>th</sup>	Reflection	Presentations Due		and Presentations
	Year-End Show	Year-End Show Preparation		Due
	Preparation			
15	Year-End Show	Self-Assessment (in-class)		Self-
April 15 <sup>th</sup>	Preparation			Assessment
		Feedback on Final		
		Proposals and Presentations		
		i resemuations		
		Preparation for Year-End		
		Show (cont)		

Please note: this schedule may change as resources and circumstances require.

For information on withdrawing from this course without academic penalty, please refer to the College Academic Calendar: http://www.georgebrown.ca/Admin/Registr/PSCal.aspx

# **GRADING SYSTEM**

The passing grade for this course is: D

A+	90-100	4.0	B+	77-79	3.3	C	67-69	2.3	D	57-59	1.3	Below 50	F	0.0
Α	86-89	4.0	В	73-76	3.0	Ċ	63-66	2.0	D	50-56	1.0			
A-	80-85	3.7	B-	70-72	2.7	C-	60-62	1.7						

Excerpt from the College Policy on Academic Dishonesty:

The *minimal* consequence for submitting a plagiarized, purchased, contracted, or in any manner inappropriately negotiated or falsified assignment, test, essay, project, or any evaluated material will be a grade of zero on that material.

To view George Brown College policies please go to: www.georgebrown.ca/policies

## **Resources and Support for Students**

The College is committed to the success of its students. To this end, a number of academic and administrative departments and services have been developed to support them. It's important for you to know what some of these services are in case you have to offer students advice for remediation or information on where to receive appropriate counselling.

• **Library Learning Commons (LLC):** Situated at St. James (at 200 King East, the main floor and basement), the LLC provides open access computer services,

Microsoft Office and course-related software, and printing/copying services; and provides research materials in a variety of formats.

- The Tutoring and Learning Centre (TLC): Is located in Room 430A and is available to all post-secondary students at the College. TLC delivers assistance to students for English and math and is staffed by peer tutors and fulltime professors.
- **The Peer Tutoring Program:** Is for students who're having difficulty in a subject. There is no charge to the student receiving the tutoring. Peer Tutors are found in the Orange Box at 230 Richmond and in Room 518 at 341 King.
- Counseling & Disability Services: Students with physical, emotional and/or learning disabilities can obtain support to help them with their studies through the Disability Services Department. Counsellors are available to help students with personal, career, or school-related problems. Contact 416-415-5000 ext. 2107 or letstalk@georgebrown.ca