# CARLETON UNIVERSITY SCHOOL OF INDUSTRIAL DESIGN

# COURSE OUTLINE IDES 1000A • THEORY AND HISTORY OF DESIGN • FALL(2021)

Instructor: Alisdair MacRae

Alisdair.MacRae@carleton.ca

Location: remote

Office Hours: Please email the Teaching Assistant for all course-related

questions and email the instructor for more personal issues.

**Teaching Assistant: First Name Last Name** 

LeahAlonzi@cmail.carleton.ca@cmail.carleton.ca

Office Hours: To be determined by second week of class.

**Time and Location:** September 10, 2021 to December 3, 2021; Fridays, 08:35 – 11:25, online blended section, 10:25 – 11:25, synchronous online meeting. Please refer to Carleton Central under Student Services – Registration – Search Schedule for further information.

# **Course Description**

The theoretical and historical background of industrial design and design; disciplinary foundations and interdisciplinary connections; methodological aspects and economic and social contexts; contemporary scenarios in design; technological innovation and manufacturing processes. Also listed as ARCH 2006. Lectures three hours a week.

# **Learning Outcomes**

By the end of this course, students will be able to:

1. Compare and contrast professional definitions of industrial design and identify professional organizations nationally and internationally

- 2. Identify historical events associated with the development of the industrial design profession from the 18th to 21st century.
- 3. Describe typical work responsibilities of an industrial designer.
- 4. Describe the steps associated with the design process, including: research, concepts, manufacturing and sales.
- 5. Apply creativity methods in a group setting including mind maps and brainstorming.
- 6. Name common plastic, wood and metal materials and be familiar with their primary properties.
- 7. Describe mass production processes in plastic, metal, fabric and wood.
- 8. Describe interdisciplinary connections with social sciences, engineering and business.
- 9. Describe the evolving nature of design by outlining contemporary issues in design.
- 10. Acquire theoretical skills, critical attitudes and design thinking.
- 11. Understand better the challenges and advantages to teamwork and the need to develop interpersonal communication skills for teamwork.
- 12. Demonstrate improvement in presentation and graphic skills, and make group presentations of knowledge gained.

#### **Course Deliverables**

These are the deliverables for this course. Please see 'Appendix A Course Schedule' for more detailed information.

## **Course Projects/Assignments/Exams**

There is one group project for the term. Students will be randomly pre-assigned into groups of 5-6 students. The group project includes group activities and is focused on applying design principles introduced in the class. The main deliverable for the group project is a written report and in-class presentation of how products have evolved over time as a result of design

## **Course Evaluation Information**

Weekly Reading Posts (1% each): 10% (11 over the course of 11 weeks, one not counted)

Quizzes (7%, 10%, 10%): 27% (online using Brightspace)

Group Project: 33% (Written Report and Online Presentation, 30%, Peer

Evaluation, 3%)

# Readings

Final Exam:

Online readings are assigned on Brightspace under ARES link to the Carleton Library. Note that the readings are listed in 'Appendix A Course Schedule'. They have been scanned and made available to you for free. Each student will make a brief weekly post (maximum 50 words) to their discussion board area related to the week's readings.

## **Assignments and Final Report**

Small asynchronous online assignments are assigned each week throughout the term to make up for the loss of classroom time. These must be submitted on time to be given a grade, particularly as they are completed as a group.

#### In Class Quiz

Three term quiz tests will be done in class through Brightspace. The student is not allowed to complete these outside the scheduled time provided except through special accommodation. There are no make-up tests offered except with a valid reason and adequate documentation. A student who misses a test or a large portion of the class for valid reason and with adequate documentation will have their final grade calculated by increasing the value of other tests, final exam and group project.

# **Participation and Professionalism**

Active participation and professional conduct are particularly important in this class as there are readings and group activities as well as tests that require your attention to the class every week.

# **Student Access to Quiz, Test and Exam Papers**

Examinations are for evaluation purposes only and will not be returned to the student.

## **Required Materials**

Materials required for the course are listed below. You may be asked by your instructor to refer to Brightspace for a more comprehensive list of required materials.

Some simple materials may be required as part of in class exercises and students will be notified what to have available. Zoom software is used as part of the class to participate in synchronous discussions involving the whole class, and, if necessary, can be downloaded here – <a href="https://zoom.us/">https://zoom.us/</a>. The Brightspace student support site contains information and tutorials for students related to most functions in Brightspace.

# **Computer Requirements**

Please refer to the computer requirements on the School of Industrial Design Website. You may be asked by your instructor to refer to Brightspace for other information or requirements related to computer work.

http://www.id.carleton.ca/undergraduate/about-the-bid-program/computer-requirements

## Individual/Group Work

Courses may include individual and group work. It is important in collaborative work that students clearly demonstrate their individual contribution.

### **Review/Presentation Attendance**

Attendance at scheduled SID Reviews/Presentations is mandatory. These are equivalent to exams when indicated in the course outline. Failure to attend the Review/Presentation without reasonable cause, will result in a grade of F. Students arriving late for the Review/Presentation or not remaining for the complete session without approval from the instructor, will be addressed on a case-by-case basis at the discretion of the instructor.

If you are not able to attend a Review/Presentation, foresee arriving late or need to leave before it is complete, please email your instructor in advance explaining the reason for the situation. It is important that you provide a reasonable rationale for your absence, late arrival or early departure. In the event of an illness or death in the family, you will be required to sign a form verifying your claim and this form is available through the SID administration office.

#### Late Submission of Lecture & Studio Deliverables

Students who do not hand in deliverables on time will have their earned grade reduced by 10% per day up to a maximum of 3 days.

# **Participation and Professionalism**

Active participation and professional conduct (e.g. class discussion, consultations with instructors, work ethic, etc.) are important in lecture and studio courses and may be formally evaluated by a grade. Professionalism also includes Carleton's Policy on Academic Integrity described in more detail below with links to content which you are required to review.

## **Academic Integrity**

Carleton's Policy on Academic Integrity is available at: <a href="https://carleton.ca/registrar/academic-integrity/">https://carleton.ca/registrar/academic-integrity/</a> and covers the following topics:

*Plagiarism* (e.g. submitting work in whole or in part by someone else, failing to acknowledge sources through the use of proper citations when using another's work).

Test and Exam Rules (e.g. attempting to read another student's exam paper, speaking to another student even if the subject matter is irrelevant to the text, using material not authorized by the examiner).

Other Violations (e.g. improper access to confidential information, disruption in classroom activities, misrepresentation of facts for any academic purpose).

This policy governs the academic behavior of students. In industrial design, ideas and concepts come from a multitude of sources and may be modified and utilized in the design and development process. The student should reference such sources appropriately and it is strongly advised that you read Carleton's Policy on Academic Integrity prior to conducting any work at the University.

# **Requests for Academic Accommodation**

You may require special arrangements to meet your academic obligations during the term. For an accommodation request for any of the following topics below, refer to the link provided for more information: <a href="https://students.carleton.ca/course-outline/">https://students.carleton.ca/course-outline/</a>

- Parental Leave
- Religious/Spiritual Obligation
- Academic Accommodations for Students with Disabilities
- Survivors of Sexual Violence
- Accommodations for Student Activities

# Student Responsibility

The student is responsible for knowing the content of this course outline; the schedule of classes, assignments, and/or Reviews; and the material that was covered when absent. The studio is a professional environment and students should be working during the scheduled hours.

Unless otherwise arranged, the class will meet during scheduled class hours. Please note that attendance is important since issues and questions may be raised in class, and announcements made,

along with information disseminated through Brightspace. As external professionals are often involved in our work, scheduling changes for guest lectures, presentations, and Reviews may occur at short notice, requiring students to stay informed.

# **Changes to the Course Outline**

The course outline may be subject to change in the event of extenuating circumstances.

# Appendix A - Course Schedule

## **Course Schedule**

	First Half of Class (Theory and Profession)	Second Half of Class (History and Depth)	
Week 1	Course Introduction	ARES: Movie "Objectified"	
Sep. 10	Course Outline is reviewed, Group Assignment reviewed, students are assigned to groups		
	(check Brightspace)		
Week 2	A: What is Industrial Design? / Materials of	B: Human Made Artefacts, A Historical	
Sep. 17	Manufacture	Perspective	
	ARES: Week 2 Readings (The Context of	ARES: Week 2 Readings (The Context of Industrial	
	Industrial Design, Gilles, pg. 61-73)	Design, Gilles pg. 7-22)	
	Group project is distributed and groups are released		
	Work on Group Project using Zoom/BigBlueButton (Brainstorming, Mindmaps)		
Week 3	A: Manufacturing Processes	B: The Start of The Industrial Revolution	
Sep. 24	ARES: Week 3 Readings (The Context of	Entrepreneurial Efforts in Britain 1750-1790	
	Industrial Design, Gilles pg. 31-45)	ARES: Week 3 Readings (History of Modern Design,	
		Second Edition, Raizman pg.31-36)	
	Test 0: This test is a practice quiz worth 0%	to check functionality and participation	

Week 4	A: Manufacturing Processes	B: Industrial Revolution in Britain and North		
Oct. 01	ARES: Week 4 Readings (The Context of	America		
	Industrial Design, Gilles, pg. 46-59)	Mechanization & Design 1830-1914		
	Professor: Steve MacLeod	ARES: Week 4 Readings (Design In Context,		
		Sparke, pg. 37-56)		
Week 5	A: Stages of Design 1-2:	B: Arts and Crafts and Art Nouveau,		
Oct. 08	Research, Brief and Specification	ARES: Week 5 Readings (A History of Design from		
	ARES: Week 5 Readings (Product Design,	the Victorian Era to the Present: A Survey of the		
	Rodgers and Milton, pg. 55-76)	Modern Style in Architecture, Interior Design,		
		Industrial Design, Graphic Design, and		
		Photography, Ferebee, pg. 63-92)		
	Work on Group Project, First Deliverable Due	e (List of Sources. Division of Labour)		
	Test (Quiz 1): All Readings Week 2-4 + Lecture Material			
Week 6	A: Stages of Design 3:	B: The Bauhaus and De Stijl		
Oct. 15	Conceptual Design	ARES: Week 6 Readings (Design: History, Theory,		
		and Practice of Product Design, Bürdek, pg. 25-41		
		OPTIONAL: Design In Context Second Edition,		
		Sparke, pg. 127-153)		
	Work on Group Project, Meet with FirstName	Work on Group Project, Meet with FirstName LastName TA using Zoom (Concerns, Progress		
	Review)			
Week 7	A: Stages of Design 4:	B: American Streamlining, Art Deco 1930s-		
Oct. 22	Preliminary Design: Prototyping and	1940s		
	Testing			

	ARES: Week 7 Readings (Prototyping and	ARES: Week 7 Readings (History of Modern Design	
	Modelmaking for Product Design, Hallgrimsson,	Second Edition, Raizman, pg. 240-242, Art Deco: A	
	Chapter 2: How Prototypes Are Used, pg. 20-	Mode of Mobility, Windover, pg. 18-35)	
	38)	Professor: Michael Windover	
Week 8	Fall Break		
Oct. 29	Week-long break from October 25 to 29, 2021. No classes will take place during this time		
Week 9	A: Stages of Design 5: Detailed Design:	B: Modernism after WWII (1950s-1960s)	
Week 9	A. Stages of Design 3. Detailed Design.	B. Modernism after WWII (19305-19005)	
Nov. 05	How Sketching and Drawing is used in	ARES: Week 9 Readings (Design In Canada Since	
	Design	1945: Fifty Years from Teakettles to Task Chairs	
	Professor: Tim Haats	First Edition, Gotlieb and Golden, pg. 36-43,	
		History of Modern Design Second Edition, Raizman,	
		pg. 260-291)	
	Work on Group Project		
	Test (Quiz 2): All Readings Week 5-7 + Lecture Material		
Week 10	A: American Design and Style Trends 1925-	B: Postmodernism and Memphis (1980s)	
Nov. 12	2015	ARES: Week 10 Readings (Design In Canada Since	
	ARES: Week 10 Readings (The Presence of	1945: Fifty Years from Teakettles to Task Chairs	
	Products: A Question of Perspective, Gilles, pg.	Second Edition, Gotlieb and Golden, pg. 44-55,	
	5-8, American Design and Style Trends,	History of Modern Design Second Edition, Raizman	
	Inspirations from the Past, Kawanari, pg. 18-	pg. 353-360)	
	Inspirations from the Past, Kawanari, pg. 18- 21)	pg. 353-360)	
		pg. 353-360)	
		pg. 353-360)	
Week 11	Group Project: Redesign Class Exercise		
Week 11	21)	B: The Digital Age 1995-Present	

Nov. 19	ARES: Week 11 Readings (Design Thinking:	ARES: Week 11 Readings (Design: The Whole	
	Driving Transformation, agency, pg. 1-18)	Story, Wilhide, pg. 475-493)	
	Professor: Chantal Trudel		
Week 12	A: Marketing and Selling and The	B: Sustainability, Accessibility, Health and	
Nov. 26	Emergence of Fields of Design: (2000+)	Well Being, Social Innovation	
	ARES: Week 12 Readings (Design for Extreme	Course Review for Examination and	
	Poverty and Disability, Hallgrimsson, pg. 1-8,	Project Presentation Instructions	
	History of Modern Design First Edition, Raizman,		
	pg. 363-374)		
	Test (Quiz 3): All Readings Week 9-11 + Lecture Material		
Week 13	Group Project: Final project presentations during-class and hand-in on Brightspace		
Dec. 03			