INSTRUCTOR

Barry Wylant, (by appointment) bwylant@ucalgary.ca 403-220-8456

CLASS SCHEDULE

Monday/Wednesday 9:30am -12:15 in PF2140

INTRODUCTION

This course provides opportunities to explore the topic of *People and Technology* through product design.

This studio uses the term 'technology' in a broad manner. It can refer to any collection of tools, objects, devices, human built spaces and even ideas or concepts which facilitate the way in which people engage the physical world in the pursuit of daily life. Examples include (actual course content may differ):

- Consumer products (toothpaste, lawnmowers, or frozen dinners)
- Industrial products (airliners, road graders, or nuclear power plants)
- Institutions (hospitals, corporations, or restaurants)
- Services (Service providers like utilities, air traffic control systems, Internet service providers)
- Architecture (buildings, houses, interior space)
- Urban spaces and systems.

The course builds upon a tradition of industrial design, an area fundamentally concerned with technology, products and people. Using the practices and methods of industrial design, the course allows student to engage aspects of the philosophy of technology, the cultural implications of technology, the ergonomics and use of technology, the infrastructural, social and economic systems which support our development and use of technology. The course acknowledges the complex interrelation between these many systems and is intended to foster a broad comprehension of the technological complexities that punctuate our world, through design.

COURSE OBJECTIVES

- To gain an understanding of industrial design and product design.
- To gain an understanding of the human relationship to technology.
- To gain exposure to industrial design processes and methodologies, such as the design brief.
- To gain exposure to manufacturing materials and technologies.
- To gain exposure to aspects of ergonomics and human factors.
- To gain experience in undertaking an extensive product design exercise.

TEACHING APPROACH

The course will use a combination of lectures, guest lectures (as available), assignments, and studio exercises to cover the topic areas listed in the course objectives. Initial lectures will introduce broad topics of industrial design, industrial design itself and the philosophy of technology. Subsequent lectures and sessions will hone in on other attending aspects of industrial design.

COURSE CONTENT (note: subject to change, depending upon availability of guest lecturers)

week 1	Course Outline, introduction to ID, philosophy of technology	
week 2	technology as infrastructure/EVENTS exercise due	
week 3 introduction to ergonomics/task analysis due		

PRODUCT DESIGN (People and Technology) COURSE OUTLINE

week 4	lecture on mapping and info graphics/task analysis due	
week 5	Age simulation suits work	
week 6 (Feb 17, 19)	BLOCK WEEK	
week 7	Age sim suits due/design brief intro/problem space	
week 8	Problem space work/design brief due	
week 9	manufacturing materials and processes intro/field trip to DIRTT	
week 10	life cycle assessment/interim presentation 1 due	
week 11	business plan lecture/ongoing design work	
week 12	ongoing design work/Interim Presentation 2 Due	
week 13	ID legal and intellectual property/ongoing design work	
week 15	final design project presentation: April 15, 2016	

MEANS OF EVALUATION

The means of evaluating student performance in the course is based exclusively upon the completion of project work (7 projects in total), as broken down below. There will be no final examination for the course.

P1: EVENT: 5%
P2: Task Analysis: 10%
P3: Age Simulation Suit: 10%
P4: Design Brief: 20%
P5: Interim Presentation 1: 15%
P6: Interim Presentation 2: 15%
P7: Final Design: 25%

REQUIRED TEXTBOOK

The following text is required for the course and is available in the U of C Bookstore:

Cuffaro, Daniel F., et. al. <u>The Industrial Design Reference & Specification Book</u>, 2013. Rockport Publishers, ISBN: 978-1-59253-847-8.

SUGGESTED READINGS

A number of references address both design and the development of technology in our world:

Boradkar, Prasad. <u>Designing Things: A Critical Introduction to the Culture of Objects</u>, 2010. Berg Press, ISBN: 978-1-84520-427-3.

Dunne, Anthony. <u>Hertzian Tales: Electronic Products, Aesthetic Experience, and Critical Design</u>, 2005. The MIT Press, ISBN:0-262-04232-0.

Hannington, Bruce and Martin, Bella. <u>Universal Methods of Design: 100 Ways to Research Complex</u>

<u>Problems, Develop Innovative Ideas, and Design Effective Solutions, 2012.</u> Rockport Publishers,

PRODUCT DESIGN (People and Technology) COURSE OUTLINE

ISBN: 978-1592537563.

Hawken, Paul, et. al. <u>Natural Capitalism: Creating The Next Industrial Revolution</u>, 2008. Back Bay Books, ISBN:978-0316353007.

Ihde, Don. <u>Philosophy of Technology: An Introduction</u>, 1998. Paragon Issues in Philosophy, ISBN: 978-1557782731.

Marcus, Greil. <u>Lipstick Traces: A Secret History of the Twentieth Century</u>, 1990. Harvard University Press, ISBN: 978-0674535817.

Thackara, John. In the Bubble: Designing in a Complex World, 2005. MIT Press, ISBN: 0-262-20157-7.

Walker, Stuart. <u>Designing Sustainability: Making Radical Changes in a Material World</u>, 2014. Routledge ISBN: 978-0415744126.

GRADING SCALE

Final grades will be reported as letter grades, with the final grade calculated according to the 4-point range.

Grade	Grade Point Value	4-Point Range	Percent	Description
A+	4.00	4.00	95-100	Outstanding - evaluated by instructor
A	4.00	3.85-4.00	90-94.49	Excellent - superior performance showing comprehensive understanding of the subject matter
A-	3.70	3.50-3.84	85-89.99	Very good performance
B+	3.30	3.15-3.49	80-85.99	Good performance
В	3.00	2.85-3.14	75-79.99	Satisfactory performance
B-	2.70	2.50-2.84	70-74.99	Minimum pass for students in the Faculty of Graduate Studies
C+	2.30	2.15-2.49	65-69.99	All final grades below B- are indicative of failure at the graduate level and cannot be counted toward Faculty of Graduate Studies course requirements.
С	2.00	1.85-2.14	60-64.99	
C-	1.70	1.50-1.84	55-59.99	
D+	1.30	1.15-1.49	50-54.99	
D	1.00	0.50-1.14	45-49.99	
F	0.00	0-0.49	0-44.99	

Notes:

A student who receives a "C+" or lower in any one course will be required to withdraw regardless
of their grade point average (GPA) unless the program recommends otherwise. If the program
permits the student to retake a failed course, the second grade will replace the initial grade in
the calculation of the GPA, and both grades will appear on the transcript.

SPECIAL BUDGETARY REQUIREMENTS

There will be design projects assigned as part of the course and as such, students will be required to prepare pin-up presentations and construct design models, incurring the costs associated with these activities.

Notes:

- Written work, term assignments and other course related work may only be submitted by e-mail if prior permission to do so has been obtained from the course instructor. Submissions must come from an official University of Calgary (ucalgary) email account.
- 2. Academic Accommodations. Students who require an accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to their Instructor or the designated contact person in EVDS, Jennifer Taillefer (jtaillef@ucalgary.ca). Students who require an accommodation unrelated to their coursework or the requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to the Vice-Provost (Student Experience). For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/
- 3. Plagiarism Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Most commonly plagiarism exists when:(a) the work submitted or presented was done, in whole or in part, by an individual other than the one submitting or presenting the work (this includes having another impersonate the student or otherwise substituting the work of another for one's own in an examination or test),(b) parts of the work are taken from another source without reference to the original author,(c) the whole work (e.g., an essay) is copied from another source, and/or,(d) a student submits or presents work in one course which has also been submitted in another course(although it may be completely original with that student) without the knowledge of or prior agreement of the instructor involved. While it is recognized that scholarly work often involves reference to the ideas, data and conclusions of other scholars, intellectual honesty requires that such references be explicitly and clearly noted. Plagiarism is an extremely serious academic offence. It is recognized that clause (d) does not prevent a graduate student incorporating work previously done by him or her in a thesis. Any suspicion of plagiarism will be reported to the Dean, and dealt with as per the regulations in the University of Calgary Graduate Calendar.
- 4. Information regarding the Freedom of Information and Protection of Privacy Act (http://www.ucalgary.ca/secretariat/privacy) and how this impacts the receipt and delivery of course material
- 5. Emergency Evacuation/Assembly Points (http://www.ucalgary.ca/emergencyplan/assemblypoints)
- 6. Safewalk information (http://www.ucalgary.ca/security/safewalk)
- 7. Contact Info for: Student Union (http://www.su.ucalgary.ca/page/affordability-accessibility/contact); Graduate Student representative(http://www.su.ucalgary.ca/page/quality-education/academic-services/student-rights).