IDES 1001 / Arch 2101 – Industrial Design Analysis – Winter 2019

Instructor: Thomas W. Garvey, BID, MSc, PhD, WDO
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613-520-2600 Ext. 5674 / thomas.garvey@carleton.ca

Office Hours: By appointment

Teaching Assistant: Ahmed Asfand / AhmedAsfand@cmail.carleton.ca
Office Hours: During class or by appointment

Course Time and Location: Thursday 11:35 – 14:25 / 208 TB (Tory Building)

Course Description
Principles of comparative product design analysis covering marketing and sales, manufacturing techniques and materials, ambiance and qualities of the object/context relationship, and design analysis from the perspective of the designer, the maker and the user.

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

1. Demonstrate qualitative and quantitative comparative product analysis techniques.
2. Identify and describe fundamental human factors elements and evaluation techniques.
3. Disassemble, analyze, and identify product components and production techniques.
4. Describe products and environments using professional terms for ambiance, design language and principles.
5. Carry out and demonstrate application of preliminary research regarding market, use, manufacture, and environmental context along with observational research of product use.
6. Discuss the principles of sustainability of products and manufacturing methods.
7. Write a basic product design brief based on analysis process and findings.
8. Understand better the challenges and advantages to teamwork and the need to develop interpersonal team collaboration skills.
9. Demonstrate improvement in presentation and graphic skills, and make group presentations of knowledge gained.

Course schedule – attached as separate document

Course Support
This course will be supported by the cuLearn Course Management System. Course-related announcements and a variety of resources (some readings, handouts, class presentations or relevant links) will be made available through the cuLearn site. Make sure that your cuLearn account is activated (webct.carleton.ca) and check the class site well before each class. You are responsible for reading and responding to all information distributed through cuLearn.
Course Materials
Course Reference Textbook:
Additional readings may be added. You will be notified in advance.
Durable Consumer Product:
Required for Assignment 1 (to be purchased by team as advised in class)

Course Format
The course consists of lectures, hands on analyses of existing products and student presentations, and in class exercises and quizzes. Each lecture presents a different approach to product analysis. Readings will be assigned in order to prepare for the next lecture and/or for the exercises and quizzes. Attendance and participation is required and critical to learning and success. Those who do not attend classes are unlikely to achieve their full potential in this course.

Course Assignments and Evaluation
Assignment 1:
Students will work in teams to analyze various aspects of a consumer product according to material delivered in the course, and will make final public presentations of their results. For this purpose, a portion of the class time will be allocated to teamwork and consultation with the instructor and teaching assistant.
Assignment 2, 3, and 4:
Students will individually complete short assignments based on material studied in class.
In class quizzes:
There will be in class quizzes to evaluate comprehension of the material in order to clarify.

Course Evaluation Information
Assignment 1 - Product Analysis (team): 40%
Assignment 2 - Design Analysis / WDO and UN SDGs (individual): 30%
Assignment 3 - Design Analysis / Life in a Cube (individual): 30%

Individual/Group Work
Courses may include various combinations of individual and group work. Students must demonstrate individual aptitude, and achieve a passing grade for individual work, in order to pass the course. It is important where collaborative work is undertaken that students be able to clearly demonstrate that individual contribution has been made.

Review Attendance and Deliverables
Attendance at scheduled assignment reviews is mandatory. Failure to attend and present as scheduled will result in a grade of F for the review. If you are not able to attend a review, please notify the instructor and TA in advance. In the case of a medical condition, a comprehensive medical certificate or other documentation to substantiate the absence must be submitted as soon as possible after the review. Such documentation must state the date of illness onset, the expected date of recovery, and the extent to which the student is incapacitated. A grade of F can be modified only if a student completes the project requirements on a date agreed upon with the instructor. A student not remaining for the complete session, or arriving late for the review, without approval from the instructor, will receive a 10% grade reduction for that review.
Late Submission of Hand-in Deliverables
All hand-in deliverables submitted late will accrue a 10% per day deduction from the determined grade, to a maximum of 3 days, from the original deadline time and date. Failure to submit within 3 days, without prior approval from the instructor, will result in a grade of F.

Student Responsibility
The student is responsible for knowing the content of this course outline, the schedule of classes and assignments, and material covered during any absence from scheduled classes.

Changes to the Course Outline
The course outline may be subject to change in the event of extenuating circumstances. Every effort will be made to inform students in as timely a manner as possible.

Requests for Academic Accommodation
You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

Pregnancy Obligation
Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: https://carleton.ca/equity/accommodation/

Religious Obligation
Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: https://carleton.ca/equity/accommodation/

Academic Accommodations for Students with Disabilities
If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. carleton.ca/pmc

Survivors of Sexual Violence
As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: https://carleton.ca/sexual-violence-support

Accommodation for Student Activities
Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf
<table>
<thead>
<tr>
<th>Wk</th>
<th>Thu</th>
<th>WINTER 2019 SCHEDULE / CRITICAL DATES</th>
<th>Team (40%)</th>
<th>Individual (60%)</th>
<th>Special</th>
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<tbody>
<tr>
<td>1</td>
<td>10-Jan</td>
<td>Introduction to Course / Teaming / WDO</td>
<td>A1 Introduction</td>
<td>A2 Introduction</td>
<td>TA Activity</td>
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<td>2</td>
<td>17-Jan</td>
<td>General Product Descriptions / Competitors and Context</td>
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<td>24-Jan</td>
<td>POP Sales and Brands / Typography and Design Layout / Team Formation</td>
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<td>31-Jan</td>
<td>Human Factors / Affordances and Cognition</td>
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<td>5</td>
<td>07-Feb</td>
<td>Usability Studies and Evaluations Theory</td>
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<td>Hand-in</td>
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<td>6</td>
<td>14-Feb</td>
<td>Use Demonstrations: Food + Drink Preparation</td>
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<td>7</td>
<td>21-Feb</td>
<td>WINTER STUDY BREAK</td>
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<td>8</td>
<td>28-Feb</td>
<td>NID Update / TOKYO + Density as Context for Design</td>
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<td>TA Activity</td>
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<td>9</td>
<td>07-Mar</td>
<td>Assignment 1: REVIEW 1</td>
<td>Presentations</td>
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<td>14-Mar</td>
<td>Product and Environmental Ambiance</td>
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<td>11</td>
<td>21-Mar</td>
<td>Manufacturing (Manufactured Landscapes Introduction)</td>
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<td>28-Mar</td>
<td>Sustainability in Product Design and Development</td>
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<td>13</td>
<td>04-Apr</td>
<td>Assignment 1: REVIEW 2</td>
<td>Presentations</td>
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<td>TA Activity</td>
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**Instructor**
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