IDE1300 – 1B - INTRODUCTORY PROJECTS - Course Outline – FALL 2017

1. GENERAL COURSE INFORMATION AND SCHEDULING

Instructor: Brett Hooper, brett.hooper@carleton.ca
           Office Hours: During studio hours by appointment
           Room 2492, MacKenzie Building (ME)
           Tel. 613 • 520 • 5672

Teaching Assistants: Amina Balaa
           Office Hours: During studio hours by appointment
           Room 430, Azrieli Pavilion (AP)
           Tel. 613 • 520 • 2600 ext. 8960

Time Table: Section B1 – Lecture / Studio: Tuesdays 9:35 – 12:35 / Lunch / 1:35 – 4:25, Room 3495

2. GENERAL COURSE CONTENT

Basic Course Outline: An introduction to the techniques of industrial design including drawing and sketching as an aid to design, basics of line and shape, ideation and visualization, product drawing, presentation techniques, laboratory (studio) equipment and practices, introduction to the design process.

Course Objectives: Introductory studio objective is to introduce students to the skills required to undertake a design project and to initiate the material taught in the other courses of the School of Industrial Design undergraduate program.

By the end of this course students will be able to:
   1. Demonstrate and apply the basic principles and tools of design.
   2. Carry out basic visualization and ideation sketching techniques through use of line drawing in context, shading and shadow.
   3. Gain the ability to identify the fundamentals of colour theory and translate these principles into project-based assignments.
   4. Perform analog layout techniques as to recognize the basic principles of graphic language and presentation.
   5. Explore the role of basic model making in design process.
   6. Use and understand the rudimentary rules of structure and material properties through the use of sheet modeling materials.
   7. To be aware and to apply the principles of technical drawing through scale orthographic projection based on drawing standards.
   8. Recognize then develop good communication skills through in-class visual and oral presentation.
   9. Employ the rules of perspective and measured perspective drawing.
  10. Understand knowledge gained in projects and assignments through the writing of a basic learners report.
3. PARTICULAR COURSE INFORMATION

**Sketchbook:** Freehand sketching allows the designer to take that brilliant idea, put it onto paper and then develop a design. The sketchbook allows the student to record their ideas, practice different techniques, do in-class exercises, make notes, paste loose hand sketches/photos/articles, workout details, note daily observations and record different products that surround us.

The sketchbook should be personal reflections and observation; it should be used every day. Most in-class exercises will require sketching, therefore making the sketchbook a valuable tool to complete the assignments. Students will be expected to fill one or more sketchbooks by the end of the term. Upon review, the sketchbook will be evaluated to see the range of work, the quality of work, which demonstrates the visual process and exploration completed by the student.

**Sketchbooks:** will be a design project in itself. Students will be required to construct their own sketchbook. This personal artifact will be evaluated on craft and originality. Students will be instructed on how to construct sketchbooks in a cost conscious manner.


Note: Unlike previous years, this year students will be required to do assignments based on the content in Drawing Ideas.

**Recommended Text - RAPID VIZ – A New Method for Rapid Visualization of Ideas**, Hanks & Belliston, Crisp Publications, Inc. Available as an online purchase.

**Computer Requirements:** Please refer to the computer requirements in the School of Industrial Design Web Site [https://carleton.ca/id/id/computer-requirements/](https://carleton.ca/id/id/computer-requirements/)

Students should purchase the ADOBE ILLUSTRATOR Student Version license.

Purchase this discount version online but make sure you have your student number (card) available, as discount is only valid with this number. License can be purchase per month or yearly.

In the future you may want to upgrade your system to the full Adobe suite.

**Materials and Equipment:** The primary tools of design must be acquired at the start of the course. These tools will be used throughout the students design education and are essential for completion of the required assignments. Particular specialized materials will be required for certain projects some of these materials may be purchased from the school shops, others at local art and hardware stores.

Most of the materials listed can be purchased a local specialized art supply stores.

**Paper:**
- Newsprint Pad – 14” x 17” or larger – *purchased in student modeling lab*
- Tracing Paper (in role format) 11” or longer
- One pack of HP Bight White Ink Jet paper or Similar 8 ½ x 11”

**Drawing Media:**
- Verithin Pencils – color selection – Non-Repro Blue (minimum 2), Indigo Blue, and/or Black (minimum 6)
- Two (2) White Prismacolor Pencils
• Various Nylon Tipped or Roller Ball Pens - *investigate different pens, you will get a feel for what you like.*  
  *Purchase pens with black ink. My personal favorite for drawing is the BIC Crystal, medium point.*

• Pencils – Mechanical (0.7, 0.5,) – HB & 1H
• Small st of Soft Core Colored Pencils (I prefer Prismacolor)
• Cool Gray Designer Markers – Series 1 to 10 (Kits with a selection of markers can be purchased in sets of 5)
• Markette Markers, one (1) chisel point, one (1) Thinrite.
• 2 Pastel Colour Designer Markers
• Conte Hard Pastel, one (1) white, one (1) black.

**Technical Instruments:**
• French Curves (option for ship curves, but they are difficult to source)
• Plastic Straight edge (further discussion during first week of classes)
• Circle and Ellipse Templates, 2mm - 50mm
• Eraser (pencil) and Eraser Shield
• A good pencil sharpener (electric would be best)
• Roll of masking/drafting tape (25mm)
• Roll of double sided tape (25mm)

**Cutting and Modeling Tools:**
• Small Toolbox - *more and more tools will be added to the toolbox as the years go by.*
• Segmented Knife – Olfa - replacement blades required, a pack of 50 is recommended
• Cork back steel ruler – 15+”
• Cutting Board – Small 30cm x 45cm
• Hot Glue Gun and Glue Sticks…. *Small craft glue guns are not sufficient*
• Rubber Cement & Rubber Cement Pick-up
• Engineer Square or equivalent
• 100 and 220 Grit Wet Dry Sand Paper with a Sanding Block

**Safety Materials:**
• One set of Safety Goggles, A must to work in modeling shop
• I you have sensitive hearing I would also suggest ear plugs
• If you need dust masks they can be purchased at shops.

**Project Materials for the first weeks of classes**
• Mayfair (Coronado Cover) – 2ply -white
• Foam Board 3/16” thick – White – 2 sheets 18” x 24”
• Styrene – Which will be purchased from the SID shops

Listed here is the minimum of materials required in the Lab/Studio environment. Instructors will be presenting different visual techniques using a variety of materials throughout the semester. You personally may want to experiment with other visual mediums after these presentations.
SCHEDULING

Dates:

**Introduction** - Tuesday 5th September

Let's get acquainted – Get together at the studio – Material list – Meet Brett Hooper and Stephen Field

*Review materials that will be required for next class.*

1st Week – Tuesday 12th September

- Introduction - Course Outline – Let's get to know who you are through a sketch
- School of Industrial Design tour.
- Presentation – A typical product
- Sketching/ Desk Top Modeling – Warm-up Exercised / Cubes and Geometric Shapes - Basic theory on perspective - Decorate the cube exercise – Cube will be presented at next class
- Making a Sketchbook – required
- Prepare for next week's Jamming Session

2nd Week • JAMMING SESSION – Monday 18th and Tuesday 19th September

- The school's faculty will be instructing students on different sketching techniques
- Phase 1 Major Project Presented
- Material list presented for next week – Styrene can be purchased from SID shops

3rd Week – Tuesday 26th September

- REVIEW – Jamming Session assignment
- Introduction to Orthographic Projection
- Presentation – Sketching, Side Views
- Form groups of 2 to 3 people – Ergie Development
- Working with Styrene
- Hand Interaction Assignment Presented
- Major Project – Speed Storming

4th Week – Tuesday 3rd October

- REVIEW - ERGIE
- Major Project – Speed Storming
- Presentation – Design Process
- Presentation – The Hand
- Desktop Modeling – Foam Board
- Product Sketch Assignment / Orthographic Views to a Perspective

Tuesday 10th October

- WORK SESSION

5th Week – Tuesday 18th October

- REVIEW – Hand Interaction
- Presentation – Descriptive/Technical Drawings
- Presentation – Measure Perspective
- Demonstration – Desktop Modeling – Orthographic Drawings
- Two Dimensional Design
- Consultation session / In-class major project work session
- Assignment Presented- Flat/ Colour Design

**STUDY BREAK** – October 23rd to October 27th

**6th Week** – Tuesday 31st October
- **REVIEW** – Major Project
- **HAND IN** - Sketch Book
- Presentation - Drawing ellipses presentation
- **Presentation – Composition**
- **Presentation - Passions**
- Line – in-class assignment
- Orthographic - Using value, reflections, stylizing
- Assignment work session

**7th Week** – Tuesday 7th November
- **REVIEW** - Flat/Colour Designs
- Highlight (Canson) rendering demonstration
- Introduction to Adobe Illustrator
- Midterm mark review – consultation session – one-on-one
- Major Project B – **Presented**
- Structure Assignment – **Presented**

**8th Week** – Tuesday 14th November
- Presentation – Structure/Mechanics
- Newton Project
- Presentation- Making It – Collapsible
- Process Drawing / Drawing with colour demonstration
- Presentation – Descriptive drawing
- Art of Communication lecture / Helvetica film
- Work Session

**9th Week** – Tuesday 21st November
- **REVIEW** – Structure/Mechanics Assignment
- Presentation – HOLES
- Work Session - HOLES

**10th Week** – Tuesday 28th November
- In-Class work session - HOLES
- **REVIEW** – HOLES – 1:00
- Introduction to Illustrator
• Process, “The Making of Design”
• In-Class work session on Major Project

11th Week – Tuesday 5th December
• WORK SESSION - In-Class Work on Major Project

12th Week – Friday 8th December
• REVIEW – 1:00 - Major Project B
• HAND-IN – Sketchbook

FIRST YEAR WALK-AROUND – DECEMBER 11TH
All work will be displayed by 9:30,

Note: Changes may occur in scheduling based on instructor evaluation

4. COURSE COMPLETION AND EVALUATION INFORMATION

Course Requirements: The students will be required to complete a series of:
- Five (5) short assignments: exploring line, 2-D & 3-D design and colour.
- Two (2) major projects:
  • First Major Design Project – The focus of this project will be on Human Centered Design
  • Second Major Design Project – The focus of this project will be on structure
- Sketch Books – will be reviewed twice during semester

Course Evaluation Information: The final grade for the course will be based on:
1. Five (5) assignments 45%
2. Major Project 1 – 20%
3. Major Project 2 20%
4. Sketchbook – two reviews 10%
5. Attendance, Participation and Individual Development 5%

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

Review Attendance
Attendance at scheduled SID reviews is mandatory. These are equivalent to exams in IDES courses when indicated in the course outline. Failure to attend will result in a grade of F. If you are not able to attend a review, you are required to call the General Office (613-520-5672) and/or send an email to id@carleton.ca to leave a message in advance. A comprehensive medical certificate or other documentation to substantiate the absence must be submitted as soon as possible after the review. The documentation must state the date of illness onset, the expected date of recovery, and
the extent to which the student is incapacitated. The student is also required to set up a meeting with the instructor as soon as he or she is well enough to discuss and schedule an alternative date.

Any student in the review should submit materials for presentation and present as scheduled. In addition, a student who does not remain for the complete review session, who does not present as scheduled, or who arrives late for the review, without approval from the instructor, will receive a 10% grade reduction for that review.

**LATE SUBMISSION OF DELIVERABLES**

**Course Deliverables for reviews and other due dates**
All 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 approval from the instructor, will result in a grade of F.

**Participation and Professionalism**
Active participation and professional conduct are particularly important in studio courses and will be evaluated. At the same time, when the student’s work is reviewed at the end of the course, an evaluation will be made based on one or more of the following: in class discussion; consultations with instructors; and work ethic. However, none of these evaluations will be used to raise an overall failing grade, to a passing one, based on the quality of the work.

. 5. STUDENT CONSIDERATIONS AND RESPONSIBILITIES

**Academic Accommodation** (Equity Services)
You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

**Pregnancy obligation:** write to me 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: [http://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf](http://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf)

**Religious obligation:** write to me 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: [http://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf](http://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf)

**Academic Accommodations for Students with Disabilities:** The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your **Letter of Accommodation** at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation *(if applicable)*. **Requests made within two weeks will be reviewed on a case-by-case basis.** After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website ([www.carleton.ca PMC](http://www.carleton.ca)) for the deadline to request accommodations for the formally-scheduled exam
Instructional Offenses / Plagiarism
The regulations of the university require that we bring to your attention regulations on Instructional Offenses, descriptions of which can be found in the current Academic Integrity Policy available on the Student Affairs website. The policy governs the academic behavior of students. At the same time it seems that students do not always understand the meaning of plagiarism and how to avoid it.

In industrial design, ideas and concepts come from a multitude of sources to be modified and utilized in the design and development process. The student should reference sources appropriately.

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

Unless otherwise arranged, the class will meet during regularly scheduled studio hours. These meetings are mandatory; important issues and questions will be raised, and announcements might be made. Everyone is expected to be based in studio and to work during scheduled hours. The studio should be considered a professional design studio environment. Because of the special involvement of external professionals, scheduling changes for guest lectures, presentations, and reviews may occur at short notice; students should stay informed regularly.

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

Gantt Chart of IDES 1300 Section A Fall Semester Next Page
<table>
<thead>
<tr>
<th>Week</th>
<th>1st Review</th>
<th>2nd Review</th>
<th>Sketch Book</th>
<th>Major Project A</th>
<th>Major Project B</th>
<th>JAMMING Session</th>
<th>Hand Interaction/Layout</th>
<th>Flat Design Colour</th>
<th>Structure</th>
<th>Holes</th>
<th>Thanksgiving</th>
<th>Fall Break</th>
<th>Thanksgiving</th>
<th>Fall Break</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sept. 6-15</td>
<td>Sept. 11-15</td>
<td>Oct. 9-13</td>
<td>Oct. 16-20</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sept. 16-23</td>
<td>Sept. 25-29</td>
<td>Oct. 16-20</td>
<td>Nov. 3-10</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Oct. 9-13</td>
<td>Oct. 16-20</td>
<td>Nov. 3-10</td>
<td>Nov. 6-11</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Oct. 26</td>
<td>Oct. 30-Nov.3</td>
<td>Nov. 12-17</td>
<td>Nov. 15-24</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nov. 11</td>
<td>Nov. 20-24</td>
<td>Nov. 27-Dec.2</td>
<td>Nov. 4-12</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nov. 17</td>
<td>Nov. 20-24</td>
<td>Nov. 27-Dec.2</td>
<td>Nov. 4-12</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nov. 21</td>
<td>Nov. 27-Dec.2</td>
<td>Nov. 4-12</td>
<td>Nov. 4-12</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Nov. 28</td>
<td>Nov. 4-12</td>
<td>Nov. 4-12</td>
<td>Nov. 4-12</td>
</tr>
</tbody>
</table>

**Major Reviews:**
- Major Project A: Tuesday October 31, 2017
- Major Project B: Friday December 8, 2017

**Minor Reviews:**
- JAMMING: Tuesday September 26, 2017
- Hand/Layout: Tuesday October 17, 2017
- Flat Design: Tuesday November 7, 2017
- Structure: Tuesday November 23, 2017
- Holes: Tuesday November 28, 2017
- Sketch Book 1: Tuesday October 31, 2017
- Sketch Book 2: Friday December 8, 2017