

## Studio Course Syllabus/Course Outline

Course title	4D Core Design Studio III		
Course mnemonic	DESN 215	Day + time	T 12:30PM - 3:20PM F 1:00PM - 3:50PM
Section number	S001	Term start date	January 6, 2016
Credits	6	Term end date	April 23, 2016
		Location	SB 392
Prerequisites	DESN 200 Core Design Studi	o II	

## Instructor Information

Instructor	Sabrina Hauser Markus Schilling	Email	shauser@ecuad.ca markusschilling@ecuad.ca
Office number	ТВА	Office hours	T 12:30 pm - 3:20 pm F 1:00 pm - 3:50 pm
Office telephone	NA		

# Website Catalogue Description | www.ecuad.ca

This Core Studio builds on the knowledge and skills learned in DESN 200 Core Design Studio II. This course offers the exposure to the key aspects of Interaction Design. Projects involve primary and secondary design research methods and practices as well as prototyping using a variety of form-giving strategies. Specific design perspectives are determined by the stream or major. Students engage in all aspects of the design process: research, analysis, iteration, prototyping, presentation and evaluation in order to meet the required objectives through individual and group projects. Discussion and reflection help students make informed decisions about their personal and professional development.

# **Course Content**

In this course, students will deepen their understanding of interaction design and interaction design practice, revisit the design process and develop further their practice as designers-to-be. Students will engage into three consecutive interaction design projects and master techniques and methods including research methods like user research and secondary research, empathy building techniques like personas and scenarios, analysing techniques like Kano analysis and information architecture, design techniques for graphical user interfaces, concept iterations, prototyping techniques, and presentation and evaluation techniques.

### Course Design Projects

There are three studio projects for the course; one is developed individually and two are group-based. Students will work in class to share theory, process, methods, and resources. Each project focuses on a different aspect of interaction design as well as a different part of the design process. This way students will gain an insight into different design disciplines while getting familiar with the single parts of iterative design process.

### Project 1: Re-design an Application

This project is individual work. Using UI design tools and strategies (Kano model, Flow Charts, Personas, etc), students will analyze, restructure, and redesign a software or app with a specific user and user scenario in mind. Through GUI development (type, icons, color) and rapid prototyping tools, the outcome of the project will be a small, interactive redesign of the software or app.

### Project 2: Exploring Interaction

This project is group work. Students will design and build a physical interface to control a HSB color picker. Next to learning practical building and electronic prototyping skills, students will engage with form, material, and affordances of a user interface. The outcome of the project is a physical interface to control a Processing sketch that displays the selected color.

#### Project 3: Designing Futures

This project is group work. Students will leave the grounds of design projects driven by efficiency and productivity and learn how interaction design projects can be explorative by either applying other design theories (e.g., Slow Technology, Ludic Design) or by exploring the possibilities of cutting edge or future technology. In the course students will receive a detailed project topic and assignment description. The outcome of the project will take the form of either a concept movie, a prototype, or screen designs.

#### Method and Format

Instructional methods of this studio course are:

- · Faculty-led short lectures, presentations, discussions, demonstrations, reviews, and critiques
- In-class studio work on projects and exercises, which may include a combination of project production, one-on-one/group tutorials, and desk critiques
- · Student presentations and critiques

The course is divided into two 3-hour weekly studio classes. Topics, case examples, demonstrations and design challenges are introduced in class. Attendance and participation is required and critical to learning and success. Students who do not regularly attend and participate are unlikely to achieve their full potential or pass the course. Students are responsible for managing their time effectively, and for maintaining an inviting and respectful work environment. For every hour of course contact you should expect to work a minimum of two to three additional hours per week on your own. Students are expected to complete and document three design projects.

# **Course Learning Outcomes**

Since the course covers many facets of interaction design practice, the learning outcomes are as manifold as they are vital for design practice. Since interaction design is a very broad field and can be applied in many different forms and fields, it is important to understand the varied applications and implications of interaction design. Therefore the three projects in this course all have a different focus:

Redesigning an application- Understanding user needs for a software or application. Focus on examining and restructuring a software and designing a UI (Type, Color, Icons).

Exploring Interaction - Understanding and designing the counterpart of UI design. Focus on Form, Material, Affordances and electronic prototyping to test and evaluate the design.

<u>Design Explorations</u> - Understanding design approaches that stand in opposition to generic design approaches. Focus on invention and ethics of design practice while designing the future.

As an introductory course to Interaction Design, these project will give the students an understanding of the depth and breadth of IxD - while at the same time equip them with the necessary tools and theories to understand, handle, and communicate their future projects.

Methods and techniques covered in this course may include but are not restricted to:

Personas, Icons/Type/Color in UI Design, Wireframing, Flow Charts, Use Cases, User Scenarios, Arduino, Processing, Material/Form/Affordances in Physical Interfaces, Storyboarding, (Electronic) Prototyping tools, Ethics in Design, Theories of design (e.g. Critical Design / Slow Technology / Reflective practice), Adobe Creative Suite (Fireworks, Photoshop, Illustrator, After Effects).

## **Resource Materials**

Materials needed

- · Markers for sketching
- · Sketchbook (one designated for this course only)
- Post-its
- Emily Carr print and photocopy card
- Digital camera (or smart phone camera)
- Laptop with Adobe Creative Suite Master Collection 6 and a productivity suite such as iWork, Microsoft Office or OpenOffice
- · Digital storage media such as a flash drive, memory stick, CD-Rs or external drive for backup
- · Arduino Board (preferably Arduino UNO) + needed sensors (\*will be discussed in class)

#### Selected Recommended References

• Hanington, Bruce, and Bella Martin. Universal methods of design: 100 ways to research complex problems, develop innovative ideas, and design effective solutions. Rockport Publishers, 2012.

- Kolko, Jon. Thoughts on interaction design. Morgan Kaufmann, 2010.
- Norman, Donald A. The design of everyday things: Revised and expanded edition. Basic books, 2013.
- Moggridge, Bill, and Bill Atkinson. Designing interactions. Vol. 14. Cambridge: MIT press, 2007.
- Saffer, Dan. *Designing for interaction: Creating innovative applications and devices (voices that matter)*. Berkeley, CA: New Riders (2009).
- Löwgren, Jonas, and Erik Stolterman. Thoughtful interaction design. (2004).
- Papanek, Victor. Design for the Real World 2nd Edition. (2005)
- Banzi, Massimo. Getting Started with Arduino. O'Reilly Media (2009).
- Reas, Casey and Fry, Ben. Processing: A Programming Handbook for Visual Designers and Artists. The MIT Press (2007).

Note: Specific readings including parts of the above references and others will be assigned in class.

### **Evaluation Criteria**

<u>Design project</u> grades account for 70% of the course grade. The projects' <u>Process and Documentation</u> account for 15%. Through <u>Attendance</u>, as well as <u>Preparedness</u>, <u>Participation</u>, and <u>Motivation</u>, students can achieve the remaining 15%. In the latter category students can also influence their overall grade negatively, e.g., in case of very poor preparedness or participation.

Attendance	5 %
Preparedness, Participation, Motivation	-20 - 10 %
Process & Documentation	15 %
Design Project 1 Re-design and Application	30 %
Design Project 2 Exploring Interaction	20 %
Design Project 3 Designing Futures	20 %
Total	100%

### **Evaluation Criteria Definitions**

#### Attendance

Attendance is taken at the start of each class. "Class attendance at Emily Carr University is mandatory and unexcused absences may result in failure and/or suspension from the Institute."

The class starts at the scheduled times whether students are there or not. If students are late it will be noted and negatively affect their grade (and work!). Other than medical reasons there is no excuse for being absent and if a student misses several classes for medical reasons s/he should consider a medical leave or withdrawal for extenuating circumstances. Students are responsible for the class material.

#### Preparedness, Participation and Motivation

Students are expected to prepare for each class. Assigned readings should be done, requested work should be completed in stages as defined in class. Current project work should be organized so students can present it quickly.

Students are expected to be generally interested in learning to become a great designer and actively participate in class through engagement and interest in class lectures, responding to and asking questions and taking notes, class work and critique sessions, as well as respectful and helpful treating of classmates.

#### Process & Documentation

Students are expected to use a sketchbook (e.g., 11" x 14") on a daily basis for a range of purposes-for example: course notes, ideation processes, observational studies, practicing of techniques, concept sketches, different drawing strategies (conceptual, pictorial, orthographic), fabrication research and details, user criteria, critical observations of designs you see or use, and examples of designer's work that are sources of inspiration/information.

Additionally, for each design project of this class, students are expected to create a process booklet/ documentation, which will be marked.

#### **Design Projects**

There are three projects for the course; one is individually based, which accounts for 30% of the overall course grade, and two are team projects, which each accounts for 20% of the course grade. Usually, team members receives the same grade for a project. The grading of design projects is done by evaluation of the (differently weighed) several project stages and their deliveries (see table below).

The following table shows the maximum point values for items in this course:

	Project 1 30%	Project 2 20%	Project 3 20%
Research	10	5	30
Analysis	60	5	30
Concept	60	20	40
Iteration	40	50	20
Prototyping	30	50	10
Final Design Outcome	50	40	40
Final Presentation	50	30	30
Total Project Points	300	200	200
Attendance		50	
Attitude and Preparation		100	
Process and Documentation		150	
Total Possible Points		1000	

# **Grade Scale**

Letter Grade	Grade Points	Percentage	Equivalent Description	Expanded Description
A+	4.33	95-100	Distinguished Achievement	
А	4.00	90-94	Outstanding Achievement	
A-	3.67	85-89	Excellent Achievement	
B+	3.33	80-84	Very Good Achievement	
В	3.00	75-79	Commendable Achievement	
B-	2.67	70-74	Good	
C+	2.33	65-69	Competent	
С	2.00	60-64	Satisfactory	
C-	1.67	55-59	Pass	
D	1.00	50-54	Marginal Pass	
F	0.00	0-49	Fail	
P/F	0.00		Pass/Fail	
I			Incomplete Grade	
W			Withdrawal from a course	

# Additional Policies and Information

### **University Attendance Policy**

You are required to attend all classes. Absence and lateness will affect your grade for the course. Therefore, you should be aware of the following criteria:

- You will receive a 5% penalty for each absence and a 2.5% penalty for each time that you are late for class.
- You will be considered late if you arrive after attendance is taken, when the class has formally begun. Furthermore, you are subject to the same penalty if you leave the session before it has properly ended.
- Being more than one hour late is equivalent to being absent.

- · More than three unexcused absences in a class will result in failure of the course.
- To formally excuse an absence due to illness or emergency, students must phone or send an email to the instructor by the end of the day. You may be required to give proof of a legitimate excuse, such as a doctor's note.
- It is also your responsibility to determine what you missed and what you must do to complete any assigned work.

## **University Participation**

100% attention is required during critiques and meetings. Thoughtful and serious engagement, critical thinking and sensitivity regarding other students and their work are crucial. You are expected to be present and engaged in every class, and well prepared for every meeting and critique.

### Academic Accommodations

Accessibility Services (formerly Disability Services) provides accommodations to the learning environment for students with speech, hearing, visual, physical, mental health and neurological disabilities (learning, attention deficit hyperactivity disorder, autism spectrum disorders), as well as chronic health conditions and acquired brain injury. To receive an accommodation, students need to establish their eligibility through supporting documentation and become registered with the Accessibility Services Coordinator. An Accommodation Notice will be prepared for the student to submit to their Faculty. Faculty can then facilitate the accommodation. If you have a disability and have not yet registered with Accessibility Services, please visit https://www.ecuad.ca/studentservices/accessibility

# **University General Policies**

• Students must maintain an appropriate standard of conduct. They must demonstrate respect for all persons on the campus, and display mature conduct. All students must abide by the university's Student Conduct Policies and the university's Harassment Policies (see Emily's A to Z). Failure by students to maintain appropriate standards of conduct may result in the initiation of disciplinary action by the university. Instructors are responsible for managing the classroom. Students whose behaviour is disruptive, challenging or intimidating will be addressed and may be excused from class. If the behaviour continues, disciplinary measures (see Emily's A to Z) will be employed.

• The instructor may modify the material or schedule specified in this outline. Any changes will be announced in class.

· Late assignments or projects may be penalized as specified in the course outline.

• It is plagiarism to present someone else's work or ideas as one's own. Plagiarism may result in failure of an assignment, of the course, and, if repeated, expulsion from the university. Assistance with the ethical practices of attribution and documentation is available from the Writing Centre or online at www.ecuad.ca/wc

• A student may be required to provide proof of a legitimate excuse, such as a doctor's note, for illness or absence which causes any missed assignments, tests, projects, exams, etcetera, or for absences of more than two classes. At the discretion of the instructor, the student may complete the work for a prorated grade.

• Students must demonstrate that they understand and practice the safe use of tools and other equipment, materials, and processes used in their course projects. They must conduct themselves in a responsible manner that does not endanger themselves or others, and must adhere to area procedures regarding authorized operation of equipment, handling of materials, and use of space.

• Professional counselling and therapy is available at no charge to students who have concerns of a personal nature. Information shared is held in strict confidence. To make an appointment, call 604-630-4555 or email counselling@ecuad.ca or come in to the Counselling Centre.

• The Writing Centre is a service that Emily Carr provides to all students, staff, and faculty from every program area who would like to improve their reading, writing, critical thinking, and research skills. This is a free, voluntary, and confidential service. Writing Centre instructors can help you at every stage of your writing, from developing ideas to final revision. This applies to any kind of writing, from a three line artist's statement to a twenty page academic paper. Please check out the Writing Centre blog site for more information and to sign up for an appointment http://blogs.eciad.ca/wc/ Telephone: 604-629-4511; Coordinator: Heather Fitzgerald

• Email is an official means of communication with Emily Carr students by faculty, administration and other service providers on campus. Email routing will be confined to the university's internal communication network, and delivered to an officially assigned and verifiable University Email Address. All users are bound by the provisions of Emily Carr Policy 415: Code of Conduct for Appropriate Use of Information Technology Facilities and Services (outlined on the Emily Carr website and in Emily's A to Z). Instructors will outline and detail the expected extent and parameters of email use in the course in the first class, and clarify the timeframe for checking and responding to emails.

• Emails will be answered in a timely manner, usually within 48 hours after receiving the email. Emails will not, however, be answered on weekends or the day before an assignment is due if the email relates to the assignment.

### **Important Dates**

January 4, Monday: University Reopens January 6, Wednesday: Spring semester classes begin February 7-13, Sunday - Saturday - Study Week: No Classes February 8, Monday - Family Day: University Closed February 15-27, Monday - Saturday - Grad Studies 2016 MAA Thesis Exhibition + External Review March 4-12, Friday - Saturday - Grad Studies 2017 MAA Interim Exhibition March 25, Friday - Good Friday: University Closed - classes rescheduled on Wednesday, April 6 March 28, Monday - Easter Monday: University Closed - classes rescheduled on Thursday, April 7 April 5, Tuesday - Last day of regularly scheduled classes April 6, Wednesday -Classes rescheduled from Friday, March 25 April 7, Thursday -Classes rescheduled from Monday, March 28 (Last day of rescheduled classes) April 6-7 - Wednesday - Thursday - Grad Studies 2017 MAA + MDes Interim Thesis Presentations April 8 - 14, Friday - Thursday - Critique, exam + assessment week April 8 - 14, Friday - Thursday - Design Reviews - Final Critiques April 11 - 15, Monday to Friday - Review Panels for Visual Arts, FVIM, ANIM, ISMA, CRCP + CGIA April 11-15, Monday to Friday - Grad Studies 2017 MAA + MDes Advancement Reviews April 15-21, Friday - Thursday - Assessment + grading week April 15-21, Friday - Thursday - Design review + assessment week (follow up, individual meetings with students, project documentation, and program events)

April 18 - 22, Monday - Friday - Grad Studies 2016 MAA + MDes Final Thesis Project Presentations

April 22, Friday: Spring Semester Ends