York University / Sheridan College - Honours Bachelor of Design Program

FA/YSDN 4003 3.0 / GS/MDES 5403

Interactive System Design

3 credits | Fall Term | Academic Year 2014/15 YSDN Design Elective Practicum

Course Director: James March james.march@sheridancollege.ca Section A: Friday 13:30 - 17:30 J291 Office Hours by appointment

Prerequisite

Prerequisite: FA/YSDN 3005 or FA/YSDN 3006 or permission of the Department of Design.

For students not in the BDes program, Compulsory and Voluntary Supplementary Fees apply.

Course description

An advanced investigation into systems – intuitive and learned – that support human activities via interactive communication and distribution networks. An understanding of these communication/ distribution methods working in reciprocal fashion from users to the computer and back, is presented.

Expanded course description

The course will expand upon concepts of user experience design as introduced in Interactivity 3 and Design and Systems: user centred research, information architecture, interactive modelling, prototyping and graphic strategies for user interfaces. The principles and theories of user experience design are embedded in course projects, tutorials, lectures, and readings.

This course will follow a design process of ideation, planning, visualization and implementation.

User centred research methods will be applied for developing a critical approach to interactive design.

Course learning objectives

The purpose of this course is to assist students with developing a conceptual and technical framework for approaching interactive design projects and related theoretical issues.

The specific objectives of this course that students will be able to:

- · Actualize functional prototypes of interactive designs
- Prioritize appropriate design research strategies
- Ideate and communicate interactive design concepts in visual, written and oral forms
- Independently research and critically examine interactive objects, environments and services
- Enhance visual design concepts for user interfaces
- Produce communication documents such as diagrams, briefs and storyboards
- Further explore and enhance technical abilities with a variety digital media tools and technologies
- Collaborate with peers to develop collective design knowledge and skills

Integrate and extend principles and practices across the design field.

Schedule

See course website

Required textbook

There is no required textbook for the course. Instead instructors will refer to various texts (online and print) as needed throughout the course.

Recommended readings

The following are useful texts that, though not required, could help you in developing a better understanding of issues related to the content of this course.

Benyon, David. Turner, Phil. Turner, Susan. *Designing Interactive Systems*. Pearson Education Limited, 2005.

Buxton Bill. *Sketching User Experiences*. Morgan Kaufman, 2007.

Buxton, Bill. Carpendale, Sheelagh, Greenburg, Saul. Marquardt, Nicolai. *Sketching User Experiences: The Workbook*. Morgan Kaufman, 2012.

Cooper, Alan. About Face: The Essentials of Interaction Design. Wiley Publishing, 2007.

Garett, Jesse James. *The Elements of User Experience*. New Riders Publishing, 2003.

Johnson, Jeff. *Designing With the Mind in Mind: Simple Guide to Understanding User interface Design Rules.*Morgan Kaufmann, 2010.

Martin, Bella. Hanington, Bruce. *Universal Methods of Design*. Rockport Publishers, 2012.

Preece, Jennifer. Rodgers, Yvonne. Sharp, Helen. *Interaction Design, Beyond Human-Computer Interaction.* John Wiley & Sons, 2002.

Saffer, Dan. Designing for Interaction: Creating Smart Applications and Clever Devices. New Riders, 2007.

Saffer, Dan. Designing Gestural Interfaces: Touchscreens and Interactive Devices. O'Reilly, 2008.

Other Resources

Visual material and case studies in print and video format are available in the Scott Library and on the web, or owned personally by the instructors. The instructor will add to this list through web links and other references as determined by the class activities.

Evaluation

1. App Audit, Design Brief	10%
2. Wireframe Set	15%
3. High Fidelity Screens	15%
4. Motion Video	20%
5. Final Vision	20%
Project Documentation/Website	10%
Participation, preparation, attendance	10%

Last date to drop course

November 7, 2014 is the last day that a student can DROP this course without receiving a grade. Financial penalties may be involved and could be assessed depending on the precise date that the course was dropped.doing their work not only well, but on time. Accordingly, assignments for this course must be received on the due date specified for the assignment. Assignments are to be handed in (specify how, where and when if this information was not provided in the Description of Assignments above).

Grading System

A+ (9) 90-100%	exceptional work
A (8) 80-89%	excellent work
B+ (7) 75–79%	very good work
B (6) 70-74%	good
C+ (5) 65-69%	competent
C (4) 60-64%	fairly competent
D+ (3) 55-59%	passing
D (2) 50-54%	marginally passing
E (1) marginally below 50%	marginally failing
F (0) below 50%	inadequate work

Assignment Submission

Proper academic performance depends on students doing their work not only well, but on time. Accordingly, assignments for this course must be received on the due date specified for the assignment. Assignments are to be handed as outlinded in the individual project description.

Lateness Penalty

Assignments received later than the due date will be penalized 10% per business day that the assignment is late. Exceptions to the lateness penalty for valid reasons such as illness, compassionate grounds, etc., may be entertained by the Course Instructor but will require supporting documentation (e.g., a doctor's letter).

Missed Tests

Students with a documented reason for missing a course test, such as illness, compassionate grounds, etc., which is confirmed by supporting documentation (e.g., doctor's letter) may request accommodation from the

Course Instructor. Further extensions or accommodation will require students to submit a formal petition to the Faculty.

Attendance and Lateness

Regular and punctual attendance is required professional behaviour in industry and therefore in this program. Attendance will be taken at the beginning of each class. Students are responsible for letting faculty know ahead of time if they are going to be late for class, or not attending.

Being late twice equals one absence. Lateness of more than thirty minutes equals one absence. If a student is absent from four classes during the term, a grade of "F" will be given for the course. Exceptions to the lateness penalty for valid reasons such as illness, compassionate grounds, etc., may be entertained by the Course Instructor but will require supporting documentation (e.g., a doctor's letter).

Students will be responsible for all academic, financial penalties and consequences resulting from their non-attendance.

Important Course Information For Students

Please note that this information is subject to periodic update. All students are expected to familiarize themselves with the following information:

Academic Honesty and Integrity

YSDN students are required to maintain high standards of academic integrity and are subject to the Senate Policy on Academic Honesty (http://www.yorku.ca/univsec/policies/document.php?document=69).

There is also an academic integrity website with complete information about academic honesty. Students are expected to review the materials on the Academic Integrity website (http://www.yorku.ca/academicintegrity).

Occupational Health & Safety

Students must be aware of ergonomic factors related to the course work and should practice recommended exercise to prevent developing occupational related health problems. Please refer to the following web page for details:

http://www.yorku.ca/dohs/ergonomics/ergonomics.htm

Access/Disability

Both York and Sheridan provide services for students with disabilities (including physical, medical, learning and psychiatric disabilities) needing accommodation related to teaching and evaluation methods/materials. These services are made available to students in all Faculties and programs at York University and Sheridan College. Students in need of these services are asked to register with Counselling & Disability Services as early as possible to ensure that appropriate academic accommodation can be provided with advance notice. You are encouraged to schedule a time early in the term to meet with each professor to discuss your accommodation needs.

Please note that registering with disabilities services and discussing your needs with your professors is necessary to avoid any impediment to receiving the necessary academic accommodations to meet your needs. At York University:

Additional information is available at www.yorku.ca/cds or by contacting the offices of the disability service providers:

- Learning Disability Services W128 Bennett Centre for Student Services (BCSS), 416-736-5383, www.yorku.ca/cds/lds.
- Mental Health Disability Services N110 BCSS, 416-736-5297, www.yorku.ca/cds/mhds.
- Physical, Sensory and Medical Disability Services -N108 Ross Building, 416-736-5140, www.yorku.ca/cds/psmds.

The York Senate Policy on Accommodating Students with Disabilities is available at http://www.yorku.ca/secretariat/policies/document.php?document=68.

At Sheridan College:

 Accessible Learning Services is located in Room B103, Trafalgar Campus. 905-845-9430 x2530

Ethics review process

YSDN students are subject to the York University Policy for the Ethics Review Process for Research Involving Human Participants. In particular, students proposing to undertake research involving human participants (e.g., interviewing the director of a company or government agency, having students complete a questionnaire, etc.) are required to submit an Application for Ethical Approval of Research Involving Human Participants at least one month before you plan to begin the research. If you are in doubt as to whether this requirement applies to you, contact your Course Director immediately.

Religious observance accommodation

York and Sheridan are committed to respecting the religious beliefs and practices of all members of the community, and making accommodations for observances of special significance to adherents. Should any of the dates specified in this syllabus for an in-class test or examination pose such a conflict for you, contact the Course Director within the first three weeks of class. Similarly, should an assignment to be completed in a lab, practicum placement, workshop, etc., scheduled later in the term pose such a conflict, contact the Course Director immediately.

Please note that to arrange an alternative date or time for an examination scheduled in the formal examination periods (December and April/May), students must complete an Examination Accommodation Form, which can be obtained from Student Client Services, Student Services Centre or online at http://www.registrar.yorku.ca/pdf/exam_accommodation.pdf

Procedures for submitting work

All work is to be turned in personally to the Course Instructor during the officially scheduled class time. Students are responsible for obtaining any material distributed during missed classes.

At York, under normal situations, the Design Office will NOT accept drop-off of student work. In the rare case of illness of the instructor on a due date, special arrangements can be made (between the Course Director and the Office) with the Office for the submission of student work.

In case of unusual circumstances, students at Sheridan may submit their work by depositing it into the drop-off mail slot, provided by the mailroom at Sheridan. Please address your envelope(s) to your instructor and inform the instructor immediately about this special arrangement. Students should refer to the University Calendar for the proper process of applying for Deferred Standing or requesting Aggregate Standing, if such is applicable.

Student Responsibilities

It is the responsibility of the student to:

- always back-up/save/archive digital work—the hard drives on the computers will be trashed of all student files on a regular basis
- read and understand the university Policy on proper use of computing facilities (This policy is posted on the York University web site and posted on Notice Boards in and around the Design studios.)
- inform the Course Director, in a timely fashion, of any problems that may interfere with the student's progress in the course.

Student Conduct

Students and instructors are expected to maintain a professional relationship characterized by courtesy and mutual respect and to refrain from actions disruptive to such a relationship. Moreover, it is the responsibility of the instructor to maintain an appropriate academic atmosphere in the classroom, and the responsibility of the student to cooperate in that endeavour. Further, the instructor is the best person to decide, in the first instance, whether such an atmosphere is present in the class.

A statement of the policy and procedures involving disruptive and/or harassing behaviour by students in academic situations is available on the York website http://www.yorku.ca/univsec/policies/document.php?document=82

Please note that this information is subject to periodic update. For the most current information, please go to the CCAS webpage (see Reports, Initiatives, Documents): http://www.yorku.ca/secretariat/senate_cte_main_pages/ccas.htm

Entering External Award Shows

In an effort to encourage more students to enter external award shows and competitions, the York/Sheridan Program in Design will reimburse the entry fee for winning entries at outside award shows and competitions, up to \$30 (CAD) per piece entered.

To take advantage of this, students must:

- Enter the competition, pay entry fees and postage and arrange for delivery;
- Provide written proof that they have received an award/ prize, and
- Provide the original receipts for the entry fee in Canadian dollars. (If the entry fee was paid in another currency, we require a receipt indicating the exact amount you paid in Canadian dollars).

Note: Students are responsible for any other fees that may be associated with the prize. Please contact Barb Batke (email: bbatke@yorku.ca) for reimbursement after you receive the award.