EXPANDED COURSE DESCRIPTION

YORK/SHERIDAN DESIGN
School of the Arts, Media, Performance and Design
Design Department

FA / YSDN 4008 3.0 SECTION A
DATA VISUALIZATION DESIGN
FALL 2019 / WINTER 2020

Last Modified Date: 09/13/2019

COURSE CALENDAR DESCRIPTION

Explores the affordances of both print and digital media for the application of Information Design principles and methodologies introduced and developed in earlier courses. This course will take an intra-disciplinary (print, interactivity, time-based, environmental) approach to researching and developing a comprehensive presentation of a site to be determined by each section. Prerequisite: FA/YSDN 3008 3.00 or FA/YSDN 3012 3.00 or permission of the Department of Design. Note: For students not in the BDes program, compulsory and voluntary supplementary fees apply. Integrated with GS/MDES 5408 3.00.

Information Design is a burgeoning area in which designers employ a range of methods for clarifying and presenting complex information to a wide audience. It is an opportune area of concentration in which to explore affordances of both print and digital media for solutions to design problems which involve complex layering and presentation of disparate bodies of information that must work together cohesively. This course will take an intra-disciplinary (print, interactivity, time based, environmental) approach to researching and developing a comprehensive presentation of a site to be determined by each section. Projects will be developed by groups of students based on common interests for exploration. Environmental graphics, dynamic diagramming, time-based compositions and/or print solutions will be prepared for exhibition at end of term.

INSTRUCTOR(S)

<table>
<thead>
<tr>
<th>Name</th>
<th>Section / Format / Term</th>
<th>Contact Email</th>
<th>Contact Phone</th>
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</thead>
<tbody>
<tr>
<td>Talaie, Borzu</td>
<td>Sec. A / STDO / F</td>
<td><a href="mailto:borxu@yorku.ca">borxu@yorku.ca</a></td>
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SPECIAL FEATURES

York University / Sheridan College Program in Design
Course: FA/YSDN 4008 3.00 – Data Visualization Design
Course Website: TBA
Term: Fall 2019
Prerequisite / Co-requisite
FA/YSDN 3008 3.0 Information Design 2 or FA/YSDN 3012 3.0 Information Design 3 or permission of the Department of Design. An intermediate knowledge of Adobe Photoshop and Adobe Illustrator is required for this course. A Basic knowledge of Microsoft Excel is required for this course.
Course Instructor(s), Time and Location
Course Director: Borzu Talaie borxu@yorku.ca
Office Hours: By appointment
Section A: Tuesday 8:30-12:30 4028 DB
Course Description
Explores the affordances of both print and digital media for the application of Information Design
principles and methodologies introduced and developed in earlier courses. This course will take an intra-disciplinary (print, interactivity, time-based and/or environmental) approach to researching and developing a comprehensive presentation of selected data-set(s).

Expanded Course Description

Explores the affordances of both print and digital media for the application of Information Design principles and methodologies introduced and developed in earlier courses. This course will take an intra-disciplinary (print, interactivity, time-based and/or environmental) approach to researching and developing a comprehensive presentation of selected data-set(s).

“Everyday 2.5 quintillion bytes of data is produced.” – IBM Labs

This amount of data (also known as Big Data) needs to be structured and represented correctly in order to be useful. This course is an introduction to the emerging field of data visualization and visual analytic tools which involves extraction and analysis of personal and/or public data-sets and visualizing them by means of the Processing programming environment.

This course is designed to be a culmination of skills and principals you’ve learned in both Information Design and Interactivity Design courses.

Course Learning Objectives

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

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

• Investigate the visual grammar and creative strategies involved in data visualization projects
• Design and communicate data visualization concepts
• Articulate individual ideas in visual, oral and written forms
• Develop code literacy to understand and apply programming concepts
• Perform technical implementation of design concepts into functional prototypes using Processing
• Undertake independent creative and technical learning and research
• Integrate and extend principles and practices across the design field
• Collaborate with peers to develop collective knowledge and skills

Note: This is a general outline only; it may be changed to suit the development of assignments.

Course Schedule

See course website. Any changes to the schedule will be announced in class and posted on the website.

Course Text / Readings


Recommended Text / Readings

See course website.

Other Resources

Supplementary course materials and case studies in print and/or digital format are available in the Scott Library at York, Sheridan Library, owned personally by the instructor or online – Safari Books (requires Sheridan Library account) and complete access to LinkedIn Learning courses (through York University Portal). The instructor will list these resources as determined by the class activities.

Required Material(s)

Some specific materials may be required for completion of projects. Their cost will vary depending on the materials and techniques chosen by a student. Students will also need digital data storage devices
such as USB flash drives and/or portable hard drives to regularly backup their work. Students also need access to the digital-locker server at York University.

Proper Use of Facilities
Use of the YSDN facilities and equipment is for proper completion of assigned projects only. Privileges may be withheld for improper use. Lateness or incomplete work due to the loss or suspension of privileges is not an acceptable reason for missed deadlines. Students under suspension of privileges must find alternative means to complete projects.

Evaluation
This course will consist of a combination of lecture, research assignments, hands-on tutorials and creative production of projects. Emphasis will be placed on the exploration of the contextual meanings of time-based design, visual syntax, visual expression, technical experimentation, and documentation of the design process.

When grading individual projects and assignments, you will be graded on the following four distinct aspects of the work:
1. Concept and Ideas – their originality and relevance to the problem. Lateral Thinking abilities, analysis of project requirements, understanding of the problem and its parameters, goals and objectives.
2. Refinement of the Concept – the ability to take the original idea(s) and further develop/improve and apply them. Vertical Thinking abilities, critical evaluation of ideas and solutions.
3. Skills – translation of ideas to visually & technically refined forms, demonstrated throughout the design process from early sketches to the finished state.
4. Presentation – the ability to communicate (visually, verbally and in written form) the systematic and logical direction your synthesis of the problem-solving process has taken. Appropriateness of the final visual resolution of the project or exercise.

Grading
The final grade for the course will be based on the following items weighted as indicated:

- Project 1 35%
- Project 2 35%
- Exercises 15%
- Individual Presentations 10%
- Attendance and Participation 5%

Course grades and continuing success in the course will be significantly affected by frequent lateness and absence; coming to class unprepared to participate in the critique and presentation of studio work; and late submission of projects.

Note: Final course grades may be adjusted to conform to program or faculty grades distribution profiles.

Grading Scheme and Feedback Policy
Senate Grading Scheme and Feedback Policy stipulates that (a) the grading scheme (i.e. kinds and weights of assignments, essays, exams, etc.) be announced, and be available in writing, within the first two weeks of class, and that, (b) under normal circumstances, graded feedback worth at least 15% of the final grade for Fall, Winter or Summer Term, and 30% for full-year courses offered in the Fall/Winter Term be received by students in all courses prior to the final withdrawal date from a course without receiving a grade.

No examinations or tests collectively worth more than 20% of the final grade in a course will be given
during the final 14 calendar days of classes in a term. The exceptions to the rule are classes which regularly meet Friday evenings or on Saturday and/or Sunday at any time, and courses offered in the compressed summer terms. See the policy for exceptions http://secretariat-policies.info.yorku.ca/policies/grading-scheme-and-feedback-policy/
The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+ = 9, A = 8, B+ = 7, C+ = 5, etc.). Assignments and tests will bear either a letter grade designation or a corresponding number grade (e.g. A+ = 90 to 100, A = 80 to 90, B+ = 75 to 79, etc.). For a full description of York grading system see Faculty Rules under the York University Undergraduate Academic Calendar https://calendars.students.yorku.ca/2019-2020/programs/design
Students may take a limited number of courses for degree credit on an ungraded (pass/fail) basis. For full information on this option see Faculty Rules, Grading and Academic Standards under the York University Undergraduate Academic Calendar https://calendars.students.yorku.ca/2019-2020/programs/design
To review and manage your academic records visit http://myacademicrecord.students.yorku.ca
Grade / Grade Point / Percent / Range Description
A+ 9 90 –100% RARE AND EXCEPTIONAL WORK
Thorough knowledge of concepts and techniques and exceptional skill and/or great originality in the use of those concepts/techniques in satisfying the requirements of an assignment/course.
A 8 80 – 89% EXCELLENT WORK
Thorough knowledge of concepts and techniques together with a high degree of skill and/or some elements of originality.
B+ 7 75 – 79% VERY GOOD WORK
Thorough knowledge of concepts and techniques together with a fairly high degree of skill in the use of those concepts/techniques.
B 6 70 – 74% GOOD WORK
Good level of knowledge of concepts and techniques together with considerable skill.
C+ 5 65 – 69% COMPETENT WORK
Acceptable level of knowledge of concepts and techniques together with considerable skill representing the student’s competence to continue and the department’s wish to have the student continue.
C 4 60 – 64% FAIRLY COMPETENT WORK
Acceptable level of knowledge of concepts and techniques together with some skill.
D+ 3 55 – 59% PASSING WORK
Slightly better than minimal knowledge of required concepts and techniques together with limited skill.
D 50 – 54% POOR WORK
Representing a lack of effort or minimum knowledge of concepts and techniques, despite completion of required exercises.
E 1 31 – 49% VERY POOR WORK
F 0 0 – 30% INADEQUATE WORK
All courses taken at York and Sheridan, including failures, are included in grade point average calculations. To calculate your Grade Point Average visit https://ampd.yorku.ca/current-students/academic-resources/gpa-calculator/
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 in class or submitted online on the appropriate date.

At York and Sheridan, the administrative offices will NOT accept drop-off of student work. In the rare case of illness of the instructor on a due date, special arrangements between the course director and the office can be made for the submission of student work.

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 project deadline or a test, such as illness, compassionate grounds, etc., which is confirmed by supporting documentation (e.g. doctor’s letter) may request an 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 a required professional behaviour in industry and therefore in this program. Attendance will be taken at the beginning of each class. Students are responsible for informing their faculty ahead of time if they are going to be late for a class or not attending.

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.

Last Date to Drop the Course
Friday November 8, 2019 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.

To review important university sessional dates such as classes and exams start/end dates, financial deadlines, holidays and more visit https://registrar.yorku.ca/enrol/dates/fw19

Students Responsibilities
1. Always backup/save/archive digital work on at least two different mediums (e.g. a cloud service and a flash drive). Computer hard drives in the labs will be erased of all student files on regular basis.
2. Inform the course instructor – in a timely fashion – of any problems that may interfere with the students’ progress in the class.
3. Read and understand university policies and important course information (see next section).

Academic Policies & Information
The Senate Academic Standards, Curriculum and Pedagogy Committee (ASCP) provides a Student Information Sheet that can be reviewed at http://secretariat.info.yorku.ca/senate/

All students are expected to familiarize themselves with the following information.

Academic Honesty & Integrity
YSDN students are required to maintain high standards of academic integrity and are subject to the Senate Policy on Academic Honesty. For full information visit http://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/

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 at https://www.yorku.ca/tutorial/academic_integrity/

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. Refer to the following URL for details https://yulink-new.yorku.ca/group/yulink/health-safety-and-employee-wellbeing

Accessibility/Disability Services
Both York and Sheridan provide services for students with disabilities (including learning, mental health, physical, sensory and medical disabilities) needing accommodation related to teaching and evaluation methods/materials. These services are made available to students in all Faculties and programs at both institutions. Students in need of these services are asked to register at both York and Sheridan as early as possible to ensure sufficient advance notice so that appropriate academic accommodation can be provided. 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 these 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
The York Senate Policy on Accommodating Students with Disabilities is available at http://secretariatpolicies.info.yorku.ca/policies/academic-accommodation-for-students-with-disabilities-policy/
Additional information on Counselling & Disability Services is available at http://cds.info.yorku.ca or by contacting the offices of the disability service providers listed below:
Learning Disability Services
W128 Bennett Centre for Student Services (BCSS), (416) 736-5383
http://yustart.yorku.ca/learning-disability-services/
Mental Health Disability Services
N110 Bennett Centre for Student Services (BCSS), (416) 736-5297
http://mhw.info.yorku.ca/organization/mental-health-disability-services-mhds-through-counselling-anddisability-services/
Physical, Sensory and Medical Disability Services
At Sheridan College
Accessible Learning Services
Trafalgar campus, B104, (905) 845-9430, ext. 8196
www.sheridancollege.ca/life-at-sheridan/student-services/accessible-learning-services
Counselling Services
Trafalgar campus, B104, (905) 845-9430, ext. 2557
www.sheridancollege.ca/life-at-sheridan/student-services/counselling-services
Health Services
Trafalgar campus, B129, (905) 845-9430, ext. 2550
www.sheridancollege.ca/life-at-sheridan/student-services/health
Alternate Exam and Test Scheduling
York’s Counselling & Disability Services and the Registrar’s Office work in partnership to support
alternate exam and test accommodation services for students with disabilities at the Keele campus. To review the exam and test policies and procedures visit http://altexams.students.yorku.ca

Ethics Review Process

YSDN students are subject to the York University Policy for the Ethics Review Process for Research Involving Human Participants. To review the Senate Policy visit http://secretariat-policies.info.yorku.ca/policies/ethics-review-process-for-research-involving-human-participants-policy/

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 instructor 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 instructor 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 instructor 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 at York, Student Client Services, Student Services Centre or online at http://www.registrar.yorku.ca/pdf/exam_accommodation.pdf

Further information on religious observance is available at https://w2prod.sis.yorku.ca/Apps/WebObjects/cdm.woa/wa/regobs

Student Code of 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://secretariat-policies.info.yorku.ca/policies/disruptiveandor-harassing-behaviour-in-academic-situations-senate-policy/

For more information visit http://oscr.students.yorku.ca

Entering External Design Award Shows and Competitions

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 $35 (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 (bbatke@yorku.ca) for reimbursement after you receive the award.

Many courses utilize Moodle, York University’s course website system. If your course is using Moodle, click here to access it.
Moodle @ York University