

# **ENSE 405: Designing Apps for Collaboration & Learning. Fall 2021**

#### Instructors:

- **Lecture**: Dr. Tim Maciag | tim.maciag@uregina.ca | https://www.maciag.ca/
- Tim's (virtual) office hours: By email request/appointment only

#### Lectures:

• Tuesdays & Thursdays | 11:30 am – 12:45 pm | Remote via URCourses/Zoom

# **Course description & learning outcomes**

Engineering user experiences for community-centred software applications (e.g., technology tools in support of collaboration, learning, & knowledge). To take this course the student must have completed ENSE 374 or have permission from the instructor

# **Text/Resources**

- Course content will be loosely based on the following texts.
  - E. Wenger, N. White, and J.D. Smith. *Digital Habitats: Stewarding Technology for Communities*.
     CPSquare. 2009.
  - o C. Shirky. Here Comes Everybody: The Power of Organizing Without Organizing. Penguin Books. 2009.
  - J. McGonical. Reality Is Broken: Why Games Make Us Better and How They Can Change the World.
     Penguin Books; Reprint edition. 2011.
  - o A. Quan-Hasse. Social Networks, Power, and Inequality. OUP Canada. 2020.
  - o S. Garfield. *Handbook of Community Management*. De Gruyter Saur. 2020.
- All other resources will be posted in URCourses.

### **Course evaluation**

| Project<br>(individual) | Exam 1 | Exam 2 | Lecture<br>quizzes | Participation, professionalism, & attendance | Instructor discretion |
|-------------------------|--------|--------|--------------------|--|-----------------------|
| 50%                     | 15%    | 15%    | 15%                | 5%   | +/- 5%                |

### **Important notes**

#### Exams:

- Deferred exam requests are not accepted. Exam dates are set as per the schedule and are non-negotiable (minus extreme circumstances as per the instructor's discretion)
- Combining both Exam 1 and Exam 2 student scores, students must obtain an accumulated grade of greater than 50% (i.e., an accumulated grade of greater than or equal to 15/30 combining grades obtained from both exams). If students fail to obtain a grade of higher than 50% as indicated, students will receive a 0/30% for their exam #1 and exam #2 grade allocation

## **Course project:**

• Participation in the course project is mandatory. If students fail to participate in the course project, the student(s) will receive an NP in the course. This will be evaluated based on project insights (via GitHub), information obtained in individual (& class)/instructor conversations (scrums) (and all as per the instructor(s) discretion)





- Throughout the semester, individual (& class)/instructor "scrums" (meetings) will occur. Attendance at scrums is mandatory, with non-attendance resulting in a zero grade for the specific project deliverable scrum. As well, tardiness will be observed and individual deductions will apply, upward to the full specific project deliverable allocation (as per the instructor's discretion)
- Students who miss the project scrum s(instructor/peer) presentations & demo sand/or the final project scrums (instructor/peer) presentations & demos (both session 1 & 2) will get 0% on their project allocation as per Zoom logs. Students who arrive late will be deducted 5% of their project allocation grade for every minute they are late after the first presentation, again, as per Zoom logs (individual deduction). Also, please note that presentations on both days will be recorded by the instructor in Zoom and will be used for grading and accreditation purposes (but please know the videos will not be posted on the World Wide Web)

#### Instructor class research disclaimer:

- This class is an experimental class where the instructor is actively researching the student experience, specifically as it relates to the engineering graduate attributes (<a href="https://bit.ly/2WBqSxx">https://bit.ly/2WBqSxx</a>). Specific emphasis will be on the deeper understanding of student experiences from the lens of graduate attributes 3.1.9: impact of engineering on society and the environment, and 3.1.12: life-long learning
- Student written and verbal reflections may take up part of course deliverables. For example, survey submissions
  may be collected to understand impact of the student learning and experience (Note: some of this data may be
  collected by the course teaching assistant and provided to the instructor post-class after final grades have been
  submitted and released to ensure all perceived bias is removed from grading decisions. This, with the caveat
  that the instructor will make note of the student's individual student response/submission rate. If students fail
  to submit deliverables as outlined, this may have an impact on the individual student's project and participation,
  professionalism, and attendance grade allocation

#### Lectures:

- Lecture quizzes may be (or may not be, depending on how my technology experiments go) only available in URCourses for one week after posting their corresponding video lecture
- Students who have not watched lectures within 1 week of their go-live date will see grade deductions within their "Participation, professionalism, & attendance" & "Lecture quizzes" grade allocations accordingly (upwards to the full grade allocation/individual lecture)
- Students must obtain a grade of 50% (7.5/15) or higher in the course lecture quizzes. If students fail to obtain a grade of higher than 50% as indicated, students will receive a 0/15% for their lecture quizzes grade allocation

### Student professionalism:

• The instructor reserves the right to interview students on understanding of submitted works, altering individual grades accordingly (as per the instructor's discretion). In the perceived event that a student's submitted works appear to have been copied from a solution manual, classmates, or online sites such as Stack Overflow, CHEGG, Course Hero, etc., the student will receive a zero on the submitted work and be flagged to the Associate Dean Academic for a warning letter. If the behavior is repeated, the student will be flagged to the Associate Dean Academic for a formal academic misconduct investigation which will be documented in the student's official university student file

#### Student safety, behavior, ethics, & special needs:

- University of Regina, student behavior: https://bit.ly/2Kppljm
- University of Regina, about plagiarism: https://bit.ly/3ymC8uB





- University of Regina, health, safety, & emergency preparedness: <a href="https://bit.ly/2HFi0KA">https://bit.ly/2HFi0KA</a>
- If there is any student in this course who, because of a disability, may have a need for accommodations, please contact the Centre for Student Accessibility at: <a href="https://www.uregina.ca/student/accessibility">https://www.uregina.ca/student/accessibility</a>

### Course schedule

### All topics/dates are tentative/subject to change minus the exam dates

- [1] Wenger et al. Digital Habitats: Stewarding Technology for Communities. CPSquare. 2009.
- [2] Shirky. Here Comes Everybody: The Power of Organizing Without Organizing. Penguin Books. 2009.
- [3] J. McGonical. Reality Is Broken: Why Games Make Us Better and How They Can Change the World. Penguin Books; Reprint edition. 2011.
- [4] A. Quan-Hasse. Social Networks, Power, and Inequality. OUP Canada. 2020.
- [5] S. Garfield. Handbook of Community Management. De Gruyter Saur. 2020.

| Date    | Lecture topics & project activities  | Reference material/notes  |
|---------|--|---|
| Aug 31  | Zoom full session (11:30 – 12:45)  Course introduction; Syllabus overview; Teaching philosophy; Instructor research discussion |   |
| Sept 2  | It takes a village to find a phone; Communities of practice (CoP);   | <ul><li>[1] Chapter 1</li><li>[2] Chapter 1</li><li>[5] Chapter 2</li></ul>   |
| Sept 7  | Zoom check-in (11:30 – 12:00)  Technology and community; Technology stewardship;  Experience and education (Dewey)             | [1] Chapter 2, 3, 10 [4] Chapter 1, 2, 6 Kevin Kelly: <a href="https://youtu.be/GS1xL1qcBa4">https://youtu.be/GS1xL1qcBa4</a> John Dewey: <a href="https://youtu.be/gs1xL1qcBa4">Education and experience</a>   |
| Sept 9  | Constructing digital habitats  | [1] Chapter 4 Tim Berners-Lee: <a href="https://youtu.be/OM6XIICm_qo">https://youtu.be/OM6XIICm_qo</a>  |
| Sept 14 | Zoom check-in (11:30 – 12:00) Community orientations;  | [1] Chapter 6   |
| Sept 16 | Making sense of the technology landscape;  | [1] Chapter 4, 5, 7 Eli Pariser: <a href="https://youtu.be/B8ofWFx525s">https://youtu.be/B8ofWFx525s</a> NN/g (A. Kaley and M. Rosala): <a href="mailto:Tool Abundance in the Digital Workplace">Tool Abundance in the Digital Workplace</a> , <a href="mailto:Trendy or Troublesome?">Troublesome?</a> |
| Sept 21 | Zoom full session (11:30 – 12:45) Project discussion (with Roger Petry) & project reflection                                   | https://www.un.org/sustainabledevelopment/ https://www.rcenetwork.org/portal/   |
| Sept 23 | Zoom full session (11:30 – 12:45)  Project discussions & instructor signoff (idea & scope)                                     | Schedule TBA  |
| Sept 28 | Dedicated project research time (no meeting) Tim is available for individual scrums on request                                 |   |





| Sept 30 | No class, National Day for Truth & Reconciliation  |  |  |
|---------|--|--|--|
| Oct 5   | Zoom full session (11:30 – 12:45)  Community research & understanding scrum & documentation due  | Schedule TBA   |  |
| Oct 7   | Zoom full session (11:30 – 12:45)<br>Exam 1  |  |  |
| Oct 12  | Zoom check-in (11:30 – 12:00)  Data, Information, & Knowledge Management   | Tim Maciag: Knowledge Management using SpiCE   |  |
| Oct 14  | Sharing anchors community; Personal motivation meets collaborative production; Rhizomatic learning   | [2] Chapter 2, 4, 5  Dave Cormier: Community As Curriculum   |  |
| Oct 19  | Zoom full session (11:30 – 12:45)  Drafting an emerging picture, software design, & architecture scrum & documentation due                       | Schedule TBA   |  |
| Oct 21  | Content strategy; Dis/information strategy   | J. Barshay: Why Content Knowledge is Crucial to Effective Critical Thinking  D. Stiles: Meme Warfare: Design in the Age of Disinformation Mozilla: Web Literacy CBC: The real 'fake news'   CBC: fake news tips  M. Caulfield: The CBC Infolit Bot May Make People Worse at the Web CNN: Finland is winning the war on fake news Wired: There's a lot Wikipedia can teach us about fighting disinformation |  |
| Oct 26  | Zoom check-in (11:30 – 12:00)  Creativity is Queen when everyone is a media outlet   | [2] Chapter 3 Adobe: State of Create (2016) Larry Lessig: https://youtu.be/7Q25-S7jzgs Eric Raymond: The Cathedral and the Bazaar Richard Stallman: https://youtu.be/7twCCWjSnMg   |  |
| Oct 28  | Supporting learning & collaboration with Gamification  | [3] Chapter 1-15   |  |
| Nov 2   | Zoom full session (11:30 – 12:45) ***  Project scrum (instructor/peer) presentation & demo (Following a 2-week sprint cycle with MVP 1 expected) | Schedule TBA   |  |





| Nov 4  | Product quality; Change Management; Plan for change and stewarding technology in use activity;  | [1] Chapter 7, 8, 9, 10 Prosci: ADKAR model for Change Management |  |  |  |
|--------|---|---|--|--|--|
| Nov 9  | No class, Fall break  |   |  |  |  |
| Nov 11 | No class, Fall break/Remembrance Day  | , Fall break/Remembrance Day                                      |  |  |  |
| Nov 16 | Zoom full session (11:30 – 12:45) ***  Project scrum (instructor/peer) presentation & demo (Following a 2-week sprint cycle with MVP 2 expected)                    | Schedule TBA  |  |  |  |
| Nov 18 | A more distributed future; Promise, tool, bargain; A learning agenda  | [1] Chapter 11, 12 [2] Chapter 11 [4] Chapter 12                  |  |  |  |
| Nov 23 | Zoom full session (11:30 – 12:45) Exam 2  |   |  |  |  |
| Nov 25 | Dedicated project development time (no meeting) Tim is available for individual scrums on request   |   |  |  |  |
| Nov 30 | Zoom full session (11:30 – 12:45) ***  Final project scrum (instructor/peer) presentation & demo – Session 1  (Following a 2-week sprint cycle with MVP 3 expected) | Schedule TBA<br>(Random draw)                                     |  |  |  |
| Dec 2  | Zoom full session (11:30 – 12:45) ***  Final project scrum (instructor/peer) presentation & demo – Session 2  (Following a 2-week sprint cycle with MVP 3 expected) | Schedule TBA<br>(Random draw)                                     |  |  |  |
| Dec 21 | There is no "final" exam on Dec 21  |   |  |  |  |

\*\*\*As mentioned in the "Important notes" section, Students who miss the project scrums (instructor/peer) presentations & demo sand/or the final project scrums (instructor/peer) presentations & demos (both session 1 & 2) will get 0% on their project allocation as per Zoom logs. Students who arrive late will be deducted 5% of their project allocation grade for every minute they are late after the first presentation, again, as per Zoom logs (individual deduction). Also, please note that presentations on both days will be recorded by the instructor in Zoom and will be used for grading and accreditation purposes (but please know the videos will not be posted on the World Wide Web)