Geography 475 Cartography Practicum

Instructors: Tanya Buckingham & Dean Olsen

Digital syllabus: bit.ly/G475_F14

Meeting times:
Online instruction: 1.25 hours
Face-to-face (f2f): Wednesdays, 2:30 to 3:45 on the 5th floor

A bit about blending…
This class is a blended format, meaning that we will meet in person one time per week. The expectation is that you will complete one lecture’s worth of work in addition to the readings and assessment activities matching that of a 3 credit class. The blended format succeeds based on your engagement in the process of learning. You will be asked weekly to think about the process, at a higher level, of how you are receiving knowledge. Your input is valuable and will shape the direction of the class. The instructors should be considered facilitators and part of the team in a search for solutions to the proposed task.

Assessment and flow of deadlines:
Mondays at 1:30pm: assessments due
By Wednesday before face-to-face (f2f): complete reading (G475 dropbox with all readings)
Wednesday meet f2f

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Class deliverable:
You are here to create mock-ups of an interactive life history map. The instructors will act as your clients. Based on your understanding of the user and cartography that you will gain in this class, you will design an interactive map. This map will be evaluated by the families and care providers of people with Alzheimer’s Disease (AD) on its desirability and ease of use; the clients will evaluate the process you used to create the map.

In this class, you will (Learning Objectives, or LO):
1. become acquainted with and apply “Lean Startup” or evidence-based model of product creation
2. manage clients (instructors)
3. be able to evaluate the stages and potential areas of conflict for group dynamics and working in teams
4. understand and direct the development of user interface (UI) and user experience (UX) of an on-line software
5. research other disciplines for design guidelines
6. gain technical knowledge of photoshop and mock-up software
7. learn UI/UX design concepts and apply them in the project development
8. demonstrate the ability to put yourself in the place of the user of your interactive map
General braiding of concepts:

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**Week 1 2–5 September**

**Introduction to the project, working in teams, Lean Startup**

Learning objectives: LO1, L03

**face-to-face (f2f) Wednesday, September 3 1:30pm**

- Overview of blended learning, roles of the student and instructor
- How we will incorporate Lean Startup to our class (handout: Diana Kanders, *All in Startup summary by Dean Olsen*)
- Working in teams
  - Designed alliance
  - Dynamics of working in teams (handout: Darcy Luoma and Shawn Preuss, *DASH-ing Model*)
    - forming, norming, storming, performing
- Divide into interview teams
- Introduction to project (not the details, but the gist)
- Instructions on how to set up interviews, and dates when the interviews will take place
- Expectation of work for the course (*3 credits = 9 hours/week, including lectures*)

**assessment (due by Monday, September 8 at 1:30pm)**

1. **Interviews**
   - Find caregivers or family members of Alzheimer’s person to interview, tentatively schedule for weeks 4 and 10. Report your arranged time/date to Tanya (tbuckingham@wisc.edu).

2. **Complete online evaluation survey, week 1** (about 15 minutes)

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**Week 2 8–12 September**

**Flesh out the problem, possible solutions, and identify assumptions**

Learning objectives: L01, L02, L05, L08
readings (complete before f2f)

Required readings (roughly 2–3 hours of reading)

Life stories:

Evidence-based entrepreneurship methodology:
- [http://theleanstartup.com/principles](http://theleanstartup.com/principles)
  focus on these:
  - Validated learning about customers
  - Good enough never is (or is it?)
- What does it mean to create an MVP? Check out the [Dropbox MVP example](https://www.dropbox.com/quickstart/mvp).

For reference (not required)

Life stories:
- Olsen, D., Summary of McAdams Redemptive Self

Evidence-based entrepreneurship:
- Lean Startup

Group dynamics:
- [Tyranny of Structurelessness](http://www.tyrannyofstructurelessness.com)

face-to-face (f2f) Wednesday, September 10 1:30pm

- Discuss the importance of life stories and what we could do to facilitate the creation of a life story
- Identify the “problem” to test
- Begin discussion about how to ask questions in the evidence-based product development model (handout: How and What questions)
assessment (due by Monday, September 15 at 1:30pm)

1. Journal entry, guided questions:
   - technical needs for completing your assignment:
     a. create a digital document that you can share with the instructor and edit throughout the semester (such as or Microsoft OneDrive, Google Docs)
     b. respond to the following questions in your digital journal, mark your starting point clearly and add a date
     c. share with Tanya (tbuckingham@wisc.edu) by sending a link to your journal letting her know that it is ready to be assessed

   JOURNAL QUESTIONS, WEEK 1 (about 2–2.5 hours):
   Back up your statements with citations from the readings or additional research
   ● Based on the required “Life Stories” readings, create a list of symbols that we could create to represent experiences in a person’s life?
   ● What role could a tool that captures stories play in the care of the elderly?
   ● What could you envision this tool to look like?

2. Complete online evaluation survey, week 2 (about 15 mins)

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Week 3 15–19 September (Tanya at MakerCon)
Beginning to understand your user (how have others designed for your user?)
Learning objectives: L01, L02, L05, L08

online learning (complete before f2f) (about 30 minutes)
   ● Add your suggested interview questions to this shared class document

readings (complete before f2f)
Required readings (roughly 2–3 hours of reading)
Alzheimer’s and dementia:

**Evidence-based entrepreneurship methodology:**
• Finding and Engaging Early Adopters

**For reference (not required)**

*Alzheimer’s and dementia*

**Evidence-based entrepreneurship:**
• Lean Startup

**face-to-face (f2f) Wednesday, September 17 1:30pm**
• As a group, consolidate and finalize your questions, and set expectations of your interviews (length, transportation, how will the conversations be recorded and reported, other considerations?)

**assessment (due by Monday, September 22 at 1:30pm)**

1. **Journal entry, guided questions:**
   - technical needs for completing your assignment:
     a. open the digital document that you created last week
     b. enter this week’s journal response at the top of the document
     c. begin with a date
     d. share with Tanya ([tbuckingham@wisc.edu](mailto:tbuckingham@wisc.edu)) by sending a link to your journal letting her know that it is ready to be assessed

**JOURNAL QUESTIONS, WEEK 3 (about 30–45 minutes):**
• What do you want to understand most about early onset Alzheimer’s?
● According to Tuckman’s stages of group development, what stage(s) of group development have you seen this week? Please provide examples.

2. Complete online evaluation survey, week 3 (about 15 minutes)

assessment (due by Wednesday, October 1 at 1:30pm) (about 2–2.5 hours, including preparation and transportation)

1. Perform interview

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**Week 4 22–26 September**

**Introduction to User Interface**

Learning objectives: L01, L04, L07

**online learning (complete before f2f) (about 4 hours)**

- Complete a free Photoshop lesson appropriate to your level, through DoIT or via Lynda.com
- Gather 2-3 of your favorite website interfaces, share online

**readings (complete before f2f) (about 2–2.5 hours)**

**Required**

*Alzheimer’s and dementia:*


*User Interface (UI) design:*

- Tidwell, J. (2011). Designing interfaces. 2nd ed. Sebastopol, CA: O'Reilly. (selected chapters, see below for chapter assignments)

Readings from Designing Interfaces ([available online through UW Library system](available online through UW Library system)), each team member will select either Group A or Group B. There must be one person in each pair assigned to each reading Group. Each person is then responsible for bringing their partner up-to-speed on the readings

**Group A:**
• Preface, pp. xv–xix
• Chapter 2, Organizing the Content: Information Architecture and Application Structure pp. 25–61 (concept: layout)
• Chapter 3, Getting Around: Navigation, Signposts, and Wayfinding pp. 77–129 (concept: action)
• Chapter 8, Getting Input from Users: Forms and Controls pp. 341–391 (concept: action)

Group B:
• Preface, pp. xv–xix
• Chapter 4, Organizing the Page: Layout of Page Elements pp. 131–189 (concept: layout)
• Chapter 6, Doing Things: Actions and Commands pp. 239–280 (concept: action)
• Chapter 11, Making It Look Good: Visual Style and Aesthetics pp. 475–521 (concept: design)

For reference (not required)
User Interface (UI) design:

face-to-face (f2f) Wednesday, September 24 1:30pm
• As a group, create a list of guidelines for user interface design and the user experience from the readings and your instincts

assessment (due by Monday, September 29 at 1:30pm)
1. Journal entry, guided questions:
   - technical needs for completing your assignment:
     a. open the digital journal
     b. enter this week’s journal response at the top of the document
     c. begin with a date
     d. share with Tanya (tbuckingham@wisc.edu) by sending a link to your journal letting her know that it is ready to be assessed

JOURNAL QUESTIONS, WEEK 3 (about 1 hour):
• What are the most important factors in understanding our audience?
• What are the limitations to understanding our audience?
• Deconstruct the websites that you chose to share with the class, and explain, using principles from the reading, why one may be drawn to these sites.

2. Complete online evaluation survey, week 4 (about 15 minutes)
Week 5 29 September–3 October

Deeper understanding of our user
Learning objectives: L02, L05, L08

online learning  (complete before f2f)
Observation/interviews (2–2.5 hours)
- Each student will interview a care provider or family member of a person with Alzheimer’s
- Attend an observational time in a memory care facility

readings  (complete before f2f) (about 2–3 hours)
Understanding our user interactions with technology:

Video
- Alive Inside: How the Magic of Music Proves Therapeutic for Patients with Alzheimer’s and Dementia

Peer review
Read responses from classmates on interview experiences

For reference (not required)
Alzheimer’s and dementia

**face-to-face (f2f) Wednesday, October 1 1:30pm**

● Adjust the list of recommendations to fit AD (prioritize, add, etc)
● Discuss interviews

**assessment (due by Monday, October 6 at 1:30pm)**

1. Report summary of responses (2 hours)
   ● What are the most important topics discussed in your interviews? [Share online](#)

2. Complete online [evaluation survey, week 5](#) (15 minutes)

3. Journal entry, guided questions:
   - technical needs for completing your assignment:
     
     follow same instructions from week 3

   JOURNAL QUESTIONS, WEEK 5 (15 minutes):
   ● What is your “muddiest point” in the class to the class so far, that is what concept is least clear to you? Where does it fall apart in your understanding?

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### Week 6 6–10 October (*Tanya at NACIS*)

**User Experience and Begin Design**

Learning objectives: L05, L06, L07

**online learning (complete before f2f)**

● With your classmates, create a master list of symbols that should be completed for the map in this [spreadsheet](#)

**readings (complete before f2f) (2–2.5 hours)**

Understanding our user interactions with technology:

● Wang, B. (2010). *Designing a graphical user interface of an easy-to-use videophone for people with mild dementia*.


For reference (not required)

**UX**
- [LeanUX](#)
- [Case Study: UX, Design, and Food on the Table](#)

**Understanding our user interactions with technology:**

**face-to-face (f2f) Wednesday, October 8 1:30pm**
- Review the symbol set and prioritize which symbols to create and how to divide the work/tasks

**assessment (due by Monday, October 12 at 1:30pm)**

1. Create symbol set, based on workflow discussed in class (3–4 hours)
2. Complete online evaluation survey, week 6 (15 minutes)
3. Journal entry, guided questions:
   - technical needs for completing your assignment:
     follow same instructions from week 3

**JOURNAL QUESTIONS, WEEK 6 (1 hour):**
- How do the McAdams reading and the information obtained in the interviews impact your design decisions?

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**Week 7 12–17 October**

**Mock-ups**
Learning objectives: L03, L06, L08

**online learning (complete before f2f) (4–6 hours)**
- Evaluate online mock-up tools (share results of your research here), compare to Photoshop; make recommendation on how to proceed
- Define which screens you will need to give the client a feel for the project, sketch out
readings (complete before f2f)

- none

face-to-face (f2f) Wednesday, October 14 1:30pm

- Present draft mock-ups and necessary screens
- Class discussion about which software to use and which screens are necessary

assessment (due by Monday, October 20 at 1:30pm)

1. Flow of mock-ups (post sketches to dropbox) (1 hour)
2. Complete online evaluation survey, week 7 (15 minutes)
3. Journal entry, guided questions:
   - technical needs for completing your assignment:
     follow same instructions from week 3
   JOURNAL QUESTIONS, WEEK 6 (1 hour):
   - What level of group formation have you observed in the last two weeks, according to Tuckman?
   - What assumptions have we made about our users?
   - How should we test those assumptions?

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**Week 8 20–24 October**

**Mock-ups**
Learning objectives: L03, L06, L08

**online learning (complete before f2f) (6–8 hours)**

- Complete minimum viable product sketches, and begin creating it
- Create map mockup based on your own life to be used in mockups (these will present unique challenges dependent upon the differing scale of the maps)

readings (complete before f2f)

- none

face-to-face (f2f) Wednesday, October 22 1:30pm

- Project meeting: work out any issues with drafts, discuss the scalability of the map designs people of created, if class has been divided into teams, check-in and evaluate the other team’s work

assessment (due by Monday, October 27 at 1:30pm)
1. Nearly completed set of mock-ups, with functionality sent to instructors (posted to dropbox)

No journal entry this week

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Week 9 27–31 October

Mock-ups

Learning objectives:

online learning (complete before f2f) (4 hours)
  ● Complete minimal viable product

readings (complete before f2f)
  ● none

face-to-face (f2f) Wednesday, October 29 1:30pm
  ● Present and critique final mockups, decide if anything needs to be updated before the presentation to users in two weeks
  ● Begin drafting presentation of minimum viable product

assessment (due by Monday, November 3 at 1:30pm)

  1. Completed set of mock-ups, with functionality sent to instructors (posted to dropbox)
  2. Paper (4 hours)
     (length: as needed to fully answer questions; citations: provide where appropriate)
     Critique the implementation of evidence-based model in the production of our product to this point. Where are we failing, where could we be doing better, where does the model fail? Where are we succeeding?

     Compare evidence-based entrepreneurship with the principles of UI/UX design. Where do these concepts overlap? Where are they different? Use concrete examples from our experience to illustrate your points.

     Create an outline of how the class should spend the remaining weeks of the semester to meet the goals of the project.

No journal entry this week
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**Week 10** 3–7 November

**Next steps**
Learning objectives: L01, L02, L04, L08

**online learning** (complete before f2f)
- Make a draft presentation for next week

**readings** (complete before f2f)
- none

**face-to-face (f2f) Wednesday, November 5 1:30pm**
- Collaboratively decide how to move forward
- Prepare presentation to users for the following week (divide tasks as necessary)
- Prepare questions
  - Ease of use, interest, any lacking items, overall look and feel, delivery method etc.

**assessment** (due by Monday, November 10 at 1:30pm)
1. **Complete presentation and rehearse**, each person should have a role (from presenting, to preparing slides to preparing handouts)
2. **Complete online evaluation survey, week 10**
3. **Outline of weeks 12-15**

*No journal entry this week*

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**Week 11** 10–14 November

**Presentation of mock-ups to care providers of people with Alzheimer's**
Learning objectives: L01, L02, L04, L08

**online learning** (complete before f2f)
- Finalize presentation

**readings** (complete before f2f)
- none
face-to-face (f2f) Wednesday, November 12 1:30pm
- Will happen at care facility
  - Guide participants through questions about ease of use, interest, any lacking items, overall look and feel, etc.

assessment (due by Monday, November 17 at 1:30pm)
1. Deliver presentation, summarize results
2. Complete online evaluation survey, week 11
3. Journal entry, guided questions:
   - technical needs for completing your assignment:
     follow same instructions from week 3
  JOURNAL QUESTIONS, WEEK 10:
  - What assumptions did you learn we had made in our creation of the mockups?
  - What do you think is the biggest priority as the mockups are reworked?

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**Week 12** 17–21 November
Iterative creation phase; process designed by class

assessment (due by Monday, November 24 at 1:30pm)
1. Write a survey for weeks 12–15
2. Complete online evaluation survey, week 12

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**Week 13** 24–28 November
Iterative creation phase; process designed by class

assessment (due by Monday, December 1 at 1:30pm)
1. Complete online evaluation survey, week 13

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**Week 14** 1–5 December
Iterative creation phase; process designed by class

assessment (due by Monday, December 8 at 1:30pm)
1. Complete online evaluation survey, week 14
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**Week 15** 8–12 December
Iterative creation phase; process designed by class

assessment (due by Monday, December 15 at 1:30pm)
1. Complete online evaluation survey, week 15

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**Week 16** 15–19 December

Finalize the minimal viable product for delivery
Learning objectives:

assessment (final exam)
1. Mock-ups submitted to dropbox
2. Recommendations for additional pieces (e.g., photo album, playlist)
3. Reflections on class and start-up methodology
4. Evaluation of group dynamics experienced throughout the semester