**Schedule**

**INLS 582\_003, Systems Analysis, Fall 2015, Jeff Campbell**

This is a *tentative* schedule: topics, readings, and assignments may be revised at the instructor's discretion.

**1. Tuesday 8/18/15, Introductions 1**

Introductions and course business

Assignments:

* Case Study 1 volunteers' discussion points due Wednesday 8/27/15, 8:00 a.m.
* Sign up for remaining Case Studies by Thursday 8/27/15, 12:30 p.m.

**2. Thursday 8/20/15, Introductions 2**

Read before class:

* Introductions 2 prep slides
* Beyer & Holtzblatt, Ch. 1

More course business, project preview

What is an information system?

**3. Tuesday 8/25/15, The world as an information system**

Read/view before class:

* World as Information System prep slides
* Bennett P. (2005). [Design is in the details](https://www.ted.com/talks/paul_bennett_finds_design_in_the_details). TEDGlobal 2005 (TED talk, 14:10)
* [Sellen, A. & Harper, R. (2002). The future of paper.](http://libproxy.lib.unc.edu/login?url=http://eres.lib.unc.edu/eres/coursepage.aspx?cid=2001" \t "_blank) In Sellen & Harper, *The Myth of the Paperless Office*, Cambridge, MA: The MIT Press. Ch. 7, pp. 185-212.

Assignments:

* Due: Case Study 1 volunteers' discussion points due Wednesday 8/26/15, 8:00 a.m.

**4. Thursday 8/27/15, Case Study 1, Systems Development Life Cycle**

Read before class:

* SDLC prep slides
* Case Study 1: : [Jaferian, P., Botta, D., Hawkey, K., & Beznosov, B. (2009). A case study of enterprise identity management system adoption in an insurance organization.](http://libproxy.lib.unc.edu/login?url=http://doi.acm.org/10.1145/1641587.1641594" \t "_blank) Proceedings of the Symposium on Computer Human Interaction for the Management of Information Technology (CHIMIT), 46-55.
* Batra, D., Xia, W., VanderMeer, D. & Dutta, K. (2010). Balancing Agile and structured development approaches to successfully manage large distributed software projects: A case study from the cruise line industry. *Communications of the Association for Information Systems*, 27, Article 21, 379-394. (Sakai)

Approaches to SDLC, including waterfall, contextual inquiry, Agile.

Assignments:

* Due: Sign up for remaining Case Studies by Thursday 8/27/15, 12:30 p.m.

**5. Tuesday 9/1/15, Problem Definition**

Read before class:

* Problem definition prep slides
* Alter, S. (2014). Theory of Workarounds. *Communications of the Association for Information Systems*, 34, Article 55. (Sakai) Sections I & II
* [Davis, W. (1999). The problem statement](http://libproxy.lib.unc.edu/login?url=http://eres.lib.unc.edu/coursepage.asp?cid=2001" \t "_blank). In W. Davis & D. Yen, *The Information System Consultant's Handbook: Systems Analysis and Design*. Boca Raton: CRC Press. Chapter 12, 87-90.
* [Davis, W. (1999). The feasibility study](http://libproxy.lib.unc.edu/login?url=http://eres.lib.unc.edu/coursepage.asp?cid=2001" \t "_blank). In W. Davis & D. Yen, *The Information System Consultant's Handbook: Systems Analysis and Design.* Boca Raton: CRC Press. Chapter 13, 91-96.

Information problems and symptoms.

Assignments:

* Assign Problem Definition, due Tuesday 9/15/15, 12:30 p.m.

**6. Thursday 9/3/15 Problems, Symptoms, Risks**

Read before class:

* Problem, Symptoms, Risk Prep slides.
* Alter, S. (2014). Theory of Workarounds. *Communications of the Association for Information Systems*, 34, Article 55. (Sakai), Sections III to end
* [Swan, L., Taylor, A., & Harper, R. (2008). Making place for clutter and other ideas of home](http://libproxy.lib.unc.edu/login?url=http://doi.acm.org/10.1145/1375761.1375764" \t "_blank). *ACM Transactions on Computer-Human Interaction*, 15(2), Article 9.
* Dolan, P.L. (2013). [EHR design flaws causing doctors to revert to paper](http://www.amednews.com/article/20130408/business/130409961/6/). American Medical News. posted 4/8/13.
* Beyer & Holtzblatt: Ch. 2, Gathering Customer Data.

What risks do poorly-designed systems pose? How do *you* cope with an ill-fitting information system?

**7. Tuesday 9/8/15, Contextual Inquiry**

Read/view before class:

* Contextual Inquiry prep slides
* Beyer & Holtzblatt, Ch. 3, Principles of contextual inquiry & Ch. 4, Contextual inquiry in practice.
* [Gellatly, A., Hansen, C., Highstrom, M & Weiss, J. (2010). Journey: General Motors' move to incorporate contextual design into its next generation of automotive HMI designs](http://www.auto-ui.org/10/proceedings/p156.pdf" \t "_blank). *Proceedings of the Second International Conference on Automotive User Interfaces and Interactive Vehicular Applications,* 156*-*161.
* [Contextual Inquiry: Workforce Mobility](https://www.youtube.com/watch?v=Gd5fA9UQDjE) (NozPortfolio, 2010) (YouTube video, 4:05) Watch this *after* you have read Gellatly et al.

**8. Thursday 9/10/15, Models**

Read before class:

* Models prep slides
* [Hendry, D. (2004). Communication functions and the adaptation of design representations in interdisciplinary teams](http://libproxy.lib.unc.edu/login?url=http://doi.acm.org/10.1145/1013115.1013133" \t "_blank). *Proceedings of the 2004 Conference on Designing Interactive Systems*, 123-132.
* [Siceloff, B. (2012). Bell Tower roundabout will be scaled back to a single lane](http://www.newsobserver.com/2012/06/05/2112794/road-worrier-bell-tower-roundabout.html" \l "storylink=misearch" \t "_blank). News & Observer, June 5, 2012.

**9. Tuesday 9/15/15, Project Management**

Read before class:

* Project Management prep slides
* [Project Management Institute](http://www.pmi.org/Pages/default.aspx" \t "_blank) Browse the website, especially "About Us" and "Certification" pages.

Assignment:

* Due: Problem definition, due today, 12:30 p.m.
* Review Problem Definitions and submit preferences by Wednesday, 9/16/15, 12:30 p.m.
* Review Candidate Problem Definitions before class on Thursday, 9/17/15.

**10. Thursday 9/17/15, Team Formation**

Read before class:

* Problem Definitions, available Tuesday 9/15/15 in the afternoon.
* Candidate Problem Definitions, available Wednesday 9/16/15 in the afternoon.

Assignment:

* Assign Information Gathering Plan, due Thursday, 10/1/15, 12:30 p.m.

**11. Tuesday 9/22/15 Scenarios, Personas**

Read before class:

* Scenario Persona prep slides
* Beyer & Holtzblatt, Ch. 5, A language of work.
* [Carroll, J. (2000). Five reasons for scenario-based design.](http://eresources.lib.unc.edu/external_db/external_database_auth.html?A=P%7CF=N%7CID=10978%7CREL=NA%7CURL=http://libproxy.lib.unc.edu/login?url=http://www.sciencedirect.com/science/journal/09535438" \t "_blank) *Interacting with Computer*s, 13(1), 43-60.
* [Holtzblatt , K., Wendell, J. & Wood, S. (2005). *Rapid Contextual Design*. San Francisco: Morgan Kaufmann. Ch. 9, Using Contextual Data to Write Personas,](http://libproxy.lib.unc.edu/login?url=http://eres.lib.unc.edu/eres/coursepage.aspx?cid=2001) 181-191.

**12. Thursday 9/24/15, Cultural Models**

Read before class:

* Cultural Model Preparation Slides
* Beyer & Holtzblatt, Ch. 6, Work models: The cultural model, pp. 107-115.
* [Monk, A. & Howard, S. (1998).The rich picture: a tool for reasoning about work context.](http://libproxy.lib.unc.edu/login?url=http://doi.acm.org/10.1145/274430.274434" \t "_blank) *interactions*, 5(2), 21-30.

**13. Tuesday 9/29/15, Artifact Models**

Read before class:

* Artifact Models Prep Slides
* Beyer & Holtzblatt, Ch. 6, Work models: The artifact model, pp. 102-107.

Assignment:

* Assign Artifact Assignment, due Tuesday, 10/6/15, 12:30 p.m.

**14. Thursday 10/1/15, Card Sorting, Use Cases**

Read before class:

* Cart sorting prep slides
* Use Case prep slides
* [Rosenfeld, L. & Morville, P. (2006). Information Architecture for the World Wide Web](http://proquest.safaribooksonline.com/0596527349" \t "_blank). O'Reilly. Ch. 10.7.2, Card sorting
* *[optional]* [Miles & Hamilton, Ch. 2, Modeling requirements: Use cases](http://proquest.safaribooksonline.com/0596009828" \l "##################" \t "_blank)
* [Pilone & Pitman, Ch. 7, Use case diagrams.](http://libproxy.lib.unc.edu/login?url=http://proquest.safaribooksonline.com/0596007957" \t "_blank)
* [Gottesdiener, E. (2002). Top ten ways project teams misuse use cases -- and how to correct them: Part I: Content and style issues](http://www-128.ibm.com/developerworks/rational/library/content/RationalEdge/jun02/MisuseUseCasesJun02.pdf" \t "_blank) *The Rational Edge*, June 2002. [Explorer may work better than Firefox]
* [Gottesdiener, E. (2002). Top ten ways project teams misuse use cases -- and how to correct them: Part II: Eliciting and modeling use cases](http://www-128.ibm.com/developerworks/rational/library/content/RationalEdge/jul02/TopTenWaysJul02.pdf" \t "_blank) *The Rational Edge*, July 2002. [ Explorer may work better than Firefox]

Assignment:

* Due: Information Gathering Plans due today, 12:30 p.m.
* Discuss Project Draft Models, due Thursday 10/22/15, 12:30 p.m.

**15. Tuesday 10/7/15, Process/work models 1**

Read before class:

* Process/Work Models Prep slides
* [Miles & Hamilton, Ch. 3, Modeling System Workflows: Activity Diagrams.](http://proquest.safaribooksonline.com/0596009828" \l "##################" \t "_blank)
* [Pilone & Pitman, Ch. 9, Activity diagrams](http://libproxy.lib.unc.edu/login?url=http://proquest.safaribooksonline.com/0596007957" \t "_blank).
* [Bell, D. (2003).  UML Basics Part II: The activity diagram](http://download.boulder.ibm.com/ibmdl/pub/software/dw/rationaledge/sep03/f_umlbasics_db.pdf" \t "_blank). *The Rational Edge*, September 2003. [optional]

We'll start with activity models today; we probably won't address sequence models and flow charts until Thursday 10/8/15.

Assignment:

* Due: Artifact Assignment due today, 12:30 p.m.

**16. Thursday 10/8/15, Process/work models 2**

Read before class:

* Process/Work Models 2 Prep slides
* Beyer & Holtzblatt, Ch. 6, Work models: The sequence model, pp. 96-101.

Assignment:

* Case Study 2 discussion points due Monday 10/12/15, 8:00 a.m.

**17. Tuesday 10/13/15 Case Study 2, Decision models**

Read before class:

* Decision Models prep slides
* Case Study 2: Laster, S., Stitz, T. & Bove, F. (2011). Transitioning from marketing-oriented design to user-oriented design: A case study. *Journal of Web Librarianship*, 5, 299-321.

Assignment:

* Assign Process & Decision Models assignment, due Tuesday, 10/28/15, 12:30 p.m.

***Thursday 10/15/15 FALL BREAK -- NO CLASS***

**18. Tuesday 10/20/15, Flow (communication) model**

Read before class:

* Flow Model prep slides
* Beyer & Holtzblatt, Ch. 6, Work models: The flow model, pp. 89-96

**19. Thursday 10/22/15 Interpretation and catch-up day**

Read before class:

* Beyer & Holtzblatt, Ch. 7, The interpretation session.

Catch up as needed, exchange progress on projects, schedule project presentations.

Assignment:

* Due: Project Draft Models due today 12:30 p.m.

**20. Tuesday 10/27/15 Entity-Relationship (ER) Models**

View before class:

* Haas, S. W. (2013). Introduction to Databases: The Movie Database Exercise (video, 9:17, (Sakai)
* Haas, S.W. (2013) Entity-Relationship Models, Part 1: Entities and Attributes (Sakai)
* Haas, S.W. (2013) Entity-Relationship Models, Part 2: Relationships (Sakai)

Assignment:

* Due: Process & Decision Models assignment, due today, 12:30 p.m.
* Assign Entity-Relationship Model assignment, due Tuesday 11/10/15, 12:30 p.m.
* Case Study 3 discussion points due Wednesday 10/28/15, 8:00 a.m.

**21. Thursday 10/29/15. Case Study 3, Data Dictionaries (DD), CRUD models**

Read before class:

* CRUD/DD prep slides
* Case Study 3: Sutcliffe, A., de Bruijn, O., Thew, S. Buchan, I, Jarvis, P. McNaught, J., Procter, R. (2014). Developing visualization-based decision support tools for epidemiology. Information Visualization 13:3(1), 3-17.
* ADVISES paper prototype (video, 3:16) The video illustrates the paper prototyping of the preliminary design referred to in the article.

Assignment:

Schedule project team meetings

**22. Tuesday 11/3/15 Web Models, Physical Models**

Read before class:

* Web Models prep slides
* Physical Model prep slides
* [Rosenfeld, L. & Morville, P. (2006). Information Architecture for the World Wide Web](http://proquest.safaribooksonline.com/0596527349" \t "_blank). O'Reilly. Ch. 12.1 - 12.4, Design and Documentation

**23. Thursday 11/5/15 User Environment Design, Consolidation**

Read before class:

* User Environment Design prep slides
* Beyer & Holtzblatt, Ch. 15, The User Environment Design.
* Beyer & Holtzblatt, Ch. 9, Creating one view of the customer. Read pp. 151-163.
* Beyer & Holtzblatt, Ch. 11, Work redesign. "Directed skimming": please read all figures, captions, and hints.

**24. Tuesday 11/10/15 Risk & Change**

Read before class:

* Risk and change prep slides
* Sicotte, C. et al. (2006). A risk assessment of two interorganizational clinical information systems. Journal of the American Medical Informatics Association, 13, 557-566. (Sakai)
* [optional] Lorenzi, N,. & Riley, R. (2000). Managing Change: An Overview. Journal of the American Medical Informatics Association, 7, 116-124. (Sakai)

Assignment:

* Due: Entity-Relationship Model assignment, due today, 12:30 p.m.

**25. Thursday 11/12/15, Accessibility**

* Guest speaker: Tiffany Bailey, Director of Accessibility, UNC-CH.

Assignment:

* Case Study 4 discussion points due Monday 11/16/15, 8:00 a.m.

**26. Tuesday 11/17/15, Case Study 4, Ethics**

Read/listen to before class:

* Case Study 4: Case Study 4: [Guillemette, M., Fontaine, I., Caron, C. (2009). A hybrid tracking system of human resources: A case study in a Canadian university](http://libproxy.lib.unc.edu/login?url=http://aisel.aisnet.org/cais/vol24/iss1/15/" \t "_blank). Communications of the Association for Information Systems, 24(1), Article 15.
* Goldstein, J. [To Increase Productivity, UPS Monitors Drivers' Every Move](http://www.npr.org/blogs/money/2014/04/17/303770907/to-increase-productivity-ups-monitors-drivers-every-move). NPR, Broadcast 4/17/15.
* (optional but recommended) Shilton, K. (2010). Technology development with an agenda: Interventions to emphasize values in design. Proceedings of the *American Society of Information Science & Technology 2010 Annual Meeting*.

**27. Thursday 11/19/15, Project Presentations**

Projects TBD

**28. Tuesday 11/24/15, Project Presentations**

Projects TBD

**Thursday 11/26/15*, THANKSGIVING -- NO CLASS***

**29. Tuesday 12/1/15, Wrap-up**

**Final exam scheduled Tuesday 12/8/15, 12:00 p.m.**

* **Due: Projects due today 12:00 p.m.**