INFO H565
Collaborative and Social Computing

Department of Human-Centered Computing
Indiana University School of Informatics and Computing, Indianapolis

Prerequisites: None.

COURSE DESCRIPTION
Students engage with seminal research in collaborative and social computing through a series of genealogical threads linking ‘big ideas’ in the social sciences to the ways in which they have been applied in the design, study, and use of collaborative and social computing systems.

Required Text(s):
Title: Situated learning: Legitimate peripheral participation.
Author(s): Lave, J. & Wenger, E.
Publisher: Cambridge University Press
Book site: http://www.cambridge.org/us/academic/subjects/psychology/developmental-psychology/situated-learning-legitimate-peripheral-participation
ISBN: 978-0521423748

Title: The Wisdom of Crowds
Author(s): Surowieki, J.
Publisher: Anchor Books
ISBN: 978-0385721707

Additional Readings:
Texts for this course will also include conference and journal publications that are all available online via university site licenses. You will need to be logged in to the university network or connected via VPN to access these articles for free.
Student Learning Outcomes:

The core competencies of this course include the following:

<table>
<thead>
<tr>
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<th>PGPLs</th>
<th>Assessment &amp; Evaluation</th>
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</thead>
<tbody>
<tr>
<td>1. Apply critical reading skills to a diversity of texts, including social theory from a diversity of disciplines as well as informatics research reflecting varied epistemological stances and methodological approaches</td>
<td>CT K&amp;S</td>
<td>RS ILR SLR &amp; DSA FRP</td>
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<tr>
<td>2. Apply theories and insights from a diversity of texts to the design and use of contemporary collaborative and social computing systems, via both written and oral modalities</td>
<td>CT K&amp;S EC EB</td>
<td>RS CP SLR &amp; DSA FRP</td>
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<tr>
<td>3. Conduct an in-depth, genealogical, and interdisciplinary literature review</td>
<td>K&amp;S CT EC EB</td>
<td>ILR SLR &amp; DSA FRP</td>
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<td>4. Construct a design space derived from the research literature and from a competitive analysis of contemporary systems</td>
<td>K&amp;S CT EC</td>
<td>SLR &amp; DSA CDP FRP</td>
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<td>5. Create conceptual design proposals to exemplify interesting features of a design space</td>
<td>K&amp;S CT EC</td>
<td>CDP FRP</td>
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Principles of Graduate and Professional Learning (PGPL):

Learning outcomes are assessed in the following areas:

1. Knowledge and skills mastery (K&S) Minor emphasis
2. Critical thinking and good judgment (CT) Major emphasis
3. Effective communication (EC) Some emphasis
4. Ethical behavior (EB)

ASSESSMENT & EVALUATION

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Reading Summaries (RS)</td>
<td>25%</td>
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<tr>
<td>Class Participation (CP)</td>
<td>25%</td>
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<tr>
<td>Research Deliverables</td>
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<table>
<thead>
<tr>
<th>Grade</th>
<th>Points Range</th>
<th>Description</th>
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<tbody>
<tr>
<td>A+</td>
<td>97 – 100</td>
<td>Outstanding achievement, given at the instructor’s discretion</td>
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<tr>
<td>A</td>
<td>93 – 96.99</td>
<td>Excellent achievement</td>
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<tr>
<td>A–</td>
<td>90 – 92.99</td>
<td>Very good work</td>
</tr>
<tr>
<td>B+</td>
<td>87 – 89.99</td>
<td>Good work</td>
</tr>
<tr>
<td>B</td>
<td>83 – 86.99</td>
<td>Marginal work</td>
</tr>
<tr>
<td>B–</td>
<td>80 – 82.99</td>
<td>Very marginal work</td>
</tr>
<tr>
<td>C+</td>
<td>77 – 79.99</td>
<td>Unacceptable work (Core course must be repeated)</td>
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<tr>
<td>C</td>
<td>73 – 76.99</td>
<td>Unacceptable work (Core course must be repeated)</td>
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<tr>
<td>C–</td>
<td>70 – 72.99</td>
<td>Unacceptable work (Elective or core course must be repeated)</td>
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<tr>
<td>D+</td>
<td>67 – 69.99</td>
<td>Unacceptable work (Elective or core course must be repeated)</td>
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<tr>
<td>D</td>
<td>63 – 66.99</td>
<td>Unacceptable work (Elective or core course must be repeated)</td>
</tr>
<tr>
<td>D–</td>
<td>60 – 62.99</td>
<td>Unacceptable work (Elective or core course must be repeated)</td>
</tr>
<tr>
<td>F</td>
<td>Below 60</td>
<td>Unacceptable work (Elective or core course must be repeated)</td>
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Incompletes:
The instructor may assign an Incomplete (I) grade only if at least 75% of the required coursework has been completed at passing quality and holding you to previously established time limits would result in unjust hardship to you. All unfinished work must be completed by the date set by the instructor. Left unchanged, an Incomplete automatically becomes an F after one year. http://registrar.iupui.edu/incomp.html

ASSIGNMENTS:
All assignments are due by the date and time posted. There is no “late policy” in this class; there are deadlines. If you want to earn credit for your work, you should plan on meeting these deadlines. You may earn partial credit on assignments by submitting whatever you have finished at the time of the deadline.

Reading Summaries:
By midnight two days before each class for which a reading was assigned, students will be required to post a reading summary of each text to the Google Docs folder for that week. Each of your reading summaries should be ~500 words and address the following:

- A full reference to the text (in whatever format is most relevant to you, e.g., APA)
- A summary of the main points of the text in your own words (not a restatement of the abstract!)
- A brief discussion of some of the ways this text connects to your own research, life experiences or other things you have read (in this class or otherwise)
- Optional: A list of references (writ broadly… could be texts, ideas, people, projects, etc…) that you might want to explore further (I also find that jotting a quick note about why each reference seemed interesting to be useful down the road…)
- A list of questions you’d like to discuss in class (this will be a valuable resources to the discussion lead each week)

Over the course of the semester, the compilation of these reading summaries will become your own personal annotated bibliography of social and collaborative computing.

Class Participation:
Your participation in class is the primary way in which you will demonstrate your engagement with the material and contribute to our collective understanding of collaborative and social computing.

At the beginning of the semester, students will sign up to take on several different roles that will help to ensure engagement and structure class participation. Because this is a class about collaborative computing, we will be experimenting first-hand with the use of
collaborative writing technologies during class. For each class session, one student will be responsible for adopting each of the following roles:

- **Discussion Lead:** This student (or students) will prepare and present a short summary of the day’s texts and will craft a semi-structured discussion protocol for class (posted to our shared Google Docs folder). He or she is encouraged to use peer questions as input but should spend time thinking in advance about which questions will build on prior class discussions, how the questions can be structured to build on each other and about how to create a coherent arc of discussion. We will treat the protocol as a working starting point that can evolve if and when the discussion moves in interesting new directions. The protocol should also be used to reign in and refocus discussion that moves too far afield of the content of this course.

- **Primary Notetaker:** This student will be responsible for producing the first draft of our collaborative class notes. This student should plan on typing almost continuously for the duration of the class and producing a roughly structured document in Google Docs that captures as much of the content in the discussion as possible.

- **Secondary Notetaker:** This student will follow behind the primary notetaker in real time during class. His or her key responsibility will be elaborating on the work of the primary notetaker to provide additional context, framing, or organization that will help clarify the existing set of notes. The secondary notetaker should be working closely enough on the heels of the primary notetaker to add additional content in instances where the primary notetaker didn’t capture everything.

Other students are primarily responsible for contributing to the class discussion but all are encouraged to jump in and help with the notetaking as needed.

**Research Deliverables:**

In this course, you will conduct collaborative research (in teams of three or more) in collaborative and social computing. The research process will entail a genealogical literature review about a theory (broadly speaking) of relevance to collaborative and social computing; an analysis of the ways in which that theory has and has not been applied to the design and analysis of collaborative and social computing systems; a design space exploration based on your findings; and a series of conceptual design proposals to address either gaps in the design space and/or to highlight sweet spots in that space. Research papers will be curated by the instructor and high-quality work may be submitted for peer review to the *ACM Conference on Computer-Supported Cooperative Work*.

More details about each deliverable will be provided as the course progresses. Note that for each deliverable, each research team must also submit a corresponding team assessment. These team assessments must be signed by each team member and submitted in hardcopy.
## WEEKLY SCHEDULE

<table>
<thead>
<tr>
<th>Date</th>
<th>Agenda</th>
<th>Readings</th>
<th>Research Deliverable</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>Introduction to the course and your research</td>
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|           |                         | Initial Literature Review Due  
One-on-One Research Team Meetings |
| Week 6    | Research Workshop: Design Space Explorations |  

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<tr>
<td>Week 13</td>
<td>Conceptual Design Poster Presentations</td>
<td>Conceptual Design Posters Due</td>
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<tr>
<th>Week 15</th>
<th>Research Workshop: Writing for an Academic Audience</th>
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<tr>
<td>Finals Week</td>
<td>Final Research Paper Due</td>
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**CODE OF CONDUCT**

All students should aspire to the highest standards of academic integrity. Using another student’s work on an assignment, cheating on a test, not quoting or citing references correctly, or any other form of dishonesty or plagiarism shall result in a grade of zero on the item and possibly an F in the course. Incidences of academic misconduct shall be referred to the Department Chair and repeated violations shall result in dismissal from the program.

All students are responsible for reading, understanding, and applying the Code of Student Rights, Responsibilities and Conduct and in particular the section on academic misconduct. Refer to The Code > Responsibilities > Academic Misconduct at [http://www.indiana.edu/~code/](http://www.indiana.edu/~code/). All students must also successfully complete the Indiana University Department of Education “How to Recognize Plagiarism” Tutorial and Test. [https://www.indiana.edu/~istd](https://www.indiana.edu/~istd) You must document the difference between your writing and that of others. Use quotation marks in addition to a citation, page number, and reference whenever writing someone else’s words (e.g., following the Publication Manual of the American Psychological Association). To detect plagiarism instructors apply a range of methods, including Turnitin.com. [http://www.ulib.iupui.edu/libinfo/turnitin](http://www.ulib.iupui.edu/libinfo/turnitin)

**Academic Misconduct:**

1. **Cheating:** Cheating is considered to be an attempt to use or provide unauthorized assistance, materials, information, or study aids in any form and in any academic exercise or environment.
   
   a. A student must not use external assistance on any “in-class” or “take-home” examination, unless the instructor specifically has authorized external assistance. This prohibition includes, but is not limited to, the use of tutors, books, notes, calculators, computers, and wireless communication devices.

   b. A student must not use another person as a substitute in the taking of an examination or quiz, nor allow other persons to conduct research or to prepare
work, without advanced authorization from the instructor to whom the work is being submitted.

c. A student must not use materials from a commercial term paper company, files of papers prepared by other persons, or submit documents found on the Internet.

d. A student must not collaborate with other persons on a particular project and submit a copy of a written report that is represented explicitly or implicitly as the student’s individual work.

e. A student must not use any unauthorized assistance in a laboratory, at a computer terminal, or on fieldwork.

f. A student must not steal examinations or other course materials, including but not limited to, physical copies and photographic or electronic images.

g. A student must not submit substantial portions of the same academic work for credit or honors more than once without permission of the instructor or program to whom the work is being submitted.

h. A student must not, without authorization, alter a grade or score in any way, nor alter answers on a returned exam or assignment for credit.

2. **Fabrication:** A student must not falsify or invent any information or data in an academic exercise including, but not limited to, records or reports, laboratory results, and citation to the sources of information.

3. **Plagiarism:** Plagiarism is defined as presenting someone else’s work, including the work of other students, as one’s own. Any ideas or materials taken from another source for either written or oral use must be fully acknowledged, unless the information is common knowledge. What is considered “common knowledge” may differ from course to course.

   a. A student must not adopt or reproduce ideas, opinions, theories, formulas, graphics, or pictures of another person without acknowledgment.

   b. A student must give credit to the originality of others and acknowledge indebtedness whenever:

      1. directly quoting another person’s actual words, whether oral or written;
      2. using another person’s ideas, opinions, or theories;
      3. paraphrasing the words, ideas, opinions, or theories of others, whether oral or written;
      4. borrowing facts, statistics, or illustrative material; or
      5. offering materials assembled or collected by others in the form of projects or collections without acknowledgment

4. **Interference:** A student must not steal, change, destroy, or impede another student’s work, nor should the student unjustly attempt, through a bribe, a promise of favors or threats, to affect any student’s grade or the evaluation of academic performance. Impeding another student’s work includes, but is not limited to, the theft, defacement, or mutilation of resources so as to deprive others of the information they contain.

5. **Violation of Course Rules:** A student must not violate course rules established by a
department, the course syllabus, verbal or written instructions, or the course materials that are rationally related to the content of the course or to the enhancement of the learning process in the course.

6. **Facilitating Academic Dishonesty**: A student must not intentionally or knowingly help or attempt to help another student to commit an act of academic misconduct, nor allow another student to use his or her work or resources to commit an act of misconduct.

**OTHER POLICIES**

1. **IUPUI course policies**: A number of campus policies governing IUPUI courses may be found at the following link: [http://registrar.iupui.edu/course_policies.html](http://registrar.iupui.edu/course_policies.html)

2. **Classroom civility**: To maintain an effective and inclusive learning environment, it is important to be an attentive and respectful participant in lectures, discussions, group work, and other classroom exercises. Thus, unnecessary disruptions should be avoided, such as ringing cell phones, engagement in private conversations and other unrelated activities. Cell phones, media players, or any noisy devices should be turned off during a class. Texting, surfing the Internet, and posting to Facebook or Twitter during class are generally not permitted. Laptop use may be permitted if it is used for taking notes or conducting class activities. Students should check with the instructor about permissible devices in class. IUPUI nurtures and promotes “a campus climate that seeks, values, and cultivates diversity in all of its forms and that provides conditions necessary for all campus community members to feel welcomed, supported, included, and valued” (IUPUI Strategic Initiative 9). IUPUI prohibits “discrimination against anyone for reasons of race, color, religion, national origin, sex, sexual orientation, marital status, age, disability, or [veteran] status” (Office of Equal Opportunity). Profanity or derogatory comments about the instructor, fellow students, invited speakers or other classroom visitors, or any members of the campus community shall not be tolerated. A violation of this rule shall result in a warning and, if the offense continues, possible disciplinary action.

3. **Right to revise**: The instructor reserves the right to make changes to this syllabus as necessary and, in such an event, will notify students of the changes immediately.

4. **Bringing children to class**: To ensure an effective learning environment, children are not permitted to attend class with their parents, guardians, or childcare providers.

5. **Disabilities Policy**: In compliance with the Americans with Disabilities Act (ADA), all qualified students enrolled in this course are entitled to reasonable accommodations. Please notify the instructor during the first week of class of accommodations needed for the course. Students requiring accommodations because of a disability must register with Adaptive Educational Services (AES) and complete the appropriate AES-issued forms before receiving accommodations. The AES office is located at UC 100, Taylor Hall (Email: aes@iupui.edu, Tel. 317 274-3241). Visit [http://aes.iupui.edu](http://aes.iupui.edu) for more information.
6. **Administrative Withdrawal:** A basic requirement of this course is that students participate in all class discussions and conscientiously complete all required course activities and/or assignments. If a student is unable to attend, participate in, or complete an assignment on time, it is the student’s responsibility to inform the instructor. If a student misses more than half of the required activities within the first 25% of the course without contacting the instructor, the student may be administratively withdrawn from this course. Administrative withdrawal may have academic, financial, and financial aid implications. Administrative withdrawal will take place after the full refund period, and a student who has been administratively withdrawn from a course is ineligible for a tuition refund. Contact the instructor with questions concerning administrative withdrawal.

7. **Emergency Preparedness:** Safety on campus is everyone’s responsibility. Know what to do in an emergency so that you can protect yourself and others. For specific information, visit the emergency management website. http://protect.iu.edu/emergency

**MISSION STATEMENT**

The Mission of IUPUI is to provide for its constituents excellence in

- Teaching and Learning;
- Research, Scholarship, and Creative Activity; and
- Civic Engagement.

With each of these core activities characterized by

- Collaboration within and across disciplines and with the community;
- A commitment to ensuring diversity; and
- Pursuit of best practices.

IUPUI’s mission is derived from and aligned with the principal components—Communities of Learning, Responsibilities of Excellence, Accountability and Best Practices—of Indiana University’s Strategic Directions Charter.

**STATEMENT OF VALUES**

IUPUI values the commitment of students to learning; of faculty to the highest standards of teaching, scholarship, and service; and of staff to the highest standards of service. IUPUI recognizes students as partners in learning. IUPUI values the opportunities afforded by its location in Indiana’s capital city and is committed to serving the needs of its community. Thus, IUPUI students, faculty, and staff are involved in the community, both to provide educational programs and patient care and to apply learning to community needs through service. As a leader in fostering collaborative relationships, IUPUI values collegiality, cooperation, creativity, innovation, and entrepreneurship as well as honesty, integrity, and support for open inquiry and dissemination of findings. IUPUI is committed to the personal and professional development of its students, faculty, and staff and to continuous improvement of its programs and services.