

INST 352: INFORMATION USER NEEDS & ASSESSMENT

Spring 2019

Section 0101: Tues/Thurs 11 am-12:15 pm (ARC1103)

Instructor:

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NOTE: Please send any emails regarding the class to the instructor and include "INST 352" in the subject line. Please allow for email responses within 24-hours Mon-Fri and 48 hours on weekends and holidays.

Catalog Description

Prerequisite: 1 course with a minimum grade of C- from (INST201, INST301); and minimum grade of C- in INST311.

Restriction: Must be in Information Science program; and permission of INFO-College of Information Studies.

Focuses on use of information by individuals, including the theories, concepts, and principles of information, information behavior and mental models. Methods for determining information behavior and user needs, including accessibility issues will be examined and strategies for using information technology to support individual users and their specific needs will be explored.

Extended Course Description

This course will introduce students to the myriad relationships between users and the information they seek.

1 The first part of the course will first introduce students to the concepts and importance of understanding the information needs (what is being sought) and information behavior (how it is being sought and what is being done with the results) of users, as well as the methods of accessing and assimilating information employed by users (physical, cognitive, and social). The course will next introduce a range of the major models and theories employed in exploring information needs and behavior.

2 The second part of the class will focus on assessment techniques and issues. Major approaches to assessment – such as usability, accessibility, user experience– will be examined in detail, as will many methods and techniques that can be used in assessment. The ethics of assessment will also be explored.

3 The third and final part of the course will include a closer examination of users and user populations. Several weeks will be devoted to the discussion of different user populations and the ways in which populations may interact differently with information. Factors examined will include age, race, socio-economic status, education level, literacy levels, ability, immigration, and orientation, among others. Considerations of users will include detailed examinations of issues of literacy, inclusion, and digital divides in terms of the roles of information and information technologies in supporting information needs and behavior.

Across these areas of focus in the course, students will gain an understanding of the myriad issues pertaining to the use of information. In this course, the students will learn about:

- o Principles of information access, information behavior, and user needs;
- o Models and theories that explain information needs and behavior;
- o Different types of user populations and their differing information needs;
- o The impacts of literacy, inclusion, and digital divides;
- o The roles of information technologies in supporting information needs and behavior;
- o Techniques and methods for assessing user needs and information behavior; and
- o Ethical considerations in assessment.

Student Learning Outcomes

Upon completion of the course, students will be able to:

- o Describe key principles of information behavior and user needs;
- o Articulate strengths and weaknesses of different methods, models, theories, and techniques for expressing and studying information needs, use and behavior;
- o Examine the diverse information needs and behavior of different user groups;
- o Identify various ways that information technology can be used to meeting and evaluate user needs; and
- o Determine appropriateness of techniques and methods for assessing the information needs and information behavior of different user groups.

Course Materials

There is no required text for this course. Readings will be assigned from books, journals, trade publications, newspapers, conference proceedings, etc. as necessary. Links have been provided in the syllabus to a number of readings; additional assigned readings are available through Course Reserves. All journal articles are also accessible through UMD Libraries. At any point in the semester, please do not hesitate to contact me if you have any trouble locating assigned readings.

Any changes to course readings will be announced in class and via ELMS.

Campus Policies

It is our shared responsibility to know and abide by the University of Maryland's policies that relate to all courses, which include topics like:

- Academic integrity
- Student and instructor conduct
- Accessibility and accommodations
- Attendance and excused absences
- Grades and appeals
- Copyright and intellectual property

Please visit www.ugst.umd.edu/courserelatedpolicies.html for the Office of Undergraduate Studies' full list of campus-wide policies and follow up with me if you have questions.

Policy on Academic Misconduct

Cases of academic misconduct will be referred to the Office of Student Conduct (<https://www.studentconduct.umd.edu/>) irrespective of scope and circumstances, as required by university rules and regulations. It is crucial to understand that the instructors do not have a choice of following other courses of actions in handling these cases. There are severe consequences for academic misconduct, some of which are permanent and reflected on the student's transcript. For details about procedures governing

such referrals and possible consequences for the student,
see: <https://www.president.umd.edu/sites/president.umd.edu/files/documents/policies/III-100A.pdf>

It is very important that you complete your own course assignments, and do not share any work. If you are having problems with a class assignment, the best course of action is to contact the instructor.

University of Maryland Code of Academic Integrity

The University of Maryland, College Park has a nationally recognized Code of Academic Integrity (<https://www.president.umd.edu/sites/president.umd.edu/files/documents/policies/III-100A.pdf>), administered by the Student Honor Council (<http://shc.umd.edu/SHC/Default.aspx>). This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student, you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism.

Special Needs

Students with disabilities should inform the instructor of their needs at the beginning of the semester. Please also contact the Accessibility and Disability Service (ADS) (301-314-7682 or <http://www.counseling.umd.edu/ads/>). ADS will make arrangements with the student and the instructor to determine and implement appropriate academic accommodations. Students encountering psychological problems that hamper their course work are referred to the Counseling Center (301-314-7651 or <http://www.counseling.umd.edu/>) for expert help.

Academic Assistance

If you're experiencing difficulties in keeping up with the academic demands of this course, please consider contacting the University of Maryland Counseling Center, 1101 Shoemaker Building, 4281 Chapel Lane, 301-314-7651, <https://www.counseling.umd.edu/>. The Counseling Center has provided some links to on-campus and online academic resources here: <https://www.counseling.umd.edu/academic/>.

Academic Assistance: Writing Center (<http://www.english.umd.edu/academics/writingcenter/>): The University of Maryland Writing Center has tutors available in person and online to help you improve your writing, research, and critical thinking skills. The Writing Center also hosts a Grammar Hotline: 301-405-3785.

Emergency Preparedness

Please see the University's Emergency Preparedness Website (<http://prepare.umd.edu>) for information about the current status of campus. If a class session needs to be rescheduled, I will email you as soon as possible.

Course Specific Policies

Attendance

As per University policy, students may submit a self-signed note for a medically necessitated absence from a single lecture during the semester. Any student missing more than one lecture is required to provide documentation from the Health Center or from an outside health care provider that verifies the dates of treatment and time frame during which the student was unable to meet academic responsibilities.

In-Class Behavior

Please be on time for class and stay until the end, unless you have made special arrangements with me. Entering late and leaving early is distracting to the instructor and to other students. If you must enter late or leave early, please take the seat nearest an exit and enter or leave as quietly as possible. In general, be aware

of the people around you and avoid doing things that will disturb them or otherwise prevent them from fully engaging with the content. Put your phones on silent before the start of class. If you need to make/take a phone call, leave the classroom before doing so. Any student creating a disruption will be asked to leave for the day.

Missed Deadlines

If you will not be able to meet an assignment deadline, it is your responsibility to contact me **at least 48 hours** before the due date to explain why you will need to submit the assignment late; requests will be evaluated on a case-by-case basis. Assignments submitted more than 7 days late will not be accepted.

If you need to miss an exam because of outside circumstances (e.g., a religious holiday, military duties, work/athletic team travel), you must email me at least 48 hours before the exam to reschedule your exam time. If you miss an exam due to other circumstances (e.g., oversleeping), you will not be able to make up the exam. Exam extensions will not be granted beyond 7 days.

Late Assignments

A 10% penalty will be deducted for each day or part of a day that an assignment is late. Please prepare in advance so that you will not encounter technical difficulties that will result in your work receiving a late penalty. If you have a conflict with the due date, assignments can always be submitted early.

Syllabus Change Policy

This syllabus is subject to change with advance notice. If a change becomes necessary, I will announce the change in class and post an announcement on Canvas. The Course Schedule posted on Canvas (in the Syllabus section) will always provide up-to-date information.

Guideline for Written Assignments

All written assignments should be submitted via ELMS, by the date and time indicated on the syllabus. Written work should be proofread and revised as necessary before you submit it. Use Times New Roman 12-point font and one-inch margins. All documents should be single-spaced. Be sure to organize your papers, using section and subsection headings to identify portions of your work.

Use APA Style for in-text citations and reference lists. There are many resources about APA style available on the Internet. See, for example: <https://owl.english.purdue.edu/owl/resource/560/01/> and <http://www.apastyle.org/learn/faqs/index.aspx>.

Course Activities

I. Pre-Class Quizzes (10%)

Throughout the semester, you will have short, multiple-choice quizzes before (sometimes after) class, available via ELMS. There will be one quiz for each topic, which means that you may have one or two quizzes in any given week. These quizzes are designed to ensure that you come to class prepared – i.e., having done assigned readings, watched assigned videos, etc.

II. Online Discussion Posts (10%)

Throughout the semester, discussion questions will be posted on ELMS (under “Discussions”) and each will be worth 10 points. On the weeks in which a discussion post is due, the question will be posted on Thursday afternoon and you will have until 11:59 p.m. on Sunday to submit your response.

Online discussion posts will be assessed based on substance, the incorporation of reading materials, and your insights/assessment. I do not have hard and fast rules regarding the expected length of discussion posts, as I evaluate them based on quality, rather quantity – 50-150 words is a good ballpark figure though.

For full credit you should respond to the discussion question AND respond to at least one other person (with something more than “I agree”).

III. Written Assignments [30%]

- a. **Information Behavior Analysis (15%) (Due date: February 24th by 11:59pm via ELMS):** Describe one of your own recent information seeking experiences in 500-750 words. Discuss what this experience demonstrates about your information needs, how and where you look for and use information, and the information problems you face in your life. Your discussion should make clear that you have thought about and understand the concepts of information, information needs, information seeking, and information behavior as discussed in course readings.

Here are some questions you may consider as you work on this assignment:

- What factors may have prompted this information need?
- What kinds of sources did you consult (books, friends, intermediaries, search engines, etc.?) In what ways did these sources prove helpful or not helpful?
- What kinds of barriers did you note?
- What advantages do you have because of your education, training, or prior knowledge?
- Were you satisfied with the outcome of the information seeking process?

Assessment: This assignment will be graded based on your selection and discussion of a recent personal information seeking experience; evidence that you have read the required readings and understand the central concepts relevant to this assignment; evidence of critical thinking; adherence to the length, formatting, and citation requirements; and clarity and precision of thought in your writing.

- b. **Research Article Analysis (15%) (Due date: April 14th, via ELMS):** For this assignment, your first task is to select a user group that interests you – students in previous semesters have chosen diverse groups, ranging from World Cup fans to refugees who have recently arrived in the US to college students with disabilities. Then, you are to locate a **research article** that discusses some aspect of information behavior (e.g., information seeking, decision-making, information anxiety) in connection with this user group. The article must contain a “Methods” or “Methodology” section and must present the authors’ findings relating to their study participants’ information needs, seeking, and/or use.

After carefully reading your selected article, write a paper (750-1,000 words). Please be sure to include the following components: (1) A summary of the article (be sure to state the authors’ research questions and describe their findings); (2) A critical assessment of the recruitment, data collection, and data analysis methods used by the researchers; (3) A discussion of how the study findings might be used to help the user group you have selected; and (4) Two ideas for future research on the information behavior of this user group.

Assessment: This assignment will be graded based on your selection and discussion of a relevant article; evidence that you have read the required readings and understand the central concepts relevant to this assignment; evidence of critical thinking; adherence to the length, formatting, and citation requirements; and clarity and precision of thought in your writing.

IV. Mid-term exam (25%) & Final Exam (25%)

Two exams will be administered to test the students' understanding of the concepts introduced in the course.

Both will be open book, open notes, take-home exams. You may consult any of the course materials (and other outside materials if you wish) in figuring out the answers to the questions. However, you may NOT discuss the exams with ANYONE, whether they are taking the class or not. If you have any questions, direct them to me, either in my office hours, or by e-mail.

I will post the mid-term exam on ELMS at 8 am on March 14th; you have until 11:59 pm on the 14th to submit the exam, via ELMS

Details about the final exam will be provided at a later date via ELMS and in class.

Grading

Your course grade will be determined by pre-class quizzes, online discussion questions, written assignments, a midterm exam, and a final exam. The weight of each component is listed in the Course Activities section (see above).

Any challenges to a grade must be submitted in writing via email *within one week*. After considering the issue, I will adjust your grade if appropriate and inform you of my decision within one week. Final grades will be submitted 48-72 hours after the Final Exam. **Please note that I do not round grades up.** Final grades will be assigned using the following categories:

A+	97-100 pts.	C	73-76.9
A	93-96.9	C-	70-72.9
A-	90-92.9	D+	67-69.9
B+	87-89.9	D	63-66.9
B	83-86.9	D-	60-62.9
B-	80-82.9	F	less than 60
C+	77-79.9		

Note: This is a tentative schedule, and subject to change as necessary – monitor the course ELMS page for current deadlines. In the unlikely event of a prolonged university closing, or an extended absence from the university, adjustments to the course schedule, deadlines, and assignments will be made based on the duration of the closing and the specific dates missed.

***More Guest Lectures will be added. I will make updates through ELMS.

Week	TOPIC	ASSIGNMENTS
Week 1 (1/29 & 1/31)	<p><u>Tuesday</u>: Introduction & Overview, Syllabus</p> <p><u>Thursday</u>: Core Concepts - Information, Information Needs, Information Behavior Bates, Marcia (2010). "Information Behavior" in <i>Encyclopedia of Library and Information Sciences, 3rd Ed.</i> Available at: https://pages.gseis.ucla.edu/faculty/bates/articles/information-behavior.html.</p>	<p>Quiz #1 Due Thursday 1/31 11:59pm</p> <p>Discussion #1 Due Sunday 2/3 11:59pm</p>

	<p>Defining Knowledge, Information, Data. Available at: http://www.knowledge-management-tools.net/knowledge-information-data.html</p> <p>Optional Reading: Case & Given, Chapter 5 (in Elms Files) I will cover this in lecture.</p>	
Week 2 (2/5 & 2/7)	<p><u>Tuesday</u>: Related Concepts in Information Behavior: Information Overload, Information Anxiety, Relevance</p> <p>Encyclopedia of Library and Information Science. <i>Library Anxiety</i> (Available in Elms Files)</p> <p>Levitin, D.J. (2015, January). <i>Why the Modern World is Bad for Your Brain</i>. Available at: https://www.theguardian.com/science/2015/jan/18/modern-world-bad-for-brain-daniel-j-levitin-organized-mind-information-overload</p> <p><u>Thursday</u>: Information Behavior in the “Real World”; Introduction to Pew Reports</p> <p>Horrigan, John (2016, December). <i>Information Overload</i>. Available at: http://www.pewinternet.org/2016/12/07/information-overload/</p>	<p>Quiz #2</p> <p>Discussion #2 Due Sunday 2/10</p>
Week 3 (2/12 & 2/14)	<p><u>Tuesday</u>: Information Literacy</p> <p>5 Components of Information Literacy. Available at: https://prezi.com/s7xnb-bgrujk/5-components-of-information-literacy/</p> <p>Weiner, S. A. (2011). Information literacy and the workforce: A review. <i>Education Libraries</i>. Available at: https://eric.ed.gov/?id=EJ961219</p> <p><u>Thursday</u>: Information Behavior in the “Real World”; Introduction to Research Reports</p> <p>Stanford History Education Group (2016). <i>Evaluating Information: The Cornerstone of Civic Online Reasoning</i>. Available at: https://stacks.stanford.edu/file/druid:fv751yt5934/SHEG%20Evaluating%20Information%20Online.pdf</p>	<p>Quiz #3</p> <p>Discussion #3 Due 2/17</p>
Week 4 (2/19 & 2/21)	<p><u>Tuesday/Thursday</u>: Models of Information Behavior</p> <p>Case & Given Chapter 7 (in Elms Files)</p>	

		Information Behavior Analysis Due 2/24 by 11:59pm
Week 5 (2/26 & 2/28)	<u>Tuesday/Thursday:</u> Models of Information Behavior Case & Given Chapter 8 (in Elms Files)	Quiz #4 Discussion #4 Due Sunday 3/3
Week 6 (3/5 & 3/7)	<u>Tuesday:</u> Introduction to Research Articles Applying the Models & Theories of Information Behavior Reading a Research Article Quickly and Efficiently. Available at: http://www.prchn.org/Downloads/Reading%20a%20Research%20Article%20Quickly%20and%20Efficiently.pdf Raff, J. (2017, Dec.). How to Read and Understand a Scientific Paper: A Step-by-Step Guide for Non-Scientists. Available at: https://www.huffingtonpost.com/jennifer-raff/how-to-read-and-understand-a-scientific-paper_b_5501628.html <u>Thursday:</u> Given, L. M., Winkler, D. C., Willson, R., Davidson, C., Danby, S., & Thorpe, K. (2016). Watching young children “play” with information technology: Everyday life information seeking in the home. <i>Library & Information Science Research</i> , 38(4), 344-352. Available at: http://eprints.qut.edu.au/104531/3/104531.pdf	Quiz #5 Discussion #5 Due Sunday 3/10
Week 7 (3/12 & 3/14)	<u>Tuesday:</u> Midterm Review <u>Thursday:</u> Take-home Midterm (No in-person meeting)	Midterm Due 3/14 by 11:59PM
Spring Break 3/17 – 3/24		
Week 8 (3/26 & 3/28)	<u>Tuesday/Thursday:</u> Research Design and Ethics How to...Design a Research Study. Available at: http://www.emeraldgrouppublishing.com/research/guides/management/study_design.htm . Ethics in Research. Available at: https://www.socialresearchmethods.net/kb/ethics.php Are Research Ethics Obsolete in the Era of Big Data? Available at: https://www.forbes.com/sites/kalevleetaru/2016/06/17/are-research-ethics-obsolete-in-the-era-of-big-data/#45af7d167aa3 <u>Thursday:</u> Case & Given Chapter 9 (up to 9.3) https://umaryland.on.worldcat.org/oclc/923550250	Quiz #6 Discussion #6 Due Sunday 3/31
Week 9 (4/2 & 4/4)	<u>Tuesday:</u>	Quiz #7

	<p>Tuesday: Meet in 6107 McKelin for an information session and help choosing your final research article.</p> <p><u>Thursday</u>: Research Methods for Assessing Information Needs</p> <p>Case & Given Chapter 9 (9.3 to the end)</p>	<p>Discussion #7 Due Sunday 4/7</p>
Week 10 (4/9 & 4/11)	<p><u>Tuesday/Thursday</u>: Research Methods for Assessing Information Needs (cont'd)</p> <p>Usability</p> <ul style="list-style-type: none"> ■ Watch: <i>10 Usability Heuristics</i> (https://www.youtube.com/watch?v=hWc0Fd2AS3s&feature=youtu.be) ■ <i>Usability Evaluation Basics</i> (https://www.usability.gov/what-and-why/usability-evaluation.html) ■ 10 Usability Heuristics for User Interface Design (https://www.nngroup.com/articles/ten-usability-heuristics/) 	<p>Research Article Analysis due 4/14 by 11:59pm</p>
Week 11 (4/16 & 4/18)	<p><u>Tuesday</u>: Accessibility</p> <p>Quesenbery, W. (2009, Feb. 16). Usable Accessibility: Making Web Sites Work Well for People with Disabilities. Available at: http://www.uxmatters.com/mt/archives/2009/02/usable-accessibility-making-web-sites-work-well-for-people-with-disabilities.php</p> <p>Fox, S. (2011). <i>Americans living with disability and their technology profile</i>. Pew Research Center's Internet & American Life Project. Available at: http://www.pewinternet.org/2011/01/21/americans-living-with-disability-and-their-technology-profile/</p> <p><u>Thursday</u>: User Experience</p> <p>The Definition of User Experience (https://www.nngroup.com/articles/definition-user-experience/) – watch short video)</p> <p>Review: User Experience Design - http://semanticstudios.com/user_experience_design/</p> <p>Lamb, K. et al. (2016). <i>User experience in the newly refurbished CUED Library space: exploring the study needs and habits of library users through ethnographic and UX methods</i>. Available at: https://www.repository.cam.ac.uk/bitstream/handle/1810/256152/Lamb_et_al-2016-User_experience_in_the_n</p>	<p>Quiz #8</p> <p>Discussion #8 Due Sunday 4/21</p>

	ewly_refurbished_CUED_Library_space-VoR.pdf?sequence=5	
Week 12 (4/23 & 4/25)	<p><u>Tuesday</u>: Policy Issues Related to Information Needs: Digital Divides & Digital Inclusion</p> <p>Anderson, M. & Perrin, A. (2016, Sept. 7). <i>13% of Americans don't use the internet. Who are they?</i> Available at: http://www.pewresearch.org/fact-tank/2016/09/07/some-americans-dont-use-the-internet-who-are-they/</p> <p><i>What is Digital Inclusion?</i> Available at: https://www.webjunction.org/explore-topics/digital-inclusion.html</p> <p>Tsetsi, E., & Rains, S. A. (2017). Smartphone Internet access and use: Extending the digital divide and usage gap. <i>Mobile Media & Communication</i> (available through Course Reserves)</p> <p><u>Thursday</u>: Civic Engagement & Information Needs</p> <p>Moeller, J., de Vreese, C., Esser, F., & Kunz, R. (2014). Pathway to political participation: The influence of online and offline news media on internal efficacy and turnout of first-time voters. <i>American Behavioral Scientist</i>, 58(5), 689-700 (available through Course Reserves)</p> <p><i>Why are Millions of Citizens Not Registered to Vote?</i> Available at: http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2017/06/why-are-millions-of-citizens-not-registered-to-vote</p>	<p>Quiz #9</p> <p>Discussion #9 Due Sunday 4/28</p>
Week 13 (4/30 & 5/2)	<p><u>Tuesday</u>: Health Information Needs</p> <p>Turner, A. M., Osterhage, K., Hartzler, A., Joe, J., Lin, L., Kanagat, N., & Demiris, G. (2015). Use of patient portals for personal health information management: the older adult perspective. In <i>AMIA Annual Symposium Proceedings</i> (Vol. 2015, p. 1234) (available through Course Reserves)</p> <p>Schnall, R., Okoniewski, A., Tiase, V., Low, A., Rodriguez, M., & Kaplan, S. (2013). Using text messaging to assess adolescents' health information needs: an ecological momentary assessment. <i>Journal of Medical Internet</i></p>	<p>Quiz #10</p> <p>Discussion #10 Due Sunday 5/5</p>

	<p><i>Research</i>, 15(3). Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3636211/</p> <p><u>Thursday:</u> Why computer voices are mostly female. Available at: https://www.cnn.com/2011/10/21/tech/innovation/female-computer-voices/index.html</p> <p>Designing a VUI – Voice User Interface. Available at: https://uxplanet.org/designing-a-vui-voice-user-interface-c0b3b9b57ace</p>	
Week 14 (5/7 & 5/9)	<p><u>Tuesday:</u></p> <p>Subramaniam, M., St. Jean, B., Taylor, N. G., Kodama, C., Follman, R., & Casciotti, D. (2015). Bit by bit: using design-based research to improve the health literacy of adolescents. <i>JMIR research protocols</i>, 4(2). Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4464334/</p> <p><u>Thursday:</u></p> <p>Gao, T., Massey, T., Sarrafzadeh, M., Selavo, L., & Welsh, M. (2007, June). Participatory user centered design techniques for a large scale ad-hoc health information system. In <i>Proceedings of the 1st ACM SIGMOBILE international workshop on Systems and networking support for healthcare and assisted living environments</i> (pp. 43-48) (available through Course Reserves)</p> <p>Hughes, A. L., St Denis, L. A., Palen, L., & Anderson, K. M. (2014, April). Online public communications by police & fire services during the 2012 Hurricane Sandy. In <i>Proceedings of the 32nd annual ACM conference on Human factors in computing systems</i> (pp. 1505-1514)(available through Course Reserves)</p>	<p>Quiz #11</p> <p>Discussion #11 Due Sunday 5/12</p>
Week 15 (5/14)	<u>Tuesday:</u> Final Exam Review	
		Final Exam Due Date TBA