

COLLEGE OF INFORMATION STUDIES
Spring 2014

LBSC 622 **Information and Universal Usability**
Mondays, 2:00-4:45 p.m.
Hornbake Building, South Wing, 2119

INSTRUCTOR Dr. Mega Subramaniam
4121E Information Policy and Access Center
Hornbake Building, South Wing,
University of Maryland, College Park
(301) 405-3406 (office)
mmsubram@umd.edu
Follow me on Twitter - @mmsubram

OFFICE HOURS Can be arranged by appointment

COURSE SPACE <https://myelms.umd.edu/login>

CLASS TWITTER @LBSC622; hashtag #lpsc622

COURSE DESCRIPTION

This course follows Diverse Populations, Inclusion and Information (LBSC 620) and builds on the concepts of that course. This course focuses on the use and challenges of information services and technologies to provide equal experiences and outcomes to all users. Laws, standards, approaches, component concepts, access needs, and technologies in relation to physical and online information environments.

COURSE GOALS

Goals of this course are to increase students' knowledge of:

- The limitations that many diverse populations experience in their desire to gain information for education and for pleasure
- The need for libraries to improve the technology available to the special needs of their patrons
- The types of materials that should be part of every collection
- The variety of programming options that should be available, at minimal cost
- The ways in which libraries can take on a leadership role in assuring Universal Usability to all of their patrons both within their buildings and within the community
- Organizations with which libraries may wish to partnership to increase services to diverse populations

TEXT

Jaeger, P. T. (2012). **Disability and the Internet: Confronting a Digital Divide**. Lynne Rienner: Boulder, CO. [ISBN: 978-1-58826-828-0]

READINGS

As assigned (See list at the end of this syllabus).

All articles are available through Course Reserve (Modules link in Canvas).

COURSE METHOD

The course will be conducted as a seminar. It is essential that every student participate in the discussions of course materials. Participation means active involvement in class discussions. Students read the assigned readings for each week **PRIOR TO THAT WEEK'S MEETING**.

Based on critical examination of course readings, each student should develop an analytical stance concerning the issues in the course. The students are expected to question, challenge, argue, and discuss issues and topics related to that session's readings. For certain weeks, the class will be joined in the discussion by guest facilitators with specific expertise on the week's topic.

CLASSROOM ENVIRONMENT

As a graduate seminar, the classroom environment should be professional and respectful. Discussions should be based on course readings and critical thinking. Issues of universal usability can involve strongly held beliefs and current political controversies. Remember—others may have different perspectives on issues than you, but they still deserve your respect. As another aspect of respect in the classroom environment, turn off or mute all phones and other communication devices during each class session. If you use your laptop or mobile device in the classroom, limit the usage to course-related reasons (i.e., taking notes, accessing Canvas, tweeting to share content/knowledge obtained during class).

ATTENDANCE POLICY

Regular attendance and participation in this class is the best way to grasp the concepts and principles being discussed. However, in the event that a class must be missed due to an illness, the policy in this class is as follows:

1. For every medically necessary absence from class, a reasonable effort should be made to notify the instructor in advance of the class. The notification (can be in the form of an email or phone call) must identify the date of class that you will be missing and the reason for the absence, and acknowledging that the information provided is accurate.

2. If a student is absent more than TWO times consecutively, the instructor may require documentation signed by a health care professional.
3. If a student is absent on days when exam/ reflection/assignments are due, he or she is required to notify the instructor in advance (via email or phone), and upon returning to class, bring documentation of the illness, signed by a health care professional.

EXTENSIONS

Timeliness is extremely important in graduate work, and extensions will only be available during personal emergencies. Students who need to request an extension should discuss the matter in advance with the instructor. If an extension is granted, the work must be submitted within the extension period to avoid grade penalties. Unexcused delays in submission of the paper will result in a deduction of half of a letter grade for each day the paper is late, while unexcused delays in presentations will result in a deduction of half a letter grade for each class meeting the presentation is late.

STUDENTS WITH DISABILITIES

Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Disability Support Services office, and (2) discuss any necessary academic accommodation with the instructor. This should be done by the second week of class.

EMERGENCY PREPAREDNESS

Please check the University's inclement weather number (**301-405-SNOW [7669]**), which is used for inclement weather and other emergency situations. The University announces late openings and closings for snow early each day, not the night before. While local television and radio stations report on University closings, the information is not always correct.

Information about the status of the campus is available at <http://www.umd.edu/emergencypreparedness/>. If the campus is closed, please make sure to stay safe. Information about possible rescheduling of course activities will be provided via e-mail and Canvas once the campus has reopened.

ACADEMIC HONESTY

Work submitted in this course will be individual (unless indicated as group work) and original, in line with the University's Academic Honor Code and Honor Pledge. Engaging in any academic dishonesty will result in consequences in line with university policies. Academic dishonesty includes but is not limited to plagiarism, cheating, buying work, multiple submissions of the same paper, forging signatures, submitting fraudulent documents, and facilitating the academic dishonesty of others. When writing papers, be sure to carefully and thoroughly cite all materials you use in writing your paper and make

sure all ideas and quotations are properly acknowledged.

GRADING

Students grade will be determined through performance on four components: (1) class discussion; (2) individual presentation and write-up of technology/program for underserved/disadvantaged group; (3) group final project and presentation; and (4) a final exam.

Class discussion	300 points [Partial grade will be posted mid-sem]
Write/Present “tech/program”	200 points
Final project and presentation	300 points
Final exam	200 points

Each component is expected to reflect the highest professional standards, and both substantive and technical quality will be considered in determining student’s grade for each. Thoroughness, accuracy, salience, and effective organization are required; correct English grammar, spelling, punctuation, and usage are expected. Adherence to University policies on matters of intellectual integrity is also imperative. Attendance at each class is required unless prior arrangements have been made.

Grade range that will be used to determine the final grade for this class is 95+ percentage will be an A; 90-94.9 percentage will be an A-; 85-89.9 percentage will be a B+; 80-84.9 percentage will be a B; and below 80 will be a B-.

COURSE SCHEDULE

Week/Date	Topic(s)	Readings & Assignments
(1) Jan 27	Introductions Course Overview	
(2) Feb 3	Final Projects Overview – MLK DCPL presentation Concept of Universal Usability	Jaeger (2012) – Chapter 1 Lazar (2007) Story, Mueller & Mace (2011) – pages 1-30 <i>Selection of tech/program share – Feb 7</i> <i>Selection of final project – Feb 7</i>
(3) Feb 10	Accessibility law and standards Concept of Universal Design and Universal Design for Learning	Jaeger (2012) – Chapter 2 & Chapter 3 (only until page 105) ADA & ABA Guidelines (2010) Blue & Pace (2011) Burgstahler (2011) Cummings (2011) Section 508 (1998)
(4) Feb 17	Accessibility and Visual Impairment – <i>Jonathan Lazar</i>	Hochheiser & Lazar (2010) Lazar, Allen, Kleinman & Malarkey (2007) National Federation for the Blind (2014) WebAIM (2011)
(5) Feb 24	Accessibility and Hearing Impairment- <i>Janice Rosen</i>	Hearing Loss of America (2012) Zdenek (2011)
(6) Mar 3	NO CLASS – Mega attending the iConference	
(7) Mar 10	Accessibility and Autism Spectrum Disorder Accessibility and other Cognitive Disabilities (Dyslexia etc.) – <i>Matt Brady & Chris Bendel</i>	Akin & MacKinney (2004) Ellis-Cole & Smith (2011) Green (2009) Nielsen & Irvall (2001) Taare Zameen Par (2007) - movie
(8) Mar 17	NO CLASS – SPRING BREAK	
(9) Mar 24	Accessibility and Socio- Economically Challenged Community – <i>Susan Wilson</i>	Jaeger (2012) – Chapter 3 (page 105-119) Atasoy (2010) Eubanks (2012) – Skim the e-fragments Eyrich-Garg (2011) Mossberger (2009) Pilling (2010)
(10) Mar 31	Accessibility and Older Adults	RUSA (2008) Prasad (2009) Williamson & Asla (2009) <i>Work-in-progress poster due on April 1</i>

Week/Date	Topic(s)	Readings & Assignments
(11) Apr 7	Accessibility and Immigration/ELL learners – <i>Amanda Waugh & Natalie Greene Taylor</i>	Association of College and Research Libraries (2012) Ashton & Milam (2008) Naficy (2009) Picco (2008)
(12) Apr 14	Library/Cultural institutions Web Accessibility	Jaeger (2012) – Chapter 4 Caldwell, Cooper, Reid & Vanderheiden (2008) Lazar & Hochheiser (2013) McHale (2011) Quesenbery (2009) W3C (2011)
(13) Apr 21	What’s ahead for universal usability – <i>Paul Jaeger</i>	Jaeger (2012) – Chapter 5 & 6 Jaeger (2009) Preece (2007)
(14) Apr 28	Final Project presentations	<i>Final project presentations</i>
(15) May 5	Final Project Presentations	<i>Final project presentations & final projects due</i>
(16) May 12	NO CLASS	<i>Final Exam Due</i>

ASSIGNMENTS/EVALUATION

Classroom participation (30% of your final grade)

As mentioned earlier, this is a discussion-based course and is conducted in a seminar format. You are expected to read all of the readings, to think through the issues raised in the readings, and to articulate your thoughts on the materials. Clearly, you need to attend class to participate in the discussions. The syllabus is built upon 10 weeks of active discussion, while other weeks are dedicated for course introduction, and final project presentations (which you must also attend). Attendance will be taken every week, with absences being excused in cases of illness, religious observances, and other reasons in line with university policies, or if the university is closed due to inclement weather. *In order to receive an excused absence, the instructor should be notified in advance of the class meeting (see attendance policy above).* If you miss one or two classes during the weeks of active discussion due to illness, religious observances, and other reasons in line with university policies, your participation during the Q&A sessions during the final presentations will be considered.

Present/Write about Tech or a Program (20% of your final grade)

Technology (even adaptive) evolves rapidly, and programs and services in the library and other cultural institutions will need to adapt to the rapid evolvment. By participating in

this course, you are exposed to the variety of programming options and technology (including adaptive) that should and are available, at minimal cost to the underserved and disadvantaged populations. To enrich this experience even further, each of you will SHARE with the entire class in writing and presentation, ONE example of programming options or technology (including adaptive) that are available, at minimal cost to the underserved and disadvantaged populations. Students who have taken LBSC622 in Spring 2012 did a similar assignment, and all their write-ups have been compiled in the following wiki site:

<https://lbsc622-projects.wikispaces.com>

Please be informed that you may not choose the program/technology that is listed in the wikispace.

For this assignment, you will do the following:

- (1) Identify ONE program or technology (including adaptive) that are available, at minimal cost to the underserved and disadvantaged populations. Via the Collaboration area that is available through the course website in Canvas, indicate the choice of program or technology (including adaptive) that you have chosen. No more than two presentations can be done in each available week. Please align the program/technology with the theme of the discussion for the week. For example, if you would like to present a program that is suitable for older adults, you must sign-up to present on March 31. If your program/tech does not align with any of the theme, please send an email to me, and I will assign a date for you to present. This date most likely will be the date that very few presentations are scheduled. Please note that to ensure richness in sharing, students are not allowed to choose the same program or technology. Each student must bring a unique contribution. Indicating your choice on the Collaboration site on a first come first served basis (you can post after the Collaboration link appears on **Jan 28 2014 at 12.01 am**), will avoid any duplication in the sharing process. You must indicate your choice of tech/program by **Feb 7 2014**.
- (2) You will prepare a presentation (no more than 15 minutes – 10 minutes presentation and 5 minutes of Q & A) and no more than four pages of write-up (double-spaced pages in 12-point type, with standard one-inch margins) that will be posted on the Canvas discussion board “Share a Tech or a Program” right **after** your presentation, that details the following:
 - a) Briefly describe the technology or the program – include the name of the tech/program, the community it serves, its features, the cost associated with participating in the program or purchasing the technology (if any) and any other important/interesting facts;
 - b) Describe its use – how it is used, and the benefits of using or participating;
 - c) Describe how the program/tech enhances physical and intellectual accessibility; and
 - d) Describe how cultural institutions can adopt the program or technology in their setting or encourage personal use for information management.

Presentations will begin on **Feb 17, 2014** and will end on **April 14, 2014**– with one or two presentations in each class session.

Final Project (30% of your final grade)

Working with librarians at the Adaptive Services Department at Martin Luther King Branch of District of Columbia Public Library (DCPL), you will work in a team of no more than FOUR students, to complete a project that provides an opportunity for you to conduct a thorough groundwork and provide recommendations for programming and services that are customized for underserved and disadvantaged patrons.

The descriptions of the projects are in a separate document (under files in Canvas), and will be posted prior to the DCPL project information meeting scheduled to be in class on February 3th 2014. You must select your preference of a project via a link in the Collaboration area for final project sign-up by **February 7 2014**. The link will appear on **Feb 3 2014 at 12.01 am**

The deliverables for the project will be:

- (1)** A work-in-progress poster that your group will present at the Symposium on Diversity in LIS Education, which will take place on April 11, 2014 (Friday) at the University of Maryland. More information forthcoming from the symposium organizers. At least one team member must attend this symposium. The symposium is free and open to all.
- (2)** A 10-12 pages (single-spaced pages in 12-point type, with standard one-inch margins) report that adheres to the deliverables mentioned in the description for each project. You may include addendum (if needed, not included in the page count). References are also not included in the page count.
- (3)** A 40-minute group presentation in class (30 minutes presentation that summarizes (2) above and 10 minutes Q&A). In this presentation, your group should also share the approach to universal usability that you have adopted (including policy, UDL etc.) for this project, in addition to your deliverables – what you have found in the literature review, existing programming/services offered by other libraries, and your recommendations for programs that DCPL Adaptive Department can offer (and your reasons) and any recommendation for technology use (if applicable). Prepare an engaging and creative presentation that will allow optimal sharing of your knowledge gained during the project with your peers. The representatives from DCPL may attend these presentations.

(1) is due on **April 1, 2014**; (2) and (3) including presentation slides or visuals are due on **May 5, 2014**. You must submit (2) and any other documentation that you would like to provide to your DCPL contact person by **May 6, 2014**. Presentations are scheduled on **April 28, 2014** and **May 5, 2014**, and order of presentations will be determined after Spring Break.

Take Home Final Exam (20% of your final grade)

This is a take home final exam. The questions will be handed off to you on paper on **May 5**,

2014, and you must make submission of the answers via Canvas by **May 12, 2014 at 5.00 pm EST**. There will be four essay type questions. It is expected that your completed answers will consist of **no fewer than eight (8) and no more than twelve (12) typed, double-spaced** pages in **12-point type in total, with standard one-inch margins**. A cover page and/or pages of references are not included in the page count. Your answers should be drawn from the readings, class discussions, guest speakers and completion of assignments in the course. Citations from the readings will be considered a strength.

READINGS

Akin, L. & MacKinney, D. (2004). Autism, literacy and libraries. *Children & Libraries: The Journal of the Association for Library Service to Children*, 2(2), pp. 35-43.

American with Disabilities Act (ADA) and Architectural Boundaries Act (ABA) Guidelines for buildings and facilities. (2010). United States Access Board. Retrieved Jan 18, 2014 from <http://www.access-board.gov/guidelines-and-standards> [Has links to both the ADA and ABA guidelines]

Ashton, R. J. & Milam, D.P. (2008, January). Welcome strangers: Public libraries build the global village. Retrieved Jan. 26, 2012 from http://www.urbanlibraries.org/filebin/pdfs/Welcome_Stranger_Full_Report_08.pdf

Association of College and Research Libraries. (2012). Diversity Standards: Cultural competencies for academic libraries. Retrieved Dec. 24, 2012 from <http://www.ala.org/acrl/standards/diversity>

Atasoy, S., Mills, B. F., & Parmeter, C. F. (2010). Paperless food assistance: The impact of electronic benefits on program participation. [poster]. Agricultural & Applied Economics Association 2010 AAEEA, CAES, & WAEA Joint Annual Meeting. Denver, CO. <http://ageconsearch.umn.edu/bitstream/60964/2/10816.pdf>

Blue, E. V., & Pace, D. (2011, February). UD and UDL: Paving the way toward inclusion and independence in the school library. *Knowledge Quest*, 39(3), pp. 48-55.

Burgstahler, S. (2011, June 3). *Universal design in education: Principles and applications*. Seattle, WA: University of Washington. Retrieved Oct. 4, 2011 from http://www.washington.edu/doi/Brochures/PDF/ud_edu.pdf

Caldwell, B., Cooper, M. & Reid, L. & Vanderheiden, G. (2008). *Web content accessibility guidelines 2.0*. Retrieved Jan. 26, 2012 from <http://www.w3.org/TR/WCAG20/>

Cummings, E. O. (2011). Assistive and adaptive technology resources. *Knowledge Quest*, 39(3). 70-73.

Ennis-Cole, D., & Smith, D. (2011). Assistive technology and autism: Expanding the technology leadership role of the school librarian. *School Libraries Worldwide*, 17(2), pp. 86-98.

Eubanks, V. (2011). Digital dead-end: Fighting for social justice in the information age. View e-fragments: <http://books.google.com/books?id=qYIow7pw7XYC&printsec=frontcover&dq=eubanks+digital+dead+end+ebook&hl=en&sa=X&ei=gijUUqT4Le3lsASa64D4Cw&ved=0CEoQ6AEwAA#v=onepage&q&f=false>

- Eyrich-Garg, K. (2011). Sheltered in cyberspace? Computer use among the unsheltered "street" homeless. *Computers in Human Behavior*, 27(1), pp. 296-303.
- Green, R. (2009). Empowering library patrons with learning disabilities. *Journal of Access Services*, 6(1-2), 59-70.
- Hearing Loss Association of America. (2012). Technology. [web page]. *Hearing Loss Association of America*. Retrieved Jan. 26, 2012 from <http://www.hearingloss.org/content/technology>
*Please review all sub-menus under Technology: Hearing Aids, Cochlear Implants, Implantable Devices, Hearing Assistive Tech, Captioning, Telephones, Get in the Hearing Loop.
- Jaeger, P. T. (2009). Persons with disabilities and intergenerational universal usability. *Interactions*, 16(3), 66-67.
- Hochheiser, H., & Lazar, J. (2010). Revisiting breadth vs. depth in menu structures for blind users of screen readers. *Interacting with Computers*, 22(5), pp. 389-398.
- Lazar, J. (2007). Introduction to universal usability. In J. Lazar (Ed.), *Universal usability: Designing computer interfaces for diverse user populations* (p. 1-12). England: John Wiley & Sons.
- Lazar, J. & Hochheiser, H. (2013). Legal aspects of interface accessibility in the US. *Communications of the ACM*, 56(12), pp. 74-80.
- Lazar, J., Allen, A., Kleinman, J., & Malarkey, C. (2007). What frustrates screen reader users on the web: A study of 100 blind users. *International Journal of Human-Computer Interaction* 22(3), pp. 247-269.
- McHale, N. (2011). An introduction to web accessibility, web standards, and web standards makers. *Journal of Web Librarianship*, 5(2), pp. 152-160.
- Mossberger, K. (2009). Towards digital citizenship: Addressing inequality in the information age. In A. Chadwick, & P. N. Howard (Eds.), *Routledge handbook of Internet politics* (pp. 173-185). New York, NY: Taylor & Francis.
- Naficy, H. (2009): Centering Essential Immigrant Help on the Library Web site: The American Place (TAP) at Hartford Public Library. *Public Library Quarterly*, 28:2, 162-175
- National Federation for the Blind. (2014). Windows-Eyes Screen Reader now available for free to many MS Office users. Retrieved January 18, 2014 from <https://nfb.org/national-federation-blind-commends-microsoft-and-gw-micro-groundbreaking-accessibility-partnership>

- Nielsen, G. S., & Irvall, B. (2001). Guidelines for library services to persons with dyslexia. *International Federation of Library Associations and Institutions (IFLA) Professional Reports*, 70. Retrieved Jan. 26, 2012 from <http://archive.ifa.org/VII/s9/nd1/iflapr-70e.pdf>
- Picco, P. (2008): Multicultural Libraries' services and social integration: The case of public libraries in Montreal Canada. *Public Library Quarterly*, 27(1), 41-56
- Pilling, D. (2010). Adoption of e-government by disadvantaged groups in the United States and the United Kingdom. In C. G. Reddick (Ed.), *Comparative E-Government (Integrated Series in Information Systems*, Vol. 25, pp. 201-220). New York, NY: Springer New York.
- Prasad, P. (2009). Reference Services to Senior Groups in the San Antonio Public Library. *The Reference Librarian*, 50(1), 99-108.
- Preece, J. (2007). Making universal access truly universal: Looking toward the future. In J. Lazar (Ed.), *Universal usability: Designing computer interfaces for diverse user populations* (p. 587-598). England: John Wiley & Sons.
- Quesenbery, W. (2009, February 23). Usable accessibility: Making web sites work well for people with disabilities. [blog]. *UXMatters*. Message posted to <http://www.uxmatters.com/mt/archives/2009/02/usable-accessibility-making-web-sites-work-well-for-people-with-disabilities.php>
- References and User Services Association. (2008). Guidelines for library and information services for older adults. Retrieved Jan. 26, 2012 from <http://www.ala.org/rusa/resources/guidelines/libraryservices>
- Section 508: 1998 Amendment to Section 508 of the Rehabilitation Act. (1998). Retrieved Jan 18, 2014 from <http://www.section508.gov/section508-laws>
- Story, M., Mueller, J., & Mace, R. (2011). The Universal Design file: Designing for people of all ages and abilities. *Design Research and Methods Journal*, Revised edition originally published in 1998, 1(1). Retrieved from <http://www.udeducation.org/resources/63.html>
- Taare Zameen Par (International version title: Like Stars on Earth). (2007) [movie]. Details at: <http://www.taarezameenpar.com>
 * Please watch the movie by checking out a copy from your local public library, via Netflix or any other means.
- W3C. (2011). Evaluation Websites for Accessibility: Overview. [webpage]. *W3C*. Retrieved Jan. 26, 2012 from <http://www.w3.org/WAI/eval/Overview>
 *Please review all sub-pages under *Evaluating Accessibility: Preliminary Review*,

Conformance Evaluation, Specific Contexts, Involving Users in Evaluation, Selecting Tools, Tools Search, Combined Expertise, Reporting Template.

WebAIM. (2011). Screen Reader User Survey #3 Results. [webpage]. *WebAIM*. Retrieved Jan. 26, 2012 from webaim.org/projects/screenreadersurvey3/

Williamson, K., & Asla, T. (2009). Information behavior of people in the fourth age: Implications for the conceptualization of information literacy. *Library & Information Science Research*, 31(2), pp. 76-83.

Zdenek, S. (2011). Which sounds are significant? Towards a rhetoric of closed captioning. *Disability Studies Quarterly*, 31(3). Retrieved Jan. 26, 2012 from <http://dsq-sds.org/article/view/1667/1604>