INFO 6660 READINGS IN INFORMATION SCIENCE

Standardized Syllabus

(last updated May 20, 2021)

Contact Information

Instructor	Bharath M. Josiam, PhD
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Course Meetings	Weekly or bi-weekly meetings with instructor: face-to-face or online in Zoom 1 (one) meetings with instructor and entire dissertation committee (see the schedule below): face-to-face oral qualifying examination

Course Description

3 graduate credit hours. Readings in a defined area of Information Science related to the student's research interest and areas of specialization. Requires the selection and critical evaluation of highly relevant sources with particular emphasis on research problem, methodological and theoretical issues.

Prerequisite(s): This course is intended for students of Information Science (IS) Ph.D. program and is to be taken in conjunction with the qualifying examination in the last semester of course work, with the student's major professor. Prior to registering for INFO 6660, a student must have:

- completed all other required core and methods courses with the course grades of either A or B,
- successfully completed a total of at least 42 graduate credit hours of the IS Ph.D. Program (at least 51 graduate credit hours of the 72-hour program option), and
- officially designated a dissertation committee by completing and submitting to IS Ph.D. Program Office (ci-iisphd@unt.edu) the Committee Designation Form found at http://informationscience.unt.edu/advisors-committees-and-defenses.

Course Objectives

The objectives of this course are to help and strengthen students' understanding of the research process and its components and skills in planning research projects and to prepare for dissertation research.

By the end of the course, students should develop the ability to prepare a viable research proposal grounded in Information Science:

- define a topic for the dissertation, formulate a problem statement and research questions and address the significance of the proposed research

- conduct an in-depth review of literature for the research proposal, including identification and critical evaluation of authoritative research papers, including a detailed critique of the 5 topmost relevant papers to their topic.
- identification and critical evaluation of models, frameworks, theories as well as research gaps
- prepare and present preliminary research in the form of an oral presentation.

Course Activities and Evaluation

The course activities will include the following:

- **Written Report in the Form of Pre-Proposal (50% of semester grade)**

The written part of the Qualifying Examination is designed to test a student's ability to embark on individual independent research. Each student will identify a research topic relevant to student's specialization, and prepare a written report to be submitted to instructor and committee members via the UNT course management system. The report should include the followings:

- a research topic, a problem statement and research question(s)

- an in-depth literature review of the relevant literature grounded in Information Science, which should include the review of the following kinds of resources:

  o Identification, selection, and critique of the top 5 most relevant research studies/ papers applicable to the topic

  o Discussion of existing model(s), theory(-ies), and/or framework(s) applicable to the proposed research study

  o Discussion of the theoretical justification and description of a theory or model relevant to the proposed topic and research problem.

  o Discussion of the significance of the proposed study.

- **Oral Qualifying Examination (35% of semester grade)**
  The student will prepare a preliminary proposal in the form of a PowerPoint about the topic used in preparing the written portion of the exam which will include the following:
  1. Research Topic
  2. Problem Statement and research questions
  3. Critique of the top 5 most relevant papers to the study
  4. Sample of literature
  5. Theories and models relevant to the study
  6. Theoretical justification and proposed research plan

  The student will meet and present the preliminary proposal to the entire dissertation committee before the end of the semester and according to the published outline.

- **Participation (15% of semester grade)**

Each student is required to meet with the course instructor (major professor) regularly, on a weekly or bi-weekly basis, to report the preliminary results of the work on the written report and to receive feedback.

The semester schedule is included below.

Semester Schedule for INFO 6660 Offerings in Long Semesters: Fall or Spring

Course activities ab deliverables	Deadlines
Stage 1: discussion of topic and research problems	September 5, 2021
Stage 2: discussion of literature review section draft	September 19, 2021
Stage 3: discussion of methodology section draft	October 3, 2021
Stage 4: submission of finalized written report assignment to instructor and committee	October 17, 2021
Stage 4: feedback from instructor and committee on written report, setting up oral qualifying examination date during weeks 13-15	November 7, 2021
Stage 5: oral qualifying examination	No later than December 3, 2021

Grading

The written report and oral exam presentation will be evaluated based on the following three major criteria:
- Completeness
- Accuracy
- Quality of presentation and acknowledgement of sources.

The UNT scale for grading is as follows:

A = 90-100	B = 80-89	C = 70-79	D = 60-69	F = 59 and below.

An **Incomplete Grade** ("**I**") is a non-punitive grade given only during the last one-fourth of a term/semester and only if a student (1) is passing the course and (2) has a justifiable and documented reason, beyond the control of the student (such as serious illness or military service), for not completing the work on schedule. The student must arrange with the instructor to finish the course at a later date by completing specific requirements. Please refer to http://essc.unt.edu/registrar/academic-record-incomplete.html for more information.

The UNT Graduate Catalog describes and explains **withdrawa**l policies and deadlines. The UNT Registrar's Website http://registrar.unt.edu/registration/spring-registration-guide lists specific deadlines regarding withdrawal, including the deadlines to withdraw from a course with an automatic grade of **W** and to withdraw from entire semester. Please note that a student who simply stops attending class and does not file a withdrawal form may receive a final course grade of F.

Suggested Information Science Core Readings

IMPORTANT: *This is only a starting place for readings in **Information Science** in general and **information behavior** in particular. It is **not** intended to be comprehensive and does not cover the core readings for specific concentration topics (e.g., consumer behavior and experience management, cybersecurity, data science, health informatics, journalism, linguistics, etc.)*

- Allen, B. L. (1996). *Information tasks*. San Diego: Academic Press.
- Bates, M. J. (1989). The design of browsing and berrypicking techniques for the online search interface. *Online Review 13*(5), 407–424.
- Bates, M. J. (1999). The invisible substrate of Information Science. *Journal of the American Society for Information Science, 50*(12), 1043-1050.

- Bates, M. J. (2002). Toward an integrated model of information seeking and searching. Keynote address at the Fourth International Conference on Information Needs, Seeking and Use in Different Contexts, Lisbon, Portugal. Retrieved from http://www.gseis.ucla.edu/faculty/bates/articles/info_SeekSearch-i-030329.html
- Belkin, N. J., Oddy, R. N., & Brooks, H. M. (1982). ASK for information retrieval: Part I. Background and theory. *Journal of Documentation, 38*(2), 61-71.
- Black, A. (2006). Information history. In B. Cronin (Ed.), *Annual Review of Information Science and Technology* (Vol. 40, pp. 441-473). Medford, NJ: Information Today.
- Buckland, M. K. (1991). Information as thing. *Journal of the American Society for Information Science, 42*(5), 351-360.
- Burke, C. (2007). History of Information Science. In B. Cronin (Ed.), *Annual Review of Information Science and Technology* (Vol. 41, pp. 3-53). Medford, NJ: Information Today.
- Bush, V. (1945). As we may think. Atlantic Monthly.
- Bystrom, K., & Hansen, P. (2005). Conceptual framework for tasks in information studies. *Journal of the American Society For Information Science and Technology, 56*(10), 1050-1061.
- Case, D. O. (2006). Information behavior. In B. Cronin (Ed.), *Annual Review of Information Science and Technology* (Vol. 40, pp. 293-327). Medford, NJ: Information Today.
- Case, D. O. (2012). *Looking for information: A survey of research on information seeking, needs, and behavior* (3rd ed.). Bingley, UK: Emerald.
- Chang, Y. & Huang, M. (2012). A study of the evolution of interdisciplinarity in library and Information Science: Using three bibliometric methods. *Journal of the American Society for Information Science and Technology, 63*(1), 22-33.
- Chatman, E. A. (1996). The impoverished life-world of outsiders. *Journal of the American Society for Information Science, 47*(3), 193-206.
- Chatman, E. A. (1999). A theory of life in the round. *Journal of the American Society for Information Science, 50,* 207-217.
- Choo C. W., Detlor, B., Turnbull D. (2000). Information Seeking on the Web: An Integrated Model of Browsing and Searching. *First Monday*, *5*(2). Retrieved from
- http://www.firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/729/638
- Choo, C. W. (2001). *Information management for the intelligent organization: The art of scanning the environment* (3rd ed.). Medford, NJ: Information Today.
- Choo, C. W., Detlor, B., & Turnbull, D. (2000). *Web work: Information seeking and knowledge work on the World Wide Web*. Boston: Kluwer.
- Cool, C. (2001). The concept of situation in Information Science. In M. E. Williams (Ed.), *Annual Review of Information Science and Technology*, (Vol. 35, pp. 5-42). Medford, NJ: Information Today.
- Courtright, C. (2007). Context in information behavior research. In B. Cronin (Ed.), *Annual Review of Information Science and Technology* (Vol. 41, pp. 273-306). Medford, NJ: Information Today.
- Dervin, B. (1998). Sense making theory and practice: An overview of user interests in knowledge seeking and use. *Journal of Knowledge Management, 2*(2)*,* 36-46.
- Dervin, B. (1999). Chaos, order, and sense-making: A proposed theory for information design. In R. E. Jacobson (Ed.) *Information Design* (pp. 35-57). Boston: MIT Press.
- Dervin, B., & Nilan, M. (1986). Information needs and uses. In M.E. Williams (Ed.), *Annual review of information science and technology, Vol. 21* (pp. 3-33). White Plains, NY: Knowledge Industry Publications.
- Detlor, B. (2003). Internet-based information systems use in organizations: An information studies perspective. *Information Systems Journal*, 13(2), 113-132.

- Dillon, A., & Morris, M. G. (1996). User acceptance of information technology: Theories and models. In M. E. Williams (Ed.) *Annual Review of Information Science and Technology* (Vol. 31, pp. 3-32). Medford, NJ: Information Today.
- Ellis, D. (1989). A behavioral model for information retrieval system design. *Journal of Information Science, 15*, 237-247.
- Ellis, D. (2005). Ellis's model of information-seeking behavior. In K. E. Fisher (Ed.), *Theories of Information Behavior*. Medford, NJ: Information Today, Inc.
- Fidel, R. (2012). *Human information interaction: An ecological approach to information behavior*. Cambridge, MA. : MIT Press.
- Fidel, R., & Pejtersen, A. M. (2004). From information behaviour research to the design of information systems: The Cognitive Work Analysis framework. *Information Research*, 10(1). Retrieved December 3, 2004 from http://informationr.net/ir/10-1/paper210.html
- Fisher, K. E.*[1], Durrance, J. C., & Hinton, M. B. (2004). Information grounds and the use of need-based services by immigrants in Queens, New York: A context-based, outcome evaluation approach. *Journal of the American Society for Information Science and Technology, 55*(8), 754-766.
- Fisher, K. E., Erdelez, S., & McKechnie, L. (Eds.) (2005). *Theories of information behavior.* Medford, NJ: Information Today.
- Fisher, K.E. & Julien, H. (2009). Information behavior. In B. Cronin (Ed.), *Annual Review of Information Science and Technology* (Vol. 43, no. 1, pp. 1-73). Medford, NJ: Information Today.
- Haythornthwaite, C., & Hagar, C. (2005). The social worlds of the Web. In B. Cronin (Ed.), *Annual Review of Information Science and Technology* (Vol. 39, pp. 311-346). Medford, NJ: Information Today.
- Houston, R.D., & Harmon, G. (2007). Vannevar Bush and Memex. In B. Cronin (Ed.), *Annual Review of Information Science and Technology* (Vol. 41, pp. 55-92). Medford, NJ: Information Today.
- Ingwersen, P. & Järvelin, K. (2005). *The turn: Integration of information seeking and retrieval in context*. Secaucus, NJ: Springer-Verlag New York, Inc.
- Ingwersen, P. (1999). Cognitive information retrieval. In M. E. Williams (Ed.), *Annual Review of Information*
- *Science and Technology* (Vol. 34, pp. 3-52). Medford, NJ: Information Today, Inc. [1999-2000 vol.]
- Jansen, B., & Rieh, S. Y. (2010). The seventeen theoretical constructs of information searching and information retrieval. *Journal of the American Society for Information Science and Technology, 61*(8), 1517-1534.
- Kuhlthau, C. C. (2004). The information search process. In *Seeking meaning: A process approach to library and information services* (2nd ed., pp. 29-52). Norwood, NJ: Ablex.
- Lariviere, V., Sugimoto, C. R., & Cronin, B. (2012). A bibliometric chronicling of library and information science's first hundred years. *Journal of the American Society for Information Science, 63*(5), 997-1016.
- Leckie, G.J., Pettigrew, K.E., & Sylvain, C. (1996). Modeling the information seeking of professionals: A general model derived from research on engineers, health care professionals, and lawyers. *Library Quarterly, 66*(2), 161-193. [PDF] [Note: Pettigrew is Fisher's previous name.]

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[1] Fisher's earlier work is under the name K. E. Pettigrew.

- Mac Morrow, N. (2001). Knowledge management: An introduction. In *Annual Review of Information Science and Technology, 35*, 381-422. Medford, NJ: Information Today.
- Marchionini, G. (1995). *Information seeking in electronic environments*. New York: Cambridge University Press.
- Markey, K. (2007). Twenty-five years of end-user searching: Part 1: research findings. *Journal of the American Society for Information Science and Technology, 58*(8), 1071-1081.
- Miller, K. (2006). *Organizational communication: Approaches and processes* (4th ed.). Belmont, CA: Wadsworth.
- Morris, R. C. T. (1994). Toward a user-centered information service. *Journal of the American Society for Information Science 45*(7), 20-30.
- Morrison, E. W. (2002). Information seeking within organizations. *Human Communication Research*, *28*, 229– 242. [PDF]
- Nahl, D. & Bilal, D. (Eds). (2007). *Information and emotion: The emergent affective paradigm in information behavior research and theory*. Medford, NJ: Information Today.
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, *5*(1), 14-37.
- Pettigrew, K. E., Fidel, R., & Bruce, H. (2001). Conceptual frameworks in information behavior. In M. E. Williams (Ed.), *Annual review of information science and technology*, (Vol. 35, pp. 43-78). Medford, NJ: Information Today. [Note: Pettigrew is Fisher's previous name.]
- Rogers, E.M. (1995). *Diffusion of innovations* (4th ed.). New York: The Free press.
- Saracevic, T. (1999). Information science. *Journal of the American Society for Information Science, 50*(12), 1051-1063.
- Schamber, L. (1994). Relevance and information behavior. In M. E. Williams (Ed.), *Annual review of information science and technology,* (Vol. 29, pp. 3-48). Medford, NJ: Learned Information.
- Shneiderman, B. (2004). *Designing the user interface* (4th ed.). Reading, MA: Addison Wesley Longman.
- Taylor, R. S. (1986). *Value-added processes in information systems.* Norwood, N.J.: Ablex.
- Vakkari, P. (2003). Task-based information searching. *Annual Review of Information Science and Technology, 37*, 413-464.
- White, H. (2010). Bibliometric overview of Information Science. *In* Encyclopedia of Library and Information Sciences, Third Edition., 1: 1, 534- 545. DOI: 10.1081/E-ELIS3-120044527
- Wilson, T. D. (1999). Models in Information Behavior Research. *Journal of Documentation, 55(3), 249-270.* [PDF]
- Wilson, T. D. (2000). Human information behavior. *Informing Science*, *3*(2), 49-55.
- Wilson, T.D. (2006). On user studies and information needs. *Journal of Documentation, 62*(6), 658-670.
- Zins, C. (2007). Knowledge map of information science. *Journal of the American Society for Information Science and Technology*, 58(4), 526-535.

Suggested Research Prospective Readings

Paradigms and assumptions underlying research in information science and related disciplines. Foci of scholarly and professional literature. Quantitative and qualitative research methods. Development of research questions and research agendas.

- Allen, D., Karanasios, S., & Slavova, M. (2011). Working with activity theory: Context, technology, and information behavior. *Journal of the American Society for Information Science & Technology, 62*(4), 776-788. doi: 10.1002/asi.21441

- Chou, J., & Tsai, H. (2009). On-line learning performance and computer anxiety measure for unemployed adult novices using a grey relation entropy method. *Information Processing & Management, 45*(2), 200-215. doi: 10.1016/j.ipm.2008.12.001
- De Beer, C. S. (2009). Method/beyond-method: The demands, challenges and excitements of scholarly information work. *South African Journal of Library & Information Science, 75*(1), 12-19. Retrieved from http://www.journals.co.za/ej/ejour_liasa.html
- Fidel, R. (1993). Qualitative methods in information retrieval research. *Library & Information Science Research, 15*(3), 219-247.
- Ford, N. (1999). The growth of understanding in Information Science: Towards a developmental model. *Journal of the American Society for Information Science, 50*(12), 1141-1152.
- Gioia, D., & Pitre, E. (1990). Multiparadigm perspectives on theory building. *Academy of Management Review, 15*(4), 584-602.
- Harter, S. P., & Hert, C. A. (1997). Evaluation of information retrieval systems: Approaches, issues, and methods. In M. E. Williams (Ed.), *Annual Review of Information Science and Technology,* (Vol. 32, pp. 3-94). Medford, NJ: Information Today.
- Haythornthwaite, C. (1996). Social network analysis: An approach and technique for the study of information exchange. *Library & Information Science Research, 18*(4), 323-342.
- Julien, H. & Duggan, L. (2000). A Longitudinal analysis of the information needs and uses literature. *Library and Information Science Research, 22*(3), 291-309.
- Kishida, K. (2011). Historical overview and issues of evaluation methods in information retrieval. *Journal of Information Processing & Management, 54*(8), 439-448. doi: 10.1241/johokanri.54.439
- Krathwohl, D. (1998). Finding research problems. In *Methods of educational and social science research: An integrated approach* (2nd ed., pp. 79-99). New York, NY: Longman.
- Lopatovska, I., & Arapakis, I. (2011). Theories, methods and current research on emotions in Library and Information Science, information retrieval and human–computer interaction. *Information Processing & Management, 47*(4), 575-592. doi: 10.1016/j.ipm.2010.09.001
- Ondrusek, A. L. (2004). The attributes of research on end-user online searching behavior: A retrospective review and analysis. *Library & Information Science Research, 26, 221-265.*
- Orlikowski, W. J., & Baroudi, J. J. (1991). Studying information technology in organizations: Research approaches and assumptions. *Information Systems Research, 2*(1), 1-28.
- Pettigrew, K. E., & McKechnie, L. (2001). The use of theory in Information Science research. *Journal of the American Society for Information Science, 52*(1), 62-73.
- White, Howard D.(2010). Relevance in theory. In Bates, M. (Ed.) *Encyclopedia of Library and Information Sciences*, (3rd ed., Vol. 1:1, pp. 4498-4511).
- Widén-Wulff, G., & Davenport, E. (2007). Activity systems, information sharing and the development of organizational knowledge in two Finnish firms: an exploratory study using Activity Theory. Information Research, 12(3), 19.

UNT Acceptable Student Behavior and Academic Integrity Policy (Including Plagiarism)

Students are expected to be engaged with the course throughout the semester and to demonstrate professional behavior. This means interacting in a supportive and tactful manner based on mutual respect for each other's ideas and approaches.

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of

Student Conduct. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at https://deanofstudents.unt.edu/conduct .

Standards of academic integrity are maintained and enforced by UNT faculty and administrative authorities. Academic dishonesty includes cheating, plagiarism and other unethical and illegal activities. The instructor of this course abides by and enforces the UNT policies on academic misconduct. The instructor assumes you have read and understood the UNT's Student Standards of Academic Integrity Policy (http://policy.unt.edu/sites/default/files/untpolicy/pdf/7-Student_Affairs-Academic_Integrity.pdf).

The term "cheating" includes, but is not limited to
- the use of any unauthorized assistance in taking quizzes, tests or examinations;
- dependence upon the aid of sources specifically prohibited by the instructor in writing papers, preparing reports, solving problems or carrying out other assignments;
- dual submission of a paper or project, or resubmission of a paper or project to a different class without express permission from the instructor(s)
- the acquisition, without permission, of tests or other academic material belonging to a faculty or staff member of the university.

The term "plagiarism" includes, but is not limited to:
- the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgement;
- the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

Penalties range from reducing the grade for a test or assignment to revoking an academic degree already granted. Specific policies, penalties, and the appeals process are explained in UNT's Code of Student Conduct and Discipline, Graduate Catalog, and the Policy Manual, all of which are available online.

In this course, written report will be submitted via the TurnItIn Dropbox to ensure academic integrity.

UNT Policy on Sexual Discrimination, Harassment, & Assault

UNT is committed to providing an environment free of all forms of discrimination and sexual harassment, including sexual assault, domestic violence, dating violence, and stalking. If you (or someone you know) has experienced or experiences any of these acts of aggression, please know that you are not alone. The federal Title IX law makes it clear that violence and harassment based on sex and gender are Civil Rights offenses. UNT has staff members trained to support you in navigating campus life, accessing health and counseling services, providing academic and housing accommodations, helping with legal protective orders, and more.

UNT's Dean of Students' website offers a range of on-campus and off-campus resources to help support survivors, depending on their unique needs: http://deanofstudents.unt.edu/resources_0. Renee LeClaire McNamara is UNT's Student Advocate and she can be reached through e-mail at SurvivorAdvocate@unt.edu or by calling the Dean of Students' office at 940-565-2648. You are not alone. We are here to help.

UNT Americans with Disabilities Act (ADA) Compliance Statement

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide student with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the Office of Disability Accommodation website at http://disability.unt.edu/. You may also contact them by phone at (940) 565-4323.