Fall 2014
INSC 587
Mining the Web
Course Syllabus

Professor: Dr. Dania Bilal
Meeting time: Tuesdays, 5:05-7:45 P.M.
Meeting Place: Virtual via Blackboard Collaborate (BC).
Office Location: COM 451 Suite, Office 446.
Office Hours: Tuesdays 3:30-5:30 P.M. Other meeting times are available by appointment.
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Catalog Description

Covers strategies for mining the Web, Web engines and directories, cognitive accessibility, Web design and development, and usability engineering.

Updated Description

Current strategies for mining the Web, Web search engines and directories, Web data analytics, mobile access and data retrieval, crowdsourcing (e.g., citizen science), cognitive accessibility, usability principles, and developing and evaluating web spaces.

Required Texts

- Hock, Randolph. 2013. *The Extreme Searcher's Internet Handbook*: *A Guide for the Serious Searcher*. 4th ed. Medford, NJ: CyberAge Books. A supplement to this book is Hock's Extreme Searcher's Web Page (http://www.extremesearcher.com) where you will find a list of links for all of the websites included in each book chapter.
- Jansen, Bernard. 2009. *Understanding User – Web Interactions via Web Analytics*. Morgan & Claypool Publishers. Click on the course's *Readings link* to download this book. Note that Jansen has also published articles on the topic.

Readings from outside of the textbook will be noted on the Course schedule. Additional readings may be added throughout the semester as needed.

Course Objectives

This is an elective course that should be taken after you have completed the three SIS required courses (IS 510, IS 520, and IS 530). Non-SIS students may take this course if they have adequate computing skills (see Computing Requirements) and basic content knowledge.

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

- become familiar with the history and growth of the Internet;
- develop understanding of the characteristics, content, and searchability of the Internet and its components including the Web.
- describe and discuss the functionality of web search engines' indexing and retrieval techniques;
- formulate effective search formulation and modification strategies in web search engines and directories;
- identify and evaluate the most valuable aspects of specialized web resources (e.g., news services, aggregation sites, blogs, microblogs, and feeds);
- discuss the "web as platform" for communication, social networking, participation, and publication;
- identify and use specific research methods to collect data about users' interaction with web search engines;
- become familiar with web data analytics (including mobile analytics) and discuss their implications for varied information environments;
- become familiar with web accessibility guidelines developed for people with disabilities;
- identify and use crowdsourcing web sites in disciplines of interest;
- apply usability and web design principles to develop or evaluate web interfaces; and
- become a "serious" searcher of the web.

Seeking and Achieving Success in this Course
Success begins with you! This course is demanding in that it requires that you spend much time outside of the classroom to fulfill the requirements.

Expectations and Challenges
The amount of knowledge and skills you will gain from this course will depend on the amount of time and work you invest in it. Much of the content of the course is problem-based and requires critical thinking. You will need to dig deeper into the Web to find/extract/compare answers and synthesize information to solve simple and complex information problems. Searching effectively and efficiently may have become a "buzz" word in light of predictive search words or phrase search engines provide as you search for information. You will be challenged, intrigued, and sometimes lost in web space. Finding your way back "safely" is a key to success in this course.

This course is structured to be a rewarding learning experience that will provide meaning for you as information professional or as a professional from another field of study who will be managing web sites, interacting with users on a regular basis, or analyzing web data to develop better services.

Course Delivery

The course content will be delivered virtually through BC. Supporting materials such as class notes, slides, assignments, projects, and so forth will be posted on Blackboard Learn (BL). The class dynamics consist of lectures, demos, hands-on activities, field experiences, and class discussions. I will create discussion forums on BL in support of class activities. In addition, students should use tools (e.g., Google+, Skype) for virtual group meetings and Google Docs or similar programs to share documents in a virtual environment. You may also set up BC group sessions to meet and discuss group work.

BC is equipped with a live chat feature that you may use for class-related purposes. This text chat is not private and will be recorded during each session. Therefore, be careful in using this feature.

Contacting the Instructor
Maintaining a good communication with me is essential to ensure that you are on the right track and that concerns or issues you may experience in this course are addressed and that your needs are attended to. I urge you to contact me (dania@utk.edu) to share concerns, issues, and ideas about the content and progress of the course. You may request an appointment to see me in person in my office, or meet virtually to discuss course-related concerns or problems. Email is the quickest way to contact me. If you choose to email me, START the subject line with **INSC 587**. I will reply to your messages as soon as I can; however, replies over the weekend and during holidays may be slow.

Submission of Class Activities
All class activities (assignments, tests, projects, etc.) should be submitted in BL Assignments Page. Please *do not send any class activity as email attachment because it will be ignored.*

Word process each assignment, save the document, scan it for virus, and open it on your computer *before you submit it in BL.* If the document opens fine on your side, submit it in BL; otherwise, detect and solve the problems in opening the document and submit in BL.

Use MS Word or equivalent to process class assignments/documents.

Please refrain from using PDF, RTF, or HTML format.

Name each individual assignment/document for submission as follows:

> **YourlastnameFirstinitial-587-Assignmentnumber**
>
>> Example: **BilalD-587-Assignment1**

Name a team or group project as follows:

> **Projectnumber-587-lastnameofeachstudentintheTeam**

Example: **Project1-587-Bilal-Smith-Johnson-Potnis**

Late Submission of Class Activities
All class activities are due for submission in BL by midnight, Eastern Time on the scheduled due date. BL considers activities submitted past 11:59 P.M. as late. Late submission will incur a reduced credit of **1 point for every day an assignment is past due**. However, if late submission is due to sickness, family emergency, or the like and the student has informed me as soon as possible, the reduced credit may be restored.

Lecture Notes
Most lecture notes will be posted on Blackboard Learn. **Please note that faculty members are not obliged to post lecture notes on BL at any other times.** It is up to the faculty member to share these notes with the students. However, sharing the lecture notes with the students is part of my instructional delivery method and teaching philosophy. The notes **do not** substitute for required readings from the textbook or external sources.

Computing Requirements
      Students (YOU) must:
- have adequate computing skills, including but not limited to use of Microsoft Office 2007 or 2010 suite or equivalent to process, format, save, and retrieve documents. In some instances, you may need to use MS or equivalent diagnosis tools to detect and clean up documents/files from viruses before submitting them in Blackboard Learn.
- be able to download and launch applications from the Web, including but not limited to Java, in order to use Blackboard Collaborate (BC) for attending the class.
- be able to use the web safari/browsing feature in BL effectively to launch web sites on your own computer or smartphone during class.
- subscribe to the SIS listserv (UTKSIS-L@LISTSERV.UTK.EDU) and monitor messages about class and other school events or matters.
- have a UTK email account.
- have access to PowerPoint or Prizi or the like applications to download lecture notes and create class presentations.
- use a USB headset for best quality audio.
- test the computer audio by running the BC Audio Wizard before attending each class session. This will help to synch the audio in BC and ensure a quality audio on both sides during class. If you connect to BC via a **wireless network** to attend class, you may experience problems with audio and video transmissions. Please read the Recommendations below on **Connection to the Internet and Network Timeouts**.
- attend class in a quiet area with no background noise. Please do not attend class in noisy places such as café, TV room, playgrounds, or other places where the computer or mobile device audio will be compromised.. **Use of iPhone or other mobile devices** to attend class may cause problems, including but not limited to breakup in sound and video transmissions, and delay in video display of slides and surfing external web sites launched during class.

- close all applications on your computer so that you obtain good quality audio and video during class.

Connection to the Internet (Recommendations from LiveOnline@UT Course Delivery Team):

 "We recommend minimal speed to audio/video of 6Mbps or higher. Standard DSL often connects at lower speeds. Check the speed of your provider and router/gateway.
- We recommend a hard wired (ethernet cable) connection to your router/gateway.
- Wireless connections are often twice as slow as cabled connections. Even if you have a wireless "n" router, with speeds up to 300 Mbps, you cannot take advantage of that if your connection to the Internet is on 6Mbps. Wireless router speeds are only as good as the pipe connecting the router to the Internet.
- Additional Internet activity in your house (wired or wireless) while attending online classes will impact the quality of your session. Minimize other Internet activity in your location while attending classes.
- Restart your router/gateway at least weekly.

Network Timeouts
- Find out what your ISP's "lack of activity" timeout is. Sometimes this is as little as 15 minutes. Network timeouts will reset your connections and create problems with your class session.
- Find out what you Internet router "lack of activity" timeout is. Defaults are often set at very short intervals."

You may obtain help by contacting OIT at (865) 974-9900 or by completing a help form online at http://remedy.utk.edu/contact. Note that OIT office is not open 24/7; therefore, plan to connect to BL at least one 60 minutes before class time.

Class Engagement and Interaction
You are highly encouraged to participate in class by sharing ideas and related experiences, engaging in class discussion, and collaborating with peers to solve certain problems or simulate situations. Please make sure that when you participate in class, you do not take up time from other classmates so that they can also contribute their ideas. Five percent **(5%)** of the total grade is assigned to constructive, active class participation throughout the semester.

Attendance
Class attendance is required for mastering the content of the course. In case you have to miss a class, make sure you check with classmates about notes, discussions, announcements, and other activities they have captured in class. You are responsible for catching up with the course content. Please arrive to class on time so that you do not miss out on topics or other class-related matters.

Readings
Readings from outside of the Textbook are noted in the course schedule and in a list of readings on the course's BL page. As new or other relevant articles or sources appear, I will add them to the list. Some

readings may be available in full text for immediate download from the course schedule and list; others may require access to [Hodges Library](#) databases, Jstor (http://www.jstor.com), or Google Scholar (http://scholar.google.com), or selected digital libraries to find and download on your computers.

Citing and Formatting References

Use any standard style manual (e.g., APA, Turabian, Chicago) for citing and formatting sources used in assignments. You may use EndNotes or Sotero or any other application program to import and format citations according to the chosen style manual. These and other applications are available free of charge through Hodges Library.

Grading

Graded class activities will be returned to you within two to three weeks. I will send you email through BL about the completion of every graded assignment or activity. Please read the comments and suggestions I provide even if you receive a full grade on an assignment.

You have one week from the time the grade for an assignment has been posted on BL to request a review of your grade. In this case, I will review the assignment within one week from the time of your request. In case of travels, unforeseen circumstances, or urgent matters on my part, it may take longer to complete the grade review process.

Grades will be assigned using this scale:

Grade	Points	Performance
A	93-100	Excellent
B+	86-92.99	Very good
B	80-85.99	Good
C+	75-79.99	Marginal
C	70-74%	Below graduate level

Performance Evaluation
Student performance will be evaluated on these activities:

Activity	Points/percent
Query mining set I	20
Query mining set II	20
Data analytics	10
Tests (2) in-class	20
Team project	20
Class presentations of team project	5
Constructive, active class participation, readings, etc.	5

Academic Integrity

Students should be familiar and maintain their *Academic Integrity* described in Hilltopics 2013-2014, p. 45 (http://dos.utk.edu/files/Hilltopics2013-2014.pdf) as:

"*Study, preparation and presentation should involve at all times the student's own work, unless it has been clearly specified that work is to be a team effort. Academic honesty requires that the student present his or her own work in all academic projects, including tests, papers, homework, and class presentation. When incorporating the work of other scholars and writers into a project, the student must accurately cite the source of that work.*"

Students should abide by the *Honor Statement* described in the same Hilltopics, p. 18

Honor Statement

"*An essential feature of The University of Tennessee is a commitment to maintaining an atmosphere of intellectual integrity and academic honesty. As a student of the University, I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity.*"

Civility

"*In 2011, the university adopted the Principles of Civility and Community. They are designed to work in concert with all existing codes of conduct. The principles encourage all members of the campus community to foster a learning environment where the differences of our diverse culture are valued, respected and celebrated. Civility is an act of showing regard and respect for others including: politeness, consideration, tact, good manners, graciousness, cordiality, affability, amiability and courteousness...*" (Hilltopics, p.12).

The above statement applies to communicating with the instructor, classmates, and other members of the UT community.

Disabilities and/or Special Needs
UT Office of Disability Services (ODS) "assists students with documented disabilities by determining their eligibility for services and then working with students to determine reasonable accommodations and services which will, in turn, give the student equal access to the University. It is important for students to remember that it is their responsibility to request disability services in the post-secondary setting, and they can start the process here at ODS…" Please contact ODS at 865.974.6087, should you need course adaptations or any other accommodations. Please contact me about this matter if you need to discuss any concerns. For additional information about ODS, visit http://ods.utk.edu

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CCI Diversity Statement
"*The College of Communication and Information recognizes that a college diverse in its people, curricula, scholarship, research, and creative activities expands opportunities for intellectual inquiry and engagement, helps students develop critical thinking skills, and prepares students for social and civic responsibilities. All members of the College benefit from diversity and the quality of learning,*

research, scholarship and creative activities is enhanced by a climate of inclusion, understanding and appreciation of differences and the full range of human experience. As a result, the College is committed to diversity and equal opportunity and it recognizes that it must represent the diversity inherent in American society. The College is acutely aware that diversity and fairness are foundations that unite the College's faculty, staff, students, and the larger communication and information community." (See http://www.cci.utk.edu/diversity-statement for CCI's full Diversity Statement).

Inclement Weather Policy

"*The University of Tennessee will remain open except in the most severe weather conditions. The Chancellor (or appointed representative) may officially close or suspend selected activities of the university because of extreme weather conditions. When a decision to close is reached, campus and local radio and TV stations will be notified and a UTAlert will be issued. The notice will also be posted on the front page at www.utk.edu...*" (Hilltopics, p. 39) (http://dos.utk.edu/files/Hilltopics2013-2014.pdf). SIS will cancel classes when UT is closed. Please check the SIS student listserv (UTKSIS-L@LISTSERV.UTK.EDU) for messages about closing.

August 22, 2014.