Insc 532: Sources & Services for Science & Engineering
The School of Information Sciences
The University of Tennessee
Class Meetings: Mondays, 6:30 pm—9:10 pm on ZOOM;
ZOOM ID 835-068-789/ https://tennessee.zoom.us/j/835068789
UTK Syllabus, Provost’s Office:
http://tenntlc.utk.edu/the-syllabus/

Teresa Berry, Instructor
Office Hours: By Appointment
Office: 450 Communications Bldg.
(865) 974-8685
Office: 1345 Circle Park Drive
kberry0@utk.edu (best choice for contact)
Office: 37996-0341
Office: SIS Office: 865.974.2148
Office: Fax (SIS): 865.974.4667

COURSE DESCRIPTION
Information sources in engineering, physical and life sciences.

STUDENT OUTCOMES
Students who complete this course will be able to

- Explain how scientific information is created, organized, and communicated.
- Explain the content and structure of key information sources in the sciences and engineering.
- Design, execute, and evaluate search strategies to meet scientific and engineering information needs.
- Identify and analyze key issues and trends in science librarianship.

COURSE DESIGN
The course adopts an active learning approach. You are required to complete all required readings, attend all class lectures, complete graded activities and assignments, and participate in all class activities, including teacher-led and student-led discussions, and small-group and individual activities. All required and recommended readings are listed in Canvas. You are expected to browse or search the professional literature to supplement your reading and share what you’ve learned with your colleagues in the discussion section of Canvas.
**REQUIRED TEXTS**

No text is required. Readings will be available through UTK Libraries’ subscriptions, openly available on the web, or in Canvas.

**COMMUNICATION**

I am required to communicate with you through your UTK email address. If you prefer to use another address, consult the OIT Helpdesk to obtain directions for forwarding your UTK mail to your preferred address if you don’t wish to check both accounts.

**COMPUTING REQUIREMENTS**

You must have adequate computing skills, including but not limited to use of word processing, Web browsers, e-mail, listservs, Canvas, and Zoom software. You must learn how to submit your assignments using Canvas. The Office of Information Technology (OIT) provides training classes in using varied technologies for students at no charge (advance registration is required). OIT also offers online training through Lynda.com.

You must obtain a UT email account and subscribe to the SIS student listserv. In addition, you must have the PowerPoint Reader or the regular PowerPoint software installed on your computer in order to download the lecture notes from Canvas.

**CLASS ATTENDANCE POLICY**

It is assumed that each student be present and speak in class — the equivalent of a "B" grade for "participation." Missing more classes or failing to participate will lower your grade; frequent participation will raise the grade.

Regular attendance is required and necessary. A substantial portion of your grade will be based on in-class work and participation. Unexplained absences will affect your grade. Contact me as soon as possible if you cannot attend class. If you will be absent from class, you must:

- Inform me in advance or as soon as possible after class.
- Listen to class recording, and submit a summary of the recording with commentary as if you were present in class.
- Check with classmates and on Canvas for notes, announcements, etc.

Acceptable reasons for absence from class include:

- Illness
- Serious family emergencies,
- Special curricular or job requirements (e.g., judging trips, field trips, professional conferences),
• Military obligation,
• Severe weather conditions,
• Religious holidays
• Participation in official university activities such as music performances, athletic competition or debate
• Obligations for court imposed legal obligations (i.e., jury duty, subpoena)

Missing more than one class meeting for reasons other than those listed above will have a negative impact on your course participation grade.

**INCLEMENT WEATHER**

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 made, information is distributed to the campus community, shared with local media, and posted on the front page at www.utk.edu. (Public Safety)

SIS will cancel classes when UT is closed. Please check the SIS student listserv (UTKSIS-L@LISTSERV.UTK.EDU) for messages about closing.

**ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES**

Students who may need course adaptations because of a disability are welcome to make an appointment to speak with me. Students with disabilities must register with the Student Disability Services, 100 Dunford Hall, Knoxville, TN 37996-4020, before accommodations can be made. If you require course accommodations but have not contacted Student Disability Services, please call (865) 974-6087 or email sds@utk.edu to inquire about the registration procedure.

**CIVILITY**

Civility is genuine respect and regard for others: politeness, consideration, tact, good manners, graciousness, cordiality, affability, amiability and courteousness. Civility enhances academic freedom and integrity, and is a prerequisite to the free exchange of ideas and knowledge in the learning community. Our community consists of students, faculty, staff, alumni, and campus visitors. Community members affect each other’s well-being and have a shared interest in creating and sustaining an environment where all community members and their points of view are valued and respected. Affirming the value of each member of the university community, the campus asks that all its members adhere to the principles of civility and community adopted by the campus: https://civility.utk.edu/.
**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.

**INSTRUCTOR STATUS AS A TITLE IX MANDATORY REPORTER**

University of Tennessee faculty are committed to supporting our students and upholding gender equity laws as outlined by Title IX. Please be aware that if you choose to confide in a faculty member regarding an issue of sexual misconduct, dating violence, or stalking, we are obligated to inform the University’s Title IX Coordinator, who can assist you in connecting with all possible resources both on- and off-campus. If you would like to speak with someone confidentially, the Student Counseling Center (865-974-2196) and the Student Health Center (865-974-3135) are both confidential resources.

For additional resources and information, visit [titleix.utk.edu](http://titleix.utk.edu).

**ACADEMIC INTEGRITY**

Students should be familiar and maintain their Academic Integrity described in [Hilltopics](http://hilltopics) 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 their 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 [Student Code of Conduct](http://studentcodeofconduct):

*An essential feature of the University 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.”*
Plagiarism in any of its several forms is intolerable, and attention to matters of documentation in all written work is expected and required. Inadvertence, alleged lack of understanding, or avowed ignorance of the various types of plagiarism are not acceptable excuses.

Specific examples of plagiarism are:

- Copying without proper documentation (quotation marks and a citation) written or spoken words, phrases, or sentences from any source;
- Summarizing without proper documentation (usually a citation) ideas from another source (unless such information is recognized as common knowledge);
- Borrowing facts, statistics, graphs, pictorial representations, or phrases without acknowledging the source (unless such information is recognized as common knowledge);
- Collaborating on a graded assignment without the instructor’s approval;
- Submitting work, either in whole or in part, created by a professional service and used without attribution (e.g., paper, speech, bibliography, or photograph).

Students who may be unsure of the nature of plagiarism should consult the instructor or a guide for writing research reports. Additional resources are available at UT Libraries.

Infractions of academic integrity are penalized according to the severity of the infraction but may include a course grade of "F."

Assignments and Grading

Student work is assigned a grade based on quality of thought and writing style, thoroughness of research and of references, appropriateness of length, and originality. Only exceptional work will receive an "A" grade. Papers that are received after the due date will be assigned a lower grade than it would otherwise have received. All sources must be cited, quotations must be in quotation marks and attributed correctly. Not doing so constitutes plagiarism.

Due Dates and Late Assignments

Assignments should be submitted to the Assignments area of Canvas and are due at 12:00 a.m. Eastern Time on the due date listed on the syllabus. If you know you will miss the deadline, email me before the deadline asking for an extension. Ten percent (10%) will be deducted for each 24-hour hour period the assignment is not turned in.
INCOMPLETES

Based on adopted University of Tennessee-Knoxville and SIS policy, a grade of I (Incomplete) is reserved for emergencies that prevent the student from completing the course on time. Incompletes are granted only under "the most unusual of circumstances" and solely at the discretion of the instructor. Plan your semester's course of study carefully to insure sufficient time to complete the required work.

For students who simply "disappear" without contacting the instructor and without completing the required form, an "F" is submitted.

ASSIGNING GRADES

I will use a points-based grading system in which you will receive points for individual assignments. To compute the letter grade you currently have,

\[
\frac{\text{Current number of points earned}}{\text{Total points possible}} \times 100 = \text{Your percentage grade}
\]

Refer to the scale below to determine the corresponding letter grade. Your final grade will be based on total points earned/total possible points over the course of the semester.

EVALUATION

Grading rubrics for individual assignments are available in Canvas.

Semester grades will be assigned according to the following scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>93≤</td>
<td>(4 quality points per semester hour) superior performance.</td>
</tr>
<tr>
<td>A-</td>
<td>90-92.99</td>
<td>(3.7 quality points per semester credit hour) intermediate grade performance.</td>
</tr>
<tr>
<td>B+</td>
<td>88-89.99</td>
<td>(3.5 quality points per semester hour) better than satisfactory performance.</td>
</tr>
<tr>
<td>B</td>
<td>83-87.99</td>
<td>(3 quality points per semester hour) satisfactory performance.</td>
</tr>
<tr>
<td>B-</td>
<td>80-82.99</td>
<td>(2.7 quality points per semester credit hour) intermediate grade performance.</td>
</tr>
<tr>
<td>C+</td>
<td>78-79.99</td>
<td>(2.5 quality points per semester hour) less than satisfactory performance.</td>
</tr>
</tbody>
</table>
C 70-77.99 (2 quality points per semester hour) performance well below the standard expected of graduate students.

D 60-69.99 (1 quality point per semester hour) clearly unsatisfactory performance and cannot be used to satisfy degree requirements.

F 59.99≤ (no quality points) extremely unsatisfactory performance and cannot be used to satisfy degree requirements.

I (no quality points) a temporary grade indicating that the student has performed satisfactorily in the course but, due to unforeseen circumstances, has been unable to finish all requirements. An I is not given to enable a student to do additional work to raise a deficient grade. The instructor, in consultation with the student, decides the terms for the removal of the I, including the time limit for removal. If the I is not removed within one calendar year, the grade will be changed to an F. The course will not be counted in the cumulative grade point average until a final grade is assigned. No student may graduate with an I on the record.

S/NC (carries credit hours, but no quality points) S is equivalent to a grade of B or better, and NC means no credit earned. A grade of Satisfactory/No Credit is allowed only where indicated in the course description in the Graduate Catalog. The number of Satisfactory/No Credit courses in a student’s program is limited to one-fourth of the total credit hours required.

P/NP (carries credit hours, but no quality points) P indicates progress toward completion of a thesis or dissertation. NP indicates no progress or inadequate progress.

W (carries no credit hours or quality points) indicates that the student officially withdrew from the course.

**COURSE EVALUATION**

You will be invited to evaluate the course at the end of the term. Please participate in this valuable process. If you have any comments, suggestions, and recommendations during the semester, please don’t hesitate to contact me.

**ASSESSMENTS: DESCRIPTION**

The following table identifies the MSIS Program Outcomes addressed in course assignments:
<table>
<thead>
<tr>
<th>Assignment</th>
<th>MSIS Program Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Presentation</td>
<td>5. Identify critical professional issues in a variety of organizational, cultural, societal, disciplinary, transdisciplinary, and historical contexts.</td>
</tr>
<tr>
<td>Presentation Paper</td>
<td>5. Identify critical professional issues in a variety of organizational, cultural, societal, disciplinary, transdisciplinary, and historical contexts.</td>
</tr>
<tr>
<td>LibGuide/Pathfinder</td>
<td>8. Assess and implement information technologies, systems, sources, and services that serve users effectively and efficiently.</td>
</tr>
<tr>
<td>Information Resource Tutorial</td>
<td>8. Assess and implement information technologies, systems, sources, and services that serve users effectively and efficiently.</td>
</tr>
</tbody>
</table>

The following table provides a brief summary of assignment names, due dates, and grade distribution. A fuller description of each assignment follows the table.

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Value</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes</td>
<td>5%</td>
<td>As assigned</td>
</tr>
<tr>
<td>Practice Questions</td>
<td>20%</td>
<td>As assigned</td>
</tr>
<tr>
<td>Subject Guide</td>
<td>15%</td>
<td>April 5</td>
</tr>
<tr>
<td>Tutorial</td>
<td>15%</td>
<td>April 5</td>
</tr>
<tr>
<td>Group Presentation</td>
<td>15%</td>
<td>April 15 &amp; 22</td>
</tr>
<tr>
<td>Presentation Paper</td>
<td>20%</td>
<td>April 27</td>
</tr>
<tr>
<td>Participation</td>
<td>10%</td>
<td>Weekly</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>
Quizzes
There will be five multiple-choice quizzes throughout the semester to test your knowledge of a database’s content and/or features. You may take the quiz multiple times.

Practice Questions
There will be two sets of practice questions to provide practical experience in searching. For each set, submit a document with these components:
- For each question, provide the search string that you believe provides the best results. If you find that more than one database is needed to adequately answer the question, include the search string for each database.
- Write a reflective essay (2-4 pages, double-spaced, describing your search process.
- Choose one of the questions, and compose an email to the patron explaining how to search for the information.

Subject Guide
Many libraries use LibGuides, a content management system, to create guides to help users begin research in a topic or subject area. For this assignment, you will create a LibGuide for a STEM discipline, specialized topic, or course of your choice. Your LibGuide should clearly indicate the intended audience, purpose, and type of library.

Tutorial
Create a web-based tutorial on how to use a science/engineering resource related to your LibGuide topic. You may use whatever tools you have on hand (e.g., LibWizard, a trial version of Camtasia, Zoom, Arc, etc.). Embed the tutorial into your LibGuide.

Group Presentation & Paper
Your 3-person group has been asked to present a paper for an STS forum at ALA Annual Conference. You are to make a 20-minute presentation and submit a paper to be published in the proceedings.

The topic of the forum is how the roles of STEM liaison librarians are expanding and evolving in response to changes in technology, scholarly communication, and academia in general. What are these new and changing responsibilities? How are librarians rising to meet the challenge? What new innovations and collaborations are taking place with librarians and their campus colleagues? How has the incorporation of new responsibilities impacted existing services and resources?
Suggested topics include
- Research metrics and impact
- Systematic reviews
- Research data management
- Geospatial services
- Open access
- Data visualization
- Makerspace
- Virtual and augmented reality

In addition to the presentation, the group will write a paper on the presentation topic. The paper should be about 2,500-5,000 words, double-spaced, 12-point font, prepared according to The Chicago Manual of Style, and include a bibliography of cited references (in addition to the 2,500-5,000 words).

The timeline for the presentation and paper is as follows:
- **January 29**: Submit your presentation proposal (via email) with a preliminary title and a short abstract of no more than 200 words describing your presentation.
- **February 5**: Sign up for a presentation date.
- **April 15 & 22**: Presentations
- **April 27**: Papers due in Canvas

**Participation**
You are expected to actively participate in the course. What does active participation look like?
- Participating every week in class activities and discussions by using interactive tools in Zoom and/or Canvas.
- Proactively reading the professional literature, and regularly sharing articles relevant to STEM librarianship with colleagues through Canvas.
- Contributing thoughtful comments that stimulate conversations or make connections to the professional literature, prior experience, or other coursework.
- Asking questions that clarify understanding or challenge ideas

If you miss a class (see Class Attendance section), you can participate by listening to the class recording, and submitting a written summary of the recording with commentary as if you were present in class, along with completing as many of the class activities as possible.
LIBRARY SUPPORT

UT Libraries is your gateway to services and resources to support your research needs. Research assistance is available via chat, phone, text, email, and in person. For in-depth assistance, contact your subject librarian, Anna Sandelli (asandell@utk.edu).

- Information Sciences Research Guide
- Information for Graduate Students

DISCLAIMER

Please be aware revisions may be made to this syllabus over the course of the semester, and as such, the content contained within may be subject to change.