



THE UNIVERSITY OF  
TENNESSEE  
KNOXVILLE

SCHOOL OF  
INFORMATION SCIENCES

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## Teaching Philosophy

### A. Teaching Accomplishments

My teaching focuses on creating a memorable learning *experience* for students where *content* drives the class but does not burden students with information overload. Let me demonstrate the process of designing and delivering courses, with a few examples from the following courses that I taught in the spring and fall of 2019: (1) INSC 451/380 (Information Management for Information Professionals), a core course in the newly launched Bachelor of Science in Information Sciences (BSIS) program, (2) INSC 514 (IT Foundations): A newly developed core course in the MSIS program, (3) INSC 542 (Social Informatics), a required course for the [Youth Informatics certificate](#), and (4) INSC 550 (Management of Information Organizations), a required course for several [career pathways](#) identified for MSIS students.

1. All of us learn differently. Reading, writing, discussion, listening, and tactile (i.e., learning by doing) are the five primary modes of learning. My classes cater to all these learning styles and benefit students by using a combination of techniques supporting these learning styles. For instance:
  - Online discussion boards: After watching short documentaries representing case studies on topics such as fake news and other contemporary topics and/or readings assigned to students in INSC 451/380, INSC 542, and INSC 550, students answer specific questions on Canvas every week via online discussion board assignments. The following week, they are expected to respond to the answers/views/remarks posted by their classmates, which builds a community of practice among students, as they learn the same content from different perspectives and develop a shared understanding of it at the same time.
  - Breakout rooms: In the second half of my 150-minute synchronous classes, I often divide students into different groups, implemented through breakout rooms on Zoom, to help them better understand the concepts learned in the first half of class. This situated learning, manifested through video discussions in a group setting, makes

- students work in teams and sometimes even make decisions as a team, which simulates real-world work environments.
- Hands-on assignments/projects: INSC 514 trains students for web design using HTML5.0 and requires them to design a website from scratch. The leadership interview project in INSC 451/380 and INSC 550 requires students to interview any leaders or managers of their choice using my questionnaire. They are expected to analyze interviews using the management-related theoretical concepts and frameworks taught in these classes.
  - Managing real-world problems in organizations
    - Several assignments in INSC 550 ask students to solve real-world problems by putting themselves in the shoes of managers and directors of various information agencies. Sample topics and problems, they work on include: managing crisis in libraries, promoting the culture of personal growth and organizational citizenship behavior, onboarding of employees, avoiding groupthink, measuring patron satisfaction, and nurturing the culture of data-driven decision making in organizations, among others.
    - Assignments in INSC 380 put students in “what if” scenarios and ask them to provide their responses as information consumers and/or managers. A few sample topics include: sharing the personal life details of a co-worker, which students would learn over social media, with supervisors; unlimited vacation policy; managing organizational conflicts; digitization of office records; and measuring return on investment in information tools and services.
  - As part of the discovery learning approach, the final assignment in my INSC 514 class asks students to reflect on how they learned various technical concepts and built skills throughout the semester. This helps them gain greater awareness of their learning styles, which is crucial to independent, lifelong learning.
2. On the first day of a given class, I demonstrate the utility of my courses so that students realize the significance of my courses to their careers. For instance:
    - Most of our MSIS students are interested in working in libraries. Hence, on the first day of teaching INSC 514, I share a list of over 70 technology-related job titles in academic, public, school, and special libraries. After analyzing the descriptions of these job titles, I identify 10 clusters of technology competencies that are in demand in different types of libraries. Sample clusters include web design, user-centered design, networking, and integrated library systems. I walk students through the course syllabus to show how every week my course equips them with a specific cluster of technology competencies to serve in different types of libraries.
  3. I design courses that are driven by practice, meaning every course informs and equips students with the key competencies in demand in the job market. For instance:
    - I select and update topics of INSC 514 by scanning technology jobs posted on the American Library Association’s website every semester. I often consult with job portals like Indeed and salary.com for jobs related to “information management” in multiple industries when designing and updating my undergraduate course on information management. As a result, most students in this class, across a wide array of different majors, appreciate the real-world relevance to everything they do in

- this course<sup>1</sup>. It was my idea to use the Software Development Life Cycle, a conventional approach for software development, to organize course content, since I have found in my research that several information organizations go through the same cycle when investing, offering, and maintaining IT-based services. As per my idea, this course is divided into the following seven modules: 1. Technology assessment and planning, 2. Environmental scan of IT, 3. Designing and developing IT, 4. Training users and staff for using IT, 5. Deploying IT for serving patrons, 6. Managing IT, and 7. Measuring return on investment in IT. Students appreciate the way each module builds on the previous one and the last module closes the loop by measuring the return on investment in technology, including social media, by information agencies.
- After referring to multiple academic and non-academic resources on the skills and knowledge required by chief information officers in the private and public sector, I found that people, process, technology, decisions, and policies are the key factors influencing the ability of information to create value for organizations. These are also the key ingredients to becoming a successful chief information officer in any organization. Hence, INSC 451/380 equips students with the skills and knowledge related to managing people, processes, technology, decisions, and policies for effective and efficient management of different types of information in organizations.
4. I often consult with my peers (i.e., CCI faculty) and relevant scholarly literature in the field when designing and updating courses. For instance:
- When designing the INSC 514 course, I actively sought feedback from my colleagues (in the faculty retreat). Dr. Peiling Wang, a senior colleague in SIS, said that since it is going to be a core course for MSIS students, it should have a strong theoretical component. Hence, I identified over 25 theoretical frameworks and models that are suitable for explaining the factors that influence learning and adoption of technology by staff and patrons of various information organizations. Students appreciated the way in which technology adoption theories can help libraries address problems including, but not limited to, the underutilization of electronic resources like e-books in libraries.
5. In every class, I follow the “Why-What-How” approach while teaching any lesson.
- Why do students need to learn this topic and acquire related skills?
  - What are the key details of this topic?
  - How can students do things related to this topic and apply this knowledge in practice?
6. Straight from the horse’s mouth: I often invite guest speakers such as deans and directors of academic and public libraries, who share their experience and guidance with my students in my INSC 550 class. The assignment to select two favorite quotes by the top-100 business leaders identified by the Harvard Business School helps students in the INSC 451/380 class witness the vision, strategy, and leadership qualities of leaders.

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1. In 2019, as per the instructions from Dr. Kelly, SIS director, Dr. Vandana Singh, one of my colleagues in SIS, and I co-developed INSC 514, wherein we collaboratively decided the topics and assignments for this course so that students in DE and on-campus sections would have the same content and workload in this core course.

7. Sensitive and responsive to student needs and feedback: I teach in multiple modes, such as asynchronous online, synchronous online, and hybrid. I quickly learned the strengths and weaknesses of each mode and adapted my content and delivery accordingly. For instance:
  - After teaching INSC 380 asynchronously for the first time, I broke down 150-minute class recordings into smaller chunks. This curbs the boredom of undergraduates and helps them more easily process the information in these recordings. I introduced several activities in my recorded classes where I pause for 3-5 minutes in the recording for them to complete “in-class” activities, which simulates the learning experience of a real-time classroom.
  - Several of our students work full time and some of them have challenging personal lives. Hence, I release all the assignments and projects on the first day of classes so that they can plan and submit their work on time throughout the semester.
  - Every semester, I continuously seek student feedback on what works and what does not work in terms of the course content and delivery, among other factors. Several students feel comfortable sharing the things that did not work for them in that class. I make sure to work on their feedback and create a better learning experience for my students. For instance, in fall 2019, during my in-class demonstration on web design, five students who used a combination of a Mac operating system and FileZilla, a secure-file-transfer-protocol client, wanted more visual instructions for transferring files on their computer to UT’s Linux Server. In spring 2020, I added 10 more slides to my original deck of PowerPoint slides for such students.
8. Making old courses better: The earlier instructor of INSC 550 taught the course from a political science point of view. I revamped this course and started teaching it from a business perspective, since most of the management theories and models are proposed by business scholars in the business context. My course demonstrates how MSIS students can modify and apply core management concepts (i.e., organizational behavior, strategy, and human resource management) in their libraries and related information environments.
9. My courses equip students for unconventional career opportunities. I frequently encourage students to think “outside-of-the-box,” especially when searching for jobs and career opportunities. For instance:
  - Information consultants: I developed a new course on social informatics, INSC 542, that trains students to serve as “information consultants” for businesses and public sector organizations. In the last four years, UT students have created value for over 35 organizations through their semester-long pro-bono consultation projects.
  - Technology consultants: In INSC 514, I show students how they can work as “technology consultants” for designing databases, websites, and mobile apps for libraries, and testing these information tools and services using human-computer interaction skills. Using my [project funded](#) by the Institute of Museum and Library Services, I demonstrate how they can serve as [mobile technology consultants](#) for libraries and not-for-profits such as schools, churches, Boy and Girl Scout Clubs, and beyond.
10. I have invested an enormous amount of time in training our MSIS and doctoral students in conducting and publishing research. Here is a list of sample research collaborations with doctoral students in recent years.

- Joseph Winberry, CCI doctoral student: [JOLIS](#), and two under-review journal articles
- Kevin Mallary, CCI doctoral student: 2019 ALISE conference presentation and two under-review journal articles on the use of assistive technologies for better serving patrons with disabilities in libraries and academic institutions
- Iman Tahamtan, CCI doctoral student: One research grant proposal under review and two work-in-progress journal articles
- Macy Halladay, a doctoral student in the Child and Family Studies Department: [SIGMIS- Computers and People Research Conference](#) presentation and four work-in-progress journal articles

11. One of my teaching objectives is to build confidence in my students. For instance, in my INSC 514 class, several students are anxious and hesitant at the beginning of the semester, since it is the first technology class ever for most of them. By the end of the semester, the same students become confident about troubleshooting their own daily technology issues and even end up helping their families, friends, and colleagues at work.

## **B. Institutional Support**

In 2010, when I joined SIS as an assistant professor, senior colleagues like Dr. Dania Bilal shared their notes, slides, and class recordings, which helped me hit the ground running. I have offered the same guidance and support to some of the faculty who joined SIS after me.

The workshops and seminars organized by [Teaching and Learning Innovation](#) at UT were instrumental in helping me reinvent myself as a teacher. Their educational resources showed me that teaching is a science and not just an art.

I regularly attend workshops, talks, and similar events held at UT to better understand the learning, mentoring, and advising needs of our students. For instance, last year I attended a workshop on helping [“first-generation students.”](#) I learned about several challenges they could possibly experience and the type of help and resources available at UT. Since then I have helped several first-generation students in my undergraduate and graduate courses.

## **C. Proof of Outstanding Classroom Instruction**

In the latest annual performance review completed in fall 2019, I received “Far exceeds expectations for rank,” the highest possible score, in the Teaching category, by Dr. Diane Kelly, SIS Director, and Dean Michael Wirth. My overall annual performance score was “Exceeds expectations for rank.”

All sections of my classes are popular. They fill up quickly. For instance, my INSC 542 on Social Informatics, an elective course in the MSIS program, had a waitlist of 7 students in spring 2019. I am always willing to accommodate extra students on the waitlist in my classes. I taught the maximum number of students (n = 110) in AY 2018-2019 in the school, which was shared with me during my annual performance evaluation in fall 2019.

Several doctoral students outside of SIS sign up for my courses. For instance, I have had students in my classes from architecture, business, nursing, education, and sociology,

among others, which creates great visibility for SIS and helps break interdisciplinary silos across UT. Interdisciplinary interpretations of concepts along with in-class and online group discussions on related topics among students create a unique learning opportunity for all.

Several MSIS and doctoral students frequently approach me to conduct research under my guidance. I serve on six dissertation committees. I chair three dissertation committees. I have completed 13 independent research studies with MSIS students, including two US Diplomacy Labs in two consecutive years, where MSIS students created value for US diplomats in Africa by using social media to address corruption in developing countries and spreading the political ideals of the US.

In 2019, INSC 542 was selected by the CCI Graduate Committee for CCI's newly proposed Online Master's degree program. With the help of OIT, I am currently developing an asynchronous version of this course, which will be offered in Spring 2021.

I often receive "Thank You" cards by mail and "Thank You" emails from undergraduate and graduate students as a token of their appreciation for my teaching, mentoring, and advising.

Students equally like the core (e.g., INSC 514, INSC 451/380) and elective courses (e.g., INSC 542, INSC 550) I teach. Respectable teaching evaluations attest to my teaching.

#### **D. My Future "Classroom Instruction" Plan**

I am always in search of ways to make things better for my students. I often read articles in the Chronicle of Higher Education and other resources to keep my teaching practices up-to-date.

In fall 2020, I plan to teach my synchronous online, undergraduate course (INSC 451/380) in a flipped classroom style, wherein students will come to class after watching my recorded videos and will be able to ask me questions in class. We will discuss concepts and solve problems together. I will also divide the class into breakout rooms to promote group work in real time.

I also plan to introduce a new type of class assignment in my fall 2020 courses (e.g., INSC 550 and INSC 451/380) where students will watch the interviews of directors, managers, and chief information officers of various public and private sector organizations. These interviews on YouTube will provide real-world insights into the management and leadership competencies that are taught in these classes. Students will be able to see how concepts and topics in my classes are relevant to honing information management skills.

To enhance the learning experience of my students, I do not shy away from experimentation in classrooms. Sometimes experiments fail, but if you are honest and communicate your intention to students, most of them often cooperate with you and do not penalize you for trying something "out-of-the-box."