

Department of Information Science INFO 5307 Knowledge Management Tools and Technologies Fall, 2019

Instructor:

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Course Information

Course Format

This course is delivered as a hybrid course combining face-to-face meetings and online activities with a supporting Canvas website. All course materials are provided online, with the expectation that you will read the assigned materials online in order to complete your assignments. Ten learning modules that reflect the most current issues in the knowledge management field are used as a framework to organize and deliver online course materials to students.

Course Descriptions

Introduction to knowledge management (KM) technologies; Internet and Web technologies; Knowledge management processes and corresponding technologies; Collaboration tools and technologies; Information and knowledge portals; KM readiness and IT infrastructure; Evaluation and selection criteria for knowledge management tools.

Prerequisites

Knowledge of personal computer operation is the prerequisite to register for and successfully completing this course. Students taking this course should be proficient in Microsoft Office tools and are willing to learn new KM tools and technologies.

Learning Modules

The course content is organized into ten learning modules:

- Module 1: Introduction to Knowledge Management
- Module 2: Knowledge Management Processes & Practices
- Module 3: Knowledge Creation (Mind Mapping/Concept Mapping and Knowledge Networks)
- Module 4: Knowledge Discovery (Data Mining and Business Intelligence)
- Module 5: Knowledge Sharing & Collaboration (Social Media and Social Networks)
- Module 6: Knowledge Organization Tools (Metadata, Topic Maps, and Ontologies)
- Module 7: Information and Knowledge Portals
- Module 8: Knowledge Retention and Enterprise Content Management
- Module 9: Selection and Evaluation of Knowledge Management Tools
- Module 10: Data Analytics/Visualization Tools supporting Knowledge Management

Course Objectives

After completing this course, the learner should be able to:

- ✓ Understand knowledge management processes and practices
- ✓ Understand the role of technology in knowledge management
- ✓ Identify technology tools associated with managing different types of knowledge
- ✓ Identify techniques associated with managing and organizing information such as metadata, topic maps, and ontologies
- ✓ Evaluate and develop selection criterion for knowledge management tools
- ✓ Research the latest knowledge management technologies, tools and techniques.

Course Materials

Textbook

There is no required textbook.

Recommended Texts

[1] Jennex, M. E. (2018). Effective Knowledge Management Systems in Modern Society, IGI Global.

 Within the past ten years, tremendous innovations have been brought forth in information technology and knowledge management. Some of the key technical innovations have included the introduction of social media, artificial intelligence, as well as improved network connectivity and capacity. Effective Knowledge Management Systems in Modern Society is a critical scholarly resource that presents an overview of how technical, social, and process changes are impacting the way knowledge systems are being designed.

- [2] McInerney, C. R., & Koenig, M. E. (2011). <u>Knowledge management (KM) processes in organizations: Theoretical foundations and practice</u>. *Synthesis Lectures on Information Concepts, Retrieval, and Services*, 3(1), 1-96.
 - Knowledge Management (KM) is an effort to increase useful knowledge in the organization. It is a natural outgrowth of late twentieth century movements to make organizational management and operations more effective, of higher quality, and more responsive to constituents in a rapidly changing global environment. This book not only traces the evolution of KM in organizations, summarizing the most influential research and literature in the field but also presents an overview of selected common and current practices in knowledge management, including the relationship between knowledge management and decision making. The final section highlights the use of social networking and commonly adopted Web applications to increase the value of social capital and to connect practitioners with clients and colleagues.

[3] Young, R. (2010). <u>Knowledge management tools and techniques manual</u>. Tokyo: Asian Productivity Organization.

 Introduces twenty essential KM methods and tools and six further recommended tools, both divided into IT and non-IT sections.

Required Readings, Supplementary Readings

There are supplemental required readings for each of the ten modules. Required readings are listed on the Canvas course website; they are either directly linked from the website or can be easily retrieved through the UNT Libraries main catalog or electronic resources database (http://www.library.unt.edu/).

Course Requirements

Module Learning Activities (50% of Final Grade)

Each module will have various activities including concept mapping, online discussions regarding how to learn and apply the concepts to the practices and information sharing. Each module will have a single deadline for completion of the reading(s) and discussions.

- Synthesis Concept Mapping Assignments (40%). As a note-taking tool, students are required to organize/synthesize at least three key concepts from assigned readings for each learning module using the concept-mapping tool, Cmap. A short reading review/reflection is required for each module with assigned readings. Each synthesis will contain a concept map, important quotes, review (reflection), and references. The students will receive a grade of 0-100 based on the average of peer grading and instructor grading. Students should post their synthesis concept map to a wiki page on PBworks that is saved in the module folder and then submit the link (to the assignment page on PBworks) using Canvas Assignment. Students will have to submit minimum seven concept map assignments. Students who are willing to submit all nine concept mapping assignments will have the advantage of dropping their two lowest grades. Only seven highest grades will be considered.
- Online Discussions (10%). All students will be expected to monitor current knowledge
 management trends and/or studies and provide links to news, publications, or case studies
 relevant to the topics of learning modules. These will help students keep informed of recent
 KM developments in different industries and learn from each other's perspective through
 online information sharing and discussions. Students should share current information or

resources relevant to the corresponding module topic and respond constructively to at least one student's posting. Each posting should be at least 100 words and reference information source(s) relevant to the current module with in-text citations and/or references in APA format. Students will have to submit **minimum seven discussion posts**. Students willing to submit all nine discussions will have the advantage of dropping their two lowest grades. Only **seven highest grades** will be considered.

Book Summary Report (15% of Final Grade)

For this assignment, choose a book from the recommended book list or propose a book not on the list but covers specific topics about KM tools/technologies (ask the instructor). Read the book and prepare a summary report (in the format of presentation file containing at least twenty slides) to share with the class. Title the review with the title of the book, followed by the author's name and the year in parentheses. Students should summarize the book content and describe its contribution to the knowledge management field, so other students who have not read the book understand the essence of the book content. In terms of book summary, students may choose to focus on a few key chapters within the book if those appear to be most relevant to knowledge management tools and technologies. Regarding the contribution, place the book in a disciplinary perspective: For what discipline(s) or applied domain(s) was it written? How does it pertain to knowledge management tools and technologies? What impact do you think the selected book has had on knowledge management?

Final (Research) Project (35% of Final Grade)

During this semester, students are required to work individually or in a group on a term project. The final project should be related to one of the knowledge management (KM) tools/technologies and their implementations. This include but not limited to one of the following areas:

- ✓ Selection and evaluation of a specific KM tool/technology or comparison of two/multiple KM tools/technologies.
- ✓ Development of a knowledge portal or a Wiki (e.g., PBworks) that can serve as a resource for information on KM technologies.
- ✓ Development and implementation of a selected KM tool/technology project within an organization.
- ✓ Development of a specific KM service using KM tools/technologies.
- ✓ Innovations in any KM tool/technology.

The first step in the project is to identify the topic, write a **two-page project proposal** (5%), and get the approval of the instructor no later than October 7th. Students are required to submit a **presentation** highlighting the lessons learned from the project (10%) by December 2nd. The final project report (20%) is due December 9th.

Students will work **individually** or **collaboratively** on this project. The requirements for the final project include a minimum of eight pages (excluding References or Appendix) describing the chosen topic, lesson learned and the implications to the knowledge management fields. Students will be expected to cite reliable sources for the references and document their sources based on the APA Manual of Style. During the last week of class, the students will give presentations online in which they will describe their projects and what they learned. Length of presentations will depend upon course enrollment.

Assessment and Grading

Assignment grading is based on rubric attached to each assignment description on Canvas.

Activities	Grading Percentages	
Module Learning Activities	50%	
Book Summary Report	15%	
Final Project	35%	

Grading Scale

The UNT scale for grading is as follows:

- A (Excellent work) = 90 100 points
- B (Good work) = 80 89 points
- C (Fair work) = 70 79 points
- D = 60 69 points
- F = 59 points and below

Grading Timeframe

You can expect to receive a grade for any graded assignment approximately seven days after the assignment's due date. If you submit an assignment before the due date, please do not include early days in your day count. The instructor will contact the students if the grading goes beyond that timeframe.

Course Schedule (subject to change at instructor's discretion)

No.	Week	Activities	Assignment Due
1	8/26 ~ 9/2	Welcome and Course Introduction (Request the access to course wiki on PBworks, PBworks orientation assignment, Cmap introduction)	9/2
2	9/3 ~ 9/9	Module 1 Concept Map (on PB Works) and Discussion post (Canvas)	9/9
3	9/10 ~ 9/16	Module 2 Concept Map (on PB Works) and Discussion post (Canvas)	9/16
4	9/17 ~ 9/23	Module 3 Concept Map (on PB Works) and Discussion post (Canvas)	9/23
5	9/24 ~ 9/30	Module 4 Concept Map (on PB Works) and Discussion post (Canvas)	9/30

No.	Week	Activities	Assignment Due
6	10/1 ~ 10/7	Final Project Proposal	10/7
7	10/8 ~ 10/14	Module 5 Concept Map (on PB Works) and Discussion post (Canvas)	10/14
8	10/15 ~ 10/21	Module 6 Concept Map (on PB Works) and Discussion post (Canvas)	10/21
9	10/22 ~ 10/28	Book Summary Report Presentations (on PBworks)	10/28
10	10/29~ 11/4	Module 7 Concept Map (on PB Works) and Discussion post (Canvas)	11/4
11	11/5 ~ 11/11	Module 8 Concept Map (on PB Works) and Discussion post (Canvas)	11/11
12	11/12 ~ 11/18	Module 9 Concept Map (on PB Works) and Discussion post (Canvas)	11/18
13	11/19 ~ 11/25	Module 10	No Assignment
14	11/26 ~ 12/2	Happy Thanksgiving Holidays (11/28-29) Project Presentations (on PBworks)	12/2
15	12/3 ~ 12/9	Final Project Report (on Canvas)	12/9

Technical Requirements / Assistance

The following information has been provided to assist you in preparation for the technological aspects of the course.

Understanding and use of the following are required:

- Canvas online course software
- Slide presentation software (.ppt files)
- Word processing software (.docx files)
- Internet search, navigation, and application of new programs
- University of North Texas online library and databases https://library.unt.edu/

The University Information Technology (UIT) Helpdesk offers helpful resources and addresses any issues that might arise with Canvas.

http://www.unt.edu/helpdesk/

- 1. Be sure you are using a supported web browser. Canvas supports the current and first previous major releases of the following browsers:
 - Chrome 70 and 71
 - Firefox 63 and 64 (Extended Releases are not supported)
 - Flash 31 and 32 (used for recording or viewing audio/video and uploading files)
 - Internet Explorer 11 (Windows only—functionally supported; may exhibit slight visual differences from other browsers, but these differences do not restrict product functionality)
 - Edge 42 and 44 (Windows only)
 - Respondus Lockdown Browser (supporting the latest system requirements)
 - Safari 11 and 12 (Macintosh only)

Commonly used 3rd party plug-ins you may need to install for this course:

- Acrobat Reader
- Real Player
- Flash
- Shockwave
- Windows Media Player
- The above are accessible via http://remedy4.ars.unt.edu:8080/rkm/viewdoc.jsp?doc=372&sid=17234&type=Published&terms=quick_searchTerms&user=Self%20Help

2. Additional help for using Canvas:

You will need word processing software such as Word 2010. Acceptable file formats include .txt, .rtf, .doc, and .docx. https://community.canvaslms.com/docs/DOC-10554-4212710328

3. Student Support

The University of North Texas provides student technical support in the use of Canvas and supported resources. The student help desk may be reached at:

Website: http://www.unt.edu/helpdesk/

Phone: 940.565-2324 In Person: Sage Rm. 130

Regular hours are maintained to provide support to students. Please refer to the website for updated

hours.

Getting Started with Canvas

Access and Log in Information

This course was developed and will be facilitated utilizing the University of North Texas' Learning Management System, Canvas. To get started with the course, please go to: https://unt.instructure.com/. You will need your EUID and password to log in to the course. If you do not know your EUID or have forgotten your password, please go to: https://ams.unt.edu/.

Canvas Student Guide

As a student, you will have access to the "Canvas Student Guide" tutorial via Canvas. You are strongly encouraged to become familiar with the tools and tutorials within the student orientation to better equip you to navigate the course.

Accessing Grades

As assignments are graded, grades will be posted in the class grade book. Effort will be made to complete grading and post grades expeditiously, so please be patient. If a student has a question about a grade, please consult the rubric first before contacting the instructor.

Assignment Submission Instructions

Please do not wait until the last minute to post assignments as technical problems may occur.

IT Resources

- UNT Portal: http://my.unt.edu
- UNT Canvas Student Support https://community.canvaslms.com/docs/DOC-10554-4212710328
- General access computer lab information (including locations and hours of operation) can be located at: http://www.gacl.unt.edu/
- UNT Library Information for Off-Campus Users: http://www.library.unt.edu/services/facilities-and-systems/campus-access
- UNT Computing and Information Technology Center: https://citc.unt.edu/help-support/students
- Computer Lab at Discovery Park: http://www.ci.unt.edu/main/ViewPage.php?cid=235

Policies

Canvas (Instructure) Privacy Policy - Last Updated: November 17, 2017

Instructure, Inc. ("INSTRUCTURE") is committed to protecting your privacy. We have prepared this Privacy Policy to describe our practices regarding the personal information that may be collected from users of our websites, including https://www.instructure.com and http://www.canvas.net and any other sites that link to this Privacy Policy ("SITE"), Instructure's Canvas iOS and Android Applications ("APPS"), and other related educational services ("SERVICES"). By submitting personal information through our Site, Apps, or Services, you expressly consent to the processing of your personal information in the U.S. in accordance with this Privacy Policy. The use of personal information collected through our shall be limited the purposes described in this Privacy Policy. service to https://www.instructure.com/policies/privacy.

Google Privacy Policy

Access here: https://policies.google.com/privacy

YouTube Privacy Policies

Access here: https://www.youtube.com/yt/about/policies/#community-guidelines

ADA Accommodation

If you have a disability and require accommodation under the terms of the federal Americans with Disabilities Act (ADA), you must present a written accommodation request to the primary instructor by the end of the *second week of the semester*. You should submit a request even if it is possible that accommodation may not be necessary later in the semester. You should register with the UNT Office of Disability Accommodation (ODA; http://www.unt.edu/oda/ or 940-565-4323), which provides many kinds of support services. Procedures are explained in the Disability Accommodation Policy 18.1.14 in the *UNT Policy Manual* (http://www.unt.edu/policy/UNT_Policy/volume3/18_1_14.html)

Canvas Accessibility Statement

https://community.canvaslms.com/docs/DOC-2061-accessibility-within-canvas

Google Accessibility Statement

https://www.google.com/accessibility/#!#google

YouTube Accessibility - Using YouTube with a Screen Reader

https://support.google.com/youtube/answer/189278?hl=en

Netiquette

Free of Disruptions: Students have the right to pursue an education without disruption or interference and to expect enforcement of norms for acceptable classroom behavior that prevents disruption of the teaching/learning process.

Responsibility: Students may not disrupt class or any other University process by any means whatsoever (including sideline conversations, comments, arguments, noise of any kind or other activity which would hinder access to or utilization of academic information)

--#8 from "The Ten Student Academic Rights and Responsibilities", UNT Code of Student Conduct

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 in any instructional forum at UNT.

Students engaging in unacceptable behavior will be **barred from the classroom/course website** and the instructor may refer the student to the <u>Center for Student Rights and Responsibilities</u> to consider whether the student's conduct violated the <u>Code of Student Conduct</u>. The university's expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc.

Only topics related to the course content should be discussed during class time. Talking out-of-turn during a lecture/chat or engaging in inappropriate discussions in the Discussion boards is distracting to others in the class.

Failure to follow these guidelines will result in your:

• being asked to leave the classroom and/or instructor **barring** you from the course website,

- receiving a "zero" on class activities (assessment, assignment, test, etc.), and
- possibly being referred to the Center for Student Rights and Responsibilities (see above information and web address)

Therefore, be respectful of the instructor and other students around you.

UNT Policies

Academic Honesty Policy

You are encouraged to become familiar with the University's Policy of Academic dishonesty found in the <u>Student Handbook</u>. The content of the Handbook applies to this course. Additionally, the following specific requirements will be expected in this class: (enter specific requirements). If you are in doubt regarding the requirements, please consult with me before you complete any requirements of the course.

ADA Policy

The University of North Texas is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 — The Rehabilitation Act of 1973 as amended. With the passage of new federal legislation entitled Americans with Disabilities Act (ADA), pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found here. Also, you may visit the Office of Disability Accommodation in the University Union (room 321) or call us at (940) 565-4323.

Add/Drop Policy

Please refer to the UNT Faculty Handbook or your department regarding the Add/Drop Policy.

Code of Conduct

Please refer to the UNT Faculty Handbook or your department regarding the Student Code of Conduct Policy.

Important Notice for F-1 Students taking Distance Education Courses:

Federal Regulation

To read detailed Immigration and Customs Enforcement regulations for F-1 students taking online courses, please go to the Electronic Code of Federal Regulations website at http://ecfr.gpoaccess.gov. The specific portion concerning distance education courses is located at "Title 8 CFR 214.2 Paragraph (f)(6)(i)(G)" and can be found buried within this document: http://frwebgate.access.gpo.gov/cgi-bin/get-cfr.cgi?TITLE=8&PART=214&SECTION=2&TYPE=TEXT

The paragraph reads:

(G) For F–1 students enrolled in classes for credit or classroom hours, no more than the equivalent of one class or three credits per session, term, semester, trimester, or quarter may be counted toward the full course of study requirement if the class is taken on-line or through distance education and does not require the student's physical attendance for classes, examination or other purposes integral to completion of the class. An on-line or distance education course is a course that is offered principally through the use of television, audio, or computer transmission including open broadcast, closed circuit, cable, microwave, or satellite, audio conferencing, or computer conferencing. If the F–1 student's course of study is in a language study program, no on-line or distance education classes may be considered to count toward a student's full course of study requirement.

University of North Texas Compliance

To comply with immigration regulations, an F-1 visa holder within the United States may need to engage in an on-campus experiential component for this course. This component (which must be approved in advance by the instructor) can include activities such as taking an on-campus exam, participating in an on-campus lecture or lab activity, or other on-campus experience integral to the completion of this course.

If such an on-campus activity is required, it is the student's responsibility to do the following:

- (1) Submit a written request to the instructor for an on-campus experiential component within one week of the start of the course.
- (2) Ensure that the activity on campus takes place and the instructor documents it in writing with a notice sent to the International Student and Scholar Services Office. ISSS has a form available that you may use for this purpose.

Because the decision may have serious immigration consequences, if an F-1 student is unsure about his or her need to participate in an on-campus experiential component for this course, s/he should contact the UNT International Student and Scholar Services Office (telephone 940-565-2195 or email internationaladvising@unt.edu) to get clarification before the one-week deadline.

Student Support Services Available

The Student Support Services program is available to support students' academic, personal, and financial needs at UNT. Assistance provided includes:

- Academic Advising
- Tutoring
- Financial Literacy
- Career Services
- Inquiries into Graduate School and Professional Programs
- Computer Lab & Study Rooms

Student Support Services can be found at https://trio.unt.edu/sss/program-services. For more information, email them at sss@unt.edu or call 940-565-4754.

UNT also provides counseling services to struggling students. Follow this link to learn more: https://studentaffairs.unt.edu/counseling-and-testing-services/about.