# Information Retrieval Design

# INFO 5206 Section 001

## Instructor Information

*Deama Khader, Ph.D.*

Virtual Office Hours by Appointment Only

Message me via Canvas (preferred) or email: deamakhader@my.unt.edu

\***Please reach out to me via Canvas first**- emails to my UNT email can get lost or sent to Clutter. I try to check my emails daily, but I may not get back to you from Fridays after 5pm until the following Monday\*

### Prerequisites

INFO 5200 of permission of the Department of Information Science

You should also be committed to:

* Engagement with bringing people and useful documents together
* Citing sources, giving credit to where you obtain information.
* Networking with others and utilize tact when offered differing perspectives.
* Spending at least 10 hours a week reading the assignments, reflecting on the material covered, and participating in other course activities.

### Course Description

From the Course Catalog: Study of design considerations in computer-based information retrieval systems, including conventional inverted file systems using Boolean logic and automatically indexed vector-oriented systems. Evaluation of information systems in the light of user and system criteria.

Additional statement from instructor: We will examine the history and philosophy of information retrieval in general to model functional methods of bringing people with information needs together with the documents most likely to be useful to them.

### Course Structure

This course takes place 100% online. All of your interaction with me and with your fellow students will take place in Canvas. There are 14 weeks of content that we will move through. I will open up a new module each week. We will follow a seminar format of reading and discussions; your postings and my reactions will construct a distributed conversation.

### Course Objectives

Upon successful completion of this course, learners will be able to (numbered in order of presentation):

1. Describe the relationship between information, questions, and documents.
2. Identify approaches to bringing information seekers together with functional documents.
3. Evaluate the effectiveness of an information retrieval system.
4. Generate methods of representation and query to improve information retrieval.
5. Articulate retrieval models appropriate to individual circumstances
6. Work competently and critically with existing retrieval systems

### Required Text

O’Connor, B. C., Kearns, J., & Anderson, R. L. (2008). Doing things with information: Beyond indexing and abstracting. Libraries Unlimited. It is available through the [UNT bookstore](http://unt.bncollege.com/) and other sellers.

* Four videos on foundations of information retrieval design are linked from course modules
* Occasional articles appropriate to discussions will be linked in the discussion boards
* This is an online, asynchronous course thus it has digital components. To fully participate in this class, students will need internet access to reference content on the Canvas Learning Management System. If circumstances change, you will be informed of other technical needs to access course content.  Information on how to be successful in a digital learning environment can be found at [Learn Anywhere](https://online.unt.edu/learn) (https://online.unt.edu/learn).

## How to Succeed in this Course

In a graduate course the assumption is that we are all in the group because of our deep interest in the topic. Success could be described as purposeful immersion in challenging ourselves and the others in the group to reach new levels of understanding and ability, to bringing our individual questions and insights to the group, and demonstrating intellectual growth. There will likely be quite a bit of variety in experiences, challenges, background knowledge, and expectation across the members of the course. It is my role as instructor to guide and inform our explorations, but it is not my role to pronounce great truths nor to dictate how each and every member of our journey together should progress. Within the bounds of civility, tolerance, and academic integrity the exact nature of our explorations is dynamic.

As members of the UNT community, we have all made a commitment to be part of an institution that respects and values the identities of the students and employees with whom we interact. UNT does not tolerate identity-based discrimination, harassment, and retaliation so we will work as a class to collaborate in ways that encourage inclusivity.

If you have questions or concerns, please feel free to contact me through the Canvas email. During busy times, my inbox becomes rather full, so if you contact me and do not receive a response within two days, please send a follow up email. A gentle nudge is encouraged and appreciated.

## Assessing Your Work

In a graduate course success is self-driven and to a certain extent self-determined. Numerical grades are rather clumsy representations of quality of work or progress in a graduate course centered on personal reactions to readings and comments; however, they will serve as an index to guide your development and commitment. For each week’s discussions I will provide a score from 0 to 5 for each student’s work. There is no particular “correct” answer or proper way to write, but there are expectations that each discussion posting will be an intriguing insight or significant question about the reading and not a mere summary. A similar approach will be applied to final project; there is no single correct way to accomplish it, but there will guidelines on what is expected. Samples of the final project may be submitted for comment and re-writing before submission.

All 15 assignments other than the final project have a possible 50 points for a possible total of 750; the final project has a total of 250 points for a course total of 1,000 points. Course grades will be based on this scale:

A = 900-1000

B = 800-899

C = 700-799

D = 600-699

F = 500-599

If at any time you expect to have a problem completing your work by the due date, please contact me and we will work out a solution. If something unexpected keeps you from completing work on time, please notify me as soon as possible afterwards. There is no penalty for late postings **so long as you contact me.** The discussion postings serve the group as a whole, so it is most beneficial if they arrive within the expected time frame.

## Course Requirements/Schedule

### Introduction to the course

| **Week** | **Date** | **Topic** | **Assignment Due** | **Points Possible** | **% of Final Grade** |
| --- | --- | --- | --- | --- | --- |
| Week 1 | 8/24 | *Introduction* | Introduce Yourself | 50 pts. | 5% |
|  |  |  | Video 1 Discussion  Ch. 1 Discussion | 50 pts.  50 pts. | 5%  5% |

### Unit 1: Foundations of Representation

| **Week** | **Date** | **Topic** | **Assignment Due** | **Points Possible** | **% of Final Grade** |
| --- | --- | --- | --- | --- | --- |
| Week 2 | 8/31 | *Representation* | Ch. 2 Discussion | 50 pts. | 5% |
| Week 3 | 9/07 | *Representation,*  *Function, Utility* | Ch. 3 Discussion | 50 pts. | 5% |
|  |  |  | Video 2 Discussion | 50 pts. | 5% |
| Week 4 | 9/14 | *Failures of Representation* | Ch. 4 Discussion | 50 pts. | 5% |

### Unit 2: Doing Things with Information for Users

| **Week** | **Date** | **Topic** | **Assignment Due** | **Points Possible** | **% of Final Grade** |
| --- | --- | --- | --- | --- | --- |
| Week 5 | 9/21 | *Aboutness and Descriptors* | Ch. 5 Discussion | 50 pts. | 5% |
|  |  |  | Video 3 discussion | 50 pts. | 5% |
| Week 6 | 9/28 | *Indeterminacy* | Ch. 6 Discussion | 50 pts. | 5% |
| Week 7 | 10/05 | *Continue ch. 6* |  |  |  |
| Week 8 | 10/12 | *Word-Based Documents* | Ch. 7 | 50 pts. | 5% |
|  |  |  | Project Statement | 0 pts. | 0% |
| Week 9 | 10/19 | *Continue ch. 7* |  |  |  |
| Week 10 | 10/26 | *Information Measurement* | Ch. 8 Discussion | 50 pts. | 5% |
|  |  |  | Video 4 Discussion | 50 pts. | 5% |
| Week 11 | 11/02 | *Continue Ch. 8* |  |  |  |

### Unit 3: Turn to the Functional

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Week** | **Date** | **Topic** | **Assignment Due** | **Points Possible** | **% of Final Grade** |
| Week 12 | 11/09 | *Functional Ontology* | Ch. 9 Discussion | 50 pts. | 5% |
| Week 13 | 11/16 | *Continue ch. 9* |  |  |  |
| Week 14 | 12/01 | *Creek Pebbles* | Ch. 10 Discussion | 50 pts. | 5% |
| Week 15 | 12/10 | *Final Project* | Final Project | 250 pts. | 25% |

Course Policies

Class Participation  
This course is asynchronous with no scheduled online meetings. Online participation is expected on a weekly basis. For general UNT policy on attendance see: [http://policy.unt.edu/policy/06-039Links to an external site.](http://policy.unt.edu/policy/06-039)

Late WorkA student who knows of a situation that will likely result in a late or missed assignment should contact me through my email. We will work matters out. Please do not hesitate to contact me!

Without prior communication, points will be deducted for discussions per each day submitted past the deadline.

Examination Policy

This course is project-based. There are no scheduled exams.

Assignment Policy

The University is committed to providing a reliable online course system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive activity, the instructor will extend the time windows and provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and contact the UNT Student Help Desk: [helpdesk@unt.edu](mailto:helpdesk@unt.edu) or 940.565.2324 and obtain a ticket number. The instructor and the UNT Student Help Desk will work with the student to resolve any issues at the earliest possible time.

Instructor Responsibilities and FeedbackAn academic course is a collaboration in which all of us are working out some idea, concept, or problem set. A faculty member has the responsibility to present relevant material and challenges to engage students; to demonstrate a passion for the field that sparks interest; and to critically evaluate student input. Students have an equal responsibility to know themselves well enough to work out how best to engage with the course, to engage the assistance of the faculty member when needed, and to earnestly contribute to the enterprise of the course.

Grading Policy

Grades are based on mastery of the content. As a rule, I do not grade on a “curve” because that is a comparison of your outcomes to others. Every student in this course can improve by doing their own work and trying their hardest with access to appropriate resources. Students who use other people’s work without citations will be violating UNT’s Academic Integrity Policy. Please read and follow this important set of [guidelines for your academic success](https://policy.unt.edu/policy/06-003) (https://policy.unt.edu/policy/06-003). If you have questions about this, or any UNT policy, please email me or come discuss this with me during my office hours.

UNT Policies

Academic Integrity Policy

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University. [Insert specific sanction or academic penalty for specific academic integrity violation.]

ADA Policy

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time; however, ODA notices of reasonable 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 reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the [Office of Disability Access](https://studentaffairs.unt.edu/office-disability-access) website (http://www.unt.edu/oda). You may also contact ODA by phone at (940) 565-4323.

Prohibition of Discrimination, Harassment, and Retaliation (Policy 16.004)

The University of North Texas (UNT) prohibits discrimination and harassment because of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law in its application and admission processes; educational programs and activities; employment policies, procedures, and processes; and university facilities. The University takes active measures to prevent such conduct and investigates and takes remedial action when appropriate.

Emergency Notification & Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.

Retention of Student Records

Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the Canvas online system, including grading information and comments, is also stored in a safe electronic environment for one year. Students have the right to view their individual record; however, information about student’s records will not be divulged to other individuals without proper written consent. Students are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University’s policy. See UNT Policy 10.10, Records Management and Retention for additional information.

Acceptable Student Behavior

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 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. Visit UNT’s [Code of Student ConductLinks to an external site.](https://deanofstudents.unt.edu/conduct) (https://deanofstudents.unt.edu/conduct) to learn more.

Access to Information - Eagle Connect

Students’ access point for business and academic services at UNT is located at: [my.unt.eduLinks to an external site.](https://my.unt.edu/). All official communication from the University will be delivered to a student’s Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail [Eagle ConnectLinks to an external site.](https://it.unt.edu/eagleconnect) (<https://it.unt.edu/eagleconnect>).

Student Evaluation Administration Dates

Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The survey will be made available during weeks 13, 14 and 15 [insert administration dates] of the long semesters to provide students with an opportunity to evaluate how this course is taught. Students will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (no-reply@iasystem.org) with the survey link. Students should look for the email in their UNT email inbox. Simply click on the link and complete the survey. Once students complete the survey they will receive a confirmation email that the survey has been submitted. For additional information, please visit the [SPOT websiteLinks to an external site.](http://spot.unt.edu/) (http://spot.unt.edu/) or email [spot@unt.edu](mailto:spot@unt.edu).

Survivor Advocacy

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct. Federal laws and UNT policies prohibit discrimination on the basis of sex as well as sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking and/or sexual assault, there are campus resources available to provide support and assistance. The Survivor Advocates can be reached at [SurvivorAdvocate@unt.edu](mailto:SurvivorAdvocate@unt.edu) or by calling the Dean of Students Office at 940-5652648.

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 websiteLinks to an external site.](http://www.ecfr.gov/) (http://www.ecfr.gov/). The specific portion concerning distance education courses is located at Title 8 CFR 214.2 Paragraph (f)(6)(i)(G).

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](mailto:internationaladvising@unt.edu)) to get clarification before the one-week deadline.

Student Verification

UNT takes measures to protect the integrity of educational credentials awarded to students enrolled in distance education courses by verifying student identity, protecting student privacy, and notifying students of any special meeting times/locations or additional charges associated with student identity verification in distance education courses.

See [UNT Policy 07-002 Student Identity Verification, Privacy, and Notification and Distance Education CoursesLinks to an external site.](https://policy.unt.edu/policy/07-002) (https://policy.unt.edu/policy/07-002).

Use of Student Work

A student owns the copyright for all work (e.g. software, photographs, reports, presentations, and email postings) he or she creates within a class and the University is not entitled to use any student work without the student’s permission unless all of the following criteria are met:

* The work is used only once.
* The work is not used in its entirety.
* Use of the work does not affect any potential profits from the work.
* The student is not identified.
* The work is identified as student work.

If the use of the work does not meet all of the above criteria, then the University office or department using the work must obtain the student’s written permission.

Download the UNT System Permission, Waiver and Release Form

**Transmission and Recording of Student Images in Electronically-Delivered Courses**

1. No permission is needed from a student for his or her image or voice to be transmitted live via videoconference or streaming media, but all students should be informed when courses are to be conducted using either method of delivery.
2. In the event an instructor records student presentations, he or she must obtain permission from the student using a signed release in order to use the recording for future classes in accordance with the Use of Student-Created Work guidelines above.
3. Instructors who video-record their class lectures with the intention of re-using some or all of recordings for future class offerings must notify students on the course syllabus if students' images may appear on video. Instructors are also advised to provide accommodation for students who do not wish to appear in class recordings.

Example: This course employs lecture capture technology to record class sessions. Students may occasionally appear on video. The lecture recordings will be available to you for study purposes and may also be reused in future course offerings.

No notification is needed if only audio and slide capture is used or if the video only records the instructor's image. However, the instructor is encouraged to let students know the recordings will be available to them for study purposes.