Instructor
J. U. QUEVEDO-Torrero
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Office: Discovery Park E250G
Office Hours: Wednesdays 9:00am to 11:00am by appointment
https://doodle.com/bp/quevedo-torrerojesusubaldo/fall23
Office hours are for Fall 2023 only from August 21 to December 15, 2023.

Teaching Assistants:

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Office Hours</th>
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</thead>
<tbody>
<tr>
<td>Parmalla, Ganesh</td>
<td><a href="mailto:ganeshrajuparmalla@my.unt.edu">ganeshrajuparmalla@my.unt.edu</a></td>
<td>Check Canvas</td>
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<tr>
<td>Raju</td>
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<tr>
<td>Chintala, Vishnuvardhan</td>
<td><a href="mailto:vishnuvardhanchintala@my.unt.edu">vishnuvardhanchintala@my.unt.edu</a></td>
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<tr>
<td>Koganti, Harshitha</td>
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Communication Expectations: You will be expected to regularly check university email and attend class regularly. When you miss a class, you are expected to check the course calendar shortly after class to be aware of assignments, quizzes, and other materials. Questions not answered in class are best asked before or after class. For in-depth assistance on course content, you are expected to meet with the GA/TA prior to meeting with the instructor. For quick questions, email is preferred, and you can expect a response within 48 hours during the work week (M-F 9am-4:30pm, no Saturday, no Sunday). For involved questions or discussions not appropriate for the GA/TA, office hours are preferred. When you send emails, please use CSCE5200 as part of your subject. Please do not expect a response over the weekend. Feedback on assignments, exams, and grades will usually be posted within two weeks after the due date.

Welcome to UNT!
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. UNT’s full Non-Discrimination Policy can be found in the UNT Policies section of the syllabus.
Course Description
Covers traditional material and recent advances in information retrieval, study of indexing, processing, and querying textual data, basic retrieval models, algorithms, and information retrieval system implementations. May covers advanced topics in intelligent information retrieval, including natural language processing techniques and link analysis.

Course Structure
This course takes place 50% online and 50% in-person.
In-person Section: 5200.006, Time: Saturday 11:30AM - 12:50PM, Location: NTDP K150
Credit hours: 3
Dates: August 21 to December 15, 2023
I will open a new module of 1 or 2 weeks each.

Course Prerequisites
There are no required prerequisites for this course. However, to be successful in this course you will need to have:

- General programming experience, such as using C/C++, or Java or Python programming languages.
- Basic knowledge on data structures and algorithms, linear algebra, and probability theory.

Course Objectives
By the end of this course, students will be able to:

1. Demonstrate understanding of core concepts in text-based information retrieval techniques, such as inverted indexes, vector space model, and TF-IDF term weighting.
2. Understanding the mechanism of Boolean retrieval models. Show how Boolean queries can be processed and how to optimize query processing.
3. Demonstrate understanding of linguistic modules used in document preprocessing and show how to process queries that have spelling errors and other imprecise matches to the vocabulary used in the document collection.
4. Demonstrate understanding of ranked retrieval models and able to apply and analyze several algorithms for constructing the inverted index from a text collection.
5. Demonstrate understanding of frequent and basic evaluation measures for information retrieval effectiveness and able to apply them in different scenarios.
6. Design and implement a complete information retrieval system and evaluate its performance by applying the learned knowledge.

Required Texts

Technical Assistance
Part of working in the online environment involves dealing with the inconveniences and frustration that can arise when technology breaks down or does not perform as expected. Here at UNT we have a
Student Help Desk that you can contact for help with Canvas or other technology issues.

**Rules of Engagement**

Rules of engagement refer to the way students are expected to interact with each other and with their instructors. Here are some general guidelines:

- While the freedom to express yourself is a fundamental human right, any communication that utilizes cruel and derogatory language on the basis 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 will not be tolerated.

- Treat your instructor and classmates with respect in any communication online or face-to-face, even when their opinion differs from your own.

- Ask for and use the correct name and pronouns for your instructor and classmates.

- Speak from personal experiences. Use “I” statements to share thoughts and feelings. Try not to speak on behalf of groups or other individuals’ experiences.

- Use your critical thinking skills to challenge other people’s ideas, instead of attacking individuals.

- Avoid using all caps while communicating digitally. This may be interpreted as “YELLING!”

- Be cautious when using humor or sarcasm in emails or discussion posts as tone can be difficult to interpret digitally.

- Avoid using “text-talk” unless explicitly permitted by your instructor.

- Proofread and fact-check your sources.

- Keep in mind that online posts can be permanent, so think first before you type.

See these [Engagement Guidelines](https://clear.unt.edu/online-communication-tips) for more information.

**Course Requirements**

Your course grade will be determined by a combination of the following:

- Weekly Posting Activities (online-discussions and quizzes): 20%
- Assignments: 20%
- 2 Short Presentations 10%
- Exams: 50%
  - Exam 1: 15%
  - Exam 2: 15%
  - Exam 3: 20%

Total 100% (No curve or relative grading)

**Grading**

A: 90-100% (Outstanding, excellent work. The student performs well above the minimum criteria.)

B: 80-89% (Good, impressive work. The student performs above the minimum criteria.)

C: 70-79% (Solid, college-level work. The student meets the criteria of the assignment.)

D: 60-69% (Below average work. The student fails to meet the minimum criteria.)

F: 59% and below (Sub-par work. The student fails to complete the assignment.)
Grading Scale: A=90, B=80-89.9, C=70-79.9, D=60-69.9, F=0-59.9 %.

Extra Credit Options

Extra credit is optional. You do not have to participate on them to get an A in the course. These not mandatory activities cannot be substituted or make-up. They are optional. However, you must qualify to participate in extra credit options.

To qualify for extra credit, you should not have incurred in any of the penalties indicated in the next section.

- **Being on-time**: 0 points <80%, 1 point= 80%-89.9%, 1.5 points 90%-99.9, 2 points=100% (points applied on final grade)
- **Physical attendance**: 0 points <80%, 1 point= 80%-89.9%, 1.5 points 90%-99.9, 2 points=100% (points applied on Exam 3)
- **Early submissions**: up 5% as indicated in assignment/exam. This means submitting before the due date.
- **Others indicated in class**: These depend on the assignment.

Penalties

Incurring any of the following penalties disqualifies you to receive any extra credit.

1. **Cheating**: Cheating on tests and programs will be dealt with very severely. You must make a diligent effort to prevent other students from seeing your test answers. Keep your paper covered and do not let your eyes wander during tests. You should not receive or give help to others while taking an exam. We also monitor responses to course assignments generated by AI resources such as ChatGPT.
   - **First offense of Receiving or giving help while taking an exam** = -25% deducted from grade
   - **Second offense of Receiving or giving help while taking an exam**
     0% in the exam. The exam will not be graded.
   - **One of more incidents of cheating in exam** = 0% in Exam
   - **Cheating on a second exam** = F in the course

2. **Plagiarism**: Plagiarism is a form of cheating. Copying someone else's program, changing a few lines, and turning it in as your own is plagiarism; thus, this is cheating. Each student is to write his or her own programs. You should not receive or give help to others on any program that goes beyond help in deciphering syntax errors. **First time penalty** = 0% in assignment, **second time penalty** = F in the course.

3. Inappropriate multiple requests of changing a grade for any of the following statements or something similar: (1) Being in probation, (2) last semester, (3) core course, (4) financial situation, (5) Being sick, (6) suspended from the university, (7) family issues, (8) others.
Course Calendar

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<thead>
<tr>
<th>Week</th>
<th>5200.006: Saturday</th>
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<tbody>
<tr>
<td>1.</td>
<td>8/26: Class 1</td>
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<td>2.</td>
<td>9/2: Class 2</td>
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<td>3.</td>
<td>9/9: Class 3</td>
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<td>4.</td>
<td>9/16: Class 4</td>
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<td>5.</td>
<td>9/23: Class 5, Exam 1</td>
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<td>6.</td>
<td>9/30: Class 6</td>
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<td>7.</td>
<td>10/7: Class 7</td>
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<td>8.</td>
<td>10/14: Class 8</td>
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<td>9.</td>
<td>10/21: Class 9</td>
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<td>10.</td>
<td>10/28: Class 10, Exam 2</td>
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<td>11.</td>
<td>11/4: Class 11</td>
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<td>12.</td>
<td>11/11: Class 12</td>
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<td>13.</td>
<td>11/18: Class 13</td>
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<td>14.</td>
<td>11/25: Thanksgiving</td>
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<tr>
<td>15.</td>
<td>12/2: Class 14, Exam 3</td>
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<td>16.</td>
<td>12/9: Class 15, Presentations</td>
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**Note:** Exam 3 might be moved to the last week of classes. If so, it will be determined and announced the week before thanksgiving.

**Weekly Posting Activities (online-discussions)**

Discussion assignments are weekly activities that track attendance/participation to the online component of the course. They are very brief “in-class activities”, and answers are provided in class or in video(s) (not homework style, not research). They will be due on Wednesdays but with a penalty free extension to Fridays. Most students get 100% credit on them. It is suggested to post answers by Tuesday so that students have time during the week to reply/comment to other’s post.

**Course assignments.** There are several course assignments. You need to solve the problems given and submit your answers by or preferably before the due date. Please do not work on course assignments the day before they are due. Getting sick the day before the due date, it will
not give you an extension. However, most course assignments have a 2-day emergency penalty free extension labeled as “Available Until” in Canvas. The emergency time extension should be used only to complete an assignment submission and NOT to start working on the assignment. There are no further extensions after the emergency extension. **WE DO NOT ACCEPT ASSIGNMENTS SUBMISSIONS BY EMAIL.**

Course Policies

**Assignment Policy and Content Responsibility**
You are expected to learn course materials and complete all readings and assignment on time. Students are responsible for all content presented in lecture slides, in the videos, and required readings from the textbook. All class materials will be posted on Canvas. For assignments (including projects), they are individual work, and no collaboration is allowed.

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 assessment 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 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.

**Examination Policy**

- Exams will be on the computer using the Canvas quiz system. You need to bring a laptop on the appropriate exam days. Quizzes and exams must be taken in the classroom unless special accommodations have been made through the Office of Disability Accommodation (ODA). Other accommodations must be given by prior arrangement with the instructor, otherwise documentation proving an extenuating circumstance will have to be provided after the missed exam. Time will be limited, and all work will be individual. Exams will focus on the most recent material but are expected to be cumulative in scope.
- Technical errors during exams: If during an online quiz or exam there is a technical error which affects your ability to complete the assignment, you are immediately to let the quiz or exam proctor know and the instructor will discuss ways to allow you to resume the test without giving an unfair advantage. In the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment 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.

**Late Work**

No late submission is accepted.

**Attendance Policy**

- Each student will be responsible for completing the assigned reading, exercises and attending classes.
- **Attendance and in-class activities**: You are expected to attend lectures and to complete all readings. Most classes have in-class activities which need to be completed in class. In-class activities are not for homework. You can eliminate one-in class activity. There is no need to let the instructor know you have missed a class; however, you are responsible for keeping up with the material covered in
the class if you are not present. We do not have excused abscess or permissions to be absent. If a
class is missed, you are expected to proactively reach out to classmates, the TA, or the instructor if
there are any questions. There will be a sign-in sheet to record attendance for class analytics and
administration.

- If you miss a class, you are still responsible for knowing everything that took place. Your absence
does not change the due date of an assignment.

**Academic Integrity Policy**

Cheating of any sort will not be tolerated in this course. All work turned in with your name on it must
be your own work. Failure to adhere to these strict standards will cause disciplinary action that could be
as severe as expulsion from the university. If it is determined a student cheated on any assignment in
this course, they will receive an F for their final course grade and an academic integrity report will be
filed with the Office of Academic Integrity. Further, UNT is now maintaining a database recording any
acts of academic dishonesty that are available to employers. For more information see the UNT Student
Academic Integrity Policy.

**Grading Issues:** Once a grade has been posted for a course assignment, grading issues need to be
addressed with graders first. Do not contact the instructor unless the grading issue was not solved by
graders. Additionally, we only have one week after a grade has been posted to address grading errors or
any other issues. We cannot correct grades that have been posted in canvas longer than one week.