

Practice of QCF Syllabus: Fall 2026

Class Information

- Instructor: Sudheer Chava
- Office: Scheller College of Business or 16th floor CODA
- Email: chava@gatech.edu (best way of reaching me)
- Web site: <http://fintech.gatech.edu>
- Office Hours: by appointment
- Class Room: SCOB Room 300
- Class timings: Tuesday 6:30-9:15pm

Course overview

Practice of QCF is a **practicum** or **project based capstone course** for QCF students. As such, the class is a project based seminar course and not a regular lecture based class. The classes would involve student presentations of papers, methodologies, implementation through assignments and projects and finally presentation of results.

The experiential learning projects in the class are grouped into two categories

1. **Industry mentored projects** - The industry mentored projects typically would involve the students accessing proprietary data bases and systems of the industry partners. In this case, typically an NDA is required between the student and the company to get access to the systems and data. These data should be considered **confidential** and should be used only for class project and shouldn't be shared with anyone. The industry partners would pitch the project to the students in the first two classes of the term. Students can decide to apply to the particular project they are interested in and if they are selected, they can work on the project (after signing the NDA and other formalities).
2. **Projects with data that GT has access to / public data** - If any of the students don't want to sign an NDA with the experiential project partner or they are not interested in the topics proposed by the industry partners, they can work on projects that involve data that GT has access to or public data. Please note all the data made available for

the class - either through WRDS or shared through QCF servers - should be used **only** for the class purposes and shouldn't be shared with anyone outside the group. There are strict licensing and usage restrictions on data purchased by Georgia Tech.

Some potential topics are

1. Quantitative Trading Strategies
2. ML Prediction Problems
3. NLP models and LLMs applied to finance
4. Bayesian and Machine Learning Models for Credit Risk
5. FinTech, Crypto Currencies and Blockchain
6. See other topics at <https://fintech.gatech.edu>
7. Other topics are possible, but we need to discuss first

For example, in Financial Markets, one can view applications from the angle of asset markets

- Capital Markets
- Equity Markets
- Bond Markets
- Forex Markets
- Commodity Markets
- Derivative Markets etc.,

or one can view from the angle of type of financial institutions

- Banks
- Mutual Funds / Hedge Funds / Asset Management
- Wealth Management
- Insurance Firms
- Credit Bureaus
- Trading Firms etc.,

or one can view from the angle of the function

- Customer Interactions
- Underwriting (Credit / Insurance etc.,)
- Risk Management
- Quant Research
- Regulatory Compliance etc.,

The topics can cover ML and NLP applications in any aspect of financial markets and financial institutions. For example,

- get ALT Data
- NLP to generate *features*
- ML for prediction

Other topics are possible, but we need to discuss first

Class Format

The class is an assignment and project based class. As such, as there won't be many lectures. We may have some guest lectures. We will have many student team presentations in class. We may not meet as a whole class every week as the student projects can be very different. Instead, when there is not a class meeting, there would separate group meetings with me to discuss the projects. It is mandatory to attend the class when the class is meeting. It is also mandatory to attend the guest lectures and other class meetings.

Required Material

There is no **required** text book for the class. For each of the topics, some relevant papers are assigned. All the papers would be available online and all datasets would be available for download through WRDS or on canvas. In addition, the students may need to do some data annotations as part of the assignments or final project.

Online Information

Course page is maintained on canvas <canvas.gatech.edu> . All relevant information including but not limited to: readings, lectures, presentation schedules and class schedules and any changes to the schedule would be posted on the website. I would strongly recommend that you check the course page on canvas website every week.

Grading

The grade for the class is based on:

- Regular progress reports / presentations (approximately every 2 weeks) - 40%
- Final Project - 50%
- Final class presentation - 10%

There is no final exam for the class. The final project needs to be presented in the last two sessions of the class but the full final project and report would be due on the final exam date.

Note: The weekly progress reports and the final project would need to include each of the group members contributions. In each of them, I would ask the students to divide 100 points among themselves to reflect their contributions. If there is no consensus among the team members, each team member can list their distribution of the 100 points among the group members. I will then meet the group to discuss.

In addition, in the final project report, the team members should fill a CRediT (Contributor Roles Taxonomy). I will adapt a version suitable for Practice of QCF team projects from <https://www.elsevier.com/researcher/author/policies-and-guidelines/credit-author-statement> and post it on the Canvas course website.

Important Note What this means is that, based on each individual's contributions to the project, different team members can get a different score. The team score would be multiplied by the scaled individual team member contribution to get the individual team member score for the project.

The letter grades for the class would be based on the cumulative weighted score for the class and would be assigned

Letter Grade	Cumulative Score
A	90–100
B	80–89
C	70–79
D	60–69
F	< 60

Note: Attendance is mandatory when the class meetings are scheduled and count towards the class participation grade.

Meetings

- There would be regular meetings with industry mentors or the TA or the instructor to discuss the progress on the project. There would be a signup sheet for the groups to meet.

Regular Progress Reports

Each team has to submit a regular progress report, 1-3 pages, addressing the following issues

- What have you done over the past week?
- What do you plan to do over the next week?
- Please discuss the contributions of each member of your group (including yourself) over the last week. Divide 100 points among the group members based on the contributions of the individual team members. If there is no consensus among the team members, each team member can list their distribution of the 100 points among the group members. I will then meet the group to discuss.

Final Project and Teams

- The final project would be a **team** project
- Each team can have three or less students in the team
- Team selections and project proposals would need to be submitted by **August 30, 2026**

Compute, Data and Software

Data

GT's WRDS subscription allows you to access a wide variety of datasets. We can discuss the project scope and I can suggest the necessary data.

Compute Resources Based on the requirements of the project, if needed, we will provide you access to high-performance computing resources including

- You can signup for Google Colab Pro
- You have access to the PACE-ICE <https://pace.gatech.edu/pace-ice-instructional-cluster-environment-education> cluster, which has GPUs that will allow you to run programs requiring GPU usage.

Software You will be required to install basic software. Everyone will at least need VS Code, python, anaconda (miniconda will work), and Git. These are covered in the bootcamp.

Course Rules

- You must display your name card throughout the term.
- **No** cell phone usage in class. During the lecture or discussion, you should not be looking at your phone, iPad, or computer screen.
- Please do **NOT** use laptops or computers in the class room unless I ask you to do so. If I have to ask you to close your laptop, it would count against your class participation.
- You are only allowed to use your gadgets when we are having hands-on coding during the lecture.
- You are expected to be familiar with the Georgia Tech Honor Code <http://honor.gatech.edu>, and to conform to all its requirements.
- Be prepared when you come to class. There will be a lot of **cold-calling**.
- To ensure a prompt response to e-mail, please put **course number and class time** in the subject line, e.g. **MGT 6785: Question about Assignment 1**

Attendance and/or Participation

Attendance is mandatory for all class sessions. If you are unable to attend a class session, please notify me in advance and provide a valid reason for your absence. Participation in class discussions is also expected and will be factored into your overall grade.

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review Georgia Tech's Honor Code and the student Code of Conduct.

Any student suspected of cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services (404-894-2563) as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations Agreement

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student-Faculty Expectations articulate some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.