

The first section of this document provide a summary and the details of my student evaluations for my instruction, as an Assistant Instructor, in Introduction to Macroeconomics for the Fall 2024 and Spring 2025 semesters<sup>2</sup>. Across these semesters, I have consistently demonstrated excellence in teaching, earning an average overall instructor rating of **4.6/5.0**. You can find the full details of my student evaluations in the rest of the document.

The second section of this document provides a sample syllabus for an undergraduate course I would like to develop. The course is at the intersection of macroeconomics, machine learning, and text analysis. This course would teach valuable empirical methods, including sentiment analysis and topic modelling, to equip students with modern tools for their academic pursuits using non-traditional data such as text.

## 1 Quantitative Feedback

The table below presents a weighted average of my student ratings across key aspects of instruction. Students rated my performance on a 5-point scale where 5 corresponds to “Excellent” or “Strongly Agree”.

| Evaluation Metric                                      | Fall 2024 | Spring 2025 | Weighted Average |
|--|-----------|-------------|------------------|
| <b>Overall, this instructor was...</b>                 | 4.67      | 4.59        | <b>4.63</b>      |
| The instructor effectively explained the concepts.     | 4.56      | 4.63        | <b>4.60</b>      |
| The instructor carefully explained difficult concepts. | 4.67      | 4.56        | <b>4.62</b>      |
| The instructor’s techniques kept me engaged.           | 4.56      | 4.46        | <b>4.51</b>      |
| The instructor was available to students.              | 4.67      | 4.73        | <b>4.70</b>      |
| The instructor fostered an inclusive environment.      | 4.78      | 4.73        | <b>4.76</b>      |

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<sup>2</sup>I do not yet have evaluations for the current Fall 2025 semester.

## **2 Selected Student Feedback**

Paul is very passionate about economics, and it is incredibly evident in every lecture he gives. He has a deep understanding of the content and teaches in a way that is easy to understand and also very engaging. More importantly though, Paul is willing to work with his students. He makes office hours very accessible and is incredibly friendly. He is willing to really sit down with his students and answer questions without making them feel stupid or embarrassed for not understanding the material. In my opinion, Paul is a better instructor than some professors I have had.

I love when Dr. Tran connects what we're learning about to relevant real world issues. It's great to hear his perspective. I appreciate that he is always sensitive to other's political beliefs in these discussions. Personally though, if you're disagreeing on these issues with someone who is an expert in macroeconomics, I don't really care for your political opinion. Either way, I hope he continues to talk about real world topics in class! I've learned a lot about the intersection of policy and macroeconomics that I will take with me beyond this course. I really appreciate how involved and passionate Dr. Tran is about the subjects he teaches.

The subject matter of the course could be quite difficult at times but Professor Tran was quite excellent at explaining the concepts in a simple and understandable way. One thing that I may suggest going forward is to post the full slide deck after the class rather than just the redacted slides as when reviewing, the redacted slides make it more difficult to review as some of the information is missing.

Helpful lectures, great practice tests, makes the class very engaging by connecting econ topics to relevant issues in our society today.

The in-person classes were really effective. He conveyed the information in a way that was easily understandable. The way he compiled the slides made it easier to pay attention compared to other classes. Added humor in a professional manner every now and then and made sure that his voice wasn't monotone. His reviews were comprehensive and left me feeling very prepared for the tests. He also includes InQuizzatives for homework and I think they also significantly improved my performance.



# Individual Instructor Report Spring 2025 Version A for ECO 304L - INTRODUCTION TO MACROECONOMICS (34695) (Paul Tran)

Project Title: **Course Evaluations Spring 2025**

Courses Audience: **93**  
Responses Received: **41**  
Response Ratio: **44.1%**

## Report Comments

### Guide to the Interpretation of Course Evaluations at UT Austin

The goal of course evaluation process at UT Austin is to drive teaching excellence and to support continuous improvement in teaching and learning experiences. The two sets of scales used for core evaluation questions and the associated weights are:

Strongly Agree (5)

Agree (4)

Neutral (3)

Disagree (2)

Strongly Disagree (1)

Excellent (5)

Very Good (4)

Satisfactory (3)

Unsatisfactory (2)

Very Unsatisfactory (1)

The Mean is calculated by adding all of the weights for a single question and dividing by the number of respondents. The course workload question is not averaged.

The number of students (e.g. respondents) marking each option is reported for each of the items. These frequency distributions provide information about the level of student ratings and the spread and shape of the class distribution of responses. The distributions thus provide a picture of student perception of a course.

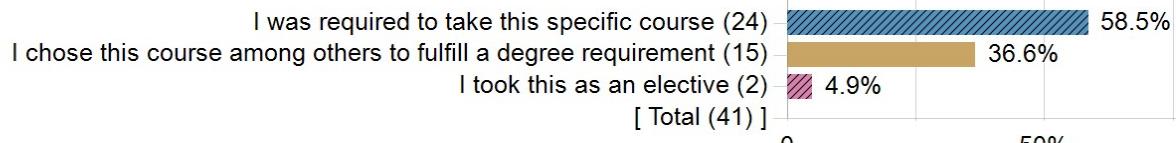
Course evaluations provide snapshots of student perspectives on their course-level learning experiences. Most experts on teaching evaluation advise that no individual method gives the complete picture of an instructor's teaching effectiveness; multiple and diverse measures, on multiple occasions, are advised to give a full picture of the teaching effectiveness of a particular instructor. Moreover, other factors, such as size of class, level of the class, and content of the course, can cause small variations in the ratings. Therefore, student perspectives for a particular instructor or course should be interpreted as a snapshot, and not as providing complete information on the teaching effectiveness of that instructor.

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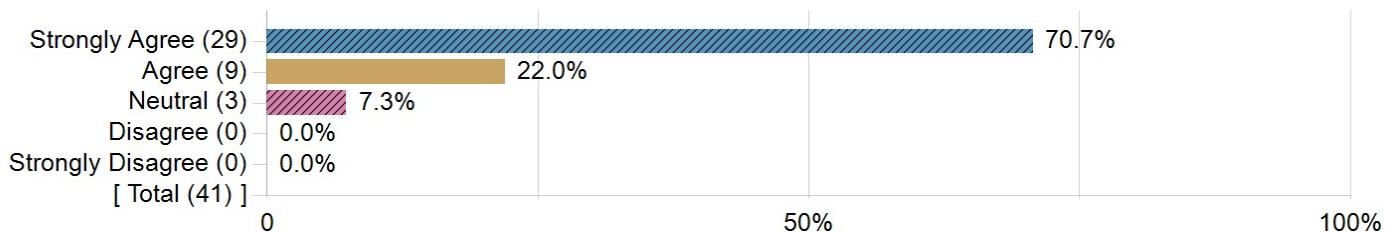
Creation Date: **Friday, May 9, 2025**

## Course Questions

Why did you take this course?

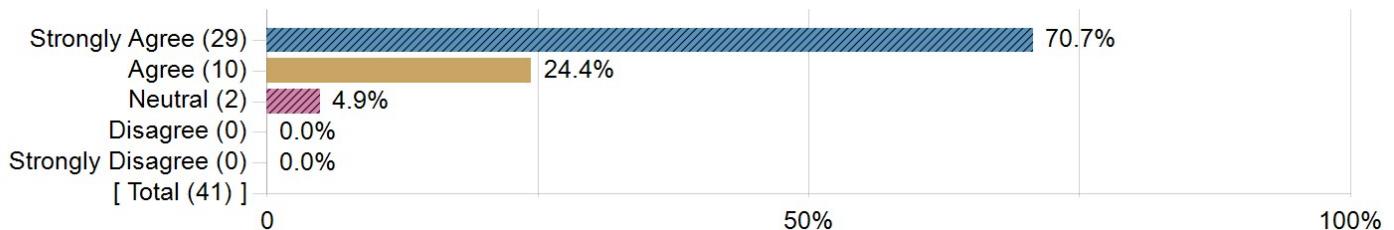


During this course, I gained a deeper understanding of the subject matter.



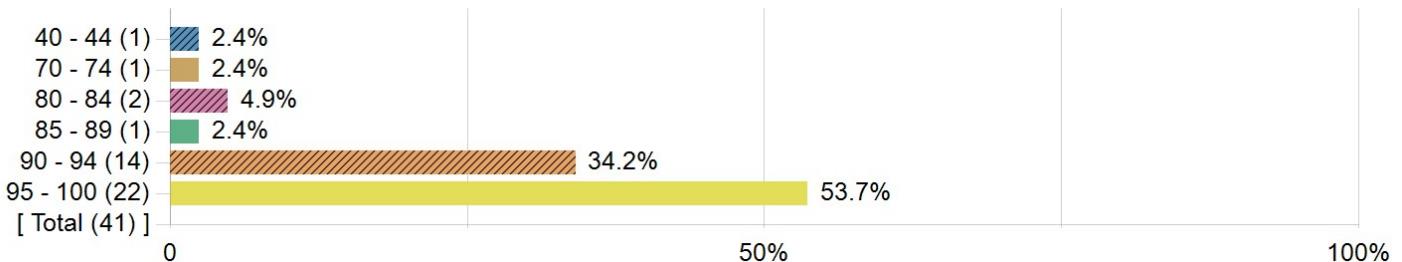
| Statistics | Value |
|------------|-------|
| Mean       | 4.63  |

The course was well organized.



| Statistics | Value |
|------------|-------|
| Mean       | 4.66  |

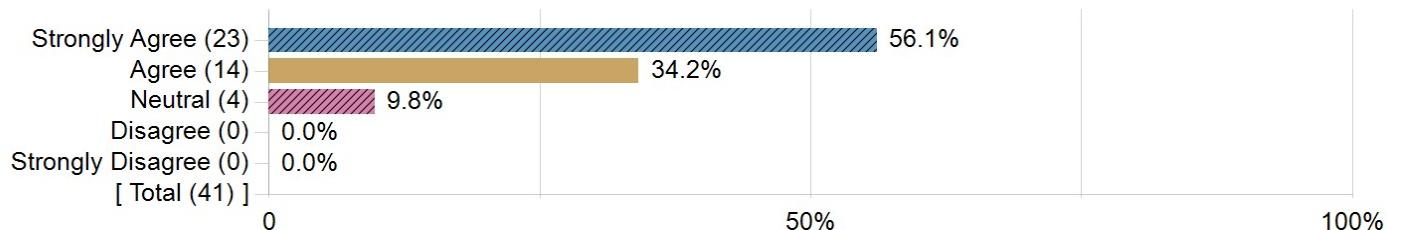
Overall, approximately what percentage of the course meetings did you attend or complete (online, in person, or asynchronously)?



| Statistics | Value |
|------------|-------|
| Mean       | 91.93 |

**The course assignments improved my ability to apply quantitative skills to real-world problems. (Flag Question)**

The course assignments improved my ability to apply quantitative skills to real-world problems.



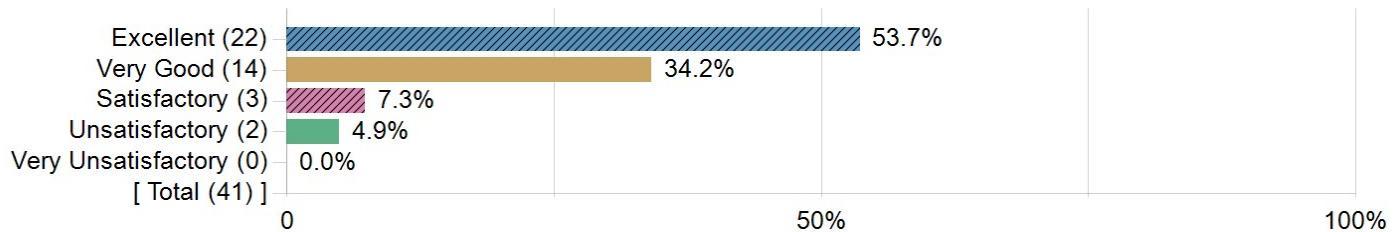
| Statistics | Value |
|------------|-------|
| Mean       | 4.46  |

## Instructor Questions

|   | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Responded | Mean |
|---|----------------|-------|---------|----------|-------------------|-----------|------|
| The instructor clearly explained the course objectives and expectations.                  | 73.2%          | 22.0% | 0.0%    | 4.9%     | 0.0%              | 41        | 4.63 |
| The instructor fostered an inclusive learning environment.                                | 75.6%          | 22.0% | 2.4%    | 0.0%     | 0.0%              | 41        | 4.73 |
| The instructor effectively explained the concepts and subject matter in this course.      | 70.7%          | 22.0% | 7.3%    | 0.0%     | 0.0%              | 41        | 4.63 |
| The instructional techniques kept me engaged in learning.                                 | 68.3%          | 19.5% | 4.9%    | 4.9%     | 2.4%              | 41        | 4.46 |
| The instructor checked for student understanding of the concepts presented in the course. | 73.2%          | 17.1% | 4.9%    | 4.9%     | 0.0%              | 41        | 4.59 |

## Overall Questions

Overall, this course was



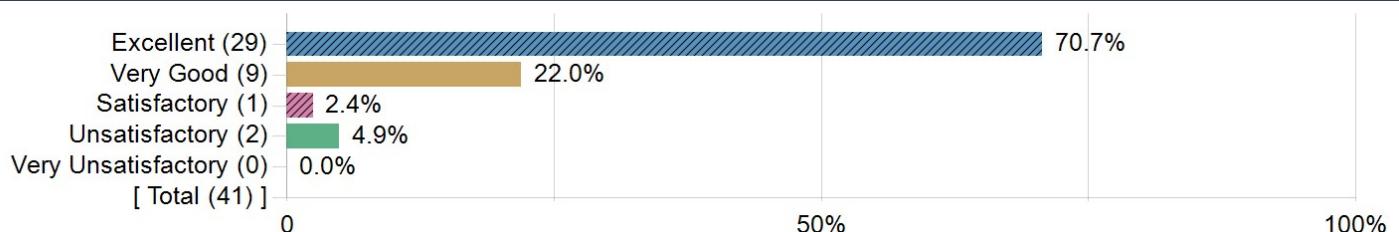
Statistics

Mean

Value

4.37

Overall, this instructor was



Statistics

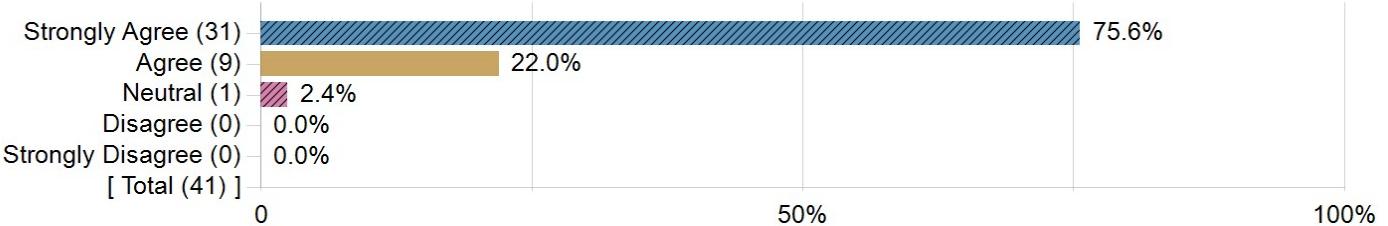
Mean

Value

4.59

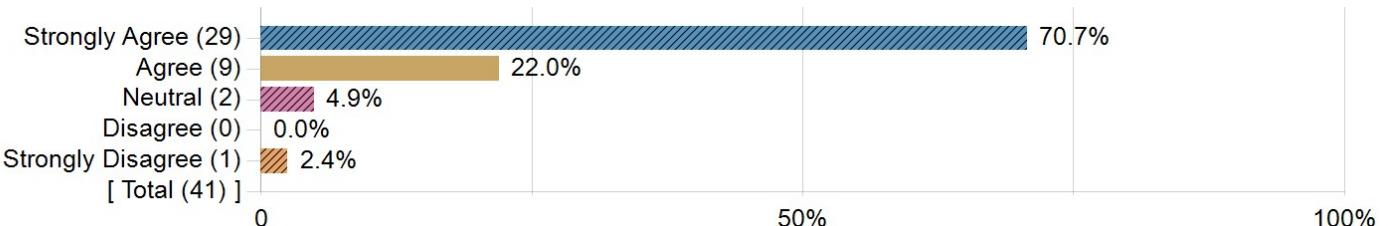
## College, School, or Unit Questions

The instructor was available to students either electronically or in person.



| Statistics | Value |
|------------|-------|
| Mean       | 4.73  |

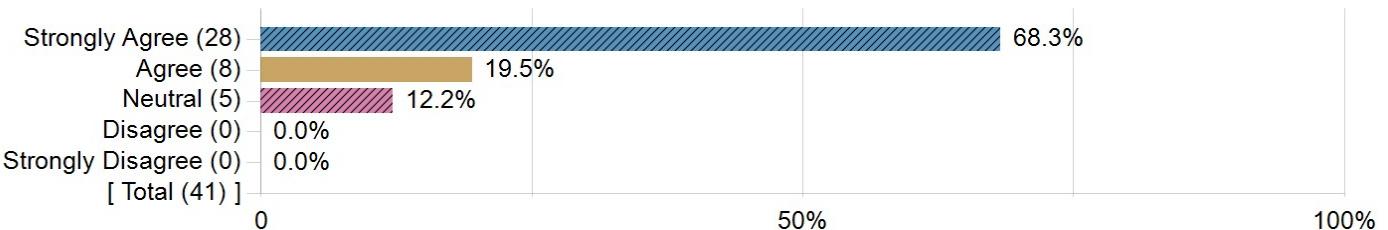
The instructor encouraged me to take an active role in my own learning.



| Statistics | Value |
|------------|-------|
| Mean       | 4.59  |

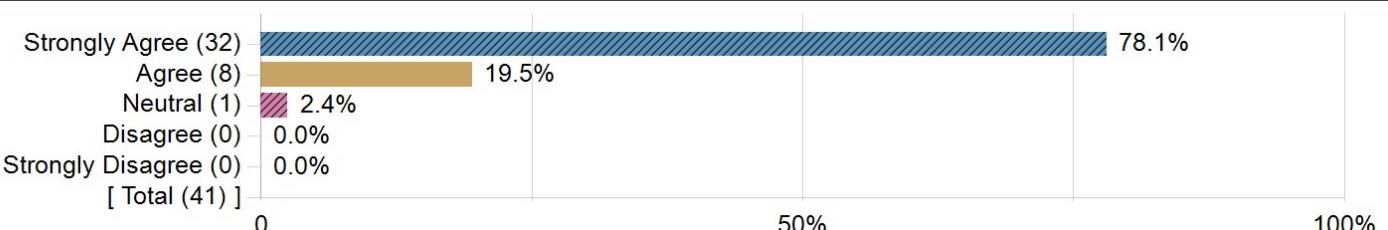
## Faculty Selected Questions

The instructor carefully explained difficult concepts, methods, and subject matter.



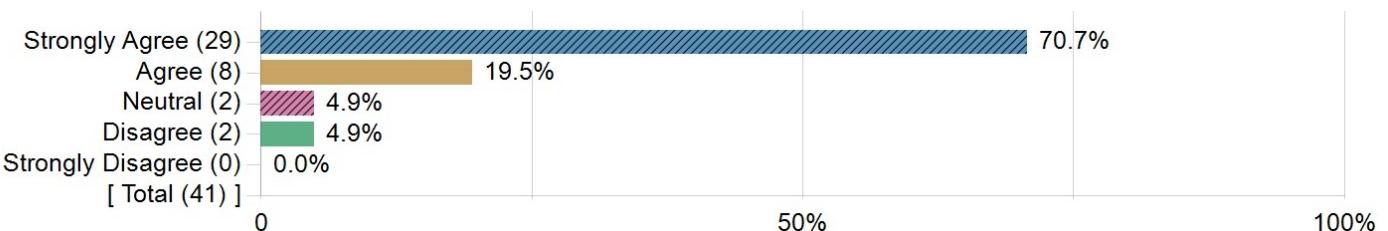
| Statistics | Value |
|------------|-------|
| Mean       | 4.56  |

The instructor seemed genuinely interested in teaching the course.



| Statistics | Value |
|------------|-------|
| Mean       | 4.76  |

During this course, I learned information that was meaningful to me.



| Statistics | Value |
|------------|-------|
| Mean       | 4.56  |

## Comment Questions

**Identify aspects of the course that were the most effective in helping your learning.**

| Comments  |
|---|
| The inquisitives, the practice exam questions, and the lectures were the most effective for me.   |
| n/a   |
| reviews   |
| daily kahoots (along with expanding more on answers when question results were mixed), open to discussions in class, reexplaining of topics, mentioning current world economic issues and applying them to in class material  |
| Lots of analogies and diving deep into concepts   |
| The pre study exam questions on canvas used to help a lot with my understanding of the class.   |
| Professor Tran was very engaging in his lectures and you could tell he enjoyed what he taught.  |
| Paul is very passionate about economics, and it is incredibly evident in every lecture he gives. He has a deep understanding of the content and teaches in a way that is easy to understand and also very engaging. More importantly though, Paul is willing to work with his students. He makes office hours very accessible and is incredibly friendly. He is willing to really sit down with his students and answer questions without making them feel stupid or embarrassed for not understanding the material. In my opinion, Paul is a better instructor than some professors I have had.  |
| I don't think anything about this class was effective for my learning   |
| Very clear and concise lecture that communicated concepts very well   |
| The tests were effective because I studied a lot for them.  |
| n/a   |
| Kahoots   |
| Inquizitives and Kahoots.   |
| I love when Dr. Tran connects what we're learning about to relevant real world issues. It's great to hear his perspective. I appreciate that he is always sensitive to other's political beliefs in these discussions. Personally though, if you're disagreeing on these issues with someone who is an expert in macroeconomics, I don't really care for your political opinion. Either way, I hope he continues to talk about real world topics in class! I've learned a lot about the intersection of policy and macroeconomics that I will take with me beyond this course. I really appreciate how involved and passionate Dr. Tran is about the subjects he teaches. |
| The kahoots during class helped to test our knowledge   |
| The greatest teacher who finds the way to approach the student and keep it interesting.   |
| The Kahoots in class  |
| Passionate about the topic, made it engaging, allowed me to succeed   |
| Great lectures and funny  |
| In class lectures, online recording of lectures, In class assignments   |
| Very caring about his students understanding very well organized as well.   |
| The inclusion of multiple kahoots during each chapter to check if you understood the content helped reinforce what I was learning.  |
| The Kahoots and Sample exam questions   |
| The weekly inquisitive assignments were very effective along with the kahoots every class.  |
| Some of the most helpful parts of this course for me were the recorded lectures and access to the slides after class.   |
| I enjoyed how the entire class was organized. I felt the slides were very in depth and hit all the main points. I also enjoyed the kahoots and the practice exams were extremely helpful.   |
| the lectures  |
| The kahoots every class were great because they encouraged and checked for understanding in a fun way that made me really want to do well.  |
| Really good teacher   |
| The organized notes that corresponded with the in-class lectures.   |
| applying econ to real life scenarios  |
| The most effective thing in helping me learn was the textbook. The textbook helped explain everything in much more detail than the professor.   |
| The in-person classes were really effective. He conveyed the information in a way that was easily understandable. The way he  |

| Comments  |
|---|
| compiled the slides made it easier to pay attention compared to other classes. Added humor in a professional manner every now and then and made sure that his voice wasn't monotone. His reviews were comprehensive and left me feeling very prepared for the tests. He also includes InQuizzatives for homework and I think they also significantly improved my performance. |
| Everything was included on the Canvas Modules page which was very helpful lectures where teacher explained concepts   |

**Identify the aspect of the course that you found most challenging, why you found it was challenging, and suggest one thing that could be done to help future students meet that challenge more effectively.**

| Comments  |
|---|
| I would say the tests were the most challenging, but adequately studying for them will help.  |
| n/a   |
| tests were not consistent with class and coursework. Questions often had multiple right answers or were ambiguous sometimes things were explained purely through verbal explanations which made it hard or confusing to understand, even if they were explanations that helped better understand the topic. more visual explanations would have been helpful (ie. drawing out tables + showing it on the overhead) ++ the inquitzitives were sometimes due before the chapter was discussed and given it was due wednesday @ 8, it was sometimes harder to complete it on time while having little to no knowledge on the topic |
| The exams were way harder for me than I thought it would be. I used to review a ton, but I would always mess up on the exam. That might just be a me problem but I still felt like the exams were a little too hard. I also felt like since the classes were only an hour, Mr. Tran would have to start going fast which was a little challenging for me. Mr. Tran was a great teacher though, loved having him this semester, I do think he does a little too fast sometimes.  |
| N/A   |
| My only complaint is that the Inquitzitives are due at 8pm. I missed a few simply because I forgot they are not due at midnight, but I suppose that's my fault and not really a reflection of this class.   |
| The tests were extremely difficult compared to the reviews he had us do + all the practice.   |
| The math was a bit of a struggle but was communicated well enough that I got a good grasp on it   |
| I found that the inquitzitives were tricky sometimes.   |
| n/a   |
| The slides aren't filled out on canvas, so if I missed a class, then I would have to look up every fill in the blank to complete all the notes and it is very fast paces.   |
| N/A   |
| I can't think of anything. I think this class's workload and exams are adequately challenging.  |
| The exams were relatively difficult compared to the microeconomics course I took the previous semester  |
| 2nd Exam, but it was more on me for not studying enough   |
| The most challenging aspect is the notes and the content on each slide along with the fast pace. I would suggest main points with example questions to get down all of the information and to have all the information on the slides rather than having blank sections for students to be able to go back to the notes later.   |
| So much info, I realize it's the content he has to teach but damn man   |
| Nothing noteworthy to mention   |
| none  |
| The aspect of the course that I found most challenging was the exams; however, I believe the instructor provided enough reviews to study, including kahoots and practice questions for each chapter.  |
| Preparation for midterm 2 felt very rushed compared to the other midterms. I am not sure how this could be changed but it was the heaviest content and had the least time to prepare.   |
| I don't necessarily think there was any part of the class that I found challenging, besides the exams themselves, but that was expected and they were very doable.  |
| The subject matter of the course could be quite difficult at times but Professor Tran was quite excellent at explaining the concepts in a simple and understandable way. One thing that I may suggest going forward is to post the full slide deck after the class rather than just the redacted slides as when reviewing, the redacted slides make it more difficult to review as some of the information is missing.  |
| In my opinion, there was nothing about this course that was extremely difficult. There is a lot of material to take in, which is probably the most challenging, but just paying attention and being present in class along with his teaching made it easier to understand the   |

| Comments   |
|--|
| concepts.  |
| the tests  |
| I don't think there were parts that were particularly challenging about this course as it was taught well.   |
| Nothjng  |
| The fast pace of the course as a whole.  |
| exams were tough, all else good  |
| The main thing i found challenging were the test. In the future the thing that could be done is having the test resemble the practice tests. I would do the practice test get all of them right (there is like 100 questions) and then I would get to the test and they would NOT be similar. If you are going to provide test material resources and label it practice exam make sure it actually resembles and old exam. |
| The hardest part about this class was the exams. However, a combination of the easy-to-understand lectures, InQuizzatives, and exam reviews should adequately prepare most students.   |
| Learning all the material  |
| memorizing specific things from textbook   |



# Individual Instructor Report Fall 2024 Version A for ECO 304L - INTRODUCTION TO MACROECONOMICS (33855) (Paul Tran)

Project Title: Course Evaluations Fall 2024

Courses Audience: 33

Responses Received: 9

Response Ratio: 27.3%

## Report Comments

### Guide to the Interpretation of Course Evaluations at UT Austin

The goal of course evaluation process at UT Austin is to drive teaching excellence and to support continuous improvement in teaching and learning experiences. The two sets of scales used for core evaluation questions and the associated weights are:

Strongly Agree (5)

Agree (4)

Neutral (3)

Disagree (2)

Strongly Disagree (1)

Excellent (5)

Very Good (4)

Satisfactory (3)

Unsatisfactory (2)

Very Unsatisfactory (1)

The Mean is calculated by adding all of the weights for a single question and dividing by the number of respondents. The course workload question is not averaged.

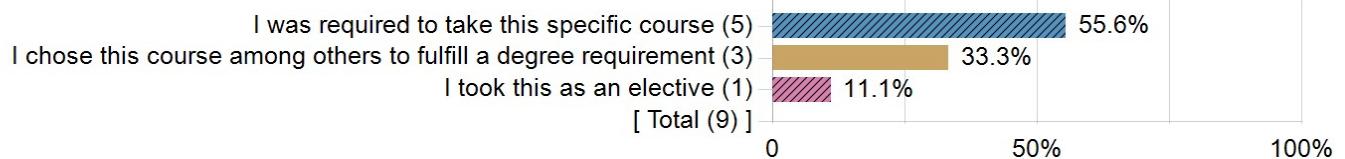
The number of students (e.g. respondents) marking each option is reported for each of the items. These frequency distributions provide information about the level of student ratings and the spread and shape of the class distribution of responses. The distributions thus provide a picture of student perception of a course.

Course evaluations provide snapshots of student perspectives on their course-level learning experiences. Most experts on teaching evaluation advise that no individual method gives the complete picture of an instructor's teaching effectiveness; multiple and diverse measures, on multiple occasions, are advised to give a full picture of the teaching effectiveness of a particular instructor. Moreover, other factors, such as size of class, level of the class, and content of the course, can cause small variations in the ratings. Therefore, student perspectives for a particular instructor or course should be interpreted as a snapshot, and not as providing complete information on the teaching effectiveness of that instructor.

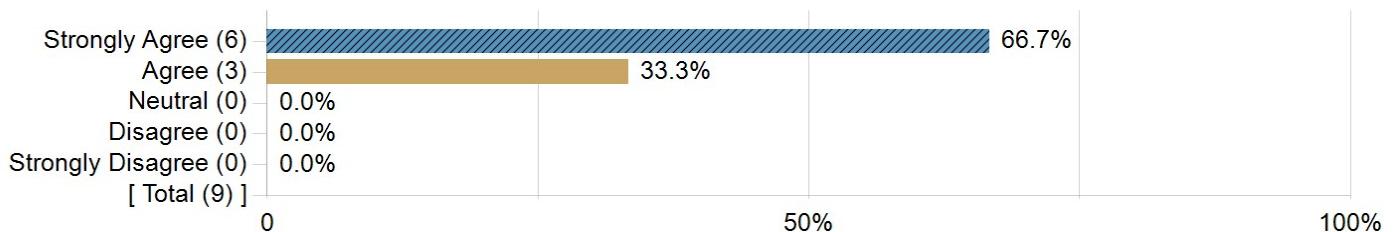
Creation Date: Monday, December 16, 2024

## Course Questions

Why did you take this course?

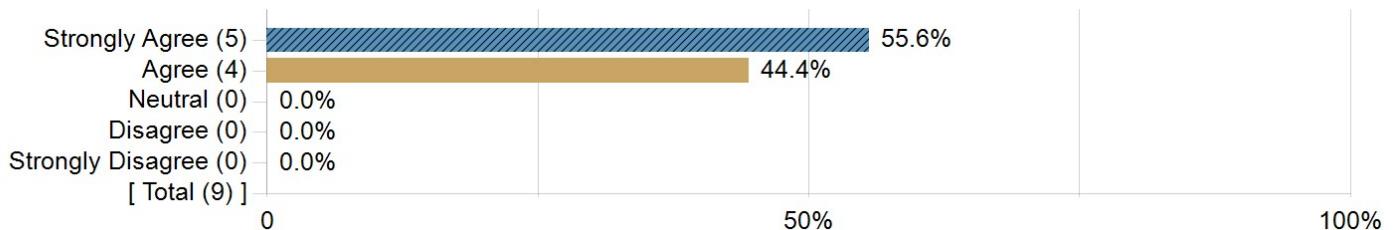


During this course, I gained a deeper understanding of the subject matter.



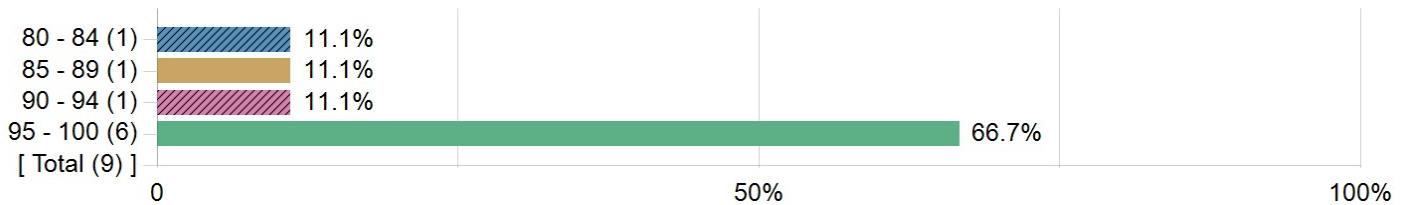
| Statistics | Value |
|------------|-------|
| Mean       | 4.67  |

The course was well organized.



| Statistics | Value |
|------------|-------|
| Mean       | 4.56  |

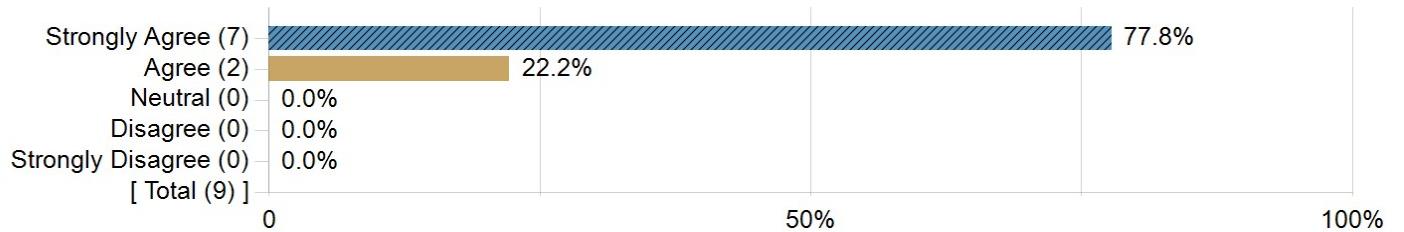
Overall, approximately what percentage of the course meetings did you attend or complete (online, in person, or asynchronously)?



| Statistics | Value |
|------------|-------|
| Mean       | 93.67 |

**The course assignments improved my ability to apply quantitative skills to real-world problems. (Flag Question)**

The course assignments improved my ability to apply quantitative skills to real-world problems.



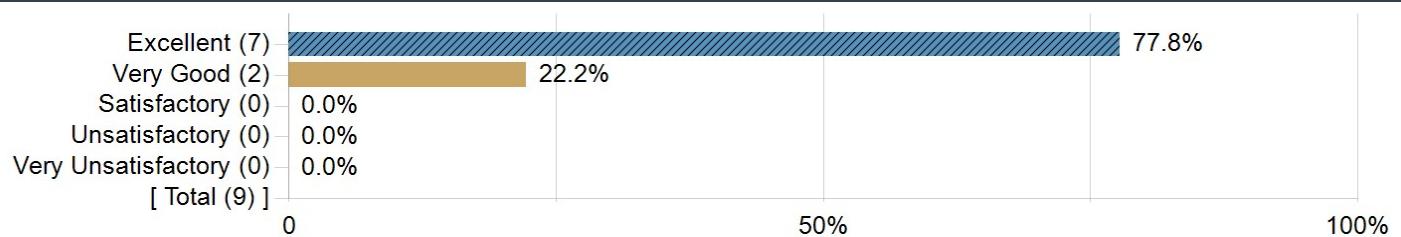
| Statistics | Value |
|------------|-------|
| Mean       | 4.78  |

## Instructor Questions

|   | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree | Responded | Mean |
|---|----------------|-------|---------|----------|-------------------|-----------|------|
| The instructor clearly explained the course objectives and expectations.                  | 66.7%          | 33.3% | 0.0%    | 0.0%     | 0.0%              | 9         | 4.67 |
| The instructor fostered an inclusive learning environment.                                | 77.8%          | 22.2% | 0.0%    | 0.0%     | 0.0%              | 9         | 4.78 |
| The instructor effectively explained the concepts and subject matter in this course.      | 55.6%          | 44.4% | 0.0%    | 0.0%     | 0.0%              | 9         | 4.56 |
| The instructional techniques kept me engaged in learning.                                 | 66.7%          | 22.2% | 11.1%   | 0.0%     | 0.0%              | 9         | 4.56 |
| The instructor checked for student understanding of the concepts presented in the course. | 77.8%          | 22.2% | 0.0%    | 0.0%     | 0.0%              | 9         | 4.78 |

## Overall Questions

Overall, this course was



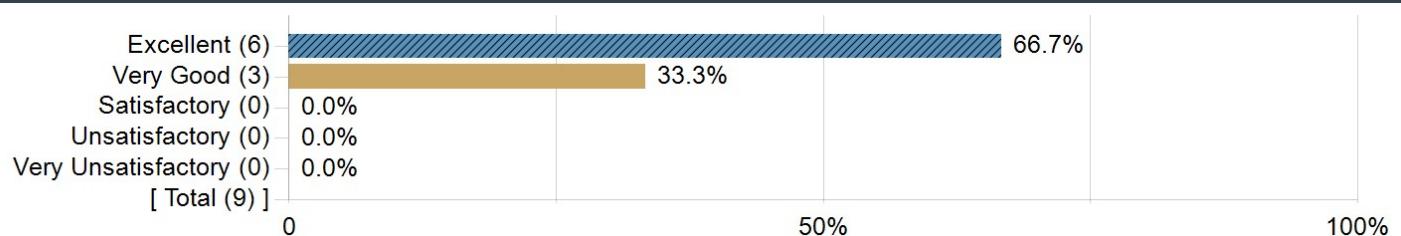
Statistics

Mean

Value

4.78

Overall, this instructor was



Statistics

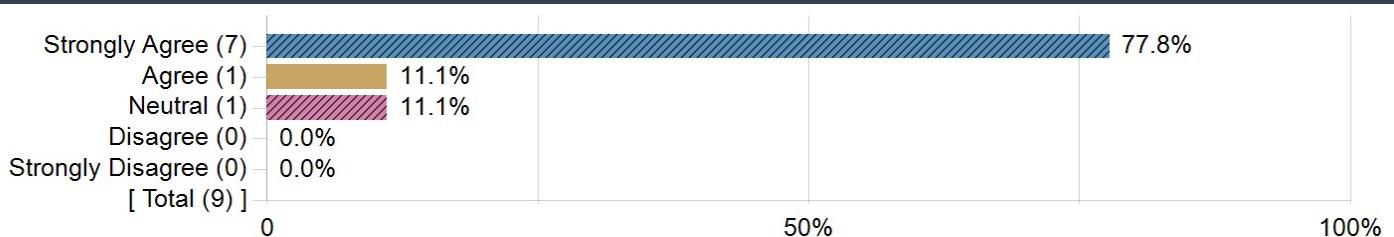
Mean

Value

4.67

## College, School, or Unit Questions

The instructor was available to students either electronically or in person.



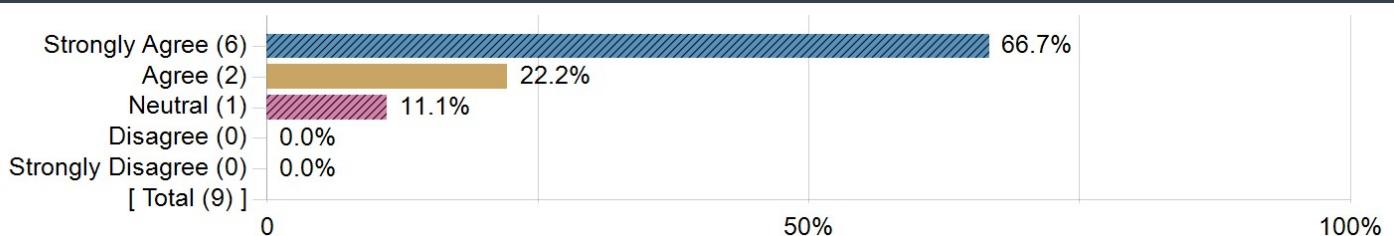
Statistics

Mean

Value

4.67

The instructor encouraged me to take an active role in my own learning.



Statistics

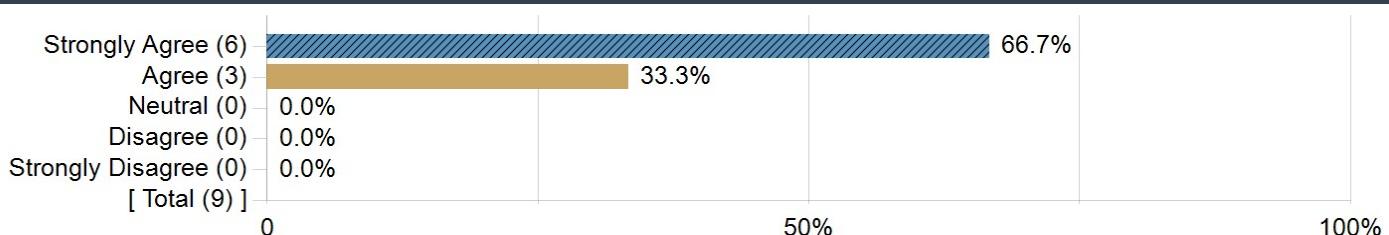
Mean

Value

4.56

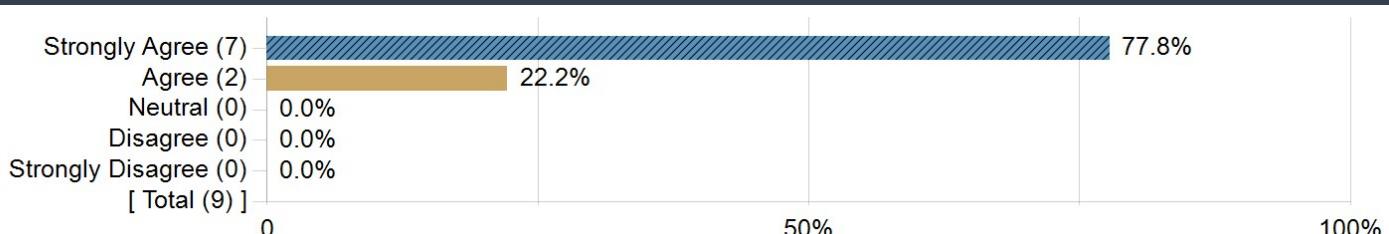
## Faculty Selected Questions

The instructor carefully explained difficult concepts, methods, and subject matter.



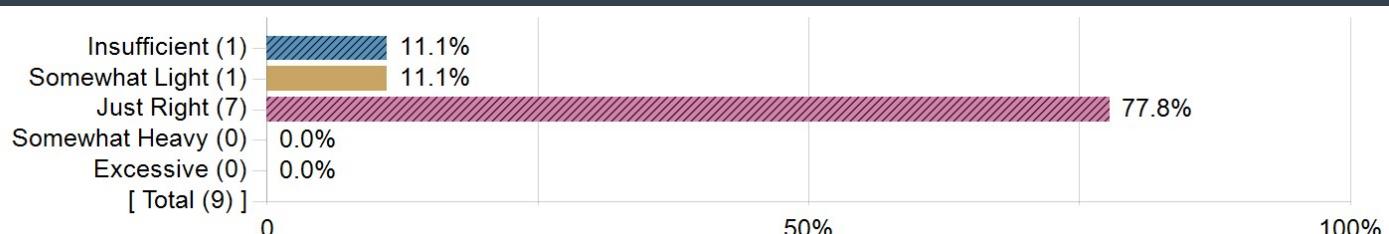
| Statistics | Value |
|------------|-------|
| Mean       | 4.67  |

The instructor showed a thorough knowledge of the course material.



| Statistics | Value |
|------------|-------|
| Mean       | 4.78  |

In my opinion, the workload in this course was...



| Statistics                    | Value |
|-------------------------------|-------|
| Invited Count                 | 33    |
| Response Count                | 9     |
| Response Ratio                | 27.3% |
| Mean                          | 2.67  |
| Median                        | 3.00  |
| Semi-Interquartile Range      | 0.25  |
| Mode                          | 3     |
| 50th Percentile               | 3.00  |
| Sum Total                     | 0.00  |
| Standard Deviation            | 0.71  |
| Population Standard Deviation | 0.67  |
| Standard Error (base on SD)   | 0.24  |
| Standard Error (base on PSD)  | 0.22  |
| Aggregate Frequency 1         | 0.0%  |



## Comment Questions

**Identify aspects of the course that were the most effective in helping your learning.**

| Comments  |
|---|
| I really enjoyed Paul Tran's welcoming attitude towards asking questions. He always encouraged us to ask questions and answered them. He is very flexible in terms of office hours, so it was very helpful to attend them. I thought it was very helpful that he was always there by our side to support us. I thought it was very effective that we covered lecture slides in class, reviewed material at home and has access to practice questions! Overall, great professor! |
| The practice exams, and in class Kahoots were very effective in the way I studied   |
| Paul Tran's lectures were very informative and I found he was a good instructor   |
| I felt as if the lecture structure and course design is very simple and intended for full understanding. Going to class is very beneficial as for participation and solidifying understanding of textbook material.   |
| Tests and Kahoots, applying learning  |
| The everyday Kahoots helped me retain and apply info in different ways each class and each of them being apart of my grade kept me focused every day. It also likely kept some classmates coming to class as well.  |
| Helpful lectures, great practice tests, makes the class very engaging by connecting econ topics to relevant issues in our society today.  |
| In class Kahoots and explanations   |

**Identify the aspect of the course that you found most challenging, why you found it was challenging, and suggest one thing that could be done to help future students meet that challenge more effectively.**

| Comments   |
|--|
| In terms of the course, there was not much that was challenging.   |
| The difference between the current and capital account was a little hard to understand, so a little more time could be spent on this, but overall a very effectively taught class  |
| This is an introduction class to Macro, but the professor at times uses real world examples that are much more complicated. Although, this really allows students to connect to real life situations. The professor also makes sure if any students have misunderstandings or questions. |
| N/A  |
| The tests were difficult, but allowed me to make in-semester adjustments to my studying habits to improve.   |
| Probably the homework. Inquisitive is genuinely just bad and has lots of trick questions. (not time efficient) I found myself quizletting them every time. I think I'd rather have problem sets similar to the practice tests.   |
| Self-teaching. Future students should focus on inquisitive assignments as opposed to slide readings.   |

# ECON 4XX: Text as Data for Macroeconomists

Professor: Paul L. Tran

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## Course Description

This course introduces undergraduates to text analysis methods and their application in applied macroeconomic research. As the ability to quantify unstructured text data (e.g., central bank communications, news) becomes essential for economists, this course equips students with the tools to answer key macroeconomic questions. We will explore techniques like sentiment analysis, topic modelling, and word embeddings to analyse policy communication, economic narratives, and expectations formation.

## Prerequisites

Intermediate Macroeconomics and Introduction to Econometrics, or permission from the instructor. Familiarity with a programming language (preferably Python or R) is recommended but not required.

## Learning Objectives

Upon successful completion of this course, students will be able to:

- Understand the theoretical foundations of text analysis methods.
- Apply various text analysis techniques to economic data.
- Critically evaluate empirical research that uses text as data.

- Conduct an original research project using text analysis to answer a macroeconomic question.

## Course Readings

Readings are central to this course. As no single textbook covers the intersection of text analysis and macroeconomics, the following books provide foundational knowledge in natural language processing. The listed papers represent the core academic literature for the course.

## Recommended Textbooks

- **JM:** Jurafsky, Dan, and James H. Martin. *Speech and Language Processing* (3rd ed. draft).
- **GKT:** Gentzkow, Matthew, Bryan T. Kelly, and Matt Taddy. *Text as Data*.
- **MS:** Manning, Christopher D., and Hinrich Schütze. *Foundations of Statistical Natural Language Processing*.

## Key Papers

- Baker, S. R., Bloom, N., and Davis, S. J. (2016). “Measuring Economic Policy Uncertainty”. *The Quarterly Journal of Economics*, 131(4), 1593-1636.
- Gentzkow, M., Kelly, B., and Taddy, M. (2019). “Text as Data”. *Journal of Economic Literature*, 57(3), 535-574.
- Hansen, S., McMahon, M., and Prat, A. (2018). “Transparency and Deliberation within the FOMC: a Computational Linguistics Approach”. *The Quarterly Journal of Economics*, 133(2), 801-870.
- Shiller, R. J. (2017). “Narrative Economics”. *American Economic Review*, 107(4), 967-1004.
- Tetlock, P. C. (2007). “Giving Content to Investor Sentiment: The Role of Media in the Stock Market”. *The Journal of Finance*, 62(3), 1139-1168.
- Tran, P. L. (2025). “How Long Do Markets Need to Fully React to Monetary Policy Announcements?” Job Market Paper.

## Optional Readings

The following papers provide further examples of text analysis in economics. They are excellent resources for a deeper understanding or for finding inspiration for your final project.

- Gáti, L. and Handlan, A. (2022). “Monetary Communication Rules”. *ECB Working Paper No. 2759*.

- Handlan, A. (2020). “Text Shocks and Monetary Surprises: Text Analysis of FOMC Statements with Machine Learning”. *Job Market Paper*.
- Loughran, T. and McDonald, B. (2011). “When Is a Liability Not a Liability? Textual Analysis, Dictionaries, and 10-Ks”. *The Journal of Finance*, 66(1), 35-65.
- McMahon, M. and Naylor, M. (2023). “Getting Through: Communicating Complex Information”. *Bank of England Staff Working Paper No. 1047*.
- Shapiro, A. H., Sudhof, M., and Wilson, D. J. (2020). “Measuring News Sentiment”. *Journal of Econometrics*, 228(2), 221-243.

## Assignments and Grading

Your final grade will be based on your engagement with the material, your application of course methods, and your execution of an original research project.

- **Participation (10%)**
- **Problem Sets (30%)**
- **Midterm Exam (25%)**
- **Final Research Project (35%)**

### Problem Sets (30%)

Four problem sets will provide hands-on experience with the computational tools of text analysis. The focus is on the *process* of turning unstructured text into meaningful data, not just on a single correct answer. Collaboration with a partner is encouraged, but you must submit your own code and solutions.

Typical tasks will include:

- Data Acquisition: Scraping text data from sources like central bank websites or news archives.
- Text Pre-processing: Cleaning and preparing raw text for analysis (e.g., tokenization, removing stopwords).
- Method Implementation: Applying techniques like dictionary-based sentiment analysis to a corpus.
- Model Estimation and Interpretation: Running a topic model (e.g., LDA) on a set of documents and interpreting the resulting topics.
- Mini-Replication: Replicating a key finding or figure from a paper discussed in class.

## Final Research Project (35%)

For the final project, students will use the course's text analysis skills to research a macroeconomic topic of their choice. This involves formulating a research question, gathering text data, applying an appropriate method, and presenting the findings in a research paper and an in-class presentation.

### Project Milestones

- **Project Proposal (Due Week 5):** A one-page proposal outlining the research question, motivation, data sources, and intended methodology.
- **In-Class Presentation (Weeks 11-12):** A 10-12 minute presentation of your research question, methods, and preliminary results.
- **Final Paper (Due Last Day of Classes):** A 12-15 page research paper (double-spaced) following a standard academic structure.

### Final Paper Structure

- **Introduction:** Motivate the research question and explain its economic significance.
- **Literature Review:** Summarize relevant existing research.
- **Data:** Describe text data source(s) and processing steps.
- **Methodology:** Explain the chosen text analysis method and its appropriateness.
- **Results:** Present findings using tables, figures, and clear explanations.
- **Conclusion:** Summarize results, discuss limitations, and suggest avenues for future research.

## Grading Rubric for Final Project

| Component                        | Excellent (A)  | Good (B)  | Satisfactory (C)  | Weight |
|----------------------------------|--|---|---|--------|
| Research Question and Motivation | Question is clear, creative, and well-motivated with strong economic intuition.                                      | Question is clear and economically relevant, but could be more original or sharply defined.                               | Question is vague or its economic relevance is not well-explained.  | 20%    |
| Methodology and Implementation   | Chosen method is highly appropriate and skilfully implemented.<br>Code is clean and well-documented.                 | Method is appropriate, but implementation may have minor errors or inefficiencies.  | Method is poorly suited for the question or is implemented incorrectly.                                   | 30%    |
| Analysis and Interpretation      | Results are presented clearly and interpreted with deep economic insight.<br>Limitations are thoughtfully discussed. | Results are presented clearly but interpretation is superficial.<br>Connection to economic theory is weak.                | Results are difficult to understand or are interpreted incorrectly.                                       | 30%    |
| Writing and Presentation         | Paper is exceptionally well-written and structured.<br>Presentation is polished, engaging, and clear.                | Paper is well-written but may have some organizational or clarity issues.<br>Presentation is clear but not very engaging. | Paper is poorly written, with significant grammatical or structural problems.<br>Presentation is unclear. | 20%    |

## Course Outline (Tentative)

- Part 1: Introduction to Text Analysis
  - Week 1: Why Text as Data?
    - \* Reading: Gentzkow, Kelly, and Taddy (2019)
  - Week 2: The Basics of Text Processing
    - \* Reading: JM Chapters 2-3

- **Part 2: Methods**

- **Week 3: Bag of Words and Sentiment Analysis**
    - \* **Reading:** GKT Chapter 4
    - \* **Optional Reading:** Loughran and McDonald (2011)
  - **Week 4: Topic Modeling**
    - \* **Reading:** Blei (2012), “Probabilistic Topic Models”
  - **Week 5: Word Embeddings**
    - \* **Reading:** JM Chapter 6
  - **Week 6: Intro to Neural Networks and Sequence Models**
    - \* **Reading:** JM Chapter 7

- **Week 7: Midterm Exam**

- Covers Parts 1 and 2 (Weeks 1-6)

- **Part 3: Applications in Macroeconomics**

- **Week 8: Monetary Policy Communication**
    - \* **Readings:** Hansen, McMahon, and Prat (2018); Tran (2025)
    - \* **Optional Readings:** Gáti and Handlan (2022); Handlan (2020); McMahon and Naylor (2023)
  - **Week 9: Measuring Economic Policy Uncertainty**
    - \* **Reading:** Baker, Bloom, and Davis (2016)
  - **Week 10: News and Economic Narratives**
    - \* **Reading:** Shiller (2017)
  - **Week 11: News, Sentiment, and Financial Markets**
    - \* **Reading:** Tetlock (2007)
    - \* **Optional Reading:** Shapiro, Sudhof, and Wilson (2020)

- **Part 4: Student Presentations and Conclusion**

- **Week 12: Student Presentations**
  - **Week 13: Student Presentations and Final Review**

## Academic Integrity

All submitted work must be your own. Academic dishonesty will result in a failing grade for the course, in accordance with the college's academic integrity policy.

## **Subject to Change Disclaimer**

Information contained in this course syllabus, other than the grade and absence policies, may be subject to change with advance notice whenever deemed necessary by the professor.