1 Contact Information

**Professor:** Dr. Paul Gaggl  
**Office:** Friday 219A  
**Office Hours:** W 10:45 am - 12:00 pm, W 2:15 pm - 4:00 pm  
**Email:** pgaggl@uncc.edu  

**Teaching Assistant:** Ercument Camadan  
**Office:** TBA  
**Office Hours:** By appointment  
**Email:** ecamadan@uncc.edu

**Course Website:** Canvas

2 Important Dates & Times

**Meeting Times**

<table>
<thead>
<tr>
<th>Lecture:</th>
<th>WF</th>
<th>1:25 - 2:15 pm</th>
<th>Friday 132</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion Section:</td>
<td>M</td>
<td>1:25 - 2:15 pm</td>
<td>Friday 132</td>
</tr>
</tbody>
</table>

**Exams (50 minutes each)**

| Midterm 1: | Friday, January 31 | in class (Friday 132) |
| Midterm 2: | Friday, February 28 | in class (Friday 132) |
| Midterm 3: | Friday, April 3 | in class (Friday 132) |
| Final Exam: | Wednesday, May 6 | 2pm (Friday 132) |

3 General Information

**Course Description**

We will study important topics in macroeconomics, including long-run economic growth, short-run fluctuations in output and employment (business cycles), and issues in macroeconomic policy (fiscal and monetary).

It is impossible to cover all important macroeconomic topics in one semester so, naturally, the course is selective. However, while the set of economic topics explicitly covered is selective, we will utilize a general conceptual framework, which is the core of virtually all modern macroeconomic analyses, irrespective of the particular topic at hand.

By the end of this course, you should be able to critically read articles on current macro issues that appear in publications such as *The New York Times, The Wall Street Journal* and *The Economist*. Note that this course requires rigorous analytical thinking and calculus.

**Prerequisites**

The formal class pre-requisites for this class are

1. ECON 2101 and ECON 2102 with a minimum grade of C
2. One of MATH 1120, MATH 1241, MATH 1242 with a minimum grade of C
3. One of STAT 1220, STAT 1221, STAT 1222 with a minimum grade of C

In particular, students are expected to be familiar with basic maximization of functions (involving first derivatives) and solving “well behaved” systems of equations with multiple unknowns.
Course Resources

The required textbook for this class is:

URL [https://books.google.com/books?id=xH06MQAACAAJ](https://books.google.com/books?id=xH06MQAACAAJ)

All additional resources will be posted on the class Canvas page.

4 Course Evaluation

Your overall grade for this course will be based on homework and exams. In addition, you have the possibility to earn 2 percentage points bonus credit for attendance and participation in discussion sections. The course grade weights are as follows:

<table>
<thead>
<tr>
<th>Course Grade</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best 6 of 7 homework assignments (equal weights)</td>
<td>20%</td>
</tr>
<tr>
<td>Best 3 of 4 Exams (equal weights)</td>
<td>80%</td>
</tr>
<tr>
<td>Bonus Credit</td>
<td>2 perc. pts.</td>
</tr>
</tbody>
</table>

4.1 Homework

Homework assignments will be **due at the beginning of class** (or discussion section) indicated on the homework assignment. Class “begins” as soon as I or the teaching assistant starts talking. Late homework is worth at most 25% of the original score. You may hand in late homework until the last day of class to earn up to 25% of the original grade.

Assignments will be graded mostly on “effort” with five possible scores on each assignment:

<table>
<thead>
<tr>
<th>Score</th>
<th>Effort</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>completed all problems with mostly correct answers</td>
</tr>
<tr>
<td>75</td>
<td>completed all problems with a serious effort</td>
</tr>
<tr>
<td>50</td>
<td>completed at least 75% of all problems with a serious effort</td>
</tr>
<tr>
<td>25</td>
<td>completed at least half of the problems with a serious effort</td>
</tr>
<tr>
<td>0</td>
<td>attempted fewer than half of the problems on the assignment.</td>
</tr>
</tbody>
</table>

Assignments will be returned in discussion sections. You will not receive detailed written comments on your homework assignments. However, **there will be a detailed answer key for each problem set**. The answer keys will provide you with what I consider a good answer to the questions asked. Based on my answer keys, it is your responsibility to check what went well and what did not go so well. I encourage you to consult the teaching assistant(s) or me if you cannot figure out whether and/or why your answers differ from the ones on the answer key or if you have any other questions related to the homework and associated answer keys.

4.2 Exams

**Test Format and Makeup Exam Policy:** There will be four **50 minute exams** (three midterms and one final). The **best three of your four exams will count toward your class grade** with equal weight. There will be **NO MAKEUP EXAMS**! If you miss an exam (for any reason) you will receive zero credit on that exam and the other three exams will count toward your course grade.

**DO NOT PLAN TO INTENTIONALLY SKIP ANY MIDTERM!** I drop your lowest test score in case you need to miss an exam due to an unforeseen emergency. **You have exactly one chance to miss an exam for any reason.** Any further exam that you miss (even if it is because of an emergency) will count with a score of zero toward your grade.\(^1\)

\(^1\)Only in the very unlikely event that you have to miss two exams because you encounter two severe unexpected emergencies that
Study Cards: You may bring one handwritten study card to each of the exams. The card’s dimensions must not exceed 8.5 × 5.5 inches (1/2 of a US Letter page) and you may write on both sides of the card. The study card must be handwritten (no exceptions). We will take away study cards that are photo copied or printed. If we catch you with a printed or photo copied study card, you also lose the right to bring study cards to any further exams.

Exam Grading Policy: The maximum score on each exam will be 100. All questions will be free response questions. Exam questions will be similar to those on the homework assignments. Your answers will be graded in detail. You will receive partial credit for partially correct answers. Like for homework assignments, there will be detailed answer keys.

Generally speaking, the most important parts of your answer are your detailed derivations and written arguments. Simply writing one number (or mathematical expression) as the final answer will give you almost no credit (even if the number or expression is correct). A logically correct argument and derivation, with an eventual wrong outcome, will in most cases result in more partial credit than the correct number/expression without any argument.

Regrading Policy: In case you believe there was a clerical mistake (scores added up wrong, etc.), you may simply contact the teaching assistant(s) or me at your convenience.

If you believe that you were graded incorrectly on any part of your exam, you must submit a regrade request in writing (together with your exam) to me no later than one week after the exam was handed back. Your request must clearly spell out what part you believe was graded incorrectly and you must explain clearly why you believe you should have received a different score. If you choose to submit such a request, Prof. Gaggl will then personally regrade your entire exam and your overall exam grade may go up or down accordingly.

4.3 Class Grade & Curve

Your overall class score will be “graded on the curve”. That is, after the final exam, I will compute your overall class score, with the weights described above. Your class letter grade will then be based on the percentiles of the class score distribution, approximately as follows:

<table>
<thead>
<tr>
<th>% of Students</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>top 25%</td>
<td>A</td>
</tr>
<tr>
<td>next 40%</td>
<td>B</td>
</tr>
<tr>
<td>next 30%</td>
<td>C</td>
</tr>
<tr>
<td>next 3%</td>
<td>D</td>
</tr>
<tr>
<td>lowest 2%</td>
<td>F</td>
</tr>
</tbody>
</table>

A curve like this ensures that the best students (in the highest percentiles) will receive an A, regardless of the score numbers. For example, if the highest score in the class happens to be 65, then the student with a 65 will for sure receive a grade of A. If the top score in the class is 100, then a score of 65 will most likely not suffice for an A. It is also possible that everybody receives a grade of A.

While the class is curved at the very end, I will provide you with a “preliminary curve”, after each exam. This will give you a rough idea of “where you stand” in the class. That is, I will let you know what grade you would receive, if the class ended that day.

4.4 Bonus Credit

Students may earn up to a total of two percentage points in bonus credit which will be added to the overall class score (up to 100%) at the end of the semester.

While the class is curved at the very end, I will provide you with a “preliminary curve”, after each exam. This will give you a rough idea of “where you stand” in the class. That is, I will let you know what grade you would receive, if the class ended that day.
1. **Section Attendance (1pp):** If you attend and sign in with the TA for at least \( \frac{2}{3} \) of the discussion sections held, I will add one percentage point to your overall class score (up to a maximum of 100% at the end of the semester).

2. **Section Participation (1pp):** You may earn a total of one percentage point for volunteering to present/attempt homework (HW) problems on the black/whiteboard during discussion sections. In some sections the TA will have a signup sheet on which you can check off which problems for the upcoming HW you are willing to present on the board. You must check off the problems you would like to volunteer before section begins. Section begins as soon as the TA says so. The TA will choose which student(s) gets to present. If you volunteer to present at least \( \frac{1}{2} \) of all the HW and practice problems available on the signup sheets throughout the semester I will add one percentage to your overall class score at the end of the semester. It does not matter whether you actually wind up presenting the problems you check off, but if you do, the TA may call you to the board during section. Also, note that the presentations are not a test. It does not matter whether or not you get the answer of the problem perfectly right. This is about the willingness and initiative to go to the board and explain to your peers how you approached/solved the HW problem. The goal is to work out a satisfactory solution together with your peers and the TA.

5. **General Rules**

   **Attendance:** Classroom attendance is strongly recommended. We will be covering a substantial amount of material in this course, and you will probably find that the easiest way to keep up (and find out what I think is important) will be to attend class and discussion sections. I expect you to be in class on time and stay for the duration. If you do not plan to attend the entire lecture, please see me in advance or refrain from coming to class.

   **Communication:** Communication with those outside of class while class is in progress is not acceptable. (In other words, turn off all communication devices prior to the start of class.) Students are expected to check their Duke e-mail as well as the class webpage regularly for correspondence and updates regarding the course.

   **Exam Bathroom Policy:** All exams will be 50 minute exams. Please use the bathroom before the start of the exam as it is disruptive for other students if somebody leaves the room in the middle of the exam. Anybody who needs to leave the room during exams (e.g. to go to the bathroom) must leave his/her exam with me (or the person proctoring the exam) and must also leave any electronic devices that he/she carries in his/her pockets (e.g. cell phone, iPod, iPad, Kindle, etc.) with me (or the person proctoring the exam) before leaving the room.

   **No Screen:** While in class, I expect you to follow my “no screen” policy. I do not want to see any cell phones. Leave them in your backpack/purse/pocket (with the sound turned off) during class. Laptops/Tablets are strongly discouraged. They will not be very helpful for note taking, as much of the class will require writing equations, graphs, etc. If you absolutely must use one, please talk to me about it in person.

   **Academic Integrity:** Please note that academic misconduct (cheating) will NOT be tolerated. In addition, students have the responsibility to know and observe the requirements of University Policy 407: The Code of Student Academic Integrity (http://legal.uncc.edu/policies/up-407). This code forbids cheating, fabrication or falsification of information, multiple submissions of academic work, plagiarism, abuse of academic materials, and complicity in academic dishonesty. Academic evaluations in this course include a judgment that the student’s work is free from academic dishonesty of any type; and grades in this course
therefore should be and will be adversely affected by academic dishonesty. Students who violate the code can be expelled from UNC Charlotte. The normal penalty for a first offense is zero credit on the work involving dishonesty and further substantial reduction of the course grade. In almost all cases, the course grade is reduced to F. Copies of the code can be obtained from the Dean of Students Office. Standards of academic integrity will be enforced in this course. Students are expected to report cases of academic dishonesty to the course instructor.

**Statement on Diversity:**  The Belk College of Business strives to create an inclusive academic climate in which the dignity of all individuals is respected and maintained. Therefore, we celebrate diversity that includes, but is not limited to ability/disability, age, culture, ethnicity, gender, language, race, religion, sexual orientation, and socio-economic status.

**Disability Services:**  UNC Charlotte is committed to access to education. Students in this course seeking accommodations to disabilities must first consult with the Office of Disability Services and follow the instructions of that office for obtaining accommodations. Contact the Office of Disability Services at 704-687-0040 or visit their office in Fretwell 230.

**Last Day of Participation:**  If a student earns an F or U grade, the last date of attendance will be reported. This may require the student to pay back any financial aid money received for this course.

### 6 Tentative Course Schedule

Below is a tentative schedule of the topics I plan to cover. However, there is no guarantee that we follow this schedule precisely. We may deviate from this schedule as the course progresses depending on time and student interest. It is your responsibility to keep up with adjustments made throughout the course.

**Part 1: The Long Run & Economic Growth**
- Measuring the Economy
- Cross-Country Income Differences
- Economic Growth

**Part 2: Consumption, Investment, & the Labor Market**
- Intertemporal Consumption and Savings Decisions
- Inflation and Real vs. Nominal Interest Rates
- Labor Markets

**Part 3: The Short Run & Economic Policy**
- Business Cycles and Economic Policy