Syllabus for STOR 305-001 Spreadsheet Models Spring 2021

Instructor: Dr. Mario Giacomazzo **Office hours**: Every Tuesday

E-mail: mgiacoma@email.unc.edu 9AM to 1PM

Phone: 480-489-1398 Office: Anywhere I Am

Assistants: Bongsoo Yi

E-mail: <u>bongsoo@email.unc.edu</u>

Office Hours: Monday & Wednesday, 10AM -11AM

Lectures: MWF from 9:05AM – 9:55AM on Zoom

Zoom Links: Lecture (PW: doctor305)

Office Hours

Bongsoo's Office Hours (PW: bZJ71S)

Course URL: Website: https://supermariogiacomazzo.github.io/STOR305 WEBSITE/

Assignment Submission: https://sakai.unc.edu/ and login with your Onyen

Description: This course studies operations research decision-making techniques and data analysis

using spreadsheets. The topics in the course will be divided into two broad types of

problems: optimization and data analysis. Specific topics include:

Optimization:

• Break even analysis

- Linear programming {including sensitivity analysis}
- Integer programming
- Non-linear programming
- Goal programming

Data analysis:

- Descriptive statistics
- Visualizing data (scatterplots, trends, histograms, heat maps)
- Correlation functions
- Percentile functions
- Linear regression

Prerequisites: STOR 155 (Introductory Statistics) or equivalent.

Textbook: Introduction to Management Science. (13th Edition), Bernard Taylor, Pearson, 2018

Software: A personal laptop with a working copy **Microsoft Excel** is required. You are required

to bring your laptop to every class.

Final Grade: Attendance (5%)

Homework (15%) Midterm 1 (25%) Midterm 2 (25%) Final (30%)

Attendance:

Attendance is **mandatory**. Once per week at random, I will take attendance using a Google Form worth 7 points. If a guest speaker is scheduled, attendance will be taken and worth 7 points even if attendance has already been taken for that week. Only students in class will be eligible for the points. Any students who are absent will be penalized by receiving 0 points. At the end of the semester, the attendance grade will be curved so students who had perfect attendance get 100% on their attendance grade.

The only way to be excused from the point penalty for absence is by acquiring a university approved absence (https://catalog.unc.edu/policies-procedures/attendance-grading-examination/).

Homework:

Due to the size of this class, we will follow rigid homework rules to make the graders' job manageable. Please note the following to ensure you get full credit:

Weekly homework will be posted on **Sakai** by **11:59PM** on **Friday**, and due at the beginning of class on the following **Friday**. Each assignment will be worth 20 points.

To receive full credit, you must clearly label each problem and neatly show all your work (including your mathematical arguments), and staple the pages of each assignment in the correct order. All assignments must be uploaded to Sakai.

No late homework will be accepted. Do not send homework via email, only paper copies can be accepted

You are allowed (and encouraged) to work with other students, but the homework you turn in should be in your own words. Copying homework from another student is forbidden. Any questions regarding a homework grade should first be addressed to the IA and if you still have questions then feel free to meet me. If you feel that some parts of a graded assignment should be regraded, please go to the IA within 2 weeks of getting back your assignment. Homework re-grades after this period will not be possible.

Exams:

There will be two midterm exams, on the dates indicated below, and one final exam, on the date determined by the Registrar's Office. The final exam will be cumulative.

Midterm 1 on February 26 at 9:05AM

Midterm 2 on April 9 at 9:05AM

Final Exam on May 13 at 8:00AM

Grade Scale: The below grading scale is guaranteed.

Α	94 to 100	В	83 to 86.99	С	73 to 76.99	D	60 to 66.99
A-	90 to 93.99	B-	80 to 82.99	C-	70 to 72.99	F	0 to 59.99
B+	87 to 89.99	C+	77 to 79.99	D+	67 to 69.99		

COVID-19:

Each of us has a responsibility to know and act on these standards and policies in a way that maximizes a safe and healthy environment for us to teach, work, learn and live. To this end, we are developing a set of community standards and policies for our students, faculty, staff and visitors. We are all in this together, and we believe that together, we can face the challenges presented by COVID-19 with resilience, determination and great support for our community.

See https://carolinatogether.unc.edu/community-standards-3-2/ for a list of guidelines that we all need to follow to reduce the spread of COVID-19.

- Understand How COVID-19 Spreads
- Wash Your Hands Often
- Practice Physical Distancing
- Wear a Face Mask
- Maintain Clean, Safe Spaces
- Engage in Smaller Group and Virtual Settings
- Follow Immunization Recommendations
- Protect the community
- Provide Medical Return Clearance

Delivery Method:

This course is classified as a remote course. More detail of this delivery method is found at https://carolinatogether.unc.edu/ and provided below:

- Students participate remotely for the entire semester and do not attend any in-person sessions in the classroom.
- Remote classes will have a scheduled class time but no physical location. Students can participate from a residence hall, campus study space, off-campus residence, or from far away from campus.
- The instructor will determine whether the class will be taught synchronously, asynchronously, or a combination of the two.
- Types of courses that may be taught with this mode include large classes where physical distancing could not occur.

Zoom

Etiquette:

These are my five expectations of you regarding Zoom.

- Have your camera turned on.
- Mute your microphone unless answering or asking a question.
- Communicate by unmuting yourself or using the chat feature.
- Be mindful of background noise when not muted.

Limit your distractions and avoid multi-tasking.

More Help:

Excel can be incredibly frustrating and take some time to get used to. Before you email your instructor or IA please spend some time trying to solve/Google the problem on your own. Then, proceed to find someone in the class to ask. It is highly possible someone else has experienced the same problem. Finally, if you have not solved the problem, email your instructor or IA.

Accessibility:

The University of North Carolina at Chapel Hill facilitates the implementation of reasonable accommodations, including resources and services, for students with disabilities, chronic medical conditions, a temporary disability or pregnancy complications resulting in difficulties with accessing learning opportunities.

All accommodations are coordinated through the Accessibility Resources and Service Office. See the ARS Website for contact information: https://ars.unc.edu or email ars@unc.edu.

Honor Code:

All students are expected to follow the guidelines of the UNC honor code. In particular, students are expected to refrain from "lying, cheating, or stealing" in the academic context. If you are unsure about which actions violate that honor code, please see me or consult honor.unc.edu.

Students are bound by the Honor Code in taking exams and in written work. The Honor Code of the University is in effect at all times, and the submission of work signifies understanding and acceptance of those requirements. Plagiarism will not be tolerated. Please consult with me if you have any questions about the Honor Code.

The University of North Carolina at Chapel Hill has had a student-administered honor system and judicial system for over 100 years. The system is the responsibility of students and is regulated and governed by them, but faculty share the responsibility. If you have questions about your responsibility under the honor code, please bring them to your instructor or consult with the office of the Dean of Students or the Instrument of Student Judicial Governance. This document, adopted by the Chancellor, the Faculty Council, and the Student Congress, contains all policies and procedures pertaining to the student honor system. Your full participation and observance of the honor code is expected (honor.unc.edu).

Counseling

Services:

CAPS is strongly committed to addressing the mental health needs of a diverse student body through timely access to consultation and connection to clinically appropriate services, whether for short or long-term needs. Go to their website: https://caps.unc.edu/ or visit their facilities on the third floor of the Campus Health Services building for a walk-in evaluation to learn more.

Title IX:

Any student who is impacted by discrimination, harassment, interpersonal (relationship) violence, sexual violence, sexual exploitation, or stalking is encouraged to seek resources on campus or in the community.

Please contact the Director of Title IX Compliance (Adrienne Allison – Adrienne.allison@unc.edu), Report and Response Coordinators in the Equal Opportunity and Compliance Office (reportandresponse@unc.edu), Counseling and Psychological Services (confidential), or the Gender Violence Services Coordinators (gvsc@unc.edu; confidential) to discuss your specific needs.

Additional resources are available at safe.unc.edu.

Legal:

Dr. Mario reserves the right to make changes to the syllabus, including all due dates. These changes will be announced as early as possible so that students can adjust their schedules.