PRE-COURSE SURVEY

Demographics

1.] What is your name?‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗

2.] What is your gender?‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗

3.] What is your major?‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗

4.] Circle your class standing: freshman, sophomore, junior, or senior.

Proficiency

5.] In the list below, circle the computing or typesetting programs that you've used before. For every program that you circle, indicate your proficiency on a scale of 1 to 5, where 1 is very low proficiency and 5 is very high proficiency.

- Python
- C++
- Java
- Excel Solver
- Maple

- Mathematica
- Gurobi
- AMPL
- LINDO
- CPLEX

- Microsoft Word
- LaTeX
- Powerpoint
- Beamer
- Zoom

Others (please specify): ‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗‗

Confidence

6.] Consider the following statement: "I am confident that I can learn a new technology, such as Python or Excel Solver, to perform programming tasks to solve mathematical problems." Circle one option below that indicates how strongly you agree/disagree with that statement:

    (1) Strongly Agree,   (2) Agree,   (3) Disagree,   (4) Strongly Disagree.

7.] Consider the following statement: "I am confident in using a technology, such as Python or Excel Solver, to perform programming tasks to solve mathematical problems." Circle one option below that indicates how strongly you agree/disagree with that statement:

    (1) Strongly Agree,   (2) Agree,   (3) Disagree,   (4) Strongly Disagree.

8.] Consider the following statement: "I am confident using typesetting software, such as LaTeX, to prepare scientific documents related to mathematics." Circle one option below that indicates how strongly you agree/disagree with that statement:

(1) Strongly Agree,   (2) Agree,   (3) Disagree,   (4) Strongly Disagree.

9.] Consider the following statement: "If I were to open a blank source file for Python, Excel Solver, or LaTeX right now, I would probably be unsure how to start or what to do." Circle one option below that indicates how strongly you agree/disagree with that statement:

(1) Strongly Agree,   (2) Agree,   (3) Disagree,   (4) Strongly Disagree.

Attitude

10.] Consider the following statement: "I am interested in learning new technology, such as Python or Excel Solver, to perform programming tasks to solve mathematical problems." Circle one option below that indicates how strongly you agree/disagree with that statement:

(1) Strongly Agree,   (2) Agree,   (3) Disagree,   (4) Strongly Disagree.

11.] Consider the following statement: "I believe that learning a new technology, especially as it applies to mathematics, is an essential part to my educational experience." Circle one option below that indicates how strongly you agree/disagree with that statement:

(1) Strongly Agree,   (2) Agree,   (3) Disagree,   (4) Strongly Disagree.

12.] Consider the following statement: "I believe that being proficient in a scientific computing language, such as Python or Excel Solver, will have a positive impact in my future career and make me more competitive in the job market." Circle one option below that indicates how strongly you agree/disagree with that statement:

(1) Strongly Agree,   (2) Agree,   (3) Disagree,   (4) Strongly Disagree.

13.] Consider the following statement: "I believe that being proficient in a typesetting language, such as LaTeX, is essential to becoming a better communicator in written and/or oral format, especially when conveying mathematical ideas." Circle one option below that indicates how strongly you agree/disagree with that statement:

(1) Strongly Agree,   (2) Agree,   (3) Disagree,   (4) Strongly Disagree.

Overall

14.] What do you expect to get out of this class?