Math 390R/490R, Winter 2025 Class Schedule

| Week Starting | Monday | Tuesday | Wednesday | Thursday | Friday |
|------------------|--|---------|--|----------|--|
| Jan 6 | | | No class (instructor out of town) | | No class (instructor out of town) |
| Jan 13 | Linear system of equations | | Gauss-Jordan elimination | | Gauss-Jordan elimination |
| Jan 20 | No class (MLK day) | | Linear programming HW 1 due | | Linear programming <mark>Quiz 1</mark> |
| Jan 27 | Linear programming | | Lab 1 <mark>HW 2 due</mark> | | Matrix multiplication <mark>Lab 1 due</mark> |
| Feb 3 | PageRank algorithm <mark>Quiz 2</mark> | | PageRank algorithm <mark>HW 3 due</mark> | | Lab 2 |
| Feb 10 | Optimization problem of single-variable function Lab 2 due | | Numerical methods for solving an equation | | Numerical methods for solving an equation |
| Feb 17 | No class (President's day) | | Lab 3 <mark>HW 4 due</mark> | | Multivariable function and partial derivatives Lab 3 due |
| Feb 24 | Partial derivatives | | Optimization problem of multivariable function Quiz 3 HW 5 due | | Steepest descent algorithm |
| Mar 3 | Steepest descent algorithm | | Lab 4 | | Optimization under constraints Lab 4 due |
| Mar 10 | Optimization under constraints | | Optimization under constraints | | Partial differential equations HW 6 due |
| Mar 17 | Separation of variables | | Euler's method Quiz 4 | | Finite difference method HW 7 due |

| Mar 24 | Finite difference method | No class (Prince Kuhio day) | | Lab 5 <mark>HW 8 due</mark> |
|--------|---|---|------------------------------|---|
| Mar 31 | Fundamentals of neural network Quiz 5 Lab 5 due | Fundamentals for neural network | Ugrad Research Conference | Neural network method for differential equations |
| Apr 7 | Neural network method for differential equations | Working on project (Math 390R only) | | Working on project (Math 390R only) |
| Apr 14 | | Project due Presentation of project (Math 390R only) | | Graduation |