Schedule

Home/Schedule

Synchronous online lectures (Section N only):

Tuesdays 12:30pm - 1:45pm

Zoom link on course CampusWire

Show Future Lectures

Semester Progress

0%

Aug Dec

Week 16

Tue, Dec 08, lecture 29
none
Group Activity 14: Machine Learning — 8 points

Wed, Dec 09
Last day of classes

Week 15

Tue, Dec 01, lecture 27
none
Sync lecture at: 12:30pm
Group Activity 13: PCA — 8 points
MP 5: Breast cancer prediction — 24 points

Thu, Dec 03, lecture 28
none
HW 13: Lecture 25 — 24 points

Week 14

Tue, Nov 24
Fall break

Thu, Nov 26
Fall break

Week 13

Tue, Nov 17, lecture 25
Principal Component Analysis — 2 points
Sync lecture at: 12:30pm
Group Activity 12: Least-squares + SVD — 8 points

Thu, Nov 19, lecture 26
none
Quiz 5: Nonlinear, Opt, Least-squares, SVD (hw 9-11) — 70 points
Time: 9:30am or 12:30pm
Details: Without remote proctoring
HW 12: Lecture 23-24 — 24 points

Week 12

Tue, Nov 10, lecture 23
Least-squares + SVD — 2 points
Sync lecture at: 12:30pm
Group Activity 11: Least-squares — 8 points
MP 4: Topology optimization — 24 points

Thu, Nov 12, lecture 24
SVD applications — 2 points
HW 11: Lecture 21-22 — 24 points

Week 11

Tue, Nov 03, lecture 21
Least-squares (Normal Equations) — 2 points
Sync lecture at: 12:30pm
Group Activity 10: Optimization — 8 points

Thu, Nov 05, lecture 22
Singular Value Decomposition — 2 points
HW 10: Lecture 19-20 — 24 points

Week 10

Tue, Oct 27, lecture 19
1D Optimization — 2 points
Sync lecture at: 12:30pm
Group Activity 9: Nonlinear equations — 8 points
MP 3: Basketball Rank — 24 points

Thu, Oct 29, lecture 20
ND Optimization — 2 points
Quiz 4: Linsys, Eigenvalues, Markov, FD (hw 6-8) — 70 points
Time: 9:30am or 12:30pm
Details: With (CBTF) remote proctoring
HW 9: Lecture 17-18 — 24 points

Week 9

Tue, Oct 20, lecture 17
1D Nonlinear System of Equations — 2 points
Sync lecture at: 12:30pm
Group Activity 8: Markov Chains — 8 points

Thu, Oct 22, lecture 18
ND Nonlinear System of Equations — 2 points
HW 8: Lecture 15-16 — 24 points

Week 8

Tue, Oct 13, lecture 15
Markov chains — 2 points
Sync lecture at: 12:30pm
Group Activity 7: Eigenvalues — 8 points
MP 2: Truss design — 24 points

Thu, Oct 15, lecture 16
Finite Difference Methods — 2 points
HW 7: Lecture 13-14 — 24 points

Week 7

Tue, Oct 06, lecture 13
Eigenvalues — 2 points
Sync lecture at: 12:30pm
Group Activity 6: Linear Systems — 8 points

Thu, Oct 08, lecture 14
Eigenvalues — 2 points
Quiz 3: Taylor, MC, Matrices, Norms (hw 4-5) — 70 points
Time: 9:30am or 12:30pm
Details: Without remote proctoring
HW 6: Lecture 11-12 — 24 points

Week 6

Tue, Sep 29, lecture 11
Linear system of equations — 2 points
Sync lecture at: 12:30pm
Group Activity 5: Matrices and Norms — 8 points
MP 1: Texas Hold'em — 24 points

Thu, Oct 01, lecture 12
Conditioning — 2 points
HW 5: Lecture 9-10 — 24 points

Week 5

Tue, Sep 22, lecture 9
Matrices and Norms
2 points

Sync lecture at: 12:30pm
Group Activity 4: Monte Carlo
8 points

Thu, Sep 24, lecture 10
Sparse systems + Linear System of Equations
2 points

Quiz 2: Errors, FP, IEEE, Rounding (hw 2-3)
70 points
Time: 9:30am or 12:30pm
Details: With CBTF remote proctoring
HW 4: Lectures 7-8
24 points

Week 4

Tue, Sep 15, lecture 7
Taylor Series
2 points

Sync lecture at: 12:30pm
Group Activity 3: Rounding
8 points

Thu, Sep 17, lecture 8
Monte Carlo Methods
2 points

HW 3: Lectures 5-6
24 points

Week 3

Tue, Sep 08, lecture 5
IEEE
2 points

Sync lecture at: 12:30pm
Group Activity 2: Floating Point
8 points

Thu, Sep 10, lecture 6
Rounding and cancellation
2 points

Quiz 1: Python, Linear Algebra (hw 1 + review)
70 points
Time: 9:30am or 12:30pm
Details: Without remote proctoring
HW 2: Lectures 3-4
24 points

Week 2

Tue, Sep 01, lecture 3
Errors, Big-O notation, plots
2 points

Sync lecture at: 12:30pm
Group Activity 1: Python
8 points

lecture activity • annotated slides

Thu, Sep 03, lecture 4
Floating Point
2 points

HW 1: Lectures 1-2
24 points

Week 1

Tue, Aug 25, lecture 1
Course syllabus and introduction

No pre-recorded video (but I will post the zoom recording from the sync lectures)
Sync lecture at: 9:30am AND 12:30pm

Thu, Aug 27, lecture 2
Python Intro
2 points

No pre-recorded video. Instead complete the self-guided Python notebook that is included in the lecture activity. Mariana will be available on Zoom today 10-11am and 1-2pm to provide additional help (use the office hours zoom link).

lecture activity