## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- Finish the 5.4-6 HW and Q early to be ready for the Assessment
- Last Assessment: Assessment 8 is this week on 5.3-6.
- No proof or T/F
- Be able to diagonalize a matrix
- Be able to find complex eigenvectors and eigenvalues
- Understand the basics of dynamical systems
- Find rotation-scaling matrices similar to $2 \times 2$ matrices with complex eigenvalues.
- We will go over the start of 6.2 on Friday saw watch that video before Friday ©


## What's up next calendar

| $5 / 31$ | Wed | Catch-up and review day |  |  |
| ---: | :--- | :--- | :--- | :--- |
| $6 / 1$ | Thu | Assessment 8 (5.3-6), Discussion Seminar VIII |  |  |
| $6 / 2$ | Fri | 6.2: Orthogonal Sets |  |  |
| $6 / 3$ | Sat | Weekend - No Class |  |  |
| $6 / 4$ | Sun | Weekend - No Class |  |  |
| $6 / 5$ | Mon | 6.2: Orthogonal Sets | $5.4-6$ HW \& Q | Slack 9 and Notes $9(5.4-6.1)$ |
| $6 / 6$ | Tue | $6.3 \& 6.4:$ Orthogonal Projections \& Gram-Schmidt |  |  |
| $6 / 7$ | Wed | $6.5 \& 6.6:$ Least-Squares Problems | 6.1 HW \& Q |  |
| $6 / 8$ | Thu | Catch-up and review day |  |  |
| $6 / 9$ | Fri | Catch-up and review day | 6.2 HW \& Q |  |
| $6 / 10$ | Sat | Weekend - No Class |  |  |
| $6 / 11$ | Sun | Weekend - No Class |  |  |
| $6 / 12$ | Mon | Final Exam $(10-11: 50$ am) | $6.3 / 4$ HW \& Q | Slack 10 |
| $6 / 13$ | Tue | Final Exam (11-12:50 pm) |  |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- Finish the 5.4-6 HW and Q early to be ready for the Assessment
- Last Assessment: Assessment 8 is this week on 5.3-6.
- No proof or T/F
- Be able to diagonalize a matrix
- Be able to find complex eigenvectors and eigenvalues
- Understand the basics of dynamical systems
- Find rotation-scaling matrices similar to $2 \times 2$ matrices with complex eigenvalues.
- We will go over the start of 6.2 on Friday saw watch that video before Friday $\mathrm{S}_{6}$.


## What's up next calendar

| 5/31 | Wed | 6.1: Inner Product, Length, \& Orthogonality |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 6/1 | Thu | Assessment 8 (5.3-6), Discussion Seminar VIII |  |  |
| 6/2 | Fri | No class on Fridays |  |  |
| 6/3 | Sat | Weekend - No Class |  |  |
| 6/4 | Sun | Weekend - No Class | 5.4-6 HW \& Q | Slack 9 and Notes 9 (5.4-6.1) |
| 6/5 | Mon | 6.2: Orthogonal Sets |  |  |
| 6/6 | Tue | 6.2: Orthogonal Sets | 6.1 HW \& Q |  |
| 6/7 | Wed | 6.3 \& 6.4: Orthogonal Projections \& Gram-Schmidt |  |  |
| 6/8 | Thu | 6.5 \& 6.6: Least-Squares Problems | 6.2 HW \& Q |  |
| 6/9 | Fri | No class on Fridays |  |  |
| 6/10 | Sat | Weekend - No Class |  |  |
| 6/11 | Sun | Weekend - No Class | 6.3/4 HW \& Q | Slack 10 |
| 6/12 | Mon | Final Exam (10-11:50 am) |  |  |
| 6/13 | Tue | Final Exam (11-12:50 pm) | 6.5/6 HW \& Q |  |

## Tuesday, May 30, 2023

## 10-10:50 am (17-101)

Home stretch! Just four lessons to go!

## What to do to be ready for tomorrow

- Finish the 5.4-6 HW and Q early to be ready for the Assessment
- Tomorrow is a catch-up day
- Last Assessment: Assessment 8 is this week on 5.3-6.


## What's up next calendar

| 5/30 | Tue | 6.1: Inner Product, Length, \& Orthogonality |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 5/31 | Wed | Catch-up and review day |  |  |
| 6/1 | Thu | Assessment 8 (5.3-6), Discussion Seminar VIII |  |  |
| 6/2 | Fri | 6.2: Orthogonal Sets |  |  |
| 6/3 | Sat | Weekend - No Class |  |  |
| 6/4 | Sun | Weekend - No Class | 5.4-6 HW \& Q | Slack 9 and Notes 9 (5.4-6.1) |
| 6/5 | Mon | 6.2: Orthogonal Sets |  |  |
| 6/6 | Tue | 6.3 \& 6.4: Orthogonal Projections \& Gram-Schmidt | 6.1 HW \& Q |  |
| 6/7 | Wed | 6.5 \& 6.6: Least-Squares Problems |  |  |
| 6/8 | Thu | Catch-up and review day | 6.2 HW \& Q |  |
| 6/9 | Fri | Catch-up and review day |  |  |
| 6/10 | Sat | Weekend - No Class |  |  |
| 6/11 | Sun | Weekend - No Class | 6.3/4 HW \& Q | Slack 10 |
| 6/12 | Mon | Final Exam (10-11:50 am) |  |  |
| 6/13 | Tue | Final Exam (11-12:50 pm) | 6.5/6 HW \& Q |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- Finish the 5.4-6 HW and Q early to be ready for the Assessment
- Watch the 6.1 video to be ready for class tomorrow (the last chapter!)
- Catch-up tomorrow at 10 am if you are interested and available
- Last Assessment: Assessment 8 is this week on 5.3-6.


## What's up next calendar

| 5/30 | Tue | 5.4-6: Dynamical Systems |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 5/31 | Wed | 6.1: Inner Product, Length, \& Orthogonality |  |  |
| 6/1 | Thu | Assessment 8 (5.3-6), Discussion Seminar VIII |  |  |
| 6/2 | Fri | No class on Fridays |  |  |
| 6/3 | Sat | Weekend - No Class |  |  |
| 6/4 | Sun | Weekend - No Class | 5.4-6 HW \& Q | Slack 9 and Notes 9 (5.4-6.1) |
| 6/5 | Mon | 6.2: Orthogonal Sets |  |  |
| 6/6 | Tue | 6.2: Orthogonal Sets | 6.1 HW \& Q |  |
| 6/7 | Wed | 6.3 \& 6.4: Orthogonal Projections \& Gram-Schmidt |  |  |
| 6/8 | Thu | 6.5 \& 6.6: Least-Squares Problems | 6.2 HW \& Q |  |
| 6/9 | Fri | No class on Fridays |  |  |
| 6/10 | Sat | Weekend - No Class |  |  |
| 6/11 | Sun | Weekend - No Class | 6.3/4 HW \& Q | Slack 10 |
| 6/12 | Mon | Final Exam (10-11:50 am) |  |  |
| 6/13 | Tue | Final Exam (11-12:50 pm) | 6.5/6 HW \& Q |  |

Wednesday, May 24, 2023

## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- Finish the 5.2 HW and Q early to be ready for the Assessment
- Assessment 7 on 4.6-5.2 is this week
- No proofs or T/F this week
- Change of coordinates (with numbers and/or graphs).
- Finding eigenvalues and eigenvectors
- Bring a printed a copy of Discussion 7 on proofs
- We will continue the dynamical systems on Friday


## What's up next calendar

| $5 / 24$ | Wed | Catch-up and review day |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $5 / 25$ | Thu | Assessment 7 (4.6-5.2), Discussion Seminar VII |  |  |
| $5 / 26$ | Fri | $5.4-6:$ Dynamical Systems |  |  |
| $5 / 27$ | Sat | Weekend - No Class |  |  |
| $5 / 28$ | Sun | Weekend - No Class |  |  |
| $5 / 29$ | Mon | No class - Memorial Day |  |  |
| $5 / 30$ | Tue | 6.1: Inner Product, Length, \& Orthogonality |  |  |
| $5 / 31$ | Wed | Catch-up and review day |  |  |
| $6 / 1$ | Thu | Assessment 8 (5.3-6), Discussion Seminar VIII |  |  |
| $6 / 2$ | Fri | 6.2: Orthogonal Sets | Slack 8 and Notes 8 (5.2-3) |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- Finish the 5.2 HW and Q early to be ready for the Assessment
- Assessment 7 on 4.6-5.2 is this week
- No proofs or T/F this week
- Change of coordinates (with numbers and/or graphs).
- Finding eigenvalues and eigenvectors
- Bring a printed a copy of Discussion 7 on proofs
- You've been such a wonderful class ...
- We will continue the dynamical systems on Tuesday


## What's up next calendar

| $5 / 24$ | Wed | 5.4-6: Dynamical Systems |  |  |
| ---: | :--- | :--- | :--- | :--- |
| $5 / 25$ | Thu | Assessment 7 (4.6-5.2), Discussion Seminar VII |  |  |
| $5 / 26$ | Fri | No class on Fridays |  |  |
| $5 / 27$ | Sat | Weekend - No Class |  |  |
| $5 / 28$ | Sun | Weekend - No Class |  |  |
| $5 / 29$ | Mon | No class - Memorial Day |  |  |
| $5 / 30$ | Tue | 5.4-6: Dynamical Systems | 5.3 HW \& Q | Slack 8 and Notes 8 (5.2-3) |
| $5 / 31$ | Wed | 6.1: Inner Product, Length, \& Orthogonality |  |  |
| $6 / 1$ | Thu | Assessment 8 (5.3-6), Discussion Seminar VIII |  |  |

Wednesday, May 17, 2023

## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- Finish the 4.5 HW and Q early to be ready for the Assessment
- Assessment 6 on 4.2-5 is this week
- Three named theorems in these sections, Zero (?) named theorems in Chapters 5 and 6
- Identifying a basis: Need two of (a.) linear independence, (b.) span, (c.) the right number of vectors.
- A basis for Col A vs the subspace Nul A
- Be able to go back and forth between standard coordinates and B-coordinates
- Using parallelogram grids
- Isomorphisms between Pn and Rn ... or M2x2 and R4.
- Bring a printed a copy of Discussion 6 on "Own your Body's Data"
- Watch the 5.2 video in prep for Friday


## What's up next calendar

| $5 / 17$ | Wed | Catch-up and review day |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $5 / 18$ | Thu | Assessment 6 (4.2-5), Discussion Seminar VI | 4.5 HW \& Q |  |
| $5 / 19$ | Fri | 5.2: The Characteristic Equation |  |  |
| $5 / 20$ | Sat | Weekend - No Class |  |  |
| $5 / 21$ | Sun | Weekend - No Class | 4.6 HW \& Q | Slack 7 and Notes 7 (4.5-5.1) |
| $5 / 22$ | Mon | 5.3: Diagonalization |  |  |
| $5 / 23$ | Tue | $5.4-6:$ Dynamical Systems | 5.1 HW \& Q |  |
| $5 / 24$ | Wed | Catch-up and review day |  |  |
| $5 / 25$ | Thu | Assessment 7 (4.6-5.2), Discussion Seminar VII | 5.2 HW \& Q |  |
| $5 / 26$ | Fri | 5.4-6: Dynamical Systems |  |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- Finish the 4.5 HW and Q early to be ready for the Assessment
- Assessment 6 on 4.2-5 is this week
- Three named theorems in these sections, Zero (?) named theorems in Chapters 5 and 6
- Identifying a basis: Need two of (a.) linear independence, (b.) span, (c.) the right number of vectors.
- A basis for Col A vs the subspace Nul A
- Be able to go back and forth between standard coordinates and B-coordinates
- Using parallelogram grids
- Isomorphisms between Pn and Rn ... or M2x2 and R4.
- Bring a printed a copy of Discussion 6 on "Own your Body's Data"
- Watch the 5.2 video in prep for Monday


## What's up next calendar

| $5 / 17$ | Wed | 5.1: Eigenvectors \& Eigenvalues |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $5 / 18$ | Thu | Assessment 6 (4.2-5), Discussion Seminar VI |  |  |
| $5 / 19$ | Fri | No class on Fridays |  |  |
| $5 / 20$ | Sat | Weekend - No Class |  |  |
| $5 / 21$ | Sun | Weekend - No Class |  |  |
| $5 / 22$ | Mon | 5.2: The Characteristic Equation | 4.6 HW \& Q | Slack 7 and Notes 7 (4.5-5.1) |
| $5 / 23$ | Tue | 5.3: Diagonalization |  |  |
| $5 / 24$ | Wed | $5.4-6:$ Dynamical Systems | 5.1 HW \& Q |  |
| $5 / 25$ | Thu | Assessment 7 (4.6-5.2), Discussion Seminar VII |  |  |

Tuesday, May 16, 2023

## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- Catch-up day tomorrow
- $\quad$ 4.4 HW and Q due tonight
- Finish the 4.5 HW and Q early to be ready for the Assessment
- Assessment 6 on 4.2-5 is this week
- Bring a printed a copy of Discussion 6 on "Own your Body's Data"
- Graduation
- I'm trying to talk to every student about graduation.
- Graduating is different than walking in the ceremony (both are good)
- I believe that most students are eligible to graduate

What's up next calendar

| $5 / 16$ | Tue | 5.1: Eigenvectors \& Eigenvalues | 4.4 HW \& Q |  |
| :--- | :--- | :--- | :--- | :--- |
| $5 / 17$ | Wed | Catch-up and review day |  |  |
| $5 / 18$ | Thu | Assessment 6 (4.2-5), Discussion Seminar VI | 4.5 HW \& Q |  |
| $5 / 19$ | Fri | $5.2:$ The Characteristic Equation |  |  |
| $5 / 20$ | Sat | Weekend - No Class |  |  |
| $5 / 21$ | Sun | Weekend - No Class | 4.6 HW \& Q | Slack 7 and Notes 7 (4.5-5.1) |
| $5 / 22$ | Mon | 5.3: Diagonalization |  |  |
| $5 / 23$ | Tue | 5.4-6: Dynamical Systems | 5.1 HW \& Q |  |
| $5 / 24$ | Wed | Catch-up and review day |  |  |
| $5 / 25$ | Thu | Assessment 7 (4.6-5.2), Discussion Seminar VII | 5.2 HW \& Q |  |
| $5 / 26$ | Fri | $5.4-6:$ Dynamical Systems |  |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- Watch 5.1 video for tomorrow
- $\quad 4.4 \mathrm{HW}$ and Q due tonight
- Finish the 4.5 HW and Q early to be ready for the Assessment
- Assessment 6 on 4.2-5 is this week
- Bring a printed a copy of Discussion 6 on "Own your Body's Data"
- Graduation
- I'm trying to talk to every student about graduation.
- Graduating is different than walking in the ceremony (both are good)
- I believe that most students are eligible to graduate

What's up next calendar

| 5/16 | Tue | 4.6: Change of Basis | 4.4 HW \& Q |  |
| :---: | :---: | :---: | :---: | :---: |
| 5/17 | Wed | 5.1: Eigenvectors \& Eigenvalues |  |  |
| 5/18 | Thu | Assessment 6 (4.2-5), Discussion Seminar VI | 4.5 HW \& Q |  |
| 5/19 | Fri | No class on Fridays |  |  |
| 5/20 | Sat | Weekend - No Class |  |  |
| 5/21 | Sun | Weekend - No Class | 4.6 HW \& Q | Slack 7 and Notes 7 (4.5-5.1) |
| 5/22 | Mon | 5.2: The Characteristic Equation |  |  |
| 5/23 | Tue | 5.3: Diagonalization | 5.1 HW \& Q |  |
| 5/24 | Wed | 5.4-6: Dynamical Systems |  |  |
| 5/25 | Thu | Assessment 7 (4.6-5.2), Discussion Seminar VII | 5.2 HW \& Q |  |

## Monday, May 15, 2023

## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- Watch 5.1 video for tomorrow
- 4.4 HW and Q due Tuesday night
- Assessment 6 on 4.2-5 is this week
- Bring a printed a copy of Discussion 6 on "Own your Body's Data"
- Graduation
- I'm trying to talk to every student about graduation.
- Graduating is different than walking in the ceremony (both are good)
- I believe that most students are eligible to graduate


## What's up next calendar

| $5 / 15$ | Mon | 4.6: Change of Basis |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $5 / 16$ | Tue | 5.1: Eigenvectors \& Eigenvalues | 4.4 HW \& Q |  |
| $5 / 17$ | Wed | Catch-up and review day |  |  |
| $5 / 18$ | Thu | Assessment 6 (4.2-5), Discussion Seminar VI |  |  |
| $5 / 19$ | Fri | 5.2: The Characteristic Equation |  |  |
| $5 / 20$ | Sat | Weekend - No Class |  |  |
| $5 / 21$ | Sun | Weekend - No Class |  |  |
| $5 / 22$ | Mon | 5.3: Diagonalization | 4.6 HW \& Q | Slack 7 and Notes 7 (4.5-5.1) |
| $5 / 23$ | Tue | 5.4-6: Dynamical Systems |  |  |
| $5 / 24$ | Wed | Catch-up and review day | 5.1 HW \& Q |  |
| $5 / 25$ | Thu | Assessment 7 (4.6-5.2), Discussion Seminar VII |  |  |
| $5 / 26$ | Fri | 5.4-6: Dynamical Systems | 5.2 HW \& Q |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- Watch 5.1 video for tomorrow
- 4.4 HW and Q due Tuesday night
- Assessment 6 on 4.2-5 is this week
- Bring a printed a copy of Discussion 6 on "Own your Body's Data"
- Graduation
- I'm trying to talk to every student about graduation.
- Graduating is different than walking in the ceremony (both are good)
- I believe that most students are eligible to graduate

What's up next calendar

| $5 / 15$ |  |  |  |
| :--- | :--- | :--- | :--- |

## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- Watch the 4.6 video for Monday
- 4.3 HW and Q due Sunday night (along with Slack and the 4.3-4 notes)
- Graduation
- Have you applied?
- Looking for students that will have 90 credits after this quarter but are not presently planning to graduate from Highline


## What's up next calendar

| 5/12 | Fri | 4.5: Dimension and Rank |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 5/13 | Sat | Weokend No Class |  |  |
| 5/14 | Sun | Neekend No Class | 4.3 HW \& Q | Slack 6 and Notes 6 (4.3-4) |
| 5/15 | Mon | 4.6: Change of Basis |  |  |
| 5/16 | Tue | 5.1: Eigenvectors \& Eigenvalues | 4.4 HW \& Q |  |
| 5/17 | Wed | Catch-up and review day |  |  |
| 5/18 | Thu | Assessment 6 (4.2-5), Discussion Seminar VI | 4.5 HW \& Q |  |

## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- Finish the 4.5 video for Friday
- 4.3 HW and Q due Tuesday night
- Assessment 5 on 2.3, 3.1/2, and 4.1 is tomorrow
- No calculator
- Memorize the Invertible Matrix Theorem, definition of a Subspace
- Be able to find determinants by hand (anything bigger than $3 \times 3$ will have lots of zeros)
- Be able to show that a space is/isn't a subspace
- Bring a printed a copy of Discussion 5 on the History of Linear Algebra to class tomorrow


## What's up next calendar

| 5/10 | Wed | Catch-up and review day |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 5/11 | Thu | Assessment 5 (2.3, 3.1/2, 4.1), Discussion Seminar V |  |  |
| 5/12 | Fri | 4.5: Dimension and Rank |  |  |
| 5/13 | Sat | Weekeno No Class |  |  |
| 5/14 | Sun | Heekend No Class: | 4.3 HW \& Q | Slack 6 and Notes 6 (4.3-4) |
| 5/15 | Mon | 4.6: Change of Basis |  |  |
| 5/16 | Tue | 5.1: Eigenvectors \& Eigenvalues | 4.4 HW \& Q |  |
| 5/17 | Wed | Catch-up and review day |  |  |
| 5/18 | Thu | Assessment 6 (4.2-5), Discussion Seminar VI | 4.5 HW \& Q |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- Finish the 4.5 video for Monday
- 4.3 HW and Q due Tuesday night
- Assessment 5 on 2.3, 3.1/2, and 4.1 is tomorrow
- No calculator
- Memorize the Invertible Matrix Theorem, definition of a Subspace
- Be able to find determinants by hand (anything bigger than $3 \times 3$ will have lots of zeros)
- Be able to show that a space is/isn't a subspace
- Bring a printed a copy of Discussion 5 on the History of Linear Algebra to class tomorrow


## What's up next calendar

| 5/10 Wed | Catch-up and review day |  |  |
| :---: | :---: | :---: | :---: |
| 5/11 Thu | Assessment 5 (2.3, 3.1/2, 4.1), Discussion Seminar V |  |  |
| 5/12 Fri | No classon thdays |  |  |
| 5/13 Sat | Weekeno no Class |  |  |
| 5/14 Sun | Weekeno No Class | 4.3 HW \& Q | Slack 6 and Notes 6 (4.3-4) |
| 5/15 Mon | 4.5: Dimension and Rank |  |  |
| 5/16 Tue | 4.6: Change of Basis | 4.4 HW \& Q |  |
| 5/17 Wed | 5.1: Eigenvectors \& Eigenvalues |  |  |
| 5/18 Thu | Assessment 6 (4.2-5), Discussion Seminar VI | 4.5 HW \& Q |  |

## Monday, May 8, 2023

## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- Finish the 4.4 video (the second half on isomorphisms is a bit challenging)
- 4.2 HW and Q due Tuesday night
- Assessment 5 on $2.3,3.1 / 2$, and 4.1 on Thursday
- Discussion 5 on the History of Linear Algebra is due Thursday


## What's up next calendar

| 5/8 | Mon | 4.4: Coordinates |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 5/9 | Tue | 4.4: Coordinates | 4.2 HW \& Q |  |
| 5/10 | Wed | Catch-up and review day |  |  |
| 5/11 | Thu | Assessment 5 (2.3, 3.1/2, 4.1), Discussion Seminar V |  |  |
| 5/12 | Fri | 4.5: Dimension and Rank |  |  |
| 5/13 | Sat | Weekeno No Class |  |  |
| 5/14 | Sun | Weekeno No Class | 4.3 HW \& Q | Slack 6 and Notes 6 (4.3-4) |
| 5/15 | Mon | 4.6: Change of Basis |  |  |
| 5/16 | Tue | 5.1: Eigenvectors \& Eigenvalues | 4.4 HW \& Q |  |
| 5/17 | Wed | Catch-up and review day |  |  |
| 5/18 | Thu | Assessment 6 (4.2-5), Discussion Seminar VI | 4.5 HW \& Q |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- Finish the 4.4 video (the second half on isomorphisms is a bit challenging)
- 4.2 HW and Q due Tuesday night
- Assessment 5 on 2.3, 3.1/2, and 4.1 on Thursday
- Discussion 5 on the History of Linear Algebra is due Thursday


## What's up next calendar



## Wednesday, May 3, 2023

## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- No video for tomorrow
- Tomorrow I will lecture through 4.3 (video watching is optional)
- No Assessment and no discussion seminar on Thursday
- Watch the 4.4 video in prep for Monday


## What's up next calendar

| 5/3 | Wed | Catch-up and review day |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 5/4 | Thu | 4.3: Linearly Independent Sets; Bases | 3.1-2 HW \& Q |  |
| 5/5 | Fri | No closs Math Conferehee |  |  |
| 5/6 | Sat | Heekenot No Class |  |  |
| 5/7 | Sun | Weokeno Ho Class | 4.1 HW \& Q | Slack 5 and Notes 5 (4.1-2) |
| 5/8 | Mon | 4.4: Coordinates |  |  |
| 5/9 | Tue | 4.4: Coordinates | 4.2 HW \& Q |  |
| 5/10 | Wed | Catch-up and review day |  |  |
| 5/11 | Thu | Assessment 5 (2.3, 3.1/2, 4.1), Discussion Seminar V |  |  |
| 5/12 | Fri | 4.5: Dimension and Rank |  |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- No video for tomorrow
- Tomorrow I will lecture through 4.3 (video watching is optional)
- No Assessment and no discussion seminar on Thursday
- Watch the 4.4 video in prep for Monday


## What's up next calendar



## Tuesday, May 2

## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- No video for tomorrow
- Tomorrow (Wednesday) is a catch-up day. Please come prepared with questions.
- No Assessment and no discussion seminar on Thursday
- On Thursday, I will lecture through 4.3 (video watching is optional)


## What's up next calendar

| $5 / 1$ | Mon | 4.1: Vector Spaces and Subspaces |  |  |
| ---: | :--- | :--- | :--- | :--- |
| $5 / 2$ | Tue | 4.2: Null Spaces, Column Spaces, and Linear Transformations |  |  |
| $5 / 3$ | Wed | Catch-up and review day |  |  |
| $5 / 4$ | Thu | 4.3: Linearly Independent Sets; Bases |  |  |
| $5 / 5$ | Fri | No class - Math Conference |  |  |
| $5 / 6$ | Sat | Weekend - No Class |  |  |
| $5 / 7$ | Sun | Weekend - No Class |  |  |
| $5 / 8$ | Mon | 4.4: Coordinates | 4.1 HW \& Q | Slack 5 and Notes 5 (4.1-2) |
| $5 / 9$ | Tue | 4.4: Coordinates |  |  |
| $5 / 10$ | Wed | Catch-up and review day | 4.2 HW \& Q |  |
| $5 / 11$ | Thu | Assessment 5 (4.1-2), Discussion Seminar V |  |  |
| $5 / 12$ | Fri | $4.5:$ Dimension and Rank |  |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- 4.2 video for tomorrow
- Tomorrow (Wednesday) is a catch-up day at 10 am. Please come prepared with questions.
- No Assessment and no discussion seminar on Thursday
- On Thursday, I will lecture through 4.3 (video watching is optional)


## What's up next calendar

| $5 / 1$ | Mon | 4.1: Vector Spaces and Subspaces |  |  |
| ---: | :--- | :--- | :--- | :--- |
| $5 / 2$ | Tue | 4.1: Vector Spaces and Subspaces |  |  |
| $5 / 3$ | Wed | $4.2:$ Null Spaces, Column Spaces, and Linear Transformations |  |  |
| $5 / 4$ | Thu | 4.3: Linearly Independent Sets; Bases | $3.1-2$ HW \& Q |  |
| $5 / 5$ | Fri | No class on Fridays |  |  |
| $5 / 6$ | Sat | Weekend - No Class |  |  |
| $5 / 7$ | Sun | Weekend - No Class | 4.1 HW \& Q | Slack 5 and Notes 5 (4.1-2) |
| $5 / 8$ | Mon | 4.4: Coordinates |  |  |
| $5 / 9$ | Tue | 4.4: Coordinates | 4.2 HW \& Q |  |
| $5 / 10$ | Wed | Catch-up and review day |  |  |
| $5 / 11$ | Thu | Assessment 5 (4.1-2), Discussion Seminar V |  |  |

Wednesday, April 26, 2023

## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- No video for tomorrow
- Note: There was an issue with the $3.1 / 2$ video. The links now jump part way into the videos ... this is correct.
- Please watch the 4.1 video in prep for Friday
- 2.2 HW and Q due tomorrow night, but highly recommended before the Assessment tomorrow.
- Assessment notes
- There are three proofs covered in the videos (two in 1.9 and one in 2.2)
- Key terms: one-to-one, onto, transpose, commutative property of multiplication, what is the short cut formula for finding the inverse of a $2 \times 2$ matrix? And does this formula work for matrices with other dimensions?
- How to show work: Write down the matrices as you would enter them in the calculator and then give the answer. In particular, write out [A \| I] when looking for the inverse.
- Make sure you can find the matrix of a linear transformation.
- Next week: No Assessment IV. Instead, would you like a catch-up day or for me to lecture a section (and save you a video)?


## What's up next calendar

| $4 / 24$ | Mon | 2.3: Characteristics of Invertible Matrices |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $4 / 25$ | Tue | 3.1 \& 3.2: Determinants |  |  |
| $4 / 26$ | Wed | Catch-up and review day |  |  |
| $4 / 27$ | Thu | Assessment 3 (1.9-2.2), Discussion Seminar III |  |  |
| $4 / 28$ | Fri | 4.1: Vector Spaces and Subspaces | 2.2 HW \& Q |  |
| $4 / 29$ | Sat | Weekend - No Class |  |  |
| $4 / 30$ | Sun | Weekend - No Class |  |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- No video for tomorrow
- Note: There was an issue with the $3.1 / 2$ video. The links now jump part way into the videos ... this is correct.
- Please watch the 4.1 video in prep for Monday
- 2.2 HW and Q due tomorrow night, but highly recommended before the Assessment tomorrow.
- Assessment notes
- There are three proofs covered in the videos (two in 1.9 and one in 2.2)
- Key terms: one-to-one, onto, transpose, commutative property of multiplication, what is the short cut formula for finding the inverse of a $2 \times 2$ matrix? And does this formula work for matrices with other dimensions?
- How to show work: Write down the matrices as you would enter them in the calculator and then give the answer. In particular, write out [A|I] when looking for the inverse.
- Make sure you can find the matrix of a linear transformation.
- Next week: No Assessment IV. Instead, I'm thinking about lecturing a day to save you a video.


## What's up next calendar

None
Tuesday, April 25, 2023

## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- No video for tomorrow
- 2.1 HW and Q due Tuesday
- Prepare questions for the catch-up day tomorrow.

What's up next calendar

| 4/24 | Mon | 2.3: Characteristics of Invertible Matrices |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 4/25 | Tue | 3.1 \& 3.2: Determinants | 2.1 HW \& Q |  |
| 4/26 | Wed | Catch-up and review day |  |  |
| 4/27 | Thu | Assessment 3 (1.9-2.2), Discussion Seminar III | 2.2 HW \& Q |  |
| 4/28 | Fri | 4.1: Vector Spaces and Subspaces |  |  |
| 4/29 | Sat | Weekend - No Class |  |  |
| 4/30 | Sun | Weekend - No Class | 2.3 HW \& Q | Slack 4 and Notes 4 (2.2-3.2) |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- Watch the 3.1/2 video
- 2.1 HW and Q due today
- Catch-up lesson at 10 am tomorrow if you are interested and available.


## What's up next calendar

| $4 / 24$ | Mon | 2.2: Inverse of a Matrix |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $4 / 25$ | Tue | 2.3: Characteristics of Invertible Matrices | 2.1 HW \& Q |  |
| $4 / 26$ | Wed | 3.1 \& 3.2: Determinants |  |  |
| $4 / 27$ | Thu | Assessment 3 (1.9-2.2), Discussion Seminar III | 2.2 HW \& Q |  |
| $4 / 28$ | Fri | No class on Fridays |  |  |
| $4 / 29$ | Sat | Weekend - No Class |  |  |
| $4 / 30$ | Sun | Weekend - No Class |  | 2.3 HW \& Q |

## Monday, April 24, 2023

## 10-10:50 am (17-101)

What to do to be ready for tomorrow

- Watch the 3.1/2 video in prep for Monday
- 2.1 HW and Q due Tuesday

What's up next calendar

| $4 / 24$ | Mon | 2.3: Characteristics of Invertible Matrices |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $4 / 25$ | Tue | 3.1 \& 3.2: Determinants |  |  |
| $4 / 26$ | Wed | Catch-up and review day |  |  |
| $4 / 27$ | Thu | Assessment 3 (1.9-2.2), Discussion Seminar III |  |  |
| $4 / 28$ | Fri | 4.1: Vector Spaces and Subspaces | 2.2 HW \& Q |  |
| $4 / 29$ | Sat | Weekend - No Class |  |  |
| $4 / 30$ | Sun | Weekend - No Class |  |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- Watch the 2.3 video in prep for Tuesday
- 2.1 HW and Q due Tuesday
- After today, you will have seen all the material that will be on the next Assessment

What's up next calendar

| $4 / 24$ | Mon | 2.2: Inverse of a Matrix |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $4 / 25$ | Tue | 2.3: Characteristics of Invertible Matrices | 2.1 HW \& Q |  |
| $4 / 26$ | Wed | 3.1 \& 3.2: Determinants |  |  |
| $4 / 27$ | Thu | Assessment 3 (1.9-2.2), Discussion Seminar III | 2.2 HW \& Q |  |
| $4 / 28$ | Fri | No class on Fridays |  |  |
| $4 / 29$ | Sat | Weekend - No Class |  |  |
| $4 / 30$ | Sun | Weekend - No Class |  | 2.3 HW \& Q |

## Friday, April 21, 2023

## 10-10:50 am (17-101)

What to do to be ready for Monday

- Watch the 2.3 video in prep for Monday
- 1.9 HW and Q due Sunday
- Slack 3 and Notes 3 (1.8-2.1) due on Sunday
- After today, you will have seen all the material that will be on the next Assessment

What's up next calendar

| $4 / 21$ | Fri | 2.2: Inverse of a Matrix |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $4 / 22$ | Sat | Weekend - No Class |  |  |
| $4 / 23$ | Sun | Weekend - No Class |  |  |
| $4 / 24$ | Mon | 2.3: Characteristics of Invertible Matrices | 1.9 HW \& Q | Slack 3 and Notes 3 (1.8-2.1) |
| $4 / 25$ | Tue | 3.1 \& 3.2: Determinants |  |  |
| $4 / 26$ | Wed | Catch-up and review day | 2.1 HW \& Q |  |
| $4 / 27$ | Thu | Assessment 3 (1.9-2.2), Discussion Seminar III |  |  |
| $4 / 28$ | Fri | 4.1: Vector Spaces and Subspaces | 2.2 HW \& Q |  |

## 11-12:05 pm (17-101)

No class

## 10-10:50 am (17-101)

Correction from 1.9: True or false, a mapping $T: \mathbb{R}^{n} \rightarrow \mathbb{R}^{m}$ is one-to-one if each vector in $\mathbb{R}^{n}$ maps onto a unique vector in $\mathbb{R}^{m}$.

This is false. Every function maps its inputs onto unique outputs ... this is the definition of a function.

## What to do to be ready for Thursday

- Assessment 2 on 1.5-8 tomorrow.
- No video tonight!
- 1.8 HW and Q due Thursday, but it would be wise to complete them before the Assessment.
- Key vocab words for Assessment 2: Homogeneous equation, Trivial solution, Non-trivial solution to the homogeneous equation, Linearly independent, Linearly dependent, What is the connection between linear dependence/independence and the homogeneous equation? Standard basis vectors: $\vec{e}_{1}, \vec{e}_{2}, \ldots$, and Definition of a Linear Transformation
- Solutions or hints to T/F posted on my website
- You are responsible for the proofs in the notes and/or covered in class


## What's up next calendar

| $4 / 19$ | Wed | Catch-up and review day |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $4 / 20$ | Thu | Assessment 2 (1.5-8), Discussion Seminar II | 1.8 HW \& Q |  |
| $4 / 21$ | Fri | $2.2:$ Inverse of a Matrix |  |  |
| $4 / 22$ | Sat | Weekend - No Class |  |  |
| $4 / 23$ | Sun | Weekend - No Class | 1.9 HW \& Q | Slack 3 and Notes 3 (1.8-2.1) |

## 11-12:05 pm (17-101)

Correction from 1.9: True or false, a mapping $T: \mathbb{R}^{n} \rightarrow \mathbb{R}^{m}$ is one-to-one if each vector in $\mathbb{R}^{n}$ maps onto a unique vector in $\mathbb{R}^{m}$.

This is false. Every function maps its inputs onto unique outputs ... this is the definition of a function.

## What to do to be ready for Thursday

- Assessment 2 on 1.5-8 tomorrow.
- No video tonight!
- 1.8 HW and Q due Thursday, but it would be wise to complete them before the Assessment.
- Key vocab words for Assessment 2: Homogeneous equation, Trivial solution, Non-trivial solution to the homogeneous equation, Linearly independent, Linearly dependent, What is the connection between linear dependence/independence and the homogeneous equation?
Standard basis vectors: $\vec{e}_{1}, \vec{e}_{2}, \ldots$, and Definition of a Linear Transformation
- Solutions or hints to T/F posted on my website
- You are responsible for the proofs in the notes and/or covered in class


## What's up next calendar

| $4 / 19$ | Wed | 2.1: Matrix Operations |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $4 / 20$ | Thu | Assessment 2 (1.5-8), Discussion Seminar II | $1.8 \mathrm{HW} \& \mathrm{Q}$ |  |
| $4 / 21$ | Fri | No class on Fridays |  |  |
| $4 / 22$ | Sat | Weekend - No Class |  |  |
| $4 / 23$ | Sun | Weekend - No Class | 1.9 HW \& Q | Slack 3 and Notes 3 (1.8-2.1) |

Tuesday, April 18, 2023

## 10-10:50 am (17-101)

What to do to be ready for Wednesday

- No video tonight! Come with question for the catch-up day tomorrow.
- $\quad$ 1.7 HW and Q due tonight.
- Key vocab words for Assessment 2: Homogeneous equation, Trivial solution, Non-trivial solution to the homogeneous equation, Linearly independent, Linearly dependent, What is the connection between linear dependence/independence and the homogeneous equation? Standard basis vectors: $\vec{e}_{1}, \vec{e}_{2}, \ldots$, and Definition of a Linear Transformation
- Solutions or hints to T/F posted on my website


## What's up next calendar

| $4 / 17$ | Mon | 1.9: Matrix of a Linear Transformation | 1.6 HW |  |
| :--- | :--- | :--- | :--- | :--- |
| $4 / 18$ | Tue | 2.1: Matrix Operations | $1.7 \mathrm{HW} \& \mathrm{Q}$ |  |
| $4 / 19$ | Wed | Catch-up and review day |  |  |
| $4 / 20$ | Thu | Assessment 2 (1.5-8), Discussion Seminar II | $1.8 \mathrm{HW} \& \mathrm{Q}$ |  |
| $4 / 21$ | Fri | 2.2: Inverse of a Matrix |  |  |
| $4 / 22$ | Sat | Weekend - No Class |  |  |
| $4 / 23$ | Sun | Weekend - No Class | $1.9 \mathrm{HW} \&$ Q | Slack 3 and Notes 3 (1.8-2.1) |

## 11-12:05 pm (17-101)

## What to do to be ready for Wednesday

- Watch the 2.1 video.
- $\quad$ 1.7 HW and Q due tonight.
- Catch-up day tomorrow from 10-10:50 tomorrow in 17-101 if you are interested and available.
- Key vocab words for Assessment 2: Homogeneous equation, Trivial solution, Non-trivial solution to the homogeneous equation, Linearly independent, Linearly dependent, What is the connection between linear dependence/independence and the homogeneous equation? Standard basis vectors: $\vec{e}_{1}, \vec{e}_{2}, \ldots$, and Definition of a Linear Transformation
- Solutions or hints to T/F posted on my website


## What's up next calendar

| $4 / 17$ | Mon | 1.8: Linear Transformations | 1.6 HW |  |
| :--- | :--- | :--- | ---: | ---: |
| $4 / 18$ | Tue | 1.9: Matrix of a Linear Transformation | 1.7 HW \& Q |  |
| $4 / 19$ | Wed | 2.1: Matrix Operations |  |  |
| $4 / 20$ | Thu | Assessment 2 (1.5-8), Discussion Seminar II | $1.8 \mathrm{HW} \&$ Q |  |
| $4 / 21$ | Fri | No class on Fridays |  |  |
| $4 / 22$ | Sat | Weekend - No Class |  |  |
| $4 / 23$ | Sun | Weekend - No Class | 1.9 HW \& Q | Slack 3 and Notes 3 (1.8-2.1) |

## 10-10:50 am (17-101)

## What to do to be ready for Monday

- Watch the 2.1 video (possibly not re-edited).
- 1.6 HW (no quiz) due tonight.
- 1.7 HW and Q due tomorrow night.
- Note that there are more HW's due this week.
- Note: The end of chapter 1 is challenging, then things will lighten up for a few sections before getting serious again in chapter 4.
- Reminder: In order to drop an Assessment score, you need to attend $60 \%$ of the days I take attendance.

What's up next calendar

| $4 / 17$ | Mon | 1.9: Matrix of a Linear Transformation | 1.6 HW |  |
| :--- | :--- | :--- | ---: | :--- |
| $4 / 18$ | Tue | 2.1: Matrix Operations | 1.7 HW \& Q |  |
| $4 / 19$ | Wed | Catch-up and review day |  |  |
| $4 / 20$ | Thu | Assessment 2 (1.5-8), Discussion Seminar II | 1.8 HW \& Q |  |
| $4 / 21$ | Fri | 2.2: Inverse of a Matrix |  |  |
| $4 / 22$ | Sat | Weekend - No Class |  |  |
| $4 / 23$ | Sun | Weekend - No Class | 1.9 HW \& Q | Slack 3 and Notes 3 (1.8-2.1) |

## 11-12:05 pm (17-101)

What to do to be ready for Tuesday

- Watch the 1.9 video (longer video)
- 1.6 HW (no quiz) due tonight.
- 1.7 HW and Q due tomorrow night.
- Note that there are more HW's due this week.
- Note: The end of chapter 1 is challenging, then things will lighten up for a few sections before getting serious again in chapter 4.
- Reminder: In order to drop an Assessment score, you need to attend $60 \%$ of the days I take attendance.


## What's up next calendar

| $4 / 17$ | Mon | 1.8: Linear Transformations | 1.6 HW |  |
| :--- | :--- | :--- | :---: | :---: |
| $4 / 18$ | Tue | 1.9: Matrix of a Linear Transformation | $1.7 \mathrm{HW} \& \mathrm{Q}$ |  |
| $4 / 19$ | Wed | 2.1: Matrix Operations |  |  |
| $4 / 20$ | Thu | Assessment 2 (1.5-8), Discussion Seminar II | $1.8 \mathrm{HW} \&$ Q |  |
| $4 / 21$ | Fri | No class on Fridays |  |  |
| $4 / 22$ | Sat | Weekend - No Class |  |  |
| $4 / 23$ | Sun | Weekend - No Class | $1.9 \mathrm{HW} \&$ Q | Slack 3 and Notes 3 (1.8-2.1) |

## Friday, April 14, 2023

## 10-10:50 am (17-101)

## What to do to be ready for Monday

- Complete 1.5 HW and Quiz in MyLabs by Sunday night.
- Slack 2 and Notes 2 are due on Sunday night.
- Watch the 1.9 video (longer video)
- Note that there are more HW's due next week.
- Note: The end of chapter 1 is challenging, then things will lighten up for a few sections before getting serious again in chapter 4.

What's up next calendar

| 4/14 | Fri | 1.8: Linear Transformations |  |  |
| :--- | :--- | :--- | :---: | :---: |
| 4/15 | Sat | Weekend - No Class |  |  |
| 4/16 | Sun | Weekend - No Class |  |  |
| 4/17 | Mon | 1.9: Matrix of a Linear Transformation | $1.5 \mathrm{HW} \& \mathrm{Q}$ | Slack 2 and Notes 2 (1.4-7) |
| 4/18 | Tue | 2.1: Matrix Operations | 1.6 HW |  |
| 4/19 | Wed | Catch-up and review day |  |  |
| 4/20 | Thu | Assessment 2 (1.5-8), Discussion Seminar II |  |  |
| $4 / 21$ | Fri | 2.2: Inverse of a Matrix | 1.8 HW \& Q |  |

## 11-12:05 pm (17-101)

No class

## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- Complete 1.4 HW and Quiz in MyLabs as part of studying. No video for tomorrow!
- Complete your Discussion Seminar 1 assignment and bring a printed copy to class tomorrow.
- About Thursday
- No calculator section (show row reduction steps)
- A few T/F questions based upon what we have done in class.
- Proofs covered in the notes so far: Vector and matrix properties
- Skills: row reduction, interpreting a row reduced matrix as the solution of a system of linear equations (including with free variables), vector and matrix presentations, coefficient vs. augmented matrices
- Pro-tip: Look at the assessments I gave last quarter to better understand the style/structure of what you will be taking (expect 3ish pages). Warm-ups


## What's up next calendar

| $4 / 5$ | Wed | 1.2: Row Reduction and Echelon Form |  |  |
| ---: | :--- | :--- | :--- | :---: |
| $4 / 6$ | Thu | $1.3:$ Vector Equations | 1.1 HW \& Q | <- HW = MyLabs homework |
| $4 / 7$ | Fri | 1.4: The Matrix Equation Ax=b |  | and Q = MyLabs quiz |
| $4 / 8$ | Sat | Weekend - No Class |  |  |
| $4 / 9$ | Sun | Weekend - No Class | 1.2 HW \& Q | Slack 1 and Notes 1 (1.1-3) |
| $4 / 10$ | Mon | 1.5: Solution Sets of Linear Systems |  |  |
| $4 / 11$ | Tue | 1.7: Linear Independence | 1.3 HW \& Q |  |
| $4 / 12$ | Wed | Catch-up and review day |  |  |
| $4 / 13$ | Thu | Assessment 1 (1.1-4), Discussion Seminar I | 1.4 HW \& Q |  |
| $4 / 14$ | Fri | 1.8: Linear Transformations |  |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- Complete 1.4 HW and Quiz in MyLabs as part of studying. No video for tomorrow!
- Complete your Discussion Seminar 1 assignment and bring a printed copy to class tomorrow.
- About Thursday
- No calculator section (show row reduction steps)
- A few T/F questions based upon what we have done in class.
- Proofs covered in the notes so far: Vector and matrix properties
- Skills: row reduction, interpreting a row reduced matrix as the solution of a system of linear equations (including with free variables), vector and matrix presentations, coefficient vs. augmented matrices
- Pro-tip: Look at the assessments I gave last quarter to better understand the style/structure of what you will be taking (expect 3ish pages). Warm-ups

What's up next calendar

| 4/12 | Wed | 1.7: Linear Independence |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $4 / 13$ | Thu | Assessment 1 (1.1-4), Discussion Seminar I | 1.4 HW \& Q |  |
| $4 / 14$ | Fri | No class on Fridays |  |  |
| $4 / 15$ | Sat | Weekend - No Class |  |  |
| $4 / 16$ | Sun | Weekend - No Class | 1.5 HW \& Q | Slack 2 and Notes 2 (1.4-7) |
| 4/17 | Mon | 1.8: Linear Transformations | 1.6 HW |  |
| 4/18 | Tue | 1.9: Matrix of a Linear Transformation | 1.7 HW \& Q |  |
| 4/19 | Wed | 2.1: Matrix Operations |  |  |
| 4/20 | Thu | Assessment 2 (1.5-8), Discussion Seminar II | 1.8 HW \& Q |  |

## Tuesday, April 11

## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- 1.3 HW and Quiz in MyLabs are tonight about midnight
- No video for tomorrow!
- Tomorrow is our first catch-up day. Please be preparing questions that you would like to discuss.
- About Thursday
- No calculator section (show row reduction steps)
- A few T/F questions based upon what we have done in class.
- Proofs covered in the notes so far: Vector and matrix properties
- Skills: row reduction, interpreting a row reduced matrix as the solution of a system of linear equations (including with free variables), vector and matrix presentations, coefficient vs. augmented matrices


## What's up next calendar

| $4 / 10$ | Mon | 1.5: Solution Sets of Linear Systems |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $4 / 11$ | Tue | 1.7: Linear Independence | 1.3 HW \& Q |  |
| $4 / 12$ | Wed | Catch-up and review day |  |  |
| $4 / 13$ | Thu | Assessment 1 (1.1-4), Discussion Seminar I | 1.4 HW \& Q |  |
| $4 / 14$ | Fri | 1.8: Linear Transformations |  |  |
| $4 / 15$ | Sat | Weekend - No Class |  |  |
| $4 / 16$ | Sun | Weekend - No Class | 1.5 HW \& Q | Slack 2 and Notes 2 (1.4-7) |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- 1.3 HW and Quiz in MyLabs are tonight about midnight
- Watch and take notes on the 1.7 video
- Optional: Tomorrow is our first catch-up day at 10 am in 17-101. You are welcome to come and bring questions that you would like to discuss.
- About Thursday
- No calculator section (show row reduction steps)
- A few T/F questions based upon what we have done in class.
- Proofs covered in the notes so far: Vector and matrix properties

Skills: row reduction, interpreting a row reduced matrix as the solution of a system of linear equations (including with free variables), vector and matrix presentations, coefficient vs. augmented matrices

## What's up next calendar

| 4/10 | Mon | 1.4: The Matrix Equation $\mathrm{Ax}=\mathrm{b}$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 4/11 | Tue | 1.5: Solution Sets of Linear Systems | 1.3 HW \& Q |  |
| 4/12 | Wed | 1.7: Linear Independence |  |  |
| 4/13 | Thu | Assessment 1 (1.1-4), Discussion Seminar I | 1.4 HW \& Q |  |
| 4/14 | Fri | No class on Fridays |  |  |
| 4/15 | Sat | Weekend - No Class |  |  |
| 4/16 | Sun | Weekend - No Class | 1.5 HW \& Q | Slack 2 and Notes 2 (1.4-7) |

## Monday, April 10

## 10-10:50 am (17-101)

## What to do to be ready for tomorrow

- 1.3 HW and Quiz in MyLabs are due Tuesday about midnight
- Watch and take notes on the 1.7 video
- Section 1.6 is about applications. We covered a chemistry example in 1.5 and will take on a network flow question as part of 1.7.
- On Wednesday we will have our first catch-up day. Please be preparing questions that you would like to discuss.
- Pro-tips
- The proofs we have worked thus far haven "proofs of equality" and have all involved:
- Defining the variables you are working with arbitrarily
- A string of equivalences (similar to a proof of a trig identity)
- In 1.7 you will see four proofs. Two are if and only if (iff) proofs recognizable by their use of arrows pointing two directions. Two are if-then proofs.
- Put on your thinking cap (3).


## What's up next calendar

| $4 / 10$ | Mon | 1.5: Solution Sets of Linear Systems |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $4 / 11$ | Tue | 1.7: Linear Independence | 1.3 HW \& Q |  |
| $4 / 12$ | Wed | Catch-up and review day |  |  |
| $4 / 13$ | Thu | Assessment 1 (1.1-4), Discussion Seminar I | 1.4 HW \& Q |  |
| $4 / 14$ | Fri | 1.8: Linear Transformations |  |  |
| $4 / 15$ | Sat | Weekend - No Class |  |  |
| $4 / 16$ | Sun | Weekend - No Class | 1.5 HW \& Q | Slack 2 and Notes 2 (1.4-7) |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- 1.3 HW and Quiz in MyLabs are due Tuesday about midnight
- Watch and take notes on the 1.5 video
- Pro-tips
- After today, you have seen all the material that will be on Assessment 1. Make sure you can solve/answer all the questions from class.


## What's up next calendar

| 4/10 | Mon | 1.4: The Matrix Equation $\mathrm{Ax}=\mathrm{b}$ |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 4/11 | Tue | 1.5: Solution Sets of Linear Systems | 1.3 HW \& Q |  |
| 4/12 | Wed | 1.7: Linear Independence |  |  |
| 4/13 | Thu | Assessment 1 (1.1-4), Discussion Seminar I | 1.4 HW \& Q |  |
| 4/14 | Fri | No class on Fridays |  |  |
| 4/15 | Sat | Weekend - No Class |  |  |
| 4/16 | Sun | Weekend - No Class | 1.5 HW \& Q | Slack 2 and Notes 2 (1.4-7) |

## 10-10:50 am (17-206 < last day)

What to do to be ready for Monday

- 1.2 HW and Quiz in MyLabs are due Sunday about midnight
- Slack Assignment 1 is due (in Gradescope) on Sunday
- Notes (1.1-3) is due (in Gradescope) on Sunday
- Watch and take notes on the 1.5 video
- Pro-tips
- After today, you have seen all the material that will be on Assessment 1. Make sure you can solve/answer all the questions from class.
- If you want to see 1.4 (again), come to the 11 am class on Monday
- Room Change
- Starting Monday we will be in 17-101

What's up next calendar

| 4/6 | Thu | 1.3: Vector Equations | 1.1 HW \& Q | <- HW = MyLabs homework |
| :---: | :---: | :---: | :---: | :---: |
| 4/7 | Fri | 1.4: The Matrix Equation $\mathrm{Ax}=\mathrm{b}$ |  | and $\mathrm{Q}=$ MyLabs quiz |
| 4/8 | Sat | Weekend - No Class |  |  |
| 4/9 | Sun | Weekend - No Class | 1.2 HW \& Q | Slack 1 and Notes 1 (1.1-3) |
| 4/10 | Mon | 1.5: Solution Sets of Linear Systems |  |  |
| 4/11 | Tue | 1.7: Linear Independence | 1.3 HW \& Q |  |
| 4/12 | Wed | Catch-up and review day |  |  |
| 4/13 | Thu | Assessment 1 (1.1-4), Discussion Seminar I | 1.4 HW \& Q |  |

## 11-12:05 pm (17-101)

What to do to be ready for Monday
No class today

## 10-10:50 am (17-206)

## What to do to be ready for tomorrow

- 1.1 HW and Quiz in MyLabs are due tonight about midnight
- Watch and take notes on the 1.4 video
- Question: Does anyone need help getting into Canvas, MyLabs, Gradescope, or Slack?
- Question: Do you know the rough order/pattern for row reduction? Do you know how to check your results?
- Pro-tips
- Warm-ups
- If you want to see 1.4 on Monday (instead of Friday), come to the 11 am class
- Room Change
- Starting Monday we will be in 17-101


## What's up next calendar

| $4 / 6$ | Thu | $1.3:$ Vector Equations | $1.1 \mathrm{HW} \& \mathrm{Q}$ | $<-\mathrm{HW}=$ MyLabs homework |
| ---: | :--- | :--- | :---: | :---: |
| $4 / 7$ | Fri | 1.4: The Matrix Equation Ax=b |  | and Q = MyLabs quiz |
| $4 / 8$ | Sat | Weekend - No Class |  |  |
| $4 / 9$ | Sun | Weekend - No Class |  |  |
| $4 / 10$ | Mon | 1.5: Solution Sets of Linear Systems |  |  |
| $4 / 11$ | Tue | 1.7: Linear Independence | 1.3 HW \& Q |  |
| $4 / 12$ | Wed | Catch-up and review day |  |  |
| $4 / 13$ | Thu | Assessment 1 (1.1-4), Discussion Seminar I | 1.4 HW \& Q |  |

## 11-12:05 pm (17-101)

## What to do to be ready for Monday

- 1.1 HW and Quiz in MyLabs are due tonight about midnight
- Watch and take notes on the 1.4 video
- Question: Does anyone need help getting into Canvas, MyLabs, Gradescope, or Slack?
- Question: Do you know the rough order/pattern for row reduction? Do you know how to check your results?
- Pro-tips
- Warm-ups
- If you want to see 1.4 on Friday (instead of Monday), come to the 10 am class


## What's up next calendar

| $4 / 6$ | Thu | 1.3: Vector Equations | $1.1 \mathrm{HW} \& \mathrm{Q}$ | $<-$ HW = MyLabs homework |
| ---: | :--- | :--- | :---: | :---: |
| $4 / 7$ | Fri | No class on Fridays |  | and Q = MyLabs quiz |
| $4 / 8$ | Sat | Weekend - No Class |  |  |
| $4 / 9$ | Sun | Weekend - No Class |  |  |
| $4 / 10$ | Mon | 1.4: The Matrix Equation Ax=b |  |  |
| $4 / 11$ | Tue | 1.5: Solution Sets of Linear Systems | 1.3 HW \& Q |  |
| $4 / 12$ | Wed | 1.7: Linear Independence |  |  |
| $4 / 13$ | Thu | Assessment 1 (1.1-4), Discussion Seminar I | 1.4 HW \& Q |  |

## 10-10:50 am (17-206)

You guys are amazing! We had the odd incident with the lost student at the start of class yesterday. Yet even though I hadn't provided any instructions and left class before it started, you organized yourselves into groups and started doing math. I am very proud of all of you and was bragging about your amazingness to my colleagues.

## What to do to be ready for tomorrow

- 1.1 HW and Quiz in MyLabs are due tonight about midnight
- Watch and take notes on the 1.3 video
- Do you want me to extend out the deadline for Discussion Seminar 0 until tonight at 11:50 pm.
- Does anyone need help getting into Canvas, MyLabs, Gradescope, or Slack?
- Pro-tips
- The solutions to the group work are posted on my webpage. It's okay to check during class.
- I've been known to ask Assessment questions straight from the group work or notes.


## What's up next calendar

| $4 / 6$ | Thu | 1.3: Vector Equations | $1.1 \mathrm{HW} \& \mathrm{Q}$ | <- HW = MyLabs homework |
| ---: | :--- | :--- | :---: | :---: |
| $4 / 7$ | Fri | 1.4: The Matrix Equation Ax=b |  | and Q = MyLabs quiz |
| $4 / 8$ | Sat | Weekend - No Class |  |  |
| $4 / 9$ | Sun | Weekend - No Class | 1.2 HW \& Q | Slack 1 and Notes 1 (1.1-3) |
| $4 / 10$ | Mon | 1.5: Solution Sets of Linear Systems |  |  |
| $4 / 11$ | Tue | 1.7: Linear Independence | 1.3 HW \& Q |  |
| $4 / 12$ | Wed | Catch-up and review day |  |  |
| $4 / 13$ | Thu | Assessment 1 (1.1-4), Discussion Seminar I | 1.4 HW \& Q |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- 1.1 HW and Quiz in MyLabs are due tonight about midnight
- Watch and take notes on the 1.3 video
- Do you want me to extend out the deadline for Discussion Seminar 0 until tonight at 11:50 pm.
- Does anyone need help getting into Canvas, MyLabs, Gradescope, or Slack?
- Pro-tips
- The solutions to the group work are posted on my webpage. It's okay to check during class.
- I've been known to ask Assessment questions straight from the group work or notes.


## What's up next calendar

| 4/5 | Wed | 1.2: Row Reduction and Echelon Form |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 4/6 | Thu | 1.3: Vector Equations | 1.1 HW \& Q | <- HW = MyLabs homework |
| 4/7 | Fri | No class on Fridays |  | and $\mathrm{Q}=$ MyLabs quiz |
| 4/8 | Sat | Weekend - No Class |  |  |
| 4/9 | Sun | Weekend - No Class | 1.2 HW \& Q | Slack 1 and Notes 1 (1.1-3) |
| 4/10 | Mon | 1.4: The Matrix Equation $\mathrm{Ax}=\mathrm{b}$ |  |  |
| 4/11 | Tue | 1.5: Solution Sets of Linear Systems | 1.3 HW \& Q |  |
| 4/12 | Wed | 1.7: Linear Independence |  |  |
| 4/13 | Thu | Assessment 1 (1.1-4), Discussion Seminar I | 1.4 HW \& Q |  |

## Tuesday, April 4, 2023

## 10-10:50 am (17-206)

## What to do to be ready for tomorrow

- Watch and take notes on the 1.2 video
- Submit the Discussion Seminar 0 on tech by 11:50 pm tonight.
- Do you have access to the class Canvas page?
- Were you able to get into MyLabs (likely by requesting temporary access)
- Can you see all four Slack channels (check your old email)
- Did you get the invite to Gradescope (check your old email)
- Did you find my webpage
- Pro-tips
- There are time stamps on the videos
- I've started a collection of the videos explaining the proofs that are in the notes

What's up next calendar

| Date Topic |  | MyLabs | Gradescope |
| :---: | :--- | :--- | :---: |
| $4 / 3$ | Mon | Introductions |  |
| $4 / 4$ | Tue | 1.1: Systems of Linear Equations |  |
| $4 / 5$ | Wed | 1.2: Row Reduction and Echelon Form |  |
| $4 / 6$ | Thu | 1.3: Vector Equations | 1.1 HW \& Q |
| $4 / 7$ | Fri | 1.4: The Matrix Equation Ax=b |  |
| $4 / 8$ | Sat | Weekend - No Class |  |
| $4 / 9$ | Sun | Weekend - No Class |  |
|  |  |  |  |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- Watch and take notes on the 1.2 video
- Submit the Discussion Seminar 0 on tech by 11:50 pm tonight.
- Do you have access to the class Canvas page?
- Were you able to get into MyLabs (likely by requesting temporary access)
- Can you see all four Slack channels (check your old email)
- Did you get the invite to Gradescope (check your old email)
- Did you find my webpage
- Pro-tips
- There are time stamps on the videos
- I've started a collection of the videos explaining the proofs that are in the notes


## What's up next calendar

| Date Topic |  | MyLabs | Gradescope |
| :---: | :--- | :---: | :---: |
| $4 / 3$ | Mon | Introductions |  |
| $4 / 4$ | Tue | 1.1: Systems of Linear Equations |  |
| $4 / 5$ | Wed | 1.2: Row Reduction and Echelon Form | Discussion Seminar 0 |
| $4 / 6$ | Thu | 1.3: Vector Equations | 1.1 HW \& Q |
| $4 / 7$ | <ri | - HW = MyLabs homework |  |
| $4 / 8$ | Nat class on Fridays | Weekend - No Class |  |
| $4 /$ | Sun | Weekend - No Class |  |

## 10-10:50 am (17-206)

What to do to be ready for tomorrow

- Watch and take notes on the 1.1 video
- Start working on the Discussion Seminar 0 on tech ... Canvas, MyLabs, Slack, Gradescope, Webpage


## What's up next calendar

| Date Topic |  | MyLabs | Gradescope |  |
| :---: | :--- | :--- | :--- | :---: |
| $4 / 3$ | Mon | Introductions |  |  |
| $4 / 4$ | Tue | 1.1: Systems of Linear Equations |  | Discussion Seminar 0 |
| $4 / 5$ | Wed | $1.2:$ Row Reduction and Echelon Form |  |  |
| $4 / 6$ | Thu | 1.3: Vector Equations |  |  |
| $4 / 7$ | Fri | 1.4: The Matrix Equation Ax=b |  | and Q = MyLabs quiz |
| $4 / 8$ | Sat | Weekend - No Class |  |  |
| $4 / 9$ | Sun | Weekend - No Class | 1.2 HW \& Q | Slack 1 and Notes 1 (1.1-3) |

## 11-12:05 pm (17-101)

## What to do to be ready for tomorrow

- Watch and take notes on the 1.1 video
- Start working on the Discussion Seminar 0 on tech ... Canvas, MyLabs, Slack, Gradescope, Webpage


## What's up next calendar

| Date Topic |  | MyLabs |  | Gradescope |
| :---: | :--- | :--- | :--- | :---: |
| $4 / 3$ | Mon | Introductions |  |  |
| $4 / 4$ | Tue | 1.1: Systems of Linear Equations |  | Discussion Seminar 0 |
| $4 / 5$ | Wed | 1.2: Row Reduction and Echelon Form |  |  |
| $4 / 6$ | Thu | 1.3: Vector Equations | 1.1 HW \& Q | $<-$ HW = MyLabs homework |
| $4 / 7$ | Fri | No class on Fridays |  | and Q = MyLabs quiz |
| $4 / 8$ | Sat | Weekend - No Class |  |  |
| $4 / 9$ | Sun | Weekend - No Class |  |  |
|  |  |  |  |  |

