

Math190 - Topics in Algebra - AY2023-2024 spring

George McNinch

Lectures

| Date | DOW | Desc | Seq | Week | Details |
|-------|-----|---------|-----|------|--|
| 01/17 | Wed | Lecture | 1 | 1 | RT 1: groups & homomorphisms; linear algebra |
| 01/22 | Mon | Lecture | 2 | 2 | RT 2: representations; irreducibility |
| 01/24 | Wed | Lecture | 3 | 2 | RT 3: the regular repr; complete reducibility |
| 01/24 | Wed | Tufts | | 2 | Academic Date: <i>Last day to add a course</i> |
| 01/29 | Mon | Lecture | 4 | 3 | RT 4: Classifying representations |
| 01/31 | Wed | Lecture | 5 | 3 | RT 5: conjugacy classes; characters |
| 02/05 | Mon | Lecture | 6 | 4 | RT 6: Fourier transform; FFT |
| 02/07 | Wed | Lecture | 7 | 4 | RT 7: symmetric gps & probability |
| 02/12 | Mon | Lecture | 8 | 5 | RT 8: using GAP |
| 02/14 | Wed | Lecture | 9 | 5 | RT 9: follow-up on GAP |
| 02/19 | Mon | Tufts | | 6 | No classes: <i>Presidents' Day</i> |
| 02/21 | Wed | Lecture | 10 | 6 | ECC 1: Entropy and information channels |
| 02/21 | Wed | Tufts | | 6 | Academic Date: <i>Last day to drop a course without record</i> |
| 02/22 | Thu | Lecture | 11 | 6 | ECC 2: Finite fields; affine and proj spaces |
| 02/22 | Thu | Tufts | | 6 | Tufts: <i>Monday schedule</i> |
| 02/26 | Mon | Lecture | 12 | 7 | ECC 3: Block codes & asymptotics |
| 02/28 | Wed | Lecture | 13 | 7 | ECC 4: Linear codes, duals, & decoding |
| 03/04 | Mon | Lecture | 14 | 8 | ECC 5: cyclic codes; MDS codes |
| 03/06 | Wed | Lecture | 15 | 8 | ECC 6: |
| 03/11 | Mon | Lecture | 16 | 9 | ECC 7: |
| 03/13 | Wed | Lecture | 17 | 9 | ECC 8: |
| 03/16 | Sat | Tufts | | 9 | No classes: <i>Spring Break</i> |
| 03/17 | Sun | Tufts | | 9 | No classes: <i>Spring Break</i> |
| 03/18 | Mon | Tufts | | 10 | No classes: <i>Spring Break</i> |
| 03/19 | Tue | Tufts | | 10 | No classes: <i>Spring Break</i> |
| 03/20 | Wed | Tufts | | 10 | No classes: <i>Spring Break</i> |
| 03/21 | Thu | Tufts | | 10 | No classes: <i>Spring Break</i> |
| 03/22 | Fri | Tufts | | 10 | No classes: <i>Spring Break</i> |
| 03/23 | Sat | Tufts | | 10 | No classes: <i>Spring Break</i> |
| 03/24 | Sun | Tufts | | 10 | No classes: <i>Spring Break</i> |
| 03/25 | Mon | Lecture | 18 | 11 | FM 1: |
| 03/27 | Wed | Lecture | 19 | 11 | FM 2: |
| 04/01 | Mon | Lecture | 20 | 12 | FM 3: |
| 04/03 | Wed | Lecture | 21 | 12 | FM 4: |
| 04/03 | Wed | Tufts | | 12 | Academic Date: <i>Last day to withdraw from a course with W</i> |
| 04/03 | Wed | Tufts | | 12 | Academic Date: <i>Last day to select Pass/Fail Option</i> |
| 04/08 | Mon | Lecture | 22 | 13 | FM 5: |
| 04/10 | Wed | Lecture | 23 | 13 | FM 6: |
| 04/15 | Mon | Tufts | | 14 | No classes: <i>Patriots' Day</i> |
| 04/17 | Wed | Tufts | | 14 | No classes: <i>Makeup Day (no classes)</i> |
| 04/22 | Mon | Lecture | 24 | 15 | FM 7: |
| 04/24 | Wed | Lecture | 25 | 15 | FM 8: |

| Date | DOW | Desc | Seq | Week | Details |
|-------|-----|---------|-----|------|--|
| 04/29 | Mon | Lecture | 26 | 16 | FM 9: |
| 04/30 | Tue | Tufts | | 16 | Academic Date: <i>Reading Period</i> |
| 05/01 | Wed | Tufts | | 16 | Academic Date: <i>Reading Period</i> |
| 05/02 | Thu | Tufts | | 16 | Academic Date: <i>Reading Period</i> |
| 05/03 | Fri | Tufts | | 16 | Academic Date: <i>Final Exam Period</i> |
| 05/04 | Sat | Tufts | | 16 | Academic Date: <i>Final Exam Period</i> |
| 05/05 | Sun | Tufts | | 16 | Academic Date: <i>Final Exam Period</i> |
| 05/06 | Mon | Tufts | | 17 | Academic Date: <i>Final Exam Period</i> |
| 05/07 | Tue | Tufts | | 17 | Academic Date: <i>Final Exam Period</i> |
| 05/08 | Wed | Tufts | | 17 | Academic Date: <i>Final Exam Period</i> |
| 05/09 | Thu | Tufts | | 17 | Academic Date: <i>Final Exam Period</i> |
| 05/10 | Fri | Tufts | | 17 | Academic Date: <i>Final Exam Period</i> |

Bibliography