

## Schedule: Spring 2024 Mathematics 431.03 and 731.03 – Section 2

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**Text:** Fundamental Ideas of Analysis, M. Reed, Wiley

There may be small adjustments in the following schedule as the course goes on.

| Date     | Sections              | Problems                                                      | Quizzes and Exams |
|----------|-----------------------|---------------------------------------------------------------|-------------------|
| Jan. 11  | 1.4,1.1               | Week-1 Problems                                               | No quiz           |
| Jan. 16  | 1.3,2.1               | p.19: #1, 3(a),3(b),3(c) (assume disjoint sets)               | Quiz 1            |
| Jan. 18  | 2.1,2.2               | p.33: 2(a), 3(a), 4(b), 7, 9,<br>p.39: #1(d),4,7,9, Thm 2.2.3 |                   |
| Jan. 23  | 2.4,2.5               | p.50-51: #1,3,4,5,9,11,13                                     | Quiz 2            |
| Jan. 25  | 2.4,2.5               | p.54-55: # 1,3,4,5,9                                          |                   |
| Jan. 30  | 2.6, 3.1              | p.59: # 1,3,4,7, Cor.2.6.3                                    | Quiz 3            |
| Feb. 1   | 3.1, 3.2              | p.79: # 3,7,8,10,11, Thm 3.2.1                                |                   |
| Feb. 6   | 3.2, 3.3              | p.86: # 1,3,6,9,10                                            | Quiz 4            |
| Feb. 8   | 3.3                   | p.93-94-95: # 1,2,3,4,9,10,13,14,15                           |                   |
| Feb. 13  | Review                |                                                               | Quiz 5            |
| Feb. 15  | <b>Midterm Exam I</b> |                                                               |                   |
| Feb. 20  | 4.1, 4.2              | p.127-128: # 2,8,10,11,12 ,                                   |                   |
| Feb. 22  | 4.2, 4.3              | p.133-134 : # 3,4,5,8,11,14                                   |                   |
| Feb. 27  | 4.3, 3.4              | Thm 4.3.2 p.139-140 : # 3,7,8,11,12                           | Quiz 6            |
| Feb. 29  | 3.4                   | p.101-102: # 1,3,5, p.120 # 3(a)(b)(c)                        |                   |
| March 5  | 5.1, 5.2              | p.168-169: #2,6,7,9,12 p.173-174: # 1,2(c),6,9,               | Quiz 7            |
| March 7  | 5.2, 5.3              | Thm 5.2.2, p.181-182: # 1,3,5,10                              |                   |
| March 12 | Spring Break          |                                                               |                   |
| March 14 | Spring Break          |                                                               |                   |

|          |                        |                             |                           |
|----------|------------------------|-----------------------------|---------------------------|
| March 19 | 5.4                    | p.186-187 : # 3,5,6,8,9     | Quiz 8                    |
| March 21 | 5.4-5.5                | p.194-195: # 3,4,5,9        |                           |
| March 26 | 5.6-5.7                | p.202: # 5,6,7,8,10         | Quiz 9                    |
| March 28 | 5.7-6.1                | p.208-209: # 1,2,3,5,12     |                           |
| April 2  | Review                 |                             | Quiz 10                   |
| April 4  | <b>Midterm Exam II</b> |                             |                           |
|          |                        | p.227: # 1(a)(b)(c),2,7,8,9 |                           |
| April 9  | 6.2                    | p.236-237: #1,4,8,9,11,15   |                           |
| April 11 | 6.2, 6.3               | p.242-243: # 2,3,4,5,7      |                           |
| April 16 | 6.4                    | p.250-251: # 1,2,3,8,9      |                           |
| April 18 | Review                 |                             | Quiz 11 (6.1,6.2,6.3,6.4) |
| April 23 | Review                 | Grad papers due             | Makeup quiz               |

**Final Exam:** 9am-12pm, May 1, room 235, Physics Building