| Date | Wkday | Wk\# | L/R \# | Topics | Assessment |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9/2/2015 | W | 1 | L1 | Hello. What is this class about? Syllabus. Some basic defs about sets and N, Z (note the typo in the def on p.5), R. Time permitting, discuss some operations on sets. | HW1 Avail |
| 9/3/2015 | R | 1 | R1 | Mostly TA present material. Sets. Set operations. Defining sets via "all x such that". Demonstrate what careful solutions look like to familiar calculus questions. |  |
| 9/4/2015 | F | 1 | L2 | Finish operations on sets. | RC1.1 Due |
| 9/7/2015 | M | 2 |  | No Class |  |
| 9/9/2015 | W | 2 | L3 | Functions. Injective, surjective, and bijective. | HW1 Due, HW2 Avail, RC2.1 Due |
| 9/10/2015 | R | 2 | R2 | Examples related to hw2. Venn diagrams. Functions. Go over HW1, with possibly some incorrect solutions. | Quiz 1 |
| 9/11/2015 | F | 2 | L4 | Functions. | RC2.2 Due |
| 9/14/2015 | M | 3 | L5 | More on functions. Injectivity and surjectivity and bijectivity. Inverse. | RC3.1 Due |
| 9/16/2015 | W | 3 | L6 | Introduce statements. | HW2 Due, HW3 Avail, RC3.2 Due |
| 9/17/2015 | R | 3 | R3 | Examples related to hw3. Go over the student examples from 9/14. Induction problems. Function problems. Go over HW2, present some incorrect solutions from HW1. | Quiz 2 |
| 9/18/2015 | F | 3 | L7 | Induction. Statements (Negation, And, Or). | RC3.3 Due |
| 9/21/2015 | M | 4 | L8 | Induction. Statements (Negation, And, Or). |  |
| 9/23/2015 | W | 4 | L9 | Implications and contradiction | HW3 Due, HW4 Avail, RC4.1 Due |
| 9/24/2015 | R | 4 | R4 | MINI EXAM (final 35 minutes of class). Go over HW3 and or incorrect solutions to HW2. |  |
| 9/25/2015 | F | 4 | L10 | Implications and contradiction | RC4.2 Due |
| 9/28/2015 | M | 5 | L11 | Implications and contradiction |  |
| 9/30/2015 | W | 5 | L12 | Implications, continued. Equivalent, converse, contrapositive. | HW4 Due, HW5 Avail, RC5.1 Due |
| 10/1/2015 | R | 5 | R5 | More on implications. Go over HW4. Present incorrect solutions to HW3 and others. | Quiz 3 |
| 10/2/2015 | F | 5 | L13 | More on implications and other problem solving from previous topics. | RC5.2 Due |
| 10/5/2015 | M | 6 | L14 | More on implications and other problem solving from previous topics. |  |
| 10/7/2015 | W | 6 | L15 | Quantifiers. | HW5 Due, HW6 Avail, RC6.1 Due |
| 10/8/2015 | R | 6 | R6 | More quantifier examples. Go over HW5. Present incorrect solutions to HW4 and others. | Quiz 4 |
| 10/9/2015 | F | 6 | L16 | Quantifiers. | RC6.2 Due |
| 10/12/2015 | M | 7 | L17 | Quantifiers and tie up random loose ends before Exam1. |  |
| 10/14/2015 | W | 7 | L18 | Review for Exam1 | HW6 Due, HW7 Avail |
| 10/15/2015 | R | 7 | R7 | EXAM 1 |  |
| 10/16/2015 | F | 7 | L19 | First real analysis day. Bounded sets, indexed union, intro to sequences. |  |


| Date | Wkday | Wk\# | L/R \# | Topics | Assessment |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10/19/2015 | M | 8 | L20 | More on first set of real analysis topics. EXTRA SESSION in the evening to return and go over Exam1 | RC8.1 |
| 10/21/2015 | W | 8 | L21 | Second real analysis day. Open / closed sets, partitions, more sequences. | HW7 Due, HW8 Avail, RC8.2 Due |
| 10/22/2015 | R | 8 | R8 | Examples for real analysis, all. Go over HW7. Present incorrect solutions to HW5, HW6 and others. | Quiz 5 |
| 10/23/2015 | F | 8 | L22 | Real analysis examples. | RC8.3 Due |
| 10/26/2015 | M | 9 | L23 | Real analysis examples. |  |
| 10/28/2015 | W | 9 | L24 | First lilnear algebra day. Vector spaces and linear functions. | HW8 Due, HW9 Avail, RC9.1 Due |
| 10/29/2015 | R | 9 | R9 | Linear algebra examples. Go over HW8. Present incorrect solutions to HW7 and others. | Quiz 6 |
| 10/30/2015 | F | 9 | L25 | Linear algebra examples. | RC9.2 Due |
| 11/2/2015 | M | 10 | L26 | Linear algebra examples. |  |
| 11/4/2015 | W | 10 | L27 | Second linear algebra day. More on vector spaces and linear functions. | HW9 Due, HW10 Avail, RC10.1 Due |
| 11/5/2015 | R | 10 | R10 | More on linear algebra. Go over HW9. Present incorrect solutions to HW8 and others. | Quiz 7 |
| 11/6/2015 | F | 10 | L28 | More on linear algebra. | RC10.2 Due |
| 11/9/2015 | M | 11 | L29 | More on linear algebra and other problem solving / previous topics |  |
| 11/11/2015 | W | 11 | L30 | First number theory day. Primes, divisibility, gcd, modular congruence. | HW10 Due, HW11 Avail, RC11.1 Due |
| 11/12/2015 | R | 11 | R11 | Number theory examples. Go over HW10. Present incorrect solutions to HW9 and others. | Quiz 8 |
| 11/13/2015 | F | 11 | L31 | More on number theory. | RC11.2 Due |
| 11/16/2015 | M | 12 | L32 | More on number theory. |  |
| 11/18/2015 | W | 12 | L33 | Second number theory day. Relations / equivalence relations. | HW11 Due, HW12 Avail, RC12.1 Due |
| 11/19/2015 | R | 12 | R12 | More on number theory, especially equivalence relations. Go over HW11, present incorrect solutions to HW10 and others. | Quiz 9 |
| 11/20/2015 | F | 12 | L34 | More on number theory. | RC12.2 Due |
| 11/23/2015 | M | 13 | L35 | More on number theory. | RC13.1 Due |
| 11/25/2015 | W | 13 | L36 | Generic examples work session | HW12 Due, HW13 Avail |
| 11/26/2015 | R | 13 |  | No Class |  |
| 11/27/2015 | F | 13 |  | No Class |  |
| 11/30/2015 | M | 14 | L37 | Catch-all for topics in HW7-HW13. |  |
| 12/2/2015 | W | 14 | L38 | Review for Exam2. | HW13 Due |
| 12/3/2015 | R | 14 | R13 | EXAM 2 |  |
| 12/4/2015 | F | 14 | L39 | Review for final exam. |  |
| 12/7/2015 | M | 15 | L40 | Return and go over Exam2. |  |
| 12/9/2015 | W | 15 | L41 | Review for final exam. |  |
| 12/10/2015 | R | 15 | R14 | Review for final exam. | Quiz 10 |
| 12/11/2015 | F | 15 | L42 | Review for final exam. |  |

