## MA 114 Spring 2019 Schedule

| Unit 1: Techniques of Integration |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Day | Date | Reading | Topic | Quizzes | Webwork Due | Webwork Topic |
| W | 9-Jan | 7.1 | Integration by parts |  |  |  |
| R | 10-Jan |  | Worksheet 01 - Integration by Parts |  |  |  |
| F | 11-Jan | 7.2 | Trig Integrals |  |  |  |
| M | 14-Jan | 7.3 | Trig Substitution |  | A1 at 11:58PM | Integration by Parts |
| T | 15-Jan |  | Worksheet 02 - Special Trigonometric Integrals | Quiz 1 on Section 7.1 |  |  |
|  | 15-Jan |  | Last day to add a class |  |  |  |
| W | 16-Jan | 7.4 | Partial Fractions |  |  |  |
| R | 17-Jan |  | Worksheet 03-Trigonometric Substitution |  |  |  |
| F | 18-Jan | 7.4 | Partial Fractions |  |  |  |
| M | 21-Jan |  | Labor Day-academic holiday |  |  |  |
| T | 22-Jan |  | Worksheet 04 - Integration by Partial Fractions |  |  |  |
| W | 23-Jan | 7.7 | Midpoint, Trapezoid, and Simpson Rules |  | A2 at 11:58 PM | Trig Integrals |
| R | 24-Jan |  | Worksheet 05 - Numerical integration | Quiz 2 on Sections 7.2-7.3 |  |  |
| F | 25-Jan | 7.7 | Simpson's Rule, Error Estimates |  | A3 at 11:58PM | Partial Fractions |
| M | 28-Jan | 7.8 | Improper Integrals |  |  |  |
| T | 29-Jan |  | Worksheet 06 - Simpson's rule and improper inte |  |  |  |
| w | 30-Jan | 11.1 | Sequences as functions from $\mathbf{N}$ to $\mathbf{R}$ |  | A4 at 11:58PM | Numerical Integration |
|  | 30-Jan |  | Last day to drop without a W |  |  |  |
| R | 31-Jan |  | Worksheet 07-Sequences | Quiz 3 on sections 7.4, 7.7 |  |  |
| F | 1-Feb | 11.1 | Sequences by recursion |  | A5 at 11:58 PM | Simpson's Rule, Improper integrals |
| M | 4-Feb |  | Review for Exam 1 |  |  |  |
| M | 4-Feb |  | Exam I Review Session, 6:00-7:30 PM, BS 116 |  |  |  |
| T | 5-Feb |  | Review Worksheet 08 |  |  |  |
| T | 5-Feb | Exam 01, 5:00-7:00 PM | Covers sections 7.1-7.4, 7.7, 7.8, web homewor |  |  |  |


| Unit II: Series |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Day | Date | Reading | Topic | Quizzes | Webwork Due | wW Topic |
| W | 6-Feb | 11.2 | Series |  |  |  |
| R | 7-Feb |  | Worksheet 09 - Recursive sequences, series |  |  |  |
| F | 8-Feb | 11.2 | Series |  | A6 at 11:58 PM | Sequences |
| M | 11-Feb | 11.3 | Integral Test |  | B1 at 11:58 PM | Recursive Sequences |
| T | 12-Feb |  | Worksheet 10 - Series, Integral Test |  |  |  |
| W | 13-Feb | 11.4 | Comparison and Limit Comparison |  | B2 at 11:58 PM | Series |
| R | 14-Feb |  | Worksheet 11 - Comparison and Limit Comparison Tests | Quiz 4 on sections 11.1-11.2 |  |  |
| F | 15-Feb | 11.5 | Alternating Series |  | B3 at 11:58 PM | Integral Test |
| M | 18-Feb | 11.6 | Absolute Convergence, Ratio and Root Tests |  | B4 at 11:58PM | Comparison tests |
| T | 19-Feb |  | Worksheet 12 - Alternating series, absolute and conditional convergence |  |  |  |
| W | 20-Feb | 11.7 | Ratio and Root Tests, Strategies for Testing Series |  | B5 at 11:58PM | Absolute and conditional convergence |
| R | 21-Feb |  | Worksheet 13 - Ratio and Root tests | Quiz 5 on sections 11.3-11.5 |  |  |
| F | 22-Feb | 11.8 | Power Series |  | B6 at 11:58PM | Ratio and root tests |
| M | 25-Feb | 11.9 | Representing functions as power series |  |  |  |
| T | 26-Feb |  | Worksheet 14 - Power series |  |  |  |
| W | 27-Feb | 11.10 | Taylor series |  | B7 at 11:58PM | Power series |
| R | 28-Feb |  | Worksheet 15 - Taylor Series | Quiz 6 on 11.7-11.8 |  |  |
| F | 1-Mar |  | Review for Exam 2 |  | B8 at 11:58PM | Taylor and McLaurin Series |
| M | 4-Mar |  | Review for Exam 2 |  |  |  |
| M | 4-Mar |  | Exam 2 Review Session, 6:00-7:30 PM, BS 116 |  |  |  |
| T | 5-Mar |  | Review Worksheet 16 |  |  |  |
| T | 5-Mar | Exam 2, 5:00-7:00 PM | Covers sections 11.1-11.10, web homeworks A6, B1-B8 |  |  |  |



| Unit IV: Conic Sections, Differential Equations |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Day | Date | Reading | Topic | Quizzes | Webwork Due | WW Topic |
| W | 10-Apr | 10.4 | Calculus with polar coordinates (arc length and area) |  |  |  |
| R | 11-Apr |  | Worksheet 25 - Calculus with polar coordinates |  |  |  |
| F | 12-Apr | 10.5 | Conic sections |  | D1 at 11:58PM | Polar coordinates |
| M | 15-Apr | 10.5 | Conic sections |  | D2 at 11:58 PM | Calculus with polar coordinates |
| T | 16-Apr |  | Worksheet 26 - Conic sections |  |  |  |
| W | 17-Apr | 9.1 | Modeling with differential equations |  | D3 at 11:58PM | Conic sections |
| R | 18-Apr |  | Worksheet 27 - Differential equations | Quiz 10 on 10.4, 10.5 |  |  |
| F | 19-Apr | 9.2 | Direction fields |  | D4 at 11:58PM | Differential equations |
| M | 22-Apr | 9.3 | Separable equations |  |  |  |
| T | 23-Apr |  | Worksheet 28 - Direction Fields, separable equations |  |  |  |
| W | 24-Apr |  | Review for Final |  | D5 at 11:58PM | Direction Fields |
| R | 25-Apr |  | Review Worksheet 29 |  |  |  |
| F | 26-Apr |  | Review for Final |  | D6 at 11:58PM | Separable equations |
| T | 30-Apr |  | Final review session, 3.30-5.00 pm in KAS 213 |  |  |  |
|  |  |  |  |  |  |  |
| W | 1-May | Final exam, 6-8pm | Covers 6.2, 6.3, 6.5, 7.1-7.4, 7.7, 7.8, 8.1-8.3, 9.1-9.3 11.10 and all web homeworks including D1-D6 |  |  |  |

