MA 114 Calendar

| Date | Topic | Due Dates | Textbook Problems (not optional) |
| :---: | :---: | :---: | :---: |
| 13-J an | §11.1: Sequences |  | §11.1: 4, 12, 22, 24, 30 |
| 15-J an | §11.1: Sequences (continued) |  | §11.1: 40, 64 |
| 18-J an | Martin Luther King Day |  |  |
| 19Jan | Assignment 1 distributed to students |  |  |
| 20-J an | §11.2: Series |  | §11.2: $2,14,16,20,22,42$ |
| 22-J an | §11.2: Series (continued) |  | §11.2: 32, 38, 50 |
| 25-J an | §11.4: Comparison tests |  | §11.4: 4, 12, 26, 28, 30 |
| 27-J an | §11.5: Alternating series | Assgn 1 due in class | §11.5: 4, 8, 12, 14, 26, 32 |
| 28-Jan | Assignment 2 distributed to students |  |  |
| 29-J an | §11.6: Absolute convergence; Ratio and root tests |  | §11.6: 4, 8, 14, 18, 26 |
| 01-Feb | §11.7: Strategy for testing series |  | §11.7: 4, 8, 22, 26, 32, 34, 38 |
| 03-Feb | §11.8: Power series |  | §11.8: $8,10,14,30$ |
| 05-Feb | §11.9: Representations of functions as power series |  | §11.9: 6, 16, 28 |
| 08-Feb | Review | Assgn 2 due in class |  |
| 09-Feb | Exam I (7:30-9:30 p.m., CP 139) |  |  |
| 10-Feb | §11.10: Taylor and Maclaurin series |  | §11.10: 12, 34, 40, 44 |
| 11-Feb | Assignment 3 distributed to students |  |  |
| $12-\mathrm{Feb}$ | §11.10: Taylor and Maclaurin series (continued) |  | §11.10: 18, 20, 28, 54 |
| 15-Feb | §5.5: The substitution rule |  | §5.5: $10,12,18,38,40,52,16,20,36,42,64,66$ |
| 17-Feb | §6.1: Area between curves | Assgn 3 due in class | §6.1: 8, 14, 20, 30 |
| 18-Feb | Assignment 4 distributed to students |  |  |
| 19-Feb | §6.2: Volumes |  | §6.2: 4, 10, 14, 52 |
| 22-Feb | §6.3: Volumes by cylindrical shells |  | §6.3: 4, 8, 10, 18, 44 |
| 24-Feb | §6.4: Work (for springs and cables) |  | §6.4: 8 |
| 26-Feb | §7.1: Integration by parts |  | §7.1: 6, 10, 26, 30 |
| 01-Mar | §7.2: Trigonometric integrals |  | §7.2: 6, 12, 20, 30, 34 |
| 03-Mar | §7.3: Trigonometric substitution | Assgn 4 due in class | §7.3: $2,4,6,8,22$ |
| 05-Mar | §7.3: Trigonometric substitution (continued) |  |  |
| 08-Mar | Review |  |  |
| 09-Mar | Exam II (7:30-9:30 p.m., Room TBA) |  |  |
| 10-Mar | §3.11: Hyperbolic functions |  | §3.11: 4, 12, 16, 20, 44 |
| 11-Mar | Assignment 5 distributed to students |  |  |
| 12-Mar | §8.1: Arc length |  | §8.1: $8,12,16,40 \mathrm{a}$ |
| Mar 15-19 | Spring Break |  |  |
| 22-Mar | §7.4: Partial fractions |  | §7.4: 2, 4, 18, 20, 26 |
| 24-Mar | §7.5: Strategy for integration | Assgn 5 due in class | §7.5: 4, 6, 26, 48, 52, 62 |
| 25-Mar | Assignment 6 distributed to students |  |  |
| 26-Mar | §7.7: Numerical integration (Last day to drop) |  | §7.7: 6a, 8a,b, 20 |
| 29-Mar | §7.7: Numerical integration (continued) |  | §7.7: 6b, 8c, 22, 30 |
| 31-Mar | §7.8: Improper integrals |  | §7.8: $14,16,28,30,32,54$ |
| 02-Apr | §11.3: Integral test |  | §11.3: 16, 22, 32 |


| 05-Apr | §9.1: Modeling with differential equations |  |  |
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| 07-Apr | §9.2: Direction fields and Euler's method |  | §9.2: 2, 3-6, 24, 25b, 28a |
| 09-Apr | §9.3: Separable equations | Assgn 6 due in class | §9.3: 2, 16, 34 |
| 12-Apr | Review |  |  |
| 13-Apr | Exam III (7:30-9:30 p.m., Room TBA) |  |  |
| 14-Apr | §9.4: Population growth |  | §9.4: 4, 6, 10, 14 |
| 16-Apr | §10.1: Parametric equations |  | §10.1: 6, 14, 16, 22, 26 |
| 19-Apr | §10.2: Calculus with parametric curves |  | §10.2: 4, 8, 10 |
| 21-Apr | §10.2: Calculus with parametric curves (continued) |  | §10.2: 14, 28, 32, 42 |
| 23-Apr | §10.3: Polar coordinates |  | §10.3: 6, 18, 34, 44, 56, 52, 54, 68, 70 |
| 26-Apr | §10.4: Areas and lengths in polar coordinates |  | §10.4: 14, 18, 24, 30, 48 |
| 28-Apr | §10.4: Areas and lengths in polar coordinates (continued) |  |  |
| 30-Apr | Review |  |  |
| 05-May | Final exam (10:30 AM - 12:30 PM) |  |  |

