

**MA 16020 Applied Calculus II – Traditional On Campus  
Calendar – Syllabus(Part I), Summer 2022**

**Exam 1: Lessons R1 – 10    Exam 2: Lessons 11 – 19    Exam 3: Lessons 20 – 30**

| <b>Date</b>         | <b>Lesson</b> | <b>Topics</b>   |
|---------------------|---------------|---|
| 6/13 M              | R1&R2         | Review of Basic Differentiation & Review of Basic Integration                   |
| 6/14 Tu             | 1A            | Integration By Substitution   |
| 6/15 W              | 1B            | Integration By Substitution   |
| 6/16 Th             | 2             | Integration By Substitution   |
| 6/17 F              | 3&4           | The Natural Logarithmic Function: Integration & Integration by Parts            |
| 6/20 M              | 5             | Integration by Parts  |
| 6/21 Tu             | 6&7           | Diff. Eqns: Solutions, Growth and Decay & Diff. Eqns: Separation of Variables   |
| 6/22 W              | 8             | Diff. Equations: Separation of Variables  |
| 6/23 Th             | 9             | First-Order Linear Differential Equations                                       |
| 6/24 F              | 10            | First-Order Linear Differential Equations                                       |
| 6/27 M              | 11            | Area of a Region Between Two Curves & REVIEW FOR EXAM 1                         |
| <b>6/28 Tu</b>      |               | <b>EXAM 1(60 minute exam during the regular class time; Room: SC 246</b>        |
| 6/29 W              | 12            | Volume of Solids of Revolution  |
| 6/30 Th             | 13            | Volume of Solids of Revolution  |
| 7/1 F               | 14            | Volume of Solids of Revolution  |
| <b>7/4 M</b>        |               | <b><i>INDEPENDENCE HOLIDAY(no classes)</i></b>                                  |
| 7/5 Tu              | 15            | Improper Integrals  |
| 7/6 W               | 16            | Geometric Series and Convergence  |
| 7/7 Th              | 17&18         | Geometric Series and Convergence & Functions of Several Variables Intro         |
| 7/8 F               | 19            | Partial Derivatives   |
| 7/11 M              | 20            | Higher Order Partial Derivatives & REVIEW FOR EXAM 2                            |
| <b>7/12 Tu</b>      |               | <b>EXAM 2(60 minute exam during the regular class time; Room: SC 246</b>        |
| 7/13 W              | 21&22         | Differentials of Multivariable Functions & Chain Rule Functns Several Variables |
| 7/14 Th             | 23            | Extrema of Functions of 2 Variables   |
| 7/15 F              | 24            | Applications of Extrema -Two Variable Functions                                 |
| 7/18 M              | 25            | LaGrange Multipliers - Constrained Min/Max                                      |
| 7/19 Tu             | 26            | LaGrange Multipliers - Constrained Min/Max                                      |
| 7/20 W              | 27&28         | Double Integrals, Volume, Applications  |
| 7/21 Th             | 29            | Double Integrals, Volume, Applications  |
| 7/22 F              | 30            | Systems of Equations, Matrices, Gaussian Elimination                            |
| 7/25 M              | 31&32         | Gauss-Jordan Elimination, Matrix Operations & REVIEW FOR EXAM 3                 |
| <b>7/26 Tu</b>      |               | <b>EXAM 3(60 minute exam during the regular class time; Room: SC 246</b>        |
| 7/27 W              | 33            | Inverse Matrices  |
| 7/28 Th             | 34            | Determinants of Matrices  |
| 7/29 F              | 35            | Eigenvalues and Eigenvectors  |
| 8/1 M               |               | REVIEW FOR FINAL EXAM   |
| 8/2 Tu              |               | REVIEW FOR FINAL EXAM   |
| <b>8/4 Thursday</b> |               | <b>FINAL EXAM (THURSDAY, 8/4 at 3:30 PM) ; Room: SC 246</b>                     |