## MA 16020 Applied Calculus II – Distance Learning Course Calendar – Syllabus(Part I), Fall 2018

## EXAM COVERAGE --- EXAM 1: Lessons R-6, Exam 2: Lessons 7-14, Exam 3: Lessons 14-21 EXAM 4: Lessons 20-26, Exam 5: Lessons 25-32

SAME number of lessons, SAME homework assignments, SAME exams as traditional sections of the course. Just a different course structure, no class meetings other than exams, NO quizzes, must independently use video lectures in LON-CAPA, and use other learning resources.

Note: Must be a self-motivated, proactive, and reasonably strong mathematics student.

| Date               | Lesson              | Quiz<br># | Assignment/Topics  |
|--------------------|---------------------|-----------|--|
| 8/20 M             | R                   |           | Review of Basic Integration  |
| 8/22 W             | 1                   |           | Integration By Substitution  |
| 8/24 F             | 2                   |           | Integration By Substitution  |
|                    |                     |           |  |
| 8/27 M             | 3                   |           | The Natural Logarithmic Function: Integration                          |
| 8/29 W             | 4                   |           | Integration by Parts   |
| 8/31 F             | 5                   |           | Integration by Parts   |
| 9/3 M              |                     |           | LABOR DAY (no classes)   |
| 9/5 W              | 6                   |           | Diff. Equations: Solutions, Growth and Decay & Separation of Variables |
| 9/7 F              | 0<br>7              |           | Diff. Equations: Solutions, Growin and Decay & Separation of Variables |
| )// 1              | 1                   |           | Diff. Equations. Separation of Variables                               |
| *9/10 M            | ****                |           | EXAM 1 – Normal Class time - Location: Computer Lab TBA                |
| 9/12 W             | 8                   |           | Diff. Equations: Separation of Variables                               |
| 9/14 F             | 9                   |           | First-Order Linear Differential Equations                              |
|                    |                     |           |  |
| 9/17 M             | 10                  |           | First-Order Linear Differential Equations                              |
| 9/19 W             | 11                  |           | Area of a Region Between two curves                                    |
| 9/21 F             | 12                  |           | Volume of Solids of Revolution   |
| 9/24 M             | 13                  |           | Volume of Solids of Revolution   |
| 9/26 W             | 14                  |           | Volume of Solids of Revolution   |
| 9/28 F             | 15                  |           | Improper Integrals   |
| 10/1 M             | *****               |           | EXAM 2 – Normal Class time - Location: Computer Lab TBA                |
| 10/3 W             | 16                  |           | Geometric Series and Convergence                                       |
| 10/5 W             | 10                  |           | Geometric Series and Convergence                                       |
| 10,01              | 17                  |           |  |
| 10/8 M             |                     |           | OCTOBER BREAK (no classes)   |
| 10/10 W            | 18                  |           | Functions of Several Variables Intro                                   |
| 10/12 F            | 19                  |           | Partial Derivatives  |
|                    |                     |           |  |
| 10/15 M            | 20                  |           | Partial Derivatives  |
| 10/17 W            | 21                  |           | Differentials of Multivariable Functions                               |
| 10/19 F            | 22                  |           | Chain Rule, Functions of Several Variables                             |
| 10/22 M            | *****               |           | EXAM 3 – Normal Class time - Location: Computer Lab TBA                |
| 10/22 W<br>10/24 W | 23                  |           | Extrema of Functions of Two Variables                                  |
| 10/24 W<br>10/26 F | 23                  |           | Extrema of Functions of Two Variables                                  |
| 10/201             | <i>4</i> - <b>T</b> |           |  |

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| Lesson         | -  | Assignment/Topics  |
|----------------|--|--|
| 25             | π  | LaGrange Multipliers - Constrained Min/Max                                       |
| 26             |  | LaGrange Multipliers - Constrained Min/Max                                       |
| 27             |  | Double Integrals, Volume, Applications   |
| *****          |  | EXAM 4 – Normal Class time - Location: Computer Lab TBA                          |
| 28             |  | Double Integrals, Volume, Applications   |
|                |  | Double Integrals, Volume, Applications   |
| 2)             |  | Double integrais, volume, Applications   |
| 30             |  | Systems of Equations, Matrices, Gaussian Elimination                             |
| 31             |  | Gauss-Jordan Elimination   |
| 32             |  | Matrix Operations  |
|                |  |  |
| 33             |  | Inverses and Determinants of Matrices  |
|                |  | THANKSGIVING BREAK VACATION (no classes)   |
|                |  | THANKSGIVING BREAK VACATION (no classes)   |
| *****          |  | *EXAM 5 – Normal Class time - Location: Computer Lab TBA                         |
| 34             |  | Inverses and Determinants of Matrices  |
| 35             |  | Eigenvalues and Eigenvectors   |
|                |  |  |
| 36             |  | Eigenvalues and Eigenvectors   |
|                |  | REVIEW FOR FINAL EXAM  |
|                |  | REVIEW FOR FINAL EXAM  |
| 12/10 to 12/15 |  | WEEK OF FINAL EXAMS  |
|                | 25<br>26<br>27<br>*****<br>28<br>29<br>30<br>31<br>32<br>33<br>*****<br>34<br>35<br>36 | 26<br>27<br>*****<br>28<br>29<br>30<br>31<br>32<br>33<br>*****<br>34<br>35<br>36 |

**\*\*SPECIAL NOTE:** The date and time of the final exam will be announced during the semester. **THE SEMESTER DOES NOT END UNTIL SATURDAY, DECEMBER 15 AT 5:00 PM**. INDIVIDUALS WANTING TO LEAVE CAMPUS EARLY **WILL NOT** BE GRANTED EARLY FINAL EXAMS TO

ACCOMMODATE TRAVEL PLANS.