**Math 1316: Syllabus for Mathematics for Economics and Business Analysis**;

**Spring 2019**

**Instructor:** Nancy Wolff **Office Number:** PKH 484 **Office Hours: 12:30 – 1:50 pm & 5:00 – 5:30 pm TTh**

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**Section Information:** Math 1316 Section 005 Mathematics for Economics and Business Analysis

**Time and Place of Class Meetings:** 2:00 – 3:20 am TTh; PKH 110

**Description of Course Content:** This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with emphasis on mathematical tools and applications in business, economics, and social sciences. Chapters 11, 12, 13 will be covered.

**Course Prerequisites:** C or better in MATH 1315 or MATH 1302. This course is not a substitute for MATH 1426 .

 **Student Learning Outcomes:** To develop mathematical tools that are useful in analysis of business and economics problems. After this course, the students should have an understanding of Differential and Integral calculus sufficient to apply to real problems in Business and Finance. After completing the course, students should be able to demonstrate the following competencies:

\* Be able to use derivative formulas such as product rule, quotient rule and chain rule to calculate derivatives.

\* Be able to use the properties of limits to find the limits [if they exist]of polynomial, rational, and piecewise functions

\* Be able to evaluate the limit of a function as x approaches infinity or negative infinity and thus be able to locate horizontal asymptotes of a function

\* Given the graph of a function or given a piecewise function be able to find: lim𝑥→𝑐−(𝑥); lim𝑥→𝑐+𝑓(𝑥); and lim𝑥→𝑐𝑓(𝑥)..

\* Be able to tell where polynomial, rational, and piecewise functions are continuous.

\* Be able to compute the slope of the tangent line.

\* Be able to use derivatives to solve business related questions involving marginals. Given the demand equation be able to utilize it to come up with the revenue equation

\* Be able to take the derivative of natural log and exponential functions.

\* Given the elasticity # associated with a product you need to be able to use it to classify the type of demand present and determine the effect on revenue of raising or lowering the price.

\* Be able to use the first derivative and 1st derivative sign diagram to identify local maximum and local minimum points of a function . You also need to be able to use it to identify intervals where the function is increasing and decreasing.

\* Be able to use the second derivative and 2nd derivative sign diagram to identify inflection points where the concavity changes from up to down and from down to up. You also need to be able to use it to identify intervals where a function is concave up and concave down

\* Be able to use derivatives to find the absolute maximum and absolute minimum obtainable values for a given function.

\* Be able to evaluate assorted indefinite integral problems including u-substitution problems, problems involving lns and exponentials, problems involving radicals or negative exponents, and application problems where given MC and a cost point or MR you are asked to calculate C(x) and R(x)

\* Be able to evaluate assorted definite Integral problems including application problems where you need to find the area between a positive curve and the x-axis between two given x values or where you need to calculate the area between two curves

\* Given the demand and supply curve you need to be able to find the equilibrium point and use it to compute the consumer or producer surplus

\* You need to be able to use integration by parts to calculate the value of a given integral

**Required Textbooks/Course Material**

**Workbook by Shanna Banda**: The Math 1316 edition entitled: **Calculus for Economics & Business; ISBN # 978-61740-660-7**. It is loose-leaf and sold in the UTA bookstore for about $29. **All students are required to buy this workbook in addition to purchasing the following:**

1. **Direct Access (Strongly Recommended**): As part of the UTA Mathematics Department Affordability Campaign, we have negotiated a reduced price bundle which **includes lifetime access to the e-Text and direct course access which will give you access to this text and all online assignments immediately**. To receive the discounted price, items must be purchased through the UTA Bookstore by clicking on the link provided under the Start Here tab on Blackboard. You may purchase your access at any time once your class’s Blackboard shell is made available. Once class begins, you will have immediate access to your course even before you make your purchase. However, if the purchase is not verified within the first two weeks of classes, the access to your course will freeze and your account will stay deactivated until the purchase is confirmed. The cost to retain this access is about $77.50. During the purchasing process, please ensure you enter your name as shown on your UTA records along with your MAVS email address for proper processing. The online homework problems include many varied online helps to assist students in working the problems and mastering the material**. Homework problems will not be turned in for a grade, but students can earn extra credit points on tests by completing the online homework assignments.**

2. **Loose-Leaf Textbook** **Upgrade (Optional):** Students who have previously purchased the online direct access described above may choose to upgrade their online purchase to include a loose-leaf version of the textbook for about an extra $25 from the same bookstore site. The textbook will be shipped directly to an address of your choosing or you may pick one up at the UTA bookstore. Alternatively, you may purchase a loose-leaf version of the textbook at minimal cost directly from the publisher using the link to the publisher provided on Blackboard . The publisher site will prompt you to enter the username: arlington and password: math 1315/1316.This reduced price loose leaf textbook is only available as an upgrade to students who have purchased the direct access described in part 1 – it cannot be purchased by itself.

3. **Hardback Edition of Text.-** As an alternative to the above opitions students can elect to purchase a hardback edition of the textbook.The textbook to be purchased is **Mathematics with Applications in the Management Natural,and Social Sciences, 12th Ed. Lial, Hungerford, Holcomb, and Mullins Pearson Ed. Inc. , ISBN: 978-0-13-476762-8**. This textbook is available at various online bookstore sites. It does not include access to the online homework problems so students who choose this option will need to do the alternative textbook homework problems provided and will not be able to earn the extra credit points available to students who complete the online problems

**Descriptions of major assignments and examinations:**.

* **Homework:** Homework will be assigned on a daily basis. There will be available on Blackboard under the syllabus section a handout listing these homework assignments including dates, page numbers, and problems assigned. Homework **will not be taken up and graded** but will be gone over at the end of lectures if there is time available. The answers to the assigned problems can be found at the back of the text since the problems assigned are odd problems. You will also be able to gain access to online homework assignments by utilizing the MyLabsPlus tab located on Blackboard. The online homework assignments are roughly equivalent to the homework problems assigned from your text. You can either elect to do the online homework assignments, the problems form your text assigned on the assignment sheet, or a combination of the two. **No matter which you elect to do (online homework or assigned problems from the text book) all homework is simply for practice and will not be turned in for a grade**. Although not turned in for a grade, homework needs to be done in order to be successful in this class. Extra credit points can be earned by electing to do the online homework.
* **Signature Assignment:** The purpose of this assignment is to fulfill the SACS and institutional requirement that all CORE courses  contain a clearly marked “SignatureAssignment” within the course that covers the following three areas. :
* Critical Thinking Skills - to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information.
* Communication Skills - to include effective development, interpretation and expression of ideas through written, oral and visual communication.
* Empirical and Quantitative Skills - to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

It will consist of a homework assignment of 5 questions that is to be completed by all Math 1316 classes.

This assignment will be handed out on the first day of class and students will complete it gradually throughout the semester as the needed skills to complete the assignment are acquired. **The assignment will need to be turned in on or before Tuesday 03/26/2019**.A copy of the assignment will be located on Blackboard so if you need another copy of the assignment you can go there and print it out.

* **Quizzes**: There will be 9 short **weekly quizzes** given . **All quizzes will be of a multiple choice format and will be given online at Blackboard.** Quizzes will be open book/ open note and will only be 5 questions in length. .**The 3 lowest of the quiz grades will be dropped**. **The remaining 6 quiz grades will be averaged and this average will count as a 15% of the student’s final course grade.** **No make-ups will be given for quizzes** regardless of the reason for missing the quiz. If you miss a quiz you must use it as one of your 3 dropped quiz grades.
* **TESTS: :** There will also be **3 major tests** given in this class. The approximate dates for these tests are:

**02/14/2019: covering sections 11.1 – 11.7 & 11.9 on the assignments sheet**

**03/21/2019: covering sections 11.8, 12.1 – 12.3, & 12.6 on the assignment sheet**

**11/20/2018: covering sections 13.1-13.3, 13.5 & 13.6 on the assignment sheet**

[ *As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course*.]

**All tests will be of a multiple choice format and a scantron form 882-E will be required for all tests**. **Students need to provide their own scantrons for tests**. Tests will be closed book but calculators and a 4 by 6 note card will be allowed. A detailed review sheet will be provided on Blackboard for each major test as well as the final exam. This review sheet will include a practice test and solutions will be provided for the practice test. All tests and quizzes will be based on the assigned homework problems and workbook problems covered during class. **If you have been able to work the homework problems, done well on quizzes, and can work the problems on this practice test, you should do well on the actual test.** The lowest of these 3 test grades will be dropped. The average of your best 2 test grades will count 50% of your final course grade.

* **Final Exam:** The final exam is a departmental final exam and will be given on **Saturday May 4th** from

9 – 11:30 am. This date needs to be kept open for the final so put it on your calendars and schedule around it.. **Makeups for the final will only be granted on a limited basis and only when written documentation verifying the need for the makeup is provided**. Students who do not have a documented justifiable reason for missing the final will receive a grade of 0 on the final exam. **The exact location for the final exam will be announced in class at a later date** **The final counts 30% of your final course grade** and **everyone is required to take the final exam.**

* **Grade Calculation:**

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|  |  |
| --- | --- |
| **Homework, Tests, Exam**  | **Percent of Grade**  |
| **Quizzes (Average of best 6 weekly online quiz grades)** | 15%  |
| **Chapter Tests (Average of best 2 Test grades)**  | 50%  |
| **Signature Assignment**  | 5%  |
| **Comprehensive Final Exam**  | 30%  |
| **Total:**  | 100%  |

 Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels; see “Student Support Services,” below.

**Extra Credit Opportunities:**

* **Bonus Quiz Problems**. An online bonus quiz will be given before each test. Points awarded on these bonus quizzes will be added onto the next upcoming major test. The assignment sheet will announce when the bonus quiz opens and closes and the quiz must be taken during the allotted time. **Students who forget to take the quiz will never be given extended time in which to complete it.** Students can earn up to **6 points extra credit** on the upcoming test by taking the bonus quiz. The bonus quizzes **will not be multiple choice** and can be taken multiple times during the period of time in which they are open with the high score being the one that counts. **The bonus quiz for test one can only be applied to test one, the one for test 2 can only be applied to test 2, and the one for test 3 can only be applied on test 3. No bonus points are available to be earned on the quizzes or final exam.**
* **Test Corrections:** Students will also be given the opportunity to do test corrections on the first 2 major tests in order to earn **4 extra points per test**. Students can take their returned test papers to the math clinic on the 3rd floor of PKH and seek their help in correcting the problems they missed on the test. Students will be give one week to get the corrections made and the corrected test papers returned to me. **There will be no time to do test corrections on the third major test, but any student who turns in corrections for the first 2 major tests will automatically be given 4 points added to the 3rd test grade.**
* **Online Homework Extra Credit:** Students who **complete correctly** at least **50% of every online homework assignment associated with an upcoming test** before the date of the test **will be awarded 5 extra credit points on the upcoming test.** Students who complete correctly at least **50% of every online homework assignment for the entire semester will also be given 5 points added** to their final test average going into the final.

**Attendance:** At The University of Texas at Arlington, taking attendance is not required but attendance is a critical indicator in student success. Each faculty member is free to develop his or her own methods of evaluating students’ academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, attendance will not be taken each daybut good attendance is necessary if you want to succeed in this course. You must make sure you are in class on test days and it is up to you to keep up with when these dates are. Tentative dates for these are given at the first of the semester but these dates sometimes change. Changes in schedule will be posted on Blackboard. If a student has any question about when a test is they should email me. However, while UT Arlington does not require instructors to take attendance in their courses, the U.S. Department of Education requires that the University have a mechanism in place to mark when Federal Student Aid recipients “begin attendance in a course.” UT Arlington instructors will report when students begin attendance in a course as part of the final grading process. Specifically, when assigning a student a grade of F, faculty report the last date a student attended their class based on evidence such as a test, participation in a class project or presentation, or an engagement online via Blackboard. This date is reported to the Department of Education for federal financial aid recipients.

**Calculators**: A good scientific calculator or a graphing calculator is needed for this class. I personally usually use a TI 83 or TI 84. **You will not be allowed to use aTI-30X Pro, TI Inspire, your cell phone, laptop calculator, or any calculator that has a qwerty or alphanumeric keyboard on a test .** **Alphanumeric or QWERTY keys are the keys on a calculator’s keyboard that consist of the alphabet letters A to Z which can be used to send text messages.** [Otherwise you can use the calculator you prefer.]

**Make-up Exams**: **No make-ups will be given for quizzes**. If you miss a quiz for any reason whatsoever you must use it as one of your 3 dropped quiz grades. **Neither will make-ups normally be allowed for major test grades** unless you miss the test due to participation in a sport or other campus activity to which I have been given documentation verifying the conflict or if a doctor’s excuse is provided which clearly indicates that the student is too ill to attend class. If you miss a test due to an above mentioned documented conflict it is up to you to e-mail me or call me and arrange to makeup the test **prior to the start of the next regularly assigned class period**. The test will be handed back at this time and once it has been handed back it is too late to take a makeup and the missed exam must be used as your dropped test grade. Otherwise if you miss a major test it will have to be used as your one dropped test grade. Anyone who misses more than one test grade needs to make an appointment to talk to me during office hours.

**Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. The last day to drop for the fall 2018 semester is Friday 03/29/2019. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://wweb.uta.edu/aao/fao/>).

**Grade Grievances**: Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current University Catalog:

<http://catalog.uta.edu/academic>regulations/grades/#undergraduatetext

**Disability Accommodations:** UTArlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including *The Americans with Disabilities Act (ADA), The Americans with Disabilities Amendments Act (ADAAA),* and *Section 504 of the Rehabilitation Act.* All instructors at UT Arlington are required by law to provide “reasonable accommodations” to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of **a letter certified** by the Office for Students with Disabilities (OSD).Only those students who have officially documented a need for an accommodation will have their request honored. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting: **The Office for Students with Disabilities, (OSD)** [www.uta.edu/disability](http://www.uta.edu/disability) or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability).

**Counseling and Psychological Services, (CAPS)** : [www.uta.edu/caps/](http://www.uta.edu/caps/) or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

**Non-Discrimination Policy: *The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit***[***uta.edu/eos***](http://www.uta.edu/hr/eos/index.php)*.*

**Title IX Policy:** The University of Texas at Arlington (“University”) is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated.*For information regarding Title IX, visit* [www.uta.edu/titleIX](http://www.uta.edu/titleIX) or contact Ms. Jean Hood, Vice President and Title IX Coordinator at (817) 272-7091 or [jmhood@uta.edu](jmhood%40uta.edu).

**Academic Integrity:** Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

*I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*

*I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

UT Arlington faculty members may employ the Honor Code in their courses by having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents’ Rule* 50101, §2.2, suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University. Additional information is available at <https://www.uta.edu/conduct/>.

**Electronic Communication:** UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

**Campus Carry:** Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit <http://www.uta.edu/news/info/campus-carry/>

**Student Feedback Survey:** At the end of each term, students enrolled in face-to-face and online classes categorized as “lecture,” “seminar,” or “laboratory” are directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student’s feedback via the SFS database is aggregated with that of other students enrolled in the course. Students’ anonymity will be protected to the extent that the law allows. UT Arlington’s effort to solicit, gather, tabulate, and publish student feedback is required by state law and aggregate results are posted online. Data from SFS is also used for faculty and program evaluations. For more information, visit <http://www.uta.edu/sfs>.

**Final Review Week:** for semester-long courses**,** a period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

**Emergency Exit Procedures:** Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located immediately to the right upon exiting the classroom. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.Evacuation plans may be found at <http://www.yta.edu/campus-ops/ehss/fire/EvacMapsBuildings.php> and <http://www.uta.edu/police/EvacuationProcedures.pdf>

**Student Support Services**:UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include [tutoring](http://www.uta.edu/universitycollege/current/academic-support/learning-center/tutoring/index.php), [major-based learning centers](http://www.uta.edu/universitycollege/resources/college-based-clinics-labs.php), developmental education, [advising and mentoring](http://www.uta.edu/universitycollege/resources/advising.php), personal counseling, and [federally funded programs](http://www.uta.edu/universitycollege/current/academic-support/mcnair/index.php). For individualized referrrals, students may visit the reception desk at University College (Ransom Hall, call the Maverick Resource Hotline at 817-272-2617, send a message to resource@uta.edu, or view the information at <http://www.uta.edu/universitycollege/resources/index.php>.

* **Universal Tutorial & Supplemental Instruction: (Ransom Hall 205)** UTSI offers a variety of academic support services for undergraduate students including: 60 minute one-on-one tutoring sessions, StartStrong Freshman tutoring program, and Supplemental Instruction. Office Hours are Monday – Friday

8:00 am – 5:00pm. For more information visit [www.uta.edu/utsi](http://www.uta.edu/utsi) or call 817-272-2617 .

* **The IDEAS Center (2nd Floor of Central Library**) offers **FREE** tutoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. Students can drop in, or check the schedule of available peer tutors at [www.uta.edu/IDEAS](http://www.uta.edu/IDEAS), or call (817)272-6593.
* **The Library’s 2nd floor Academic Plaza** offers students a central hub of support services, including IDEAS Center, University Advising Services, Transfer UTA and various college/school advising hours. Services are available during the library’s hours of operation. <http://library.uta.edu/academic-plaza>

**Course Schedule**

 “*As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. –*

**MATH 1316 ASSIGNMENT SHEET Spring 2019**

**DATE ASSIGNMENT MyLabsPlus Homework Text Book Problems**

**T 1/15** Class Welcome & Orientation; Limits(11.1) Section 11.1: 1 – 10 Page 567: 1, 3, 5, 7, 17-29 odd

**Th 1/17** More Limits (More 11.1) Section 11.1: 11 – 19 Page 567: 31 - 43 odd; 53

 One Sided Limits & Limits Involving $\infty $ (11.2) Section 11.2: all Page 579: 1 -23 odd; 29 – 33 odd,

 Workbook Pages: 3, 4, 5, 6, 8 – 11, 13 - 15 43 – 47 odd,51,53.59,63,65

**T 1/22** Continuity (11.9) Section 11.9: all Page 655: 1– 21 odd, 25, 27, 37, 39

 Rates of Change (Avg./IRC) (11.3) Section 11.3: all Page 590: 1, 3, 5, 9,13, 19, 27, 31

 WB#s: 16, 17 , 19, 21

**Th 1/24** Tangent Lines & Derivatives (11.4) Section 11.4: all Page 604: 1, 3, 5, 11, 13, 15, 17, 23

 WB#s: 22 – 25  **Quiz 1 opens on Blackboard at 5 pm**

**T 1/29** ***Quiz 1 closes at 9 am***

 Derivative Formulas (11.5) Section 11.5: all Page 617: 1 – 37 odd; 41 – 57 odd

 WB#s: 30 – 33, 35

**Th 1/31**  Product & Quotient Rule11.6) Section 11.6: all Page 627: 1 -19 odd, 25, 27, 31, 35, 37

 WB#s: 37 - 40  **Quiz 2 opens on Blackboard at 5 pm**

**T 2/05 *Quiz 2 closes at 9 am***

Chain Rule (11.7) Section 11.7: all Page 637: 1, 3, 5, 9, 11, 21 – 33 odd

 WB#s: 41 - 47

**Th 2/07** Derivative Applications (more 11.7) More Section 11.7: all Page 637: 35,37,41,51,53, 57, 59, 61,65,67

 WB#s: 48 - 54  **Quiz 3 Opens on Blackboard at 5 pm**

**T 2/12 Q*uiz 3 closes at 9 am***

 **Review for Test 1 Bonus Quiz Test 1 opens on Blackboard at 5pm**

**Th 2/14 TEST 1 (NEED A SCANTRON Form 882-E)\_**

**T 2/19** **Bonus Quiz Test 1 closes at 9 am**

 Derivative of Log Functions (11.8) Section 11.8: all Page 647: 13,15,17,25,33,51,55,73,75

 WB#s: 55 - 60

**Th 2/21** Derivative of Exp. Fctns. (more 11.8) More Section 11.8: all Page 647: 1–11,21,23,37,39, 41, 47,49, 53,

 Case Study on Elasticity Elasticity Study: all Page 664: 1 – 5

 WB#s: 61 – 66 **Quiz 4 opens on Blackboard at 5 pm**

**T 2/26 *Quiz 4 closes at 9 am***

 Local Max. & Local Min. (12.1) Section 12.1: all Page 677: 1 – 27 odd; 35, 39, 47.49,51

 WB#s: 70- 74

**Th 2/28** 2nd Derivatives (12.2) Section 12.2: 1 - 7 Page 691: 1– 17 odd

 WB#s: 75 – 79 **Quiz 5 opens on Blackboard at 5 pm**

**T 3/05** ***Quiz 5 closes at 9 am***

 Concavity & Dim. Returns (more 12.2) Section 12.2: 8 – 13 Page 691: 21 – 35 odd, 49, 57

 Curve Sketching (12.6) Section 12.6: all Page 728: 1, 3, 5, 7, 11, 29

 WB#s: 81 – 86, 88, 89

**Th 3/07** Optimization Applications (12.3) Section 12.3: all Page 703: 1 – 21 odd; 25,27,29, 41,45,47,51

 WB#s: 91 – 97 **Quiz 6 Opens on Blackboard at 5pm**

**DATE ASSIGNMENT MyLabsPlus Homework Text Book Problems**

**T 3/12 Spring Break**

**Th 3/14 Spring Break**

**T 3/19 *Quiz 6 closes at 9 am***

 **Review for Test 2 Bonus Quiz Test 2 opens on Blackboard at 5pm**

**Th 3/21 TEST 2** (**NEED A SCANTRON Form 882-E**)

**T 3/26 *Bonus Quiz Test 2 closes at 9 am***

 Antiderivatives (13.1) Section 13.1: all Page 743: 1, 5, 9 – 39 odd

 WB#s: 99 – 102 **Signature Assignment is Due to be Turned In**

**Th 3/28** Integration by substitution(13.2 ) Section 13.2: all Page 751: 3,5, 9,11 – 23 odd, 27,29,31,33

 WB#s: 103, 105 - 107 **Quiz 7 opens on Blackboard at 5 pm**

**F 3/29 Last Drop Date**

**T 4/02** ***Quiz 7 closes at 9 am***

 Int. eu(x) and u(x)-1(more 13.2) More Section 13.2: all Page 751: 11, 13, 15, 17, 19, 21

 App. of Indefinite Integrals (13.1 & 13.2) App. 13.1 & 13.2: all Page 743:43 – 55 odd; Page 751: 41,45,47

 WB#s: 109 – 111, 113 – 115

**Th 4/04** Integration by Parts(13.3) Section 13.3: all Page 760: 1, 3, 5, 7, 25, 27, 29

 WB#s: 117, 118 example 2b

119 example 3a **Quiz 8 opens on Blackboard at 5 pm**

**T 4/09 Q*uiz 8 closes at 9 am***

 More Integration by Parts (13.3) More Section 13.3: all Page760: 9, 11, 15, 17, 31, 43, 45

 Summation Formula Notes Summation: all Blackboard Summation Handout

 WB#s: 118 examples 2a and 2c

119 example 3b, 123

**Th 4/11** Fund. Theorem of Calculus (13.5) Section 13.5: all Page 781: 1 – 37 odd,51, 53, 57

 WB#s: 128 - 130 **Quiz 9 opens on Blackboard at 5pm**

**T 4/16**  ***Quiz 9 closes at 9 am***

 App. of Definite Integrals (13.6) Section 13.6: all Page 791: 1, 3, 5, 13, 15, 37, 39, 41, 43

 WB#s: 131 - 133

**Th 4/18** **Review for Test 3**  **Bonus Quiz Test 3 Opens on Blackboard at 5 pm**

**T 4/23 TEST 3 (NEED A SCANTRON Form 882-E)**

**Th 4/25 *Bonus Quiz Test 3 closes at 5 pm* Hand Back and Go Over Test 3**

**T 4/30 Review for Departmental Final**

**Th 5/02 Review for Departmental Final [Last Day of Classes]**

**SATURDAY 5/04/2019 DEPARTMENTAL FINAL EXAM**

**9:00 –11:30 AM (NEED A SCANTRON Form 882-E)**

**(Room location will be announced later)**