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

**Spring 2017**

**Instructor(s):** Nancy Wolff

**Office Number:** PKH 484

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**Office Hours: 12:30 – 1:50 pm TTh; 5:00 – 5:30 pm TTh and by appointment**

**Section Information:** Math 1316 Section 003; Mathematics for Economics and Business Analysis

**Time and Place of Class Meetings:** 9:30 – 10:50 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:** Math 1315 or equivalent.

**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

**Required Textbooks and Other Course Materials:** **:**

1. **Workbook by Shanna Banda**: The combo Math 1315/1316 edition entitled Algebra & Calculus for

Economics & Business. It is loose-leaf and sold in the UTA bookstore, **AND**

2. **Choose one of the following options:**

**a. Access Card and Textbook Bundle:** Mathematics with Applications in the Management, Natural, and Social Sciences 11th edition; Custom Edition for University of Texas at Arlington, ISBN # 1-323-48770-0. Contains MLP access code.

**b. Access Card Only - Access Code for MyLabsPlus**: Purchase your stand-alone access code at the UTA bookstore— or purchase online at www.uta.mylabsplus.com on the first class day. There is a free E-book within the MLP website

**Descriptions of major assignments and examinations:** Homework assignmentswill be given each night. There will be available on Blackboard under the syllabus section a handout listing these homework assignments including dates, page numbers, and problems assigned. This handout will also include tentative dates for the 3 major tests to be given. There will also be given weekly short online quizzes available on Blackboard.

**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.

**Other Requirements:** Prerequisite: C or better in MATH 1315 or MATH 1302. This course is not a substitute for MATH 1426 Calculus I. Students will be required to take a short weekly online quiz. There will also be given a required comprehensive departmental final exam  **on** **Saturday May, 6th.**

**Homework:** Homework will be assigned on a daily basis. Assigned problems will be listed on an assignment sheet located on Blackboard. 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 located at www.mymathlab.com. 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**. Your grade will be determined from you quiz grades, major test grades, final exam, and assigned extra credit opportunities. Homework needs to be done in order to be successful in this class. All tests and quizzes will be based on the assigned homework problems and **if you can do the homework you should** **be able to do well on them**.

**Quizzes**: There will be 10 **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 2**

**lowest of the quiz grades will be dropped**. **The remaining 8 quiz grades will be averaged and this average will count**

**as a 20% 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.

**Grading**: The **lowest of the 3 major test grades will be dropped. The average of the 2 remaining test grades will count 50%, your quiz average will count 20% and the final exam will count 30%. The final exam is departmental and cannot be dropped.**  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.

**Make-up Exams**: **No make-ups will be given for quizzes**. If you miss a quiz you must use it as one of your 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 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. Anyone can arrange to take a test early if they know they are going to have to be absent for a justifiable reason. Otherwise if you miss a major test the grade, 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.

**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.

**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. 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/>).

**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 [insert a description of the nearest exit/emergency exit]. 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.

**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 referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at <http://www.uta.edu/universitycollege/resources/index.php>.

**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. To schedule an appointment with a peer tutor or mentor email IDEAS@uta.edu or call (817) 272-6593.

**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 2017**

**DATE ASSIGNMENT TEXT**

**T 1/17** Class Welcome and Orientation

**Th 1/19** Limits (11.1) Page 578: 1, 3, 7 17 – 27 odd; 31 - 45 odd; 53, 55, 57

 Workbook Pages: 191,192,195,197,200,201

**T 1/24** One Sided Limits/$\infty $Limits (11.2) Page 589: 1 -17 odd; 21 - 33odd, 43, 45, 51, 53, 59

 WB#s: 193,194,203 - 205

**Th 1/2** Continuity (11.9) Page 667: 1 – 25 odd; 29, 37, 39

 WB#s: 198, 199 **Quiz 1 opens on Blackboard at 5 pm**

**T 1/31** ***Quiz 1 closes at 9 am***

 Rates of Change (Avg./IRC) (11.3) Page 600: 1, 3, 5, 9, 19, 27, 31

 Tangent Lines & Derivatives (11.4) Page 615: 1, 3, 7, 11, 13, 15, 17

  **WB#s: 207 – 210; 211 - 213**

**Th 2/02** Derivative Formulas (11.5) Page 628: 1 – 37 odd; 45, 47, 49, 51, 55, 57

 WB#s: 218 – 221, 223 **Quiz 2 opens on Blackboard at 5 pm**

**T 2/07 *Quiz 2 closes at 9 am***

 Product & Quotient Rule11.6) Page 637: 1, 3, 5, 11, 13, 15, 17, 25, 27, 35, 37

 WB#s: 225 - 227

**Th 2/09** Chain Rule (11.7) Page 648: 1, 3, 5, 9, 21 – 33 odd

 Derivative Applications (more 11.7) Page 648: 35 – 45 odd; 53, 57, 59, 61, 65

 WB#s: 229 – 233; 235 - 241  **Quiz 3 & Bonus Quiz Test 1 Opens on Blackboard at 5 pm**

**T 2/14 Q*uiz 3 & Bonus Quiz closes at 9 am*** **Review for Test 1**

**Th 2/16 TEST 1 (NEED A SCANTRON)\_**

**T 2/21** Derivative of Log Functions (11.8) Page 658: 13, 15, 17, 25, 33, 51, 55, 75

 WB#s: 243 - 248

**Th 2/23** Derivative of Exp. Fctns. (more 11.8) Page 658: 1 – 11 odd; 21, 23, 37, 39, 43, 47, 49, 53, 59, 61

 WB#s: 249 - 252 **Quiz 4 opens on Blackboard at 5 pm**

**T 2/28 *Quiz 4 closes at 9 am***

 Case Study on Elasticity Page 676: 1 – 5

 WBs:253 - 254

**Th 3/02** Local Max. & Local Min. (12.1) Page 688: 1 – 29 odd; 35, 39, 45

 WB#s: 257 - 261 **Quiz 5 opens on Blackboard at 5 pm**

**T 3/07** ***Quiz 5 closes at 9 am***

 2nd Derivatives & Concavity (12.2) Page 700: 1, 3, 5, 11,13, 25 – 35 odd, 39, 41, 53, 59

 Curve Sketching (12.6) Page 737: 1, 3, 5, 7, 11, 29

 WB#s: 263 – 269; 271 - 273

Th 3/09 Optimization Applications (12.3) Page 712: 1 – 17 odd; 21, 23, 25, 35, 37, 39, 45, 49

WB#s: 275 - 278  **Quiz 6 & Bonus Quiz Test 2 Opens on Blackboard at 5pm**

**T 3/14 SPRING BREAK**

**Th 3/16 SPRING BREAK**

**T 3/21 *Quiz 6 & Bonus Quiz closes at 9 am*** **Review for Test 2**

**Th 3/23 TEST 2** (**NEED A SCANTRON**)

**T 3/28** Antiderivatives (13.1). Page 753: 1 – 39 odd

 WB#s: 283 - 286

**Th 3/30** Integration by substitution(13.2 ) Page 761: 3, 5, 7, 9, 23, 27, 31, 33

 WB#s: 289 - 290 **Quiz 7 opens on Blackboard at 5 pm**

**F 3/31 Last Drop Date**

**T 4/04** ***Quiz 7 closes at 9 am***

 Int. eu(x) and u(x)-1(more 13.2) Page 761: 11, 13, 15, 17, 19, 21

 WB#s: 293 – 295

**Th 4/06** App. of Indefinite Integrals (13.1 & 13.2) Page 753: 43, 47, 51, 55 Page 761:29, 41, 43

 Summation Formula Notes Summation Handout Problems on Blackboard

 WB#s: 287, 291, 295, 297, 298, 300 **Quiz 8 opens on Blackboard at 5 pm**

**T 4/11 Q*uiz 8 closes at 9 am***

 Fund. Theorem of Calculus (13.4) Page 782: 1 – 39 odd,51, 53, 57

 WB#s: 307 - 310

**Th 4/13** App. of Definite Integrals (13.5) Page 793: 3, 11, 13, 15, 23, 31, 33, 35

 WB#s: 299, 311 – 313 **Quiz 9 opens on Blackboard at 5pm**

**T 4/18** ***Quiz 9 closes at 9 am***

 Integration by Parts(16.1 Page 885: 1 – 11 odd, 41; Int. by Parts Handout 1 - 4

 WB#s: 315 example1a

316 examples 2a and 3a

**Th 4/20** More Integration by Parts (16.1) Page 885: 13 – 21 odd, 37, 43; Int. by Parts Handout 5 – 8

 WB#s: 315 example 1b **Quiz 10 & Bonus Quiz Test 3 Opens on Blackboard at 5 pm**

316 examples 2b and 3b

**T 4/25 *Quiz 10 & Bonus Quiz closes at 9 am*** **Review for Test 3**

**Th 4/27 TEST 3 (NEED A SCANTRON)**

**T 5/02 Review for Departmental Final**

**Th 5/04 Review for Departmental Final**

 **SATURDAY 5/06/2017 DEPARTMENTAL FINAL EXAM**

**9:00 –11:30 AM (NEED A SCANTRON)**

**(Room location will be announced later**

**Emergency Phone Numbers**: In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. Non-emergency number 817-272-3381