

Math 1100 - 002 Syllabus

Business Calculus - Fall 2020

Instructor: Jose Yanez (he/his/him)

Course website: Canvas

Email: yanez@math.utah.edu

Office hours: To be announced

Course description: In Math 1100 Business Calculus, students will gain a background of calculus topics that will be important in future business classes. Topics include differentiation, maximization and minimization of functions, marginal analysis and the optimization of constrained functions, integration and applications. Not for students who have completed more than one semester of calculus. Math1100 is a 3-credit semester course.

Prerequisite: At least a C grade in Math1090 (Business Algebra) OR Math1050 (College Algebra) OR in Math1080 (Precalculus) OR Math1210 (Calculus 1) OR an Accuplacer score of 80 on the College Level Math (CLM) test OR at least an ACT Math score of 28 OR at least SAT Math score of 630.

Important Note: The mathematics department DOES enforce prerequisites for all undergraduate courses. If you were able to register for this class based on your enrollment in the prerequisite course last semester and you did not receive the minimum grade in that course to enter this class, then you will be dropped from this class on Friday of the first week of classes. If you are in this situation, it is in your best interest to drop yourself from this class and enroll in a class for which you have the prerequisites before you are forcibly dropped.

Course type: Interactive Video Conferencing (synchronous and asynchronous online).

Location & Meeting times: Tuesday, Thursday 7:30AM - 8:50AM. Canvas

Attendance & Punctuality: Students are expected to attend the synchronous online portion of the class on Tuesdays and Thursday (T Th). (Portions of the classes will be recorded, but the class is designed with active participation in mind and students benefit most when present during the live class.) Midterms will be given in class on Thursdays. You need to be present in the online class in Zoom to participate in these assessments. Not being present during an assessment, but turning it in will be considered academic misconduct.

COVID-19 Considerations: Students must self-report if they test positive for COVID-19 via coronavirus.utah.edu.

Textbook: Mathematical Applications for the Management, Life and Social Sciences, 12th Edition, by Harshbarger & Reynolds. ISBN 13: 978-1-337-62534-0

This book is being sold to student through the inclusive access program, so as to reduce the price of the book. An email will go out to all Math1100 students prior to the first day of class with information on what Inclusive Access is and instructions on how to access their digital course materials. Essentially, students will be billed for the book along with their tuition, and they won't need to do anything else to get access to the online book with this option. Students have the option to OPT OUT, but the default is to opt in. If a student opts out during the first two weeks of class, they will not be charged for the book. If they opt out, the student will be responsible to purchase/rent/borrow the book elsewhere. Through the Inclusive Access Program, students will receive a digital copy of the book. The cost for Math1100 access is around \$40.00. If a student wishes to order a hard copy of the book, they can talk to Shane Girton (U of U Bookstore) and a copy of the book can be special ordered. Lastly, if the Marriott Library is open, there are copies of the book at the Reserve Desk in the Marriott Library that you can check out for three hours at a time. This is a free option for students.

Additional course materials: Additional material will be available on Canvas. We will use the online site, Gradescope, for grading and giving feedback no exams. There is a link in Canvas to Gradescope. You may be asked to submit some assignments directly to Gradescope. The work you will complete in Math 1310 comprises weekly homework and quizzes, weekly lab assignments, three midterm exams, and a comprehensive final exam.

Technical requirements:

- For both quality learning and proctored testing, students are required to have access to the following equipment:
 - A strong internet connection with sufficient bandwidth (in order to participate in IVC classes, access course materials, and take exams)
 - A webcam on your computer or camera on your phone (this is required for taking quizzes and exams in Zoom; it is recommended for IVC lecture classes)
 - A scanning device which is different than the device you are using for your webcam (smartphones can be used as scanning devices)
 - a microphone (used for online meetings)
- Students are expected to be computer literate and Canvas and zoom navigation skills are expected. Knowledge and navigation of canvas and zoom is critical to access all features and resources of this course.
- Students are expected to participate in the IVC portion of class, which is done through Zoom, with audio and visual enabled. This is expectation is there, because it improves learning and

the classroom environment. If students need to turn off cameras and/or microphones, this is allowed. It is polite if you will be doing so for long periods to inform your instructor. Also note, even though microphones are enabled, they may be muted when not in use.

- During quizzes and exams, students are required to have audio and microphone and to have it enabled (students may be asked to mute your microphone for portions of the assessments). Students need to position the camera and/or themselves so that their head, hands and workspace is visible. Students are required to have a separate scanning device and continue to have their Zoom camera turned on while scanning; during the scanning phase, students may be gone from the screen for a few seconds if this is prearranged with their instructor.
- A printer is recommended, but not required. I will post notes for the online lectures, along with exercises to work during class. Also a printer will be helpful so you can print out templates for quizzes and exams ahead of time. If you do not have a printer, you will need to make and use hand-written versions. You must copy these exactly, but they are designed to be fast and straight forward to create by hand.

UofU Learning Support:

Math Center Online Tutoring, (Paid for by Your Student Fees) <https://www.math.utah.edu/undergrad/mathcenter.php>

The Learning Center, 3 free tutoring sessions, \$5 after that, learning consultations

<https://learningcenter.utah.edu/>

Student Success Advocates <https://ssa.utah.edu/events.php>

General Help:

Here is information from the University about logistics in light of COVID-19. There is also information about financial assistance, counseling, the food pantry, and much more. <https://coronavirus.utah.edu/#students>

Equipment Help:

The UofU has a laptop and mobile hotspot loan program –laptops, mobile hotspots mailed to current U students on a first-come, first-served basis. You can find out more information about this through this link: <https://union.utah.edu/covid-19/>

For technical assistance, review the Canvas Getting Started Guide for Students <https://community.canvaslms.com/docs/DOC-10701> and/or contact TLT, Knowledge Commons, etc

Content overview: The course goal is for students to improve their quantitative reasoning, gaining an understanding of the themes of calculus and how they relate to business and economics.

Course expected learning outcomes:

- Have a basic conceptual understanding of limits.
- Know how to differentiate and integrate polynomial, rational, logarithmic, and exponential functions.
- Use derivatives to gather information about the shape of the curve and use that information to graph the curve $y = f(x)$, for polynomial, logarithmic, exponential and simple rational functions.
- Understand how to use differentiation to optimize functions for business applications, such as maximizing profit examples.
- Use integration to find area under curves and for business examples such as average value.
- Take partial derivatives of basic functions of two variables.

Course design:

- The content of the course will be provided through prerecorded lectures. The videos will be posted on Canvas. Each week two lectures will be posted, and they will be subdivided into topics, which will make each individual video shorter. It is your responsibility to watch the lectures during the week.

Although the videos will be available throughout the semester, so you can access them whenever you want, it is highly recommended to take notes while watching them.

- On Tuesdays and Thursdays, from 7:30AM to 8:50AM, the class will meet via Zoom video conferencing. These meetings will serve three purposes.
 - The first one is to answer questions about the lectures. For this it is important that you watch the corresponding group of videos for that class (the first group of videos will correspond to the meeting on Tuesday, and the second group of videos will correspond to the meeting on Thursday).
 - Secondly, I will work on some problems step-by-step. This is your chance to take notes on how to solve problems, and ask further questions about the contents of the class.
 - Finally, there will be time for you to work in groups on some assigned problems. For each class I will prepare a worksheet with some problems related to the topics corresponding to the class. You can also use this time to work on the homework of the class. During this time, I will divide you into smaller groups so you can discuss the problems, and I will be available to answer questions.

- **Assignments:**

- **Practice quizzes:** As a way of checking basic concepts after the lecture videos, each week there will be two practice quizzes. They are short multiple choice questions and they can be retaken as many times as you want. They are due on Friday at 11:59PM.
- **Quizzes:** Each week we will have take-home group quizzes. I will post the quizzes on Wednesdays nights, and they are due on Friday at 11:59PM. There will be 2-3 questions in every quiz and they are meant to take no longer than 30 minutes.

You are encouraged to work on small groups (no more than 4 people) via Zoom (or any other form of online meeting). Even though you can work in groups, each student must write his/her own solutions.

- **Homework:** Homework will consist of questions assigned from the book. It is due on Fridays 11:59PM. You will complete homework on your own paper, and then scan each section individually and upload it to Canvas. Each section should be a SINGLE pdf, not multiple pdfs or other file types. Write the section that the HW is from on every page (so it is easy to tell if it's 1.2 or 1.3) Write the problems and their solutions neatly and in order (or if out of order, make notes, so that problems are easy to find.) Make sure that the pages you upload are in order. For every problem, write a very SHORT summary of the problem you are answering:

- * If you are solving an equation, write the equation.
- * If you are doing a word-problem, write the key facts from the word problem
- * For a true/false or multiple choice question, write a short summary of the statement or question

Look over your pdf file to make sure it is legible (writing is not too light or too fuzzy). There will be deductions if you do not follow the instructions above.

- * You will get half credit if you DO every problem. I will NOT be grading for correctness for this half of the grade, so it is your responsibility to make sure you understand the problems and their solutions. This is basically motivation for you to do the homework because that is the only way to survive a math class. (Please notice that there is no way to get an A in this course if you choose not to do any of the homework. On the other hand, turning in all of the homework can help your grade substantially.)
 - * The other half of the points for each homework set will be given for correct and neat solutions, with all work shown. The grader will grade a few problems on each homework set to check for correctness. We will not tell you ahead of time which problems will be graded for correctness.
- **Exams:** There will be two Midterm Exams on Thursday, October 8 and on Thursday, November 19, during class, and a Final Exam on December 7, from 8:00AM to 10:00AM.

- * Each Midterm will consist of two blocks with short breaks in between. During exams, students are required to have their cameras on, showing their head, hands, and workspace. Students may use one page of notes that they make during quizzes and exams. Each student should make their own notes. They should not use notes from other students or other sources. At the end of the exam, students will scan their work and upload it either to Canvas or Gradescope, the grading website. Student may ask questions to their instructor through the Chat feature in Zoom.
- * The Final exam will consist of three blocks with short breaks in between. It will be proctored in Zoom, similar to what was done for the Midterms. Not all the contents of the course will be included in the Final. The selection of topics for the Final will be announced after grading the second Midterm.
- * Calculators **will not** be allowed during the exams.

Suggested schedule: Given that most part of the content and the assignments will be available online, you can decide what time schedule works the best for you. Here is a suggested schedule that organizes the different assignments and events on a normal week (no midterm).

- Monday:
 - Watch first group of lectures. Take notes and write down questions.
 - Start working on the homework.
- Tuesday:
 - Attend class in the morning. Ask questions, work on the suggested problems.
 - After class, do the first practice quiz of the week.
 - Continue working on the homework.
- Wednesday:
 - Watch second group of lectures. Take notes and write down questions.
 - Continue working on the homework.
- Thursday:
 - Attend class in the morning. Ask questions, work on the suggested problems.
 - After class, do the second practice quiz of the week.
 - Take the weekly quiz. Schedule a 30 minutes meeting with your group to work on the problems. Write down the solutions, scan your results, and upload it.

- Continue working on the homework.
- Friday:
 - Finish homework. Write down the solutions, scan your results, and upload it.
 - Review feedback from previous assignments.
 - Check in Canvas that all the assignments of the week are completed.
 - Enjoy the weekend.

Important dates:

Exam Dates: Midterm 1: Thursday, October 8, 7:30AM - 8:50AM ; Midterm 2: Thursday, November 19, 7:30AM - 8:50AM; Final: Monday, December 7, 8:00AM - 10:00AM.

Official Drop/Withdraw Dates: The last day to drop classes is Friday, September 4; the last day to withdraw from this class is Friday, October 16. Please check the academic calendar for more information pertaining to dropping and withdrawing from a course. Withdrawing from a course and other matters of registration are the student's responsibility.

Holidays: There will be no class on Thursday, November 26 (Thanksgiving break).

Communication:

- All course materials, such as lecture slides, assignments, solutions, grades, etc. will be posted on the Course Canvas site [Add link] . Class announcements will be done via email through the Canvas server. (If you plan to post announcements on the announcements page, state this.) You will be responsible for any information contained in them as well as the information announced in class.
- It is your responsibility to also regularly check your Umail (make sure you set up forwarding if you do not check it regularly), your Umail is the only way for me to communicate privately with you, there will be occasions during the semester that we may need to reach out to you individually (e.g. regarding a grade or assignment) and it is in your best interest to respond promptly.
- Feel free to contact me by email for questions at yanez@math.utah.edu, I will do my best to answer emails promptly. I would like to encourage you to email me only if it is something personal that requires individual attention. If instead you have questions about logistics of the class, course material and assignments, and anything else your classmates may wonder as well, please post a question on the Discussions Board. This way the information is shared quickly to the entire class, and each of you can benefit from seeing other classmates' questions.

- I will always do my best to ensure the communication relevant to the course is clear and transparent, it is your responsibility as well to keep yourself updated by regularly checking: the announcements on Canvas, your Umail (or Canvas mail), the posts on the Discussions Board, and pay attention to the announcements given in class and Discussion Section.
- Course Canvas Page: Students are expected to log in and check canvas **every day** for posted announcements and assignments. Students are also strongly advised to set up notifications for canvas so they do not miss any important notifications.

Netiquette - Expectations fo online learning enviroment

- Classroom equivalency: Respectful participation in all aspects of the course will make our time together productive and engaging. Zoom lectures, discussion threads, emails and canvas are all considered equivalent to classrooms and student behavior within those environments shall conform to the student code. Specifically:
 - Posting photos or comments that would be off-topic in a classroom are still off-topic in an online posting.
 - Disrespectful language and photos are never appropriate.
 - Using angry or abusive language is not acceptable, and will be dealt with according to the Student Code. The instructor may remove online postings that are inappropriate.
 - Do not use ALL CAPS, except for titles, or overuse certain punctuation marks such as exclamation points and question marks.
 - Course e-mails, e-journals, and other online course communications are part of the classroom and as such, are University property and subject to the Student Code. Privacy regarding these communications between correspondents must not be assumed and should be mutually agreed upon in advance, in writing.
- Other expectations for online communication (on Discussion Board, Emails, Zoom chat etc):
 - Emails: When emailing your Instructor and Teaching Team keep a professional tone (e.g. Use a descriptive subject line, avoid “Hey”, and begin the e-mail with Dear Jose. Sign your message with your name and return e-mail address. Please consult this page for tips on how to write appropriate professional emails: <https://academicpositions.com/career-advice/how-to-email-a-professor>
 - Treat your instructor, teaching team and classmates with respect in email or any other communication.
 - Avoid slang terms such as “wassup?” and texting abbreviations such as “u” instead of “you.”

- Be cautious when using humor or sarcasm as tone is sometimes lost in an email or discussion post and your message might be taken seriously or be offensive to others.
- Be careful with personal information (both yours and others).
- Electronic or equipment failure: It is your responsibility to maintain your computer and related equipment in order to participate in the online portion of the course. Equipment failures will not be an acceptable excuse for late or absent assignments.
- Online submissions: You are responsible for submitting the assignment with the required naming convention, correct file extension, and using the software type and version required for the assignment.
- Canvas allows students to change the name that is displayed AND allows them to add their pronouns to their Canvas name. Additionally, students can indicate their pronouns in Zoom.

Assignments, assessment & grading:

Grade break down:

- Midterm 1: 20%
- Midterm 2: 20%
- Practice quizzes: 5%
- Quizzes: 15%
- Homework: 20%
- Final exam: 20%

If X is your percentage grade, then your letter grade is:

$93 \leq X \leq 100$	A	$80 \leq X < 83$	B-	$67 \leq X < 70$	D+
$90 \leq X < 93$	A-	$77 \leq X < 80$	C+	$63 \leq X < 67$	D
$87 \leq X < 90$	B+	$73 \leq X < 77$	C	$60 \leq X < 63$	D-
$83 \leq X < 87$	B	$70 \leq X < 73$	C-	$X < 60$	E

It is the student’s responsibility to ensure the accuracy of all recorded homework, quizzes, online assignments, and exam grades. Also you should keep as record all your graded assignments. If you see any error in your grades on Canvas reach out to me as soon as possible. If you have questions or see an error in Gradescope, for example if the feedback doesn’t match the work you show, go to the problem and submit a regrade request. Please take action promptly, at the latest within two weeks from when the assignment was returned.

Late Assignments/Missed Assignments/Regrading Policies:

In order to accommodate illness and other reasons of absence, the two lowest practice quiz scores, the lowest quiz score and the lowest homework score will be dropped.

The course is designed to provide flexibility via the assignments that are dropped. You are expected to turn things in on time and take quizzes and exams at the times given unless there are serious extenuating circumstances. If there are extenuating circumstances, please contact me in a timely way to discuss alternatives. If the situation is one that can be documented, you may be asked to provide documentation.

The University of Utah student code allows for making up quizzes or exams in advance for “officially sanctioned University Activities . . . , or government obligations, or religious obligations”. Please contact me at least one week in advance of any such obligations to arrange accommodation.

If you spot a grading error or have question about grading, please contact me within two weeks of the assignment being graded. Also, if the assignment was graded in Gradescope, use the Gradescope regrade request tool to contact me.

Incompletes: According to university policy, to be considered for an incomplete, a student must have 20% or less of the course work remaining and be passing the course with a C or better. You must request an incomplete grade and I will consider giving that grade only under exceptional circumstances.

ADDITIONAL POLICIES AND RESOURCES

Academic code of conduct: Students are encouraged to review the Student Code for the University of Utah: <https://regulations.utah.edu/academics/6-400.php>. In order to ensure that the highest standards of academic conduct are promoted and supported at the University, students must adhere to generally accepted standards of academic honesty, including but not limited to refraining from cheating, plagiarizing, research misconduct, misrepresenting one’s work, and/or inappropriately collaborating. A student who engages in academic misconduct as defined in Part I.B. may be subject to academic sanctions including but not limited to a grade reduction, failing grade, probation, suspension or dismissal from the program or the University, or revocation of the student’s degree or certificate. Sanctions may also include community service, a written reprimand, and/or a written statement of misconduct that can be put into an appropriate record maintained for purposes of the profession or discipline for which the student is preparing.

The Americans with Disabilities Act: The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability & Access, 162 Olpin Union Building, 801-581-5020. CDA will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in alternative format

with prior notification to the Center for Disability & Access.

Addressing Sexual Misconduct: Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a Civil Rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted on the basis of your sex, including sexual orientation or gender identity/expression, you are encouraged to report it to the University's Title IX Coordinator; Director, Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or to the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to police, contact the Department of Public Safety, 801-585-2677(COPS).

Campus Safety: The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu

Inclusivity Statement: It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, and veteran status, and other unique identities. gender, sexuality, disability, age, socioeconomic status, ethnicity, race, culture, and other unique identities. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.

Discrimination and Harassment: If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or Office of the Dean of Students, 270 Union Building, 801-581-7066. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS). Please see Student Bill of Rights, section E <http://regulations.utah.edu/academics/6-400.php>. I will listen and believe you if someone is threatening you.

Names/Pronouns: Canvas allows students to change the name that is displayed AND allows

them to add their pronouns to their Canvas name. Class rosters are provided to the instructor with the student's legal name as well as "Preferred first name" (if previously entered by you in the Student Profile section of your CIS account, which managed can be managed at any time). While CIS refers to this as merely a preference, I will honor you by referring to you with the name and pronoun that feels best for you in class or on assignments. Please advise me of any name or pronoun changes so I can help create a learning environment in which you, your name, and your pronoun are respected. If you need any assistance or support, please reach out to the LGBT Resource Center. https://lgbt.utah.edu/campus/faculty_resources.php

English Language Learners: If you are an English language learner, please be aware of several resources on campus that will support you with your language and writing development. These resources include: the Writing Center (<http://writingcenter.utah.edu/>); the Writing Program (<http://writing-program.utah.edu/>); the English Language Institute (<http://continue.utah.edu/eli/>). Please let me know if there is any additional support you would like to discuss for this class.

Undocumented Student Support: Immigration is a complex phenomenon with broad impact — those who are directly affected by it, as well as those who are indirectly affected by their relationships with family members, friends, and loved ones. If your immigration status presents obstacles to engaging in specific activities or fulfilling specific course criteria, confidential arrangements may be requested from the Dream Center. Arrangements with the Dream Center will not jeopardize your student status, your financial aid, or any other part of your residence. The Dream Center offers a wide range of resources to support undocumented students (with and without DACA) as well as students from mixed-status families. To learn more, please contact the Dream Center at 801.213.3697 or visit dream.utah.edu.

Veterans Center: If you are a student veteran, the U of Utah has a Veterans Support Center located in Room 161 in the Olpin Union Building. Hours: M-F 8-5pm. Please visit their website for more information about what support they offer, a list of ongoing events and links to outside resources: <http://veteranscenter.utah.edu/>. Please also let me know if you need any additional support in this class for any reason.

Wellness Statement: Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness at www.wellness.utah.edu or 801-581-7776.

Student Success Advocates: The mission of Student Success Advocates is to support students in making the most of their University of Utah experience (ssa.utah.edu). They can assist with men-

toring, resources, etc. Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact a Student Success Advocate for support (<https://asuu.utah.edu/displaced-students>).

University Counseling Center: The University Counseling Center (UCC) provides developmental, preventive, and therapeutic services and programs that promote the intellectual, emotional, cultural, and social development of University of Utah students. They advocate a philosophy of acceptance, compassion, and support for those they serve, as well as for each other. They aspire to respect cultural, individual and role differences as they continually work toward creating a safe and affirming climate for individuals of all ages, cultures, ethnicities, genders, gender identities, languages, mental and physical abilities, national origins, races, religions, sexual orientations, sizes and socioeconomic statuses. More information about the counseling center, including ways to contact them, can be found here: <https://counselingcenter.utah.edu/>.

Office of the Dean of Students: The Office of the Dean of Students is dedicated to being a resource to students through support, advocacy, involvement, and accountability. It serves as a support for students facing challenges to their success as students, and assists with the interpretation of University policy and regulations. Please consider reaching out to the Office of Dean of Students for any questions, issues and concerns. 200 South Central Campus Dr., Suite 270. Monday-Friday 8 am-5 pm. Their phone number is 801-582-7066.

Syllabus subject to change: This syllabus is meant to serve as an outline and guide for our course. Please note that I may modify it with reasonable notice to you. I may also modify the Course Schedule to accommodate the needs of our class. Any changes will be announced in class and posted on Canvas.