

# MTH 217 Course Syllabus

## I. IDENTIFYING INFORMATION

<b>Course:</b>	MTH 217
<b>Course Title:</b>	Business Calculus
<b>EPN:</b>	<b>22420361</b>
<b>Term:</b>	<b>Summer 2022</b>
<b>Location:</b>	Online
<b>Course Dates:</b>	5/16, 6/24/2022
<b>Prerequisites:</b>	Placement or successful completion of MTH 107

**Instructor:** Ben Salisbury      **E-Mail Address:** [salis1bt@cmich.edu](mailto:salis1bt@cmich.edu)

## BLACKBOARD

- Blackboard is a web-based learning management system licensed by CMU.
- Within Blackboard, a course website, also known as a shell, is automatically created for every CMU course. Face-to-face courses may or may not incorporate Blackboard, whereas Blackboard course shells are always used for online courses and will be available to you prior to the course start date.
- Seeing the course shell listed in Blackboard with “unavailable” adjacent to its title merely means your instructor has not opened the course content for students to access, yet.
- To access Blackboard, open a web browser and enter <https://blackboard.cmich.edu>. Then enter your CMU Global ID and password, click the login button.
- Find and click the course name to enter the course's Blackboard shell.
- [CMU Help Desk](#) 989-774-3662 [self-guided student tutorial resources](#)

## II. TEXTBOOKS AND INSTRUCTIONAL MATERIALS

The textbook and associated *WebAssign* homework management software, are available to students through Inclusive Access, which provides students with access to the eText on the first day of class. Charges for the textbook are offered at a significant discount and are automatically placed onto students' CMU account by the CMU Bookstore.

**All students are automatically enrolled into the Inclusive Access purchase option;** however, if you **wish to opt out, you have until Monday of the third week of the online term to do so.** To opt out, follow the instructions provided in an email sent from the CMU Bookstore, typically one to two weeks before the start of class.

<b>Title:</b>	Applied Calculus with <i>WebAssign</i>	<b>ISBN:</b>	978-1-337-65274-2
<b>Author:</b>	Waner	<b>Publisher:</b>	Cengage
<b>Edition:</b>	7 <sup>th</sup> /2018		

Here are some tips on getting started with *WebAssign*.

- <https://www.WebAssign.com/students/getting-started/>
- [http://WebAssign.net/manual/Student\\_Quick\\_Start\\_Guide\\_R.pdf](http://WebAssign.net/manual/Student_Quick_Start_Guide_R.pdf)

While you are registering to access *WebAssign* via CMU blackboard course shell, provide following information:

Your institution: cmich                      Your Id: your CMU global ID  
Password: create a new password (need not be the same as CMU password)

**Note: Password cannot be exchanged to anybody, if so, disciplinary action will be taken by CMU administration.**

### **Software and Technology**

This course will use Blackboard for the course structure, course learning materials, and communication; use *WebAssign* for practice quizzes and homework, videos, graded quizzes, tests, and final comprehensive exam; use WebEx for virtual meetings/sessions with the instructor.

### **Calculators**

Access to a graphing calculator is required for this class. TI 81-94 calculators are suggested, and are allowed for quizzes, exams, and the proctored final exam. These calculators are useful. If you are comfortable using MS Excel, that is allowed, also. No phone calculators are allowed. All graded works are closed book and closed notes — no cheat sheets nor internet help are allowed.

**Note:** All graded assignments except the final comprehensive are self-monitored/self-disciplined; if you do not follow these rules, your instructor will find out your honesty at the final proctored exam outcome. Please do not cheat yourself, be self-disciplined and organized, as for any online class.

### **Designate Your Proctor for the Final Comprehensive Exam**

You will need to complete the [Proctor Designation Form](#). Once submitted, two e-mails are sent. The first one lets you know we have received your proctor designation form. A second e-mail is sent informing you whether your proctor has been approved or denied. Once your proctor is approved, your exam information is sent to the proctor (via e-mail). Once your proctor is in receipt of your exam materials, you may then schedule your exam (note: Exam is 2 hours).

For additional questions regarding proctoring for your course, please contact the lead proctor at [cmu.online.proctor@cmich.edu](mailto:cmu.online.proctor@cmich.edu) or 989-774-1092.

## **III. COURSE DESCRIPTION**

Differentiation and integration of algebraic, exponential and logarithmic functions, business and economics applications of differentiation and integration. Does not count toward a major or minor in mathematics.

## **IV. COURSE GOALS AND OBJECTIVES**

After successful completion of this course, the student will be able to:

- Identify dependent/independent (input/output) variables.

- Model real world applications by demonstrating the use of slope-intercept form of a linear/nonlinear function and explain the meaning in business world.
- Analyze and apply the notions of limits, continuity and differentiability of various functions in business applications and economics.
- Explain various mathematical functions to address business application problems and processes.
- Apply modeling concepts to business applications by taking derivatives of algebraic, exponential and logarithmic functions and solve related optimization problems.
- Use the relative and global maxima and minima for various functions and explain their significance in business related applications and interpret the results.
- Use the concepts of concavity/convexity and point of inflection/diminishing return to problem-solving strategy in business related applications and interpret the results appropriately.
- Use anti-derivatives (integrals) of functions such as polynomials, rational functions, exponential and logarithmic functions and solve business and economic applications using integrals.
- Demonstrate the relationship between area and the definite integral.
- Integrate selected functions and how it applies to solve problems in business and economics context.
- Apply the Fundamental Theorem of Calculus to evaluate definite integrals.
- Apply the concepts of limits/derivatives/integrals to solve business applications and economics and interpret its results.

## V. METHODOLOGY

### Expectation for Students

This course requires great effort, self-discipline and good organizational skills. You must be self-motivated, organized, and self-disciplined to keep yourself on schedule with reading, assignments, video watch, quizzes/tests practice, etc. You must be a good reader to succeed in this class. Online classes are more challenging in that they have a smaller number of weeks in which you will learn a great amount of content.

If you have any computer-related problems while working on assignments and/or taking quizzes or exams, make sure to send e-mail immediately to *WebAssign* personnel's 24-hour help desk and copy your instructor on the e-mail. You may also contact the CMU Helpdesk at 989-774-3662 and/or e-mail [helpdesk@cmich.edu](mailto:helpdesk@cmich.edu). If you have trouble submitting some part of a calculus problem while you are submitting answers online, please make sure to take a screenshot and send me that along with the steps you have written to solve those particular problem(s).

I am here to help you! If you have questions, please feel free to use email ([salis1bt@cmich.edu](mailto:salis1bt@cmich.edu)) to contact me. It is extremely important that you as a student take ownership of your learning for this online course.

### A Word of Caution

Calculators and computers are tools. An over-reliance on graphing calculators or computers can be detrimental to your progress in mathematics. Remember, they are to be used as an aid, not a crutch. If you simply push buttons rather than thinking through functions, you severely limit your ability to analyze problems.

## VI. COURSE OUTLINE/ASSIGNMENTS

### Pre-Class Assignment

1. Acquire required textbook and materials.
2. Review [System Requirements & Recommendations](#) from CMU, do the [browser check](#) and review the [Blackboard Supported Browser/OS Matrix](#).
3. Review the course syllabus and Blackboard shell.
4. Take the **pre/aptitude test** (elementary algebra and college algebra) (in *WebAssign*, preferably the week *before* the start of class).
5. Review and bookmark [Blackboard Student Tutorials](#).
6. [Designate a proctor](#) for the comprehensive final exam.

Submit homework online using *WebAssign*. Also, complete your practice quizzes and tests using *WebAssign* based on the deadline given on *WebAssign* before any graded assignments — completing assignments in this order should increase your overall success. Graded quizzes, tests, and comprehensive final examination will have to be completed using *WebAssign* (schedules are on the syllabus) on the day/week as shown on the syllabus. It is your duty to look at the *WebAssign* homework and video sections every day.

### MTH 217 Course Calendar / Course Outline

Dates	Week	Session Topic	Chapters
5/16-5/19	1a	Listen to Podcast on Course Overview Read chapters 0 and 1 (algebra review) Take online quiz 1 (Chapters 0 and 1), due by Thursday at 12:00pm	0 & 1
5/19-5/22	1b	Read sections 2.1-2.4 Take online quiz 2 (Ch. 2.1-2.4), due by Sunday at 11:59pm	2
5/22-5/26	2a	Read sections 3.1-3.3 Take online quiz 3 (3.1-3.3), due by Thursday at 12:00pm	3
5/26-5/29	2b	Read sections 3.4-3.6 Take online quiz 4 (3.4-3.6), due by Sunday at 11:59pm  <b>Test 1 (Chapters 0,1,2, and 3)</b> , due by Sunday at 11:59pm	3  Test 1
5/29-6/2	3a	Read sections 4.1-4.4 Take online quiz 5 (4.1-4.4), due by Thursday at 12:00pm	4
6/2-6/5	3b	Read sections 4.5-4.6 and 5.1-5.2 Take online quiz 6 (4.5-4.6, 5.1-5.2), due by Sunday at 11:59pm	4
6/5-6/9	4a	Read sections 5.3-5.6 Take online quiz 7 (5.3-5.6), due by Thursday at 12:00pm  <b>Test 2 (Chapters 4 and 5)</b> , due by Thursday at 12:00pm	5  Test 2
6/9-6/12	4b	Read sections 6.1-6.3 Take online quiz 8 (6.1-6.3), due by Sunday at 11:59pm	6
6/12-6/16	5a	Read sections 6.4 and 7.1-7.2. Take online quiz 9 (6.4, 7.1-7.2), due by Thursday at 12:00pm	6 & 7
6/16-6/19	5b	Read sections 7.3-7.4. Take online quiz 10 (7.3-7.4), due by Sunday at 11:59pm  <b>Test 3 (Sections 6.1-6.4 and 7.1-7.4)</b> , due by Sunday at 11:59pm	7  Test 3
6/19-6/22	6a	Review Chapters 0-7 (See sections given in your syllabus)	0-7

6/22-6/24	6b	<p><b>Watch for Blackboard/WebAssign announcement</b></p> <p><b>Take online practice exam (not for grade) thru WebAssign:</b> Chapters 0, 1, 2, 3, 4, 5, 6, 7.1-7.4, due by Friday at 11:59pm</p> <p><b>Take the online Proctored Comprehensive final examination.</b> <b>Due by Friday of Week 12 at 11:59 pm.</b></p> <p><b>Note:</b> It is a <b>proctored comprehensive</b> exam, evenings &amp; weekend some of the proctors may not be available. Please adjust your time schedule according to your proctor.</p> <p><b>Note:</b> You must pass with <b>56% or higher on the final comprehensive exam (even if you have 100% throughout the semester) in order to be considered for passing grade computation.</b></p>	<p>0-7</p> <p>Final Exam</p>
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### Post-Class Assignment

- Verify the accuracy of the grades posted on Blackboard.
- Complete the student opinion survey; a link is sent to student CMU email accounts (from CMU, not the instructor) on the last Wednesday of the class. You can also access the survey by going to view your grades in CentralLink and it will ask you to complete the survey.

### Student Involvement Hours

At least 30 to 40 hours per week, depending upon your mathematical or analytical aptitude.

## VII. CRITERIA FOR EVALUATION

### Evaluation Criteria

Course assignments and points are listed as follows:

Assignment	Details	Points
Quizzes	(10 @ 10 pts. each)	100 points
Exams	(3 @ 100 pts. each)	300 points
Proctored Comprehensive Final Exam		200 points
	TOTAL	<b>600 points</b>

**Only Blackboard/WebAssign quizzes and exams are counted towards final grade. Homework, and audio/video practice assignments are not counted towards final grade.**

### Grading scale:

Percent	Grade
96-100%	A
90-95%	A-
85-89%	B+
80-84%	B
76-79%	B-
72-76%	C+

Percent	Grade
68-72%	C
64.5-68%	C-
62-64.5%	D+
59-62%	D
56-59%	D-
<56%	E

Check your grades and feedback under "My Grades" in the course at least once a week.  
[Viewing Grades and Feedback](#) | [Video](#) (41 seconds)

### **Final Exam**

**Everyone must score at least 56% on the proctored final exam** to pass this course for the entire semester. In particular, you will need both to score at least 56% for the final comprehensive exam and at least 56% in the all the other grade work to pass this course. Make sure to complete the final proctored exam on sixth week as given in your schedule section. You must obtain a proctor for final comprehensive exam at least by third week of the semester. Please refer to "Designate Your Proctor for the Final Comprehensive Exam" of this syllabus to schedule a proctor for the exam.

### **Incomplete Grades**

See Central Michigan University's [policy for incomplete grades](#).

### **Late Assignments**

No late unexcused assignments are accepted.

### **Make-ups and Rewrites**

If a student has a valid excuse (as deemed by the instructor) for missing assignments, the instructor may grant an extension on the due date.

## **VIII. EXPECTATIONS**

### **Academic Integrity**

Because academic integrity is a cornerstone of the University's commitment to the principles of free inquiry, students are responsible for learning and upholding professional standards of research, writing, assessment, and ethics in their areas of study. Written or other work which students submit must be the product of their own efforts and must be consistent with appropriate standards of professional ethics.

Academic dishonesty, which includes cheating, plagiarism and other forms of dishonest or unethical behavior, is prohibited. Further information can be found in the CMU [Policy on Academic Integrity](#).

### **Student Rights and Responsibilities**

Each member of the Central Michigan University community assumes an obligation regarding self-conduct to act in a manner consistent with a respect for the rights of others and with the University's function as an educational institution. As guides for individual and group actions within this community, the University affirms the general principles of conduct described in the [Code of Student Rights, Responsibilities and Disciplinary Procedures](#).

### **Harassment and Discrimination**

You have a right to feel safe and supported while pursuing your degree at CMU. If any professor, student, or staff member makes you feel that you have been discriminated against, disrespected or stuck in a hostile environment, the Office of Civil Rights and Institutional Equity (OCRIE) is here to help: Bovee UC 306, (989) 774-3253. For resources and more information, please see <https://www.cmich.edu/offices-departments/OCRIE>.

### **Sexual Misconduct Policy**

With the exception of the confidential resources named explicitly within the Sexual Misconduct Policy, all CMU staff and faculty are responsible employees and are required to report any information they know about possible sexual misconduct to the Title IX Coordinator in OCRIE: (989) 774-3253. This means that any information you may divulge about such an incident in the classroom or with a faculty member cannot be confidential. Reports to OCRIE are intended to provide options and resources to survivors. Please keep these reporting obligations in mind as you seek support from staff and faculty you trust and know that there are also support centers on campus that will maintain confidentiality, which include Sexual Aggression Peer Advocates (989-774-2255) and the CMU Counseling Center (989-774-3381). For resources and more information, please see <https://www.cmich.edu/offices-departments/OCRIE>.

### **Accommodation of Religious Obligations**

It is University policy to permit students to be absent from classes or examinations for reason of observing religious holidays. Students are allowed to make up course requirements when they are unable to avoid a conflict between their academic and religious obligations. Absence from classes or examinations caused by observing religious holidays does not relieve students from responsibility for any part of the course work required during the period of absence. It is the obligation of students to provide faculty with written notice of the religious holiday they will be observing and the date on which they will be absent at least two weeks prior to the date of the religious holiday. Students who miss classes or are absent on days of examinations or class assignments shall be offered an opportunity to make up the work, without penalty, unless it can be demonstrated that a make-up opportunity would interfere unreasonably with the delivery of the course.

## **IX. SUPPORT SERVICES AND OTHER REQUIREMENTS**

### **Library and Research Services**

As a CMU student you have full access to the services and resources of the CMU Library. Reference librarians will help you find information on your research topic and answer other questions related to the library. The library's Documents on Demand office will obtain copies of the books and journal articles for you. Check out the library's website at <https://library.cmich.edu> for more information.

**Reference librarian** [libref@cmich.edu](mailto:libref@cmich.edu) (989) 774-3470 <http://libguides.cmich.edu/askalibrarianform>  
**Documents on Demand** [docreq@cmich.edu](mailto:docreq@cmich.edu) (989) 774-3022 <https://illiad.cmich.edu/>

### **Mathematics Assistance Center**

The CMU Mathematics Assistance Center provides free tutoring in mathematics and statistics to students enrolled in select courses. Tutoring online and via telephone. See what courses qualify and register at <http://global.cmich.edu/mathcenter/tutoring-request.aspx>.

### **ADA**

CMU provides students with disabilities reasonable accommodations to participate in educational programs, activities or services. Students with disabilities requiring accommodations to participate in class activities or meet course requirements should register for services through Student Disability Services, 120 Park Library, 989-774-3018, <https://www.cmich.edu/student-life/student-support-services/student-disability-services>.

*Note: the student will provide to their instructors a "Notification Letter to the Instructor" outlining the accommodations the student is approved to receive.*

**Student & Enrollment Services for CMU Online Courses**  
(800) 688-4268 or (989) 774-1129 or [cmuonline@cmich.edu](mailto:cmuonline@cmich.edu)

**Drop & Withdrawal Policy for Online Courses**

<http://global.cmich.edu/courses/drop-withdraw.aspx>

**Academic Calendar and Credit/No Credit Deadlines for Online Courses**

<https://www.cmich.edu/global/calendar/Pages/default.aspx>

**Office of Information Technology Help Desk**

[https://www.cmich.edu/office\\_provost/OIT/help/help\\_desk/Pages/default.aspx](https://www.cmich.edu/office_provost/OIT/help/help_desk/Pages/default.aspx)

**Pre-Class Checklist for Online Courses**

<http://www.global.cmich.edu/cmuonline/checklist.aspx>

**Online Learning Resource Center**

<http://www.global.cmich.edu/cmuonline/about/>

**Certified Testing Center & Proctoring Information**

(989) 774-4461 or [cmu.online.proctor@cmich.edu](mailto:cmu.online.proctor@cmich.edu)  
<https://www.cmich.edu/global/cmuonline/proctoring/Pages/default.aspx>