



Walters State Community College Course Syllabus

Course Information

Course Number and Name: MATH 1830 Applied Calculus

Section ID: 81184.202380

Semester and Year: Fall 2023

Credit Hours: 3

Start Date: August 21, 2023

End Date: December 08, 2023

Course Format: DVC - Desktop Video Course

Catalog Course Description: A one-semester course in the differential and integral calculus of algebraic, exponential, and logarithmic functions with applications. Prerequisite(s): MATH 1630 or 1710, ACT Score of 24, or permission of the Dean of Mathematics. **F, S, Su**

General Education Course Designation: General Education Course

Meeting Details: TR; 09:35AM - 11:00AM; DVC

Course Drop Deadline: October 27, 2023

Instructor Information

Name: Dr. Crystal Rice

Role: Professor of Mathematics

Office Location: MBSS 230

Office Hours: Posted on office door and eLearn. Office hours are times that the instructor is available either on campus or virtually. It is recommended that students make an appointment for in-person or virtual office visits.

Office Phone: 423-585-6940

Email: crystal.rice@ws.edu

Supervisor Name: Chris Knight

Supervisor Phone: 423-585-6879

Secretary Name: Tammy Holt

Secretary Phone: 423-585-6864

Required Textbook(s) and Materials

Mathematical Applications for the Management, Life and Social Sciences

Authors: Harshbarger/Reynolds

Edition: 12th

Additional Information

The following technology is required:

- 1) TI-84 graphing calculator
- 2) Enhanced WebAssign student access code OR current subscription to Cengage Unlimited

Note: Mathematical Applications for the Management, Life and Social Sciences eText is included with WebAssign student access.

Student Learning Outcomes/Objectives

- Course Outcomes
 1. Find the limit of a function numerically, graphically, and symbolically.
 2. Find and interpret average rates of change and slopes of secant lines.
 3. Find and interpret instantaneous rates of change and slopes of tangent lines using a derivative.
 4. Use the limit definition of derivative to find derivatives.
 5. Find derivatives using derivative rules.
 6. Demonstrate an understanding of the relationship between the behavior of a function and its derivatives.
 7. Solve optimization problems.
 8. Approximate area by using rectangles.
 9. Find antiderivatives using antiderivative rules.
 10. Apply the Fundamental Theorem of Calculus to evaluate definite integrals.
 11. Use concepts of calculus and technology to investigate applied problems.

Instructional Approach and Methods

Students are responsible for acquiring all equipment that is necessary for the course. Students are also responsible for making sure that their equipment is compatible with all of the learning/testing environments (eLearn, Cengage WebAssign and Microsoft Teams) utilized in this course.

This course requires proctored exams. Students will be required to complete the proctored exams ONLINE through Microsoft Teams using their own equipment (computer, reliable internet, webcam, microphone, etc.).

Assessment, Evaluation and Testing Procedures

QUIZZES (10%)

Students will complete quizzes in Cengage WebAssign. Quizzes will be timed and must be completed in one sitting. (Students may not leave the quiz and return to complete it later.) Each quiz will have up to two attempts, with the highest score counting. **The deadline to complete quizzes in WebAssign is at 11:59 p.m. (Eastern Time Zone) on the due date.** Students will be automatically granted one additional day past the original deadline to submit each quiz. Late submissions will incur a 20% penalty. No additional extensions will be granted on quizzes! Any quiz that is not submitted by 11:59 p.m. (Eastern Time Zone) within one day of the original due date will receive a score of zero. The two lowest quizzes will be dropped at the end of the semester.

EXAMS (80%)

Students are REQUIRED to complete three proctored exams (Exam 1, Exam 2, and Exam 3) in Cengage WebAssign. Exams will be timed and must be completed in one sitting. (Students may not leave the exam and return to complete it later.) Each exam will have only one attempt. **Students must complete each exam during class through Microsoft Teams on the scheduled exam date.** A missed exam due to an absence will receive a score of zero. No make-up exams will be given after the scheduled exam date.

A comprehensive Final Exam will be given during final exam week. The Final Exam is required only if one of the three exams (Exam 1, Exam 2 or Exam 3) is missed. The Final Exam may replace only ONE missed exam score. All other missed exams will receive a score of zero.

Students who complete all three exams (Exam 1, Exam 2 and Exam 3) may also choose to take the Final Exam for an opportunity to improve their final average.

The exam (Exam 1, Exam 2, or Exam 3) with the lowest score will be replaced by the Final Exam score only if the Final Exam score is higher. In this case, the final exam score will count twice.

The Final Exam will be completed in Cengage WebAssign. The Final Exam will be timed and must be completed in one sitting. (Students may not leave the exam and return to complete it later.) The Final Exam will have only one attempt. **The Final Exam will be proctored and must be completed during class through Microsoft Teams on the scheduled exam date.**

Students are not allowed to share calculators, use cell phones, laptops, tablets or any other electronic device during exams.

Grading Scale

A	90 - 100%
B	80 - 89%
C	70 - 79%
D	60 - 69%
F	0 - 59%

Final Average = $0.10(\text{Homework Average}) + 0.10(\text{Quiz Average}) + 0.80(\text{Exam Average})$

All homework assignments, quizzes and exam scores will be posted in eLearn. The final average calculated and shown in eLearn will be the final grade for the course.

Assignments

HOMEWORK (10%)

Students will complete homework assignments in Cengage WebAssign. Each homework problem will have an unlimited number of attempts. **The deadline to complete homework assignments in WebAssign is at 11:59 p.m. (Eastern Time Zone) on the due date.** Students will be automatically granted one additional day past the original deadline to submit each homework assignment. Late submissions will incur a 20% penalty. No additional extensions will be granted on homework assignments! Any homework that is not attempted by the due date will receive a score of zero. The three lowest homework assignments will be dropped at the end of the semester.

Class Participation

Completing homework assignments, quizzes and exams by the due dates is mandatory for success in this course.

Students are expected to attend all regular scheduled class meetings using Microsoft Teams. Attendance will be taken at each class meeting.

Online/Web-Enhanced Course Supplementary Information

Web Addresses:

eLearn (opens in a new window): <https://elearn.ws.edu/d2l/home>

Cengage WebAssign (opens in a new window): <https://www.webassign.net/>

Technical Support:

Walters State Helpdesk (opens in a new window): <https://helpdesk.ws.edu/>

Morristown Campus, CCEN 303

423-318-2742

WebAssign Student Support (opens in a new window): <https://webassign.com/support/student-support/>

1-800-677-6337 (24/7)

Additional Course Requirements/Details/Information

The preferred method of communication is through eLearn email. The instructor will respond to emails and phone messages within 24 hours during the week and within 48 hours on the weekend.

Academic Honesty

Faculty expect all students to refrain from acts of academic misconduct including but not limited to:

1. Plagiarism - refers to using another person's ideas or writing without giving proper credit to the original source. Indulging in this type of conduct will subject the student to disciplinary sanctions, which may be imposed through the regular institutional procedures of Walters State Community College as outlined in the Student Handbook. Plagiarism will result in a grade of "0" for the paper/exam/presentation. Student Conduct and Disciplinary Sanctions contained in the college Catalog/Student Handbook apply (see policy 04:18:02 Disciplinary Sanctions). Plagiarism includes, but is not limited to the following:

- a. Using cut/paste tool from original document with no references given.
 - b. Copying another student's work and submitting it as one's own.
 - c. Forging or otherwise altering signatures.
 - d. Giving or falsifying academic documents or materials.
2. Cheating - construed as attempting to deceive or mislead which includes, but is not limited to the following:
- a. Utilizing old tests, projects, notes or written papers.
 - b. Providing unauthorized information to a fellow student about exam content.
 - c. Receiving unauthorized aid from any source with quizzes, examinations, or other assignments.
 - d. Seeking information in an unacceptable manner during/preceding an exam or other assigned work (cheat sheet, verbal exchange, looking at another person's paper or electronic device, utilizing headphones, using textbook when the test/quiz is not an open book test/quiz, using textbook test bank etc.).
 - e. Consulting with a classmate or others when taking a computerized test.
 - f. Disregarding other specific policies and procedures outlined for a particular class.
 - g. Utilizing unapproved technology/electronic equipment during testing (i.e.: mobile devices such as cell phones, smart devices, or tablets, etc.).
 - h. Using the same Internet Protocol network address (IP address) as another student for testing without approval from the course faculty.
3. The use of any generative artificial intelligence (AI) tool, such as OpenAI's ChatGPT, Google's Bard, or any other pre-trained language model (commonly referred to as "chatbot"), must be cited for any assignment where it has been used and may not be used unless specifically allowed by your instructor. Please see your instructor or the course policies within the syllabus if you have questions.

Student Resources

TUTORING SERVICES

Students in need of tutoring assistance are encouraged to contact the Office of Student Tutoring located as follows:

- Morristown Campus - Student Services Building Room L107 - (423) 585-6920
- Niswonger Campus - GRNV 226 - (423) 798-7982
- Sevierville Campus - MMH Room 210 - (865) 286-2787

- Claiborne Campus - Room 123A - (423) 851-4761

Specific tutoring assistance in mathematics and writing is available in-person and online as follows:

- Morristown Campus - English Learning Lab - HUM 120 - (423) 585-6970

[Walters State English Learning Lab \(opens in new window\)](https://www.waltersstate.edu/academics/humanities/writing-lab)
[ws.edu/academics/humanities/writing-lab](https://www.waltersstate.edu/academics/humanities/writing-lab)

- Morristown Campus - Mathematics Lab - MBSS 222 - (423) 585-6872

[Walters State Mathematics Learning Lab \(opens in new window\)](https://www.waltersstate.edu/academics/mathematics/learning-lab)
[ws.edu/academics/mathematics/learning-lab](https://www.waltersstate.edu/academics/mathematics/learning-lab)

TECHNOLOGY SUPPORT

Students who need assistance with computing and technology issues should contact the IET Helpdesk by phone at Morristown: (423) 318-2742; Niswonger: (423) 798-8186; or Sevierville: (865) 286-2789 or on-line access.

[Walters State Helpdesk \(opens in new window\)](https://www.waltersstate.edu/helpdesk)
[helpdesk.ws.edu](https://www.waltersstate.edu/helpdesk)

STUDENTS WITH DISABILITIES SUPPORT SERVICES

Students with disabilities must register with Student Support Services each semester in the Student Services Building, Room U134 (phone (423) 585-6892) if they need any special facilities, services, or consideration.

[Walters State Student Support Services \(opens in new window\)](https://www.waltersstate.edu/student-services/disability/)
[ws.edu/student-services/disability/](https://www.waltersstate.edu/student-services/disability/)

SUICIDE PREVENTION STATEMENT

Walters State is committed to and cares about all students. Support services are available for any person at Walters State who is experiencing feelings of being overwhelmed, hopelessness, depression, thinking about dying by suicide, or is otherwise in need of assistance. For immediate help, contact the National Suicide Prevention Lifeline by calling or texting 9-8-8 or the Trevor Lifeline at 1-866-488-7386. Veterans may also contact the Veterans Crisis Line at 1-800-273-8255 (press 1) or Text 838255.

Walters State has a relationship in place with the following community agencies to provide services (may include crisis referral services, prevention screenings, etc.):

- Cherokee Health Systems 423-586-5032

- Frontier Health 423-467-3600

College Policies

STUDENTS HANDBOOK AS OFFICIAL GOVERNING DOCUMENT

This class is governed by the policies and procedures stated in the current Walters State Community College Student Handbook. All students attending Walters State Community College, regardless of the time, location, or format of the class, must abide by the rules and regulations outlined in the current Walters State Catalog/Student Handbook and the current Walters State Timetable of Classes.

[Walters State Catalog \(opens in new window\)](http://catalog.ws.edu/)
catalog.ws.edu/

[Walters State Timetable of Classes \(opens in new window\)](http://ws.edu/admissions/registration/)
ws.edu/admissions/registration/

PURPOSE, LIMITATIONS AND MODIFICATION OF SYLLABUS

This syllabus sets forth the expectations for the course content, work, and grading as well as expectations for student performance and conduct. The syllabus does not constitute a contract between the student and the instructor or the College. The information contained here is subject to change at any time. The instructor reserves the right to modify this syllabus at any time with written notification to the students. Though changes are possible, it is expected that the course will be conducted as described in this syllabus for the semester/year specified in the Course Information section of the syllabus. This syllabus is only valid for the semester/year specified and course requirements are not guaranteed for future semesters.

COURSE GROUND RULES

- Students must attend the first day of on-ground class or contact the instructor prior to the first class. Failure to do this may result in being dropped from the class. Excessive absences may substantially lower the course grade.
- Regular class attendance is a student's obligation for any course regardless of format. (See the Walters State Catalog/Student Handbook). If a student misses class, it is his or her responsibility to contact the instructor regarding missed assignments and/or activities and to be prepared for the next class assignment.
- Students enrolled in web courses must follow the course attendance policy defined for online attendance during the first week of class and throughout the term. Failure to do this may result in being dropped from the class during week one OR may result in the accrual of absences which may negatively impact the student's grade in the course.

- Students who have not paid fees on time and/or are not correctly registered for this class and whose names do not appear on official class rolls generated by the Walters State student information system (MyWS) will not be allowed to remain in class or receive credit for this course.
- Electronic devices must not disrupt the instructional process or college-sponsored academic activity. Use of electronic devices is prohibited unless use of the device is relevant to the activity and use is sanctioned by the faculty member in charge. Electronic devices that are not relevant to the activity or sanctioned by the faculty member in charge should be set so that they will not produce an audible sound during classroom instruction or other college-sponsored academic activity.

FINANCIAL AID

Students receiving any type of financial aid or scholarship should contact the Financial Aid Office before making any changes to their schedule. Schedule changes without prior approval may result in loss of award for the current term and future terms.

All forms of student Financial Aid may be jeopardized or lost due to the lack of Satisfactory Academic Progress in one or multiple courses. Lack of Satisfactory Academic Progress may negatively impact a student's degree/certificate completion pace and further jeopardize Financial Aid eligibility.

CANCELLATION OF CLASSES AND ACADEMIC CONTINUITY

For information related to the cancellation of classes due to inclement weather or other events, please check the Senators Emergency Text system or the college's Web site at:

[Walters State Homepage \(opens in new window\)](http://www.waltersstate.edu/home/)
[ws.edu/home/](http://www.waltersstate.edu/home/)

[Walters State Facebook page \(opens in new window\)](https://www.facebook.com/WaltersState/)
<https://www.facebook.com/WaltersState/>

[Walters State Twitter page \(opens in new window\)](https://twitter.com/waltersstate)
<https://twitter.com/waltersstate>

or call the college's student information line, 1-800-225-4770, option 1; the Sevier County Campus, (865) 774-5800, option 7; the Niswonger Campus (423) 798-7940, option 7; or the Claiborne County Campus, 423-636-6200, option 7. Also, please monitor local TV and radio stations for further announcements.

When an event or disaster interrupts the scheduled operations of the college and the ability to proceed with the academic course activities as planned, the college and your instructor may alter the course plan outlined in the syllabus. Should an event occur, students should refer to their course e-

Learn pages and/or class materials previously delivered to receive guidance from their instructor. Students should continue to monitor the official college channels of communication listed in the above paragraph. If you would like to sign up for the Senators Emergency Text system, please go to the following Web site:

[Senator Emergency Text System \(opens in new window\)](#)
ws.edu/set/

Dual Enrollment students attending on a high school campus should refer to the high school inclement weather cancellations.

LEARNING MANAGEMENT SYSTEM

Brightspace (commonly known as eLearn or D2L) is the college's Learning Management System (LMS).

Brightspace is committed to accessibility by "deliver[ing] a learning experience that meets the needs of all people, regardless of age or ability." [Brightspace Accessibility Standard \(opens in new window\)](#)

Brightspace is also committed to guarding student data and privacy. [Brightspace Privacy Policy \(opens in new window\)](#)