



Math 242, Calculus I, CRN:21421, Spring 2018

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Office Hours:	TR 10:30–11:00, 17:00–17:30 or by appointment
Classroom; Days/Time:	Jabara Hall 372, MTWRF 12:30–13:20
Prerequisites:	See course description.
WebAssign Class Key:	wichita 2435 8249
Supplemental Instruction Leader:	Momin Khan
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How to Use This Syllabus

This syllabus provides you with information specific to this course, and it also provides information about important university policies. This document should be viewed as a course overview; it is not a contract and is subject to change as the semester evolves.

Academic Honesty

Purpose:

The purpose of this statement is to comply with Board of Regents policies regarding Student Academic Honesty.

Preamble:

The Board of Regents believes that academic dishonesty is inimical to the fundamental ideas of public higher education. Furthermore, the Board believes that public higher education has a mission to develop the moral reasoning abilities of students and to promote the importance of integrity in all aspects of student life, but particularly in academics. Therefore, it is the policy of the Kansas Board of Regents that student academic dishonesty not be tolerated on the campuses of the Regents institutions.

Board of Regents policy requires that Wichita State University implement and promote specific policies, procedures and programs which seek to: (i) identify prohibited academic conduct by students; (ii) educate all students, faculty and administrators with regard to the nature, impact and consequences of student academic dishonesty; (iii) effectively report and seek to reduce such behaviors; (iv) provide for due process for students accused of academic dishonesty; (v) set forth clear sanctions, ranging from reprimand to dismissal from the university, for students who have committed acts of academic dishonesty; and (vi) implement a comprehensive and integrated plan to promote academic integrity among students, faculty and administrators.

Policy Statement:

1. Opportunities for learning at Wichita State University involve the students' right to express their views and to take reasoned exception to the views of faculty; to examine all questions felt to be appropriate to a course of study; to be protected from improper disclosure or ridicule of their views and beliefs; to be tested and assessed in a fair and impartial manner; and to be treated with dignity and respect. Students are responsible, however, for learning the content of any course of study as outlined by their instructors, regardless of any views or judgments privately held and for demonstrating their attainment and performance regarding a course of study in an honest manner.
2. A standard of academic honesty, fairly applied to all students, is essential to a learning environment. Students who compromise the integrity of the classroom are subject to disciplinary action by their instructor, their department, their college and/or the University. Violations of classroom standards of academic honesty include, but are not limited to:
 - (a) Cheating in any form, whether in formal examinations or elsewhere.
 - (b) Using or submitting the work of others as one's own original work without assigning proper credit to the source.
 - (c) Misrepresentation of any work done in or out of the classroom or in preparation for class.
 - (d) Falsification, forgery or alteration of any documents pertaining to academic records.
 - (e) Colluding with others in an effort to obtain a grade or credit not truly reflective of what the student knows or has learned.

Students violating such standards must accept the consequences and appropriately assessed penalties, which may include reprimand, a failing grade, or suspension or dismissal from an academic program or the University. Students accused of abridging a standard of academic honesty will be provided with mechanisms for review and appeal of decisions regarding allegations of academic misconduct.

3. The fundamental responsibility for the maintenance of the standards of academic honesty rests with each student. It is each student's responsibility to be familiar with University policy on academic honesty and to uphold standards of academic honesty at all times and in all situations.
4. Faculty members need to be aware of the possibility of academic misconduct, watchful for any instances of academic misconduct and diligent in addressing those who do not maintain the standards of academic honesty.
5. Faculty members are responsible for clarification to their classes of the expectations and requirements relative to academic honesty for class assignments or projects. Each faculty member shall also make clear to each class the faculty member's individual policy toward penalties given for breaches of academic honesty.
6. If a faculty member alleges a violation of the University's standard of academic honesty, but imposes no academic sanction, no official follow-up is required. The faculty member should discuss her or his concern with the student and may also provide an opportunity for the student to redo the assignment or retake the examination.
7. When a faculty member has reasonable good faith belief that a student or students have committed academic misconduct, that faculty member has the sole discretion to give the student an "F" on the assignment/test on which the student[s] committed academic misconduct or an "F" for the entire course. If the student does not contest the allegation, no further action need be taken. If the student wishes to contest the allegation and/or the grade (for the course or the assignment/test), the student shall contact the Dean of the faculty member's School or College, who will refer the matter for review by an individual appointed by the Dean. The reviewer shall provide a report and recommendations to the Dean within fifteen (15) class days. The Dean shall then have ten (10) class days to act upon the report and recommendation and the Dean's decision regarding the grade (for the course or the assignment/test) shall be final. The Dean shall share her/his decision with the student, Vice President for Student Affairs, Provost and Senior Vice President, Dean of the student's School or College (if different) and the faculty member.
8. If the Dean recommends that more severe sanctions should be imposed and/or the Vice President for Student Affairs determines that more severe sanctions, including suspension or expulsion from the University should be implemented, the Vice President for Student Affairs will implement disciplinary procedures as set forth in the Student Code of Conduct.

Course Description

General education further studies course. Analytic geometry and the calculus in an interrelated form. Credit in both MATH 242 and 144 is not allowed. Prerequisites: MATH 112 with a C or better, or two units of high school algebra, one unit of high school geometry and one-half unit of high school trigonometry, or MATH 123 and 111 with a C or better in each.

Definition of a Credit Hour

Success in this 5 credit hour course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction and preparation/studying or course related activities for a total of 135 hours. *Go to: Academic Affairs for the policy and examples for different types of courses and credit hour offerings.*

Measurable Student Learning Outcomes

In the study of Calculus I a student should demonstrate understanding of, and effective ability to work with, a range of skills and concepts including:

1. Define and calculate the limits of functions, including presenting ϵ - δ proofs of the existence of limits of appropriate functions.
2. Define and calculate derivatives of functions appropriate to Calculus 1 (e.g. rational, trigonometric, logarithmic and other functions and their inverses).
3. Define and calculate indefinite and definite integrals of functions of one variable which are appropriate to Calculus I.
4. Solve appropriate problems involving science, economics and other areas of study using the tools of Calculus I (e.g. differentiation, integration).

Required Texts

Stewart, James, *Calculus*, 8th edition, Cengage Learning, 2016, ISBN-10: 0470458321, ISBN-13: 978-0470458327

Class Protocol

- Students are expected to attend classes regularly. If a student must miss class the student is expected to contact the instructor prior to class, and prior to missing any due date. It is the responsibility of the student to obtain notes and materials distributed during a missed class.
- Late homework will not be accepted once the assignment has been graded.
- Students are expected to spend **12 to 15** or more hours per week outside of class doing homework, reading, and working out examples from the book and lectures.
- If a student has difficulty with course material (including homework problems), the student should promptly seek help. The instructor can be reached by email, during office hours, and by appointment.
- Students are encouraged to work together. Students working together are expected to give credit to their colleagues in their written submissions and each student must write their own homework submission.
- While technology use is prevalent in this course, there are times that devices may become a distraction. The instructor may request devices be put away. Cell phones should be set to silent modes. Texting, online messaging or receiving calls is prohibited during class. Please leave the room if a urgent matter requires your attention.

Grading Scale

Wichita State University uses a +/– grading scale for final grades and to calculate grade point averages. (Each class assigns grades differently. Be sure to understand the grading scales for each of your classes.)

Overall Class Homework and Exam Score	Letter grade	Grade Points	Interpretation
93-100	A	4.00	<i>The A range denotes excellent performance.</i>
90-92	A–	3.70	
87-89	B+	3.30	
83-86	B	3.00	<i>The B range denotes good performance.</i>
80-82	B–	2.70	
77-79	C+	2.30	
73-76	C	2.00	<i>The C range denotes satisfactory</i>
70-72	C–	1.70	
67-69	D+	1.30	
63-66	D	1.00	<i>The D range denotes unsatisfactory</i>
60-62	D–	0.70	
Below 60	F	0.00	<i>F denotes failing performance.</i>

Exams & Quizzes

- There will be five chapter exams and a comprehensive final exam. Exam 1 cover Chapter 1, Exam 2 covers Chapter 2, Exam 3 covers Chapter 3, Exam 4 covers Chapter 4, Exam 5 covers Chapter 5, Exam 6 covers Chapter 6, and the Final Exam Covers Chapters 1-6. **SHOW ALL WORK** to get full credit for exam questions.
- Unannounced quizzes and in class exercises are completed during class; there are no make-up opportunities for these activities.

Assignments

Homework will be assigned each week and must be turned into the instructor at the beginning of class on the due date. Homework scores are based solely on the problems graded. NO LATE homework will be accepted once the assignment has been graded. Homework problems require conclusions and explanations. The student must **SHOW ALL WORK** to get full credit for the homework problem. Work must be logically arranged on the page and legibly written to get credit.

WebAssign will be used for some of the homework offered in the course. These are due periodically and are meant to reinforce the concepts discussed in class. To access WebAssign, follow this link. Signing up requires the following:

1. Valid e-mail address
2. Class key: wichita 2435 8249
3. Course name: MATH 242, section 21421
4. A student access code or a valid credit card to purchase the code online

Grading Policy

Category	Percent of Grade
Homework	30%
In Class Exercises & Quizzes	5%
Exams	65%

Important Academic Dates

- For Spring semester 2018, classes begin Tuesday, January 16, 2018, and end Thursday, May 3, 2018.
- *The last date to drop a class and receive a W (withdrawn) instead of F (failed) is Friday, March 30, 2018.*
- There are no classes during Spring Break from Saturday, March 17, 2018 through Sunday, March 25, 2018.
- *The final exam period is Tuesday, May 8, 2018 from 13:00 to 14:50.*

Disabilities

If you have a physical, psychiatric/emotional, or learning disability that may impact on your ability to carry out assigned course work, I encourage you to contact the Office of Disability Services (DS). The office is located in Grace Wilkie Annex, room 150, (316) 978-3309 (voice/tty) (316-854-3032 videophone). DS will review your concerns and determine, with you, what academic accommodations are necessary and appropriate for you. All information and documentation of your disability is confidential and will not be released by DS without your written permission.

Counseling & Testing

The WSU Counseling & Testing Center provides professional counseling services to students, faculty and staff; administers tests and offers test preparation workshops; and presents programs on topics promoting personal and professional growth. Services are low cost and confidential. They are located in room 320 of Grace Wilkie Hall, and their phone number is (316) 978-3440. The Counseling & Testing Center is open on all days that the University is officially open. If you have a mental health emergency during the times that the Counseling & Testing Center is not open, please call COMCARE Crisis Services at (316) 660-7500.

Diversity and Inclusive

Wichita State University is committed to being an inclusive campus that reflects the evolving diversity of society. To further this goal, WSU does not discriminate in its programs and activities on the basis of race, religion, color, national origin, gender, age, sexual orientation, gender identity, gender expression, marital status, political affiliation, status as a veteran, genetic information or disability. The following person has been designated to handle inquiries regarding nondiscrimination policies: Executive Director, Office of Equal Opportunity, Wichita State University, 1845 Fairmount, Wichita KS 67260-0138; telephone (316) 978-3186.

Intellectual Property

Wichita State University students are subject to Board of Regents and Wichita State University Policies and Procedures for any issue regarding intellectual property rights. Any questions regarding these rights and any disputes that arise under these policies will be resolved by the President of the University, or the President's designee, and such decision will constitute the final decision.

Shocker Alert System

Get the emergency information you need instantly and effortlessly! With the Shocker Alert System, we will contact you by email the moment there is an emergency or weather alert that affects the campus. Sign up at the Shocker Alert System website.

Student Health Services

Wichita State University's Student Health clinic is located in 209 Ahlberg Hall. Hours are 8:00am to 7:00pm (8:00 am to 5:00 pm on Fridays), though the clinic may be closed occasionally on Wednesdays from noon to 1:30pm. The telephone number is (316) 978-3620. In addition to outpatient and preventive care (including immunizations, a prescription service, and testing/counseling for sexually transmitted infections), Student Health can handle minor injuries. All services are confidential. For more information see the Student Health Services website.

Title IX

Title IX of the Educational Amendments of 1972 prohibits discrimination based on sex in any educational institution that receives federal funding. Wichita State University does not tolerate sex discrimination of any kind including: sexual misconduct; sexual harassment; relationship/sexual violence and stalking. These incidents may interfere with or limit an individuals ability to benefit from or participate in the University's educational programs or activities. Students are asked to immediately report incidents to the University Police Department, (316) 978-3450 or the Title IX Coordinator (316) 978-5177. Students may also report incidents to an instructor, faculty or staff member, who are required by law to notify the Title IX Coordinator. If a student wishes to keep the information confidential, the student may speak with staff members of the Counseling and Testing Center (316) 978-3440 or Student Health Services (316) 978-3620. For more information follow this link to Title IX.

Concealed Carry Policy

The Kansas Legislature has legalized concealed carry on public university campuses. Guns must be out of view, concealed either on the body of the carrier, or backpack, purse or bag that remains under the immediate control of the carrier. Gun owners must familiarize themselves with WSUs Concealed Carry Policy and the Kansas Board of Regents policy. If you believe that there has been a violation of this policy, please contact the University Police Department at (316) 978-3450.

The Heskett Center and Campus Recreation

Whether you are wanting to be active on campus, relieve the stress from classes or take care of your body, Wichita State Campus Recreation is the place for you. Campus Recreation, located inside the Heskett Center, contributes to the health, education, and development of Wichita State University students, faculty, staff, alumni, and community members by offering quality programs and services. With many programs and facilities which are free to all students and members, Campus Recreation offers its members limitless opportunities. For more information about our services see the Heskett Center website.

Video and Audio Recording

Video and audio recording of lectures and review sessions without the consent of the instructor is prohibited. Unless explicit permission is obtained from the instructor, recordings of lectures may not be modified and must not be transferred or transmitted to any other person, whether or not that individual is enrolled in the course.

Tentative Schedule for 16 Week Course

The overall schedule for the course will be so that lectures over new material and exams typically occur on Mondays, Wednesdays, and Fridays. Tuesdays and Thursday will be for practicing working additional exercises (recitation) and to cover material the requires more time than the designated lecture periods. The instructor reserves the right to modify the schedule or to cover new material during any class period.

Date	Sections	Topic
16/01/2018	1.1	Four Ways to Represent a Function
17/01/2018	1.2,3	Essential Functions & Making New Functions from Old Functions
19/01/2018	1.4,5	Tangent and Velocity Problems & Limits of Functions
22/01/2018	1.6	Calculating Limits with Limit Laws
24/01/2018	1.7,8	Precise Limit Definition & Continuity
26/01/2018	Chp 1	Review
29/01/2018	Exam 1	Sections 1.1-1.8
31/01/2018	2.1,2	Derivatives and Rates of Change & Properties of the Derivative
02/02/2018	2.3	Differentiation Formulas
05/02/2018	2.3,4	Differentiation Formulas (cont.) & Derivatives of Trig Functions
07/02/2018	2.5	The Chain Rule
09/02/2018	2.6	Implicit Differentiation
12/02/2018	2.7,8	Rates of Change in the Sciences & Related Rates
14/02/2018	2.9, Chp 2	Linear Approximations and Differentials & Review
16/02/2018	Exam 2	Sections 2.1-2.9
19/02/2018	3.1	Maximum and Minimum Vales
21/02/2018	3.2	Mean Value Theorem
23/02/2018	3.3	Derivatives and Their Effect on the Shape of a Graph
26/02/2018	3.4,5	Limits at Infinity, Horizontal Asymptotes, & Curve Sketching
28/02/2018	3.6	Graphing with Calculus and Calculators
02/03/2018	3.7,8	Optimization Problems & Newton's Method
05/03/2018	3.8, Chp 3	Newton's Method (cont.) & Review
07/03/2018	Exam 3	Sections 3.1-3.8
09/03/2018	4.1	Areas and Distance
12/03/2018	4.2	The Definite Integral
14/03/2018	4.3	Fundamental Theorem of Calculus
16/03/2018	4.2,3	Extra Practice with Integrals
26/03/2018	4.4	Indefinite Integrals and the Net Change Theorem
28/03/2018	4.5	The Substitution Rule
30/03/2018	Chp 4	Review
02/04/2018	Exam 4	Sections 4.1-4.5
04/04/2018	5.1	Areas Between Curves
06/04/2018	5.2,3	Volumes & Cylindrical Shells
09/04/2018	5.3,4	Cylindrical Shells (cont.) & Work
11/04/2018	5.5	Average Value of a Function
13/04/2018	Chp 5	Review
16/04/2018	Exam 5	Sections 5.1-5.5
18/04/2018	6.2*	The Natural Logarithmic Function
20/04/2018	6.3*	The Natural Exponential Function
23/04/2018	6.4*	General Logarithmic and Exponential Functions
25/04/2018	6.5	Exponential Growth and Decay
27/04/2018	6.6,7	Inverse Trigonometric & Hyperbolic Functions
30/04/2018	6.8,Chp 6	Indeterminate Forms & L'Hôpital's Rule
02/05/2018	Exam 6	Sections 6.2*-6.9
08/05/2018	Final Exam	13:00 - 14:50