

## **Math 131, Contemporary Mathematics, Summer, 2020**

- Instructor: MATHew Tucker
- Department: Mathematics, Statistics and Physics
- Office Location: Jabara Hall 325
- Email: [mktucker2@shockers.wichita.edu](mailto:mktucker2@shockers.wichita.edu)
- Preferred Method of Contact: Email
- Office/Zoom Hours: Any day(after 2:30pm) by appointment
- Classroom Day/Time: MW – 6:00 – 9:00 pm
- Prerequisites: MATH 012 or two years of high school algebra and a qualifying score on a recent departmental placement examination.

### **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. Any changes to this syllabus will be communicated to the student both in class and through announcement on Blackboard.

### **Academic Integrity**

Students at Wichita State University are expected to uphold high academic standards. WSU will not tolerate a lack of academic integrity. Students are responsible for knowing and following the Student Code of Conduct [http://webs.wichita.edu/inaudit/ch8\\_05.htm](http://webs.wichita.edu/inaudit/ch8_05.htm) and the Student Academic Honesty policy [http://webs.wichita.edu/inaudit/ch2\\_17.htm](http://webs.wichita.edu/inaudit/ch2_17.htm). When the faculty member determines sanctions are warranted for violations of academic integrity, regardless of severity, the faculty member must report the infraction to the Office of Student Conduct and Community Standards. If you need more information about the process or wish to appeal a decision, please visit [https://www.wichita.edu/about/student\\_conduct/AcademicDishonesty.php](https://www.wichita.edu/about/student_conduct/AcademicDishonesty.php). Students found in violation of the Student Code of Conduct and/or the Student Academic Honesty policy will immediately be dismissed from the course and receive an F grade.

## Course Description

General education basic skills course for students majoring in nontechnical areas. A collection of applications of mathematics illustrating how contemporary mathematical thinking is used in the decision-making process. Covers topics selected from such areas as the mathematics of social choice, management science, statistics, coding information, and the geometry of growth, shape and symmetry.

## Definition of a Credit Hour

Success in this 3 hour credit 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.

## Measurable Student Learning Outcomes

Upon successful completion of this course, students will be able to:

- Utilize problem solving strategies with a variety of applied exercises
- Construct and analyze complex sets based on components and construction
- Compose complex logical statements and valid arguments
- Evaluate the validity of presented logical arguments
- Adapt the fundamental counting principle to varied exercises in theoretical and empirical probability
- Calculate and interpret representative values of data sets
- Construct visual organizations of samples and use these for inferences and predictions about populations
- Employ financial formulas related to the percent change in the price of goods, compound interest on investments and loans and annuities and loan amortization

## Required Texts/Readings Textbook

Blitzer, Robert. *Thinking Mathematically*. 6th ed. Boston: Prentice Hall, 2015.

## Other Equipment/Materials

Students will need a scientific calculator capable of evaluating exponential expressions for use on coursework and exams. Pearson MyMathLab online support system is NOT used with this course.

The student is expected to have daily internet access for use in communication and for use of Blackboard. If home equipment is not available, you may use computers in Jabara Hall, the library and other campus buildings.

## Class Protocol

Participation: The lesson format will vary from day to day with students expected to read and write in and outside of class, speak within problem solving groups, and to address the class, and listen to the ideas of others.

Attendance: Attendance is required and daily participation will be graded. If you cannot attend class, notify the instructor prior to your return to class to make arrangements to be prepared for the next class. No makeup tests will be given.

Cell phone use: Use of cell phones is prohibited during class time by [university policy](#) and students found in violation of this policy forfeit their participation points for the class with additional penalties levied at the discretion of the instructor.

## Contact Policy

Although you may attempt to reach me by phone, email communication is always preferred. Feel free to email me any questions or concerns following these guidelines:

- Always use the course name in the subject line of the email
- Remember to sign your name.
- **Always** email me from your WSU email address. Email sent from personal email servers like Gmail, Yahoo, etc., may be flagged as spam, and I may never see them. You may also email me through Blackboard via the Email My Instructor tab.
- You should NOT contact me for tech support.
  - Any technical problems involving your computer, or issues regarding file uploading or sharing, should go through the OneStop. You can contact them at 316-978-3909. You can also fill out a request for help form at their [website](#).
  - However, if you have a problem with access or uploading assignments, you *should* let me know before your assignment is due. You will also have to accompany this notification with the file in question, so I can verify that it is completed by the due date/time.

## Response Time

Generally speaking, I will respond within 24 hours of receiving an email. However, please keep in mind that I will likely be slower to respond over the weekends and holidays.

## Grading Scale

WSU uses a +/- grading scale for final grades and to calculate grade point averages. In this class, grades are assigned according to the following chart. (Other classes might assign grades differently: Be sure to understand the different grading scales in all of your classes.)

Points/Percentage	Letter Grade	Grade Points	Interpretation
100 - 93	A	4.00	A range denotes excellent performance
92 - 90	A-	3.70	
89 - 87	B+	3.30	
86 - 83	B	3.00	B range denotes good performance
82 - 80	B-	2.70	
79 - 77	C+	2.30	
76 - 73	C	2.00	C range denotes satisfactory performance
72 - 70	C-	1.70	
69 - 67	D+	1.30	
66 - 63	D	1.00	D range denotes unsatisfactory performance
62 - 60	D-	0.70	
59 - 0	F	0.00	

\*In order to advance to Math 012 Intermediate Algebra, a student must achieve a minimum score on the final exam.

The grade scale above is for the student's reference only. This class is graded credit or no credit, and a score of at least 70% is necessary to receive credit.

## Assignments

The student's performance will be assessed and the class grade determined by accumulated points based on a variety of sources including attendance, homework assignments, quizzes and a final exam. A listing of homework and test dates follows at the end of the syllabus.

Student progress is measured via the following categories and associated weights:

Homework	–	25%
Attendance/Participation	–	5%
In-class Exams (five in total)	–	50%
Comprehensive Final	–	20%

## Extra Credit

Extra credit questions may be listed with regular homework assignments adding to your homework grades. They may also be given on in-class exams without being explicitly labeled as extra credit. It is always in the student's best interest to complete all exercises on homework and quizzes as partial credit can be awarded.

## Late Assignments

Late assignments will receive feedback but a zero grade. Participation points can be earned for missed classes if the student completes the lesson's daily work questions and submits them before the next class.

## Missed Assignments and Exams

In general, there will not be any opportunities to make up missed work or exams. The course schedule will be closely adhered to and it is the student's responsibility to be in attendance on important dates.

## Important Academic Dates

For spring semester 2020, classes begin January 21, 2020 and end May 7, 2020. The last date to drop a class and receive a W (withdrawn) instead of F (failed) is April 3, 2020. There are no classes on March 23 – 29, 2020. The final exam period is May 11, 2020 from 3:00 – 4:50pm.

## 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, room 203, (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 & Prevention Services**

WSU Counseling & Prevention Services (CAPS) provides quality mental health services to enrolled students by licensed providers and presents programs and trainings on topics promoting personal growth and optimal wellbeing. Services are by appointment, low cost and confidential. They are located in room 320 of Grace Wilkie Hall and will move to the new YMCA/Student Wellness Center in January. Their phone number is (316) 978-3440. CAPS is open during regular University business hours. If you have a mental health emergency while Counseling & Prevention Service is not open, please call 911 or COMCARE Crisis Services at (316) 660-7500 for 24 hour assistance.

## **Diversity and Inclusion**

Wichita State University is committed to being an inclusive campus that reflects the evolving diversity of society. To further that goal, Wichita State University does not discriminate in its employment practices, educational programs or activities on the basis of age (40 years or older), ancestry, color, disability, gender, gender expression, gender identity, genetic information, marital status, national origin, political affiliation, pregnancy, race, religion, sex, sexual orientation, or status as a veteran. Retaliation against an individual filing or cooperating in a complaint process is also prohibited. Complaints or concerns related to alleged discrimination may be directed to the Office of Institutional Equity and Compliance, Wichita State University, 1845 Fairmount, Wichita, KS 67260, telephone 316-978-3187.

## **Intellectual Property**

Wichita State University students are subject to Board of Regents and University policies (see [http://webs.wichita.edu/inaudit/ch9\\_10.htm](http://webs.wichita.edu/inaudit/ch9_10.htm)) 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 [www.wichita.edu/alert](http://www.wichita.edu/alert).

## **Student Health Services**

WSU's Student Health Services (SHS) provides professional medical care and health education to enrolled students by licensed health care providers. General health care services are available ranging from routine and preventive care to managing acute illnesses and minor injuries. SHS offers convenient onsite laboratory and medication services including vaccinations. Staff are available to provide health education on a variety of topics, both in and out of the classroom setting. SHS is located in 209 Ahlberg Hall and will move to the new YMCA/Student Wellness Center in January 2020. Hours are 8:00 a.m. to 5:00 p.m., Monday through Friday, and the phone number is (316) 978-3620. Check out [www.wichita.edu/shs](http://www.wichita.edu/shs) for health information and access to myShockerHealth, the online patient portal where students can schedule appointments, send a secured message to a healthcare provider, check immunizations and more. All services are confidential.

## **Title IX**

Wichita State University is committed to the elimination of sexual misconduct, relationship violence, and stalking within the University community. These incidents may interfere with or limit an individual's ability to benefit from or fully participate in the University's educational programs. Students are asked to immediately report incidents to the University Police Department, (316) 978-3450 or students may contact Sara Zafar, J.D., Title IX Coordinator at (316) 978-5177 or [Sara.zafar@wichita.edu](mailto:Sara.zafar@wichita.edu).

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 Prevention Services (316) 978-3440 or Student Health Services (316) 978-3620. For more information please refer to the Title IX Policy at [https://www.wichita.edu/about/policy/ch\\_08/ch8\\_16.php](https://www.wichita.edu/about/policy/ch_08/ch8_16.php).

## **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 [www.wichita.edu/heskett](http://www.wichita.edu/heskett).

## **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.

## **CARE Team**

Wichita State University is committed to the safety and success of and cares about all members of the University community. If you or someone you know needs support, is distressed, or exhibits concerning behavior that is interfering with their own or others' academic or personal success or the safety of members of our community, resources and assistance are available. As your Faculty, I may seek support for you. If you or another member of our campus community is in need of help, please submit a concern at [www.wichita.edu/ubit](http://www.wichita.edu/ubit) or call any CARE team member listed on that webpage. In case of emergency, please call the University Police Department at (316) 978-3450 or 911.

## **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 WSU's Concealed Carry Policy at [http://webs.wichita.edu/?u=wsunews&p=/weapons\\_policy\\_documents](http://webs.wichita.edu/?u=wsunews&p=/weapons_policy_documents) and the Kansas Board of Regent's policy at [http://www.kansasregents.org/about/policies-by-laws-missions/board\\_policy\\_manual\\_2/chapter\\_ii\\_governance\\_state\\_universities\\_2/chapter\\_ii\\_full\\_text#weapons](http://www.kansasregents.org/about/policies-by-laws-missions/board_policy_manual_2/chapter_ii_governance_state_universities_2/chapter_ii_full_text#weapons). If you believe that there has been a violation of this policy, please contact the University Police Department at (316) 978-3450.

## **Names and Pronouns**

Everyone has the right to be addressed as and referred to by the name and pronouns (including non-binary pronouns) that they choose and that correspond to their gender identity. Class rosters have a student's legal name and do not include pronouns, therefore, all students will be asked in class to indicate the names and pronouns they use for themselves. A student's chosen name and pronouns are to be respected at all times in the classroom.

## **First Generation Students**

A first-generation (FGEN) college student is a student whose parents did not complete a four-year college degree. WSU strongly supports First Generation students and offers the following resources [https://www.wichita.edu/student\\_life/firstgen/index.php](https://www.wichita.edu/student_life/firstgen/index.php).

## **Other**

Students will be offered several forms of assistance to reach success.

- The instructor will be available for assistance at posted office hours or by appointment when needed.
- The Mathematics Department has a tutor lab available on the third floor of Jabara Hall. It is generally open 8 am – 7 pm Monday through Thursday and 8 am – 1 pm on Friday.
- Students are encouraged to form study groups or work with a study partner.
- Online resources, such as the brief videos at Khan Academy, are available that might supplement the lectures.

## Tentative Schedule for 8 week class –

The schedule below is subject to change.

Week	Date	Topics, Readings, Assignments, Deadlines
1	6/01-6/07	Syllabus, Sections 1.1 and Section 1.2
1	6/01-6/07	Sections 1.2 and 2.1 – 2.4
2	6/08-6/14	Sections 2.4 and 2.5, Exam #1
2	6/08-6/14	Sections 3.1 and 3.2
3	6/15-6/21	Sections 3.3 – 3.5
3	6/15-6/21	Sections 3.6 and 3.7, Exam #2
4	6/22-6/28	Sections 11.1 – 11.4
4	6/22-6/28	Sections 11.5 – 11.7
5	6/29-7/04	Section 11.8, Review, Exam #3
6	7/05-7/11	Sections 12.1 – 12.3
6	7/05-7/11	Sections 12.3 – 12.5
7	7/12-7/18	Section 12.6, Exam #4, Section 8.1
7	7/12-7/18	Sections 8.2 – 8.5
8	7/19-7/25	Sections 8.5 and 8.7, Review and Practice
8	7/19-7/25	Exam #5, Study for Final Exam

Week	Date	Topics, Readings, Assignments, Deadlines
Final	7/22	Comprehensive Final Exam from 3:00 – 4:50 pm