SYLLABUS - MATH 1050, Section 6, Spring 2019
College Algebra

Instructor: Sergazy Nurbavliyev
he/him/his pronouns
preferred name/address: Sergazy

Class Mission Statement: *This is a kind, inclusive, brave and failure-tolerant class.*

Class Hours and Place: MWF / 1:25PM-02:45PM, FASB 295

Office Hours: Monday 8:00-9:00AM, Wednesday 5:00-6:00 PM, or by appointment

Office Location: JWB 112

E-mail:: sergazy@math.utah.edu

TA:
1. George Domat domat@math.utah.edu, Office Hours: Tuesdays 3:15 – 4:15, Wednesdays, 12:50 – 1:50
2. Juan Esquivel u0999910@utah.edu, Office Hours: Thursdays 9:30 – 10:30

Canvas Page for the course:: The course has a Canvas page where all information will be kept including the link to your textbook, MyOpenMath, information about lecture videos, and reviews for exams. Your grades will be posted regularly on Canvas. I encourage you to check your grades often in case there are any data entry mistakes.

Textbook : The text is available on the course canvas page. You may print or download any portion you would like, or may view it entirely online. Homework is also entirely available on the course Canvas page.

Course Goal: Improve quantitative reasoning and prepare for future mathematics courses such as: calculus, linear algebra, and discrete mathematics.

Topics to be covered:: Numbers, functions, sequences, series, counting problems, graphs of functions, inverse functions, polynomials, rational functions, n-th roots, exponential functions, logarithms, piecewise defined functions, matrices, and matrix equations.

Expected Learning Outcome::
- Sketch the graph of basic polynomials (second and third order), rational, radical, exponential, logarithmic, and piecewise functions with or without transformations. Be able to identify important points such as x and y intercepts, maximum or minimum values; domain and range; and any symmetry.
- For rational functions, identify x and y intercepts, vertical, horizontal and oblique asymptotes (end behavior), and domain. Use information to sketch graphs of functions.

- For polynomial functions identify all zeros (real and complex), factors, x and y intercepts, end behavior and where the function is positive or negative. Use information to sketch graphs.
- Understand the relationships between graphic, algebraic, and verbal descriptions of functions.
- Given the graph of a function, be able to identify the domain, range, any asymptotes and/or symmetry, x and y intercepts, as well as find a rule for the function if it is obtained from a standard function through transformations.
- Define i as the square root of -1 and know the complex arithmetic necessary for solving quadratic equations with complex roots.
- Solve absolute value, linear, polynomial, rational, radical, exponential and logarithmic equations and inequalities.
- Find the inverse of a function algebraically and graphically.
- Perform composition of functions and operations on functions.
- Understand sequences and be able to differentiate between geometric, arithmetic and others such as Fibonacci-type sequences, giving direct formulas where available or a numeric representation.
- Understand series notation and know how to compute sums of finite arithmetic and finite and infinite geometric series.
- Solve systems of equations (3 x 3 linear) and non-linear equations in two variables.
- Make sense of algebraic expressions and explain relationship among algebraic quantities including quadratic, exponential, logarithmic, rational, radical, and polynomial expressions, equations and functions.
- Represent and interpret "real world" situations using quadratic, exponential, logarithmic, rational, radical, and polynomial expressions, equations, and functions.

Calculators: Calculators will be useful for homework, but will not be permitted on exams.

Evaluations:
- **Homework:** All homework is to be completed on MyOpenMath, which you will access on the course Canvas page. Due dates for homework assignments can also be found there. **Late homework will not be accepted.** The SI, TA, or I will answer any questions you may have about your homework. Additionally, you may work with others on assignments and you may submit unlimited answers for each prompt. *Please note, homework is a substantial part of your grade for the course (15%), it is to your benefit to do all your homework—partial credit is better than no credit.*
- **Quizzes:** There will be 8-10 weekly quizzes (Fridays when there is no midterm.) **You must be in attendance to take the quiz.** In order accommodate conflicts in schedules that may keep students from attending class on a Friday the three lowest quiz scores will be dropped. I reserve the right to give the quizzes at any time during the class period.

Attendance:: Like any college course, attendance is not "mandatory." However, concepts will be thoroughly explained and reviewed in class, thus it is to your absolute benefit to attend all classes. Students who regularly attend score on average 30% higher on exams than those who do not.

Important dates: : Classes will meet every Monday, Wednesday, and Friday with the exception of the following days:

There will be no class:
Monday, January 21 (Martin Luther King Day)
Monday – Friday, March 11 – 15 (Spring Break)
MIDTERMS:
Friday, February 8
Friday, March 8 (this is the day before Spring Break)
Friday, April 12
   FINAL:
Tuesday, April 30, 1:00 – 3:00PM
https://registrar.utah.edu/academic-calendars/final-exams-spring.php   The location will be announced.
There are no "make-up" exams or quizzes.   Students who miss an exam or quiz will receive a "0" on the missed exam.

Grades: Numerical semester scores will be determined using the following formula: 15% homework, 7% quizzes, 18% each midterm exam, 24% final exam. The three lowest quiz scores will be dropped. Your score on the final exam will replace your lowest midterm score or you will receive a 2% bonus to your final exam grade, whichever results in the highest grade. You may NOT drop the final.

Semester letter grades will be converted from numerical semester scores (N) as follows:

Homework	15%	A:	$93 \leq N \leq 100$	C:	$73 \leq N < 78$
Quizzes	7 %	A-:	$90 \leq N < 93$	C-:	$70 \leq N < 73$
Exam 1	18 %	B+:	$88 \leq N < 90$	D+:	$68 \leq N < 70$
Exam 2	18 %	B:	$83 \leq N < 88$	D:	$63 \leq N < 68$
Exam 3	18 %	B-:	$80 \leq N < 83$	D-:	$60 \leq N < 63$
Final Exam	24 %	C+:	$78 \leq N < 80$	E:	$0 \leq N < 60$

ADDITIONAL RESOURCES::
- **Mathematics Tutoring Center:** Drop in, sit down, and if you have a question, someone will come by who can help you. There are also study areas free of tutors, a computer lab, group study rooms available through reservations, and group tutoring sessions that can be arranged to meet at a regular time. Located on 1st Floor of JWB or LCB. Open 8am-8pm MTWH; 8am-6pm F.
- **Math Department Video Lectures:** Video lectures are available at:
  http://www.math.utah.edu/lectures/math1050New.html
- **Supplementary Instruction:** Schedule and location will be discussed the first week of class. Postings for weekly sessions can also be found on the course Canvas page.
- **TA:** The TA is available to meet with students individually during their office hours.

ADA Statement: 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 Services (CDS), 162 Olpin Union Building, 581- 5020 (V/TDD). CDS will work with you and me to make

arrangements for accommodations. All information in this course can be made available in alternative format with prior notification to CDS.

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.

Student Responsibilities: All students are expected to maintain professional behavior in the classroom setting, according to the Student Code, spelled out in the Student Handbook. You have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, collusion, fraud, theft, etc. Students should read the Code carefully and know you are responsible for the content. According to Faculty Rules and Regulations, it is the faculty responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee: http://regulations.utah.edu/academics/6-400.php

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, veterans status or genetic information. 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 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 the police, contact the Department of Public Safety, 801-585-2677(COPS).

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.

Classroom Social Equity:: I strive to be ethical, kind, fair, inclusive and respectful in my classroom and expect students to behave likewise. In this regard, I have these requests of you:
- Please inform me of whichever pronouns you prefer to use for you. I will put great effort into honoring your request and ask that you correct me if I happen to make a mistake.
- Please do tell me, discreetly, if you have any sort of anxiety disorder, TBI, PTSD, C-PTSD, or any other challenge that would cause psychological harm to you by me calling on you in class. I want students to feel a little uncomfortable and stretched during class, while working on problems as a large or small group, but I definitely don't want to cause any human being

harm. So, please discreetly tell me if that is the case for you and I will confidentially accommodate your request.

- If your preferred name is different than your legal first name (the preferred name you chose does indeed show up in CIS on my roll sheet, but not yet in Canvas), please log into Canvas and go to Account (on far left)–>Settings and change your Display Name to be the name you prefer to be addressed by. This will help me greatly to know students' names, and to address you correctly when responding to Canvas quiz comments.

Additional Policies:: Due to experience, I have decided to make some additional policies regarding my classroom administration and grading.

- I do <u>not</u> allow the use of laptop computers (where the screen is perpendicular to the desk) in my classroom, in order to minimize student distractions. At this point, it's almost impossible to type notes for a math class on a laptop in real time. Thus, it is unnecessary in class. If you are using a tablet or ipad or some similar device to take notes and the screen lies parallel to your desk, that is totally fine.
- There will be no retakes of exams, for any reason.
- If you have an emergent, extenuating circumstance that makes it necessary to take an alternate exam, it is your responsibility to discuss that with me, before the exam occurs, or as soon as possible. In general, I allow exams to be taken early, but not late.
- If you have crisis-level extenuating circumstances which affect your class performance and you need guidance/advice/ideas, please communicate with me as soon as possible so I can help you in some manner, which I'm truly happy to do. The longer you wait to communicate with me, the less I can and am willing to do to help.
- I will provide and expect respectful behavior in my classroom. Examples of disrespect include, but are not limited to, reading a newspaper or magazine in class, social chatting with your friend in class, text-messaging during class, excessive use of your cell phone, or cuddling someone else in class. If you choose to be disrespectful with distracting behavior during our class, please keep in mind that you put me in a position of choosing between protecting/taking a stand for you OR for the other students or myself whom you are disrupting. I can guarantee I will choose to stand for the students who are there to learn without disruptions and I will thus take action to terminate your distracting behavior, and that action may not be desirable for you.
- There shall be no cursing nor negative ranting (for example, "math sucks") on any written work turned in, as it's unprofessional behavior. The penalty for such things on your written work will be a zero score on that assignment or test.
- I will regularly post announcements to the class in Canvas and will hold you accountable for receiving that information. Be sure to turn on your notifications in Canvas so you are alerted to announcements I make in Canvas as well as grade changes, discussion posts, etc.
- If you have questions about any exam/assignment grade, or you want to appeal the grading of the exam/assignment, you must turn it in to me within one week of the exam/assignment being turned back in class. I'm happy to look over your appeal and/or questions and give my feedback in order to benefit your learning. But, it must be done in this timeframe of a week from when I hand back the exam/assignment.
- If you cheat on any homework, quiz or exam, I will automatically give you a zero for that grade. Depending on the severity of the cheating, I may decide to fail you from the class. Please note that the use (or even just pulling it out of your pocket) of a cell phone or

any other electronic device during any in-class exam is considered cheating and cause for receiving an automatic zero. Also, if you exhibit any other behaviors that are unethical, like offering me a bribe to give you a better grade (even if you later claim you were joking), I will report your behavior to the Dean of Students.

- Please make sure you do your best throughout the semester, knowing the grading scheme and what's expected of you, and come talk to me if you need further study strategies. I will be happy to brainstorm ideas to help you maximize your study strategies and improve your mathematical understanding. I will offer an extra credit opportunity on every midterm and final exam, to help make up for arithmetic or math grammar mistakes for which you lost points. But, I will not offer any additional extra credit at the end of the semester or any other way for you to improve your grade at that time. Please respect this and do not ask for special favors or extra credit or some way to get a higher grade (however you want to word it) when you realize you don't like your grade. Your need to get into a certain program, or needing a specific grade for your work or scholarship or not wanting to upset whomever is paying for your college are all your own personal dilemmas that are truly independent from how I assign grades. The only way to "better your grade" at the end of the semester is to retrieve your final exam, compare it to the solutions, and see if you have any grading appeals. If you do have grading appeals on the final exam, please turn it in to me. I'm happy to look over those and possibly give points back, if it's warranted. Other than that, I consider it disrespectful of me and my time for you to ask for a higher grade than you earned, or for some possible way to increase your grade, at that point.

I reserve the right to change my policies stated in this syllabus at some point in the semester. If I do make a change to a policy, I will announce it in class and post an Announcement on Canvas about it.