

University of North Texas at Dallas
Fall 2016
SYLLABUS

MATH 1352: Algebra for Teachers 3 HRS	
Department of	Mathematics
School of	Liberal Arts and Sciences
Instructor Name:	Dr. Gwendolyn Johnson
Office Location:	Building 2 (Founders Hall) room 232
Office Phone:	972-338-1320
Email Address:	Gwendolyn.johnson@untdallas.edu
Office Hours:	Mondays and Wednesdays 11:30 to 1:00 and 2:30 to 3:30 Thursdays 2:30 to 5:30 Tuesdays and Fridays by appointment Please let me know ahead of time if you plan to stop by during office hours just to make sure I won't be in a meeting or out to lunch.
Course Format/Structure:	traditional face-to-face format
Classroom Location:	Building 2 (Founders Hall) room 213
Class Meeting Days & Times:	Mondays and Wednesdays 1:00 to 2:20
Course Catalog Description:	Intended for individuals seeking EC-6 or Math 4-8 teaching certification. Simplifying expressions; solving equations; modeling real-life situations; describing patterns and sequences; writing formulas to match sequences; representing functions with equations, graphs, and tables; distinguishing between linear and non-linear functions; analyzing examples of reasoning.
Prerequisites:	TSI Math-complete or MATH 1010 with a grade of C or better
Required Text:	none
Access to Learning Resources:	UNT Dallas Library: (Founders Hall) phone: (972) 780-1616 web: http://www.untdallas.edu/library e-mail: Library@untdallas.edu UNT Dallas Bookstore: (Building 1) phone: (972) 780-3652 web: http://www.untdallas.edu/bookstore e-mail: untdallas@bkstr.com
Course Goals or Overview: The goals of this course are to prepare students for the Core Subjects teacher-certification test and to equip future teachers with the knowledge of algebra they will need to teach elementary or middle school.	
Learning Objectives/Outcomes: At the end of this course, students will be able to:	
1	Identify aspects of functions such as domain and range, independent and dependent variables, etc.
2	Simplify and solve numeric and algebraic expressions and equations; use the distributive property and factoring to generate equivalent expressions and equations.
3	Identify aspects of linear functions such as intercepts and rate of change. Graph linear functions.
4	Write linear equations to model real-life situations.
5	Write and solve systems of linear equations.
6	Identify aspects of quadratic functions such as axis of symmetry, zeros, and vertex.

Course Outline

This schedule is subject to change. Any changes to this schedule will be communicated in class or Blackboard announcement. Additional activities may be added.

Timeline	Topics	SLO	In Class	Homework
Mon Aug 22	Functions	1	PPT 1A: Functions as Machines, Mappings, Order Pairs, & Graphs Group Activity: Perimeter as a Function of Side Length	Practice 1A
Wed Aug 24	Functions	1	PPT 1B: Function Tables Group Activity: Function Tables	Practice 1B
Mon Aug 29	Functions	1	PowerPoint 1C: Matching Equations and Tables Group Activity: Matching Equations with Tables	Practice 1C
Wed Aug 31	Functions	1	PowerPoint 1D: Independent and Dependent Variables Group Activity: Defining Variables	Practice 1D
Wed Sept 7	Functions	1	PowerPoint 1E: Domain and Range	Homework #1 due Friday Sept. 9
Mon Sept 12			Test on Functions	
Wed Sept 14	Equations	2	PowerPoint 2A	Practice 2A
Mon Sept 19	Equations	2	PowerPoint 2B	Practice 2B
Wed Sept 21	Equations	2	PowerPoint 2C	Practice 2C
Mon Sept 26	Equations	2	PowerPoint 2D	Practice 2D
Wed Sept 28	Equations	2	PowerPoint 2E	Homework #2 due Friday Sept. 30
Mon Oct 3			Test on Expressions and Equations	
Wed Oct 5	Linear Functions	3	PowerPoint 3A	Practice 3A
Mon Oct 10	Linear Functions	3	PowerPoint 3B	Practice 3B
Wed Oct 12	Linear Functions	3	PowerPoint 3C	Practice 3C
Mon Oct 17	Linear Functions	3	PowerPoint 3D	Practice 3D
Wed Oct 19	Linear Functions	3	PowerPoint 3E	Homework #3 due Friday October 21
Mon Oct 24			Test on Expressions and Equations	
Wed Oct 26	Modeling	4	PowerPoint 4A	Practice 4A
Mon Oct 31	Modeling	4	PowerPoint 4B	Practice 4B
Wed Nov 2	Modeling	4	PowerPoint 4C	Practice 4C
Mon Nov 7	Modeling	4	PowerPoint 4D	Practice 4D

Wed Nov 9	Modeling	4	PowerPoint 4E	Homework #3 due Friday October 21
Mon Nov 14			Test on Using Equations to Model	
Wed Nov 16	Systems	5	PowerPoint 5A	Practice 5A
Mon Nov 21	Systems & Quadratics	5, 6	PowerPoint 5B	Practice 5B
Wed Nov 23 Class Online	Systems & Quadratics	5, 6		Practice Problems and Online Discussion
Mon Nov 28	Quadratics	6	PowerPoint 5C	Test Review
Wed Nov 30			Test on Systems and Quadratics	
Mon Dec 5	Review		Review for the Final Exam	
TBA			Final Exam	

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Grading Matrix:

Instrument	Measures SLO	Value (points or percentages)	Total
Four Tests	1, 2, 3, 4	100 points each	400
Five Homework Assignments	1, 2, 3, 4, 5, 6	varies	120
In-class Group Activities	1, 2, 3, 4, 5, 6	varies	50
Attendance		50 points	50
Quiz	5, 6	60 points	60
Final Exam			120
TOTAL:			800

Grade Determination

A 90% or better
B 80 – 89 %

C 70 – 79%
D 60 – 69%
F less than 60%

University Policies and Procedures

Students with Disabilities (ADA Compliance): The University of North Texas at Dallas makes reasonable academic accommodation for students with disabilities. Students seeking accommodations must first register with the Disability Services Office (DSO) to verify their eligibility. If a disability is verified, the DSO will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, DSO notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet/communicate with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Disability Services Office website at <http://www.untDallas.edu/disability>. You may also contact them by phone at 972-338-1777; by email at UNTDdisability@untDallas.edu or at Founders Hall, room 204. (UNTD Policy 7.004)

CoursEval Policy: Student's evaluations of teaching effectiveness is a requirement for all organized classes at UNT Dallas. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider students' evaluations to be an important part of your participation in this class.

Exam Policy: Exams should be taken as scheduled. No makeup examinations will be allowed except for documented emergencies (See Student Handbook).

Academic Integrity: Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity (Policy 7.002) at http://www.untDallas.edu/sites/default/files/page_level2/pdf/policy/7.002%20Code%20of%20Academic_Integrity.pdf Refer to the Student Code of Student Rights, Responsibilities and Conduct at http://www.untDallas.edu/sites/default/files/page_level2/hds0041/pdf/7_001_student_code_of_conduct_may_2014.pdf Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabrication of information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students.

Bad Weather Policy: Campus facilities will close and operations will be suspended when adverse weather and/or safety hazards exist on the UNTD campus or if travel to the campus is deemed dangerous as the result of ice, sleet or snow. In the event of a campus closure, the Marketing and Communication Department will report closure information to all appropriate major media by 7 a.m. That department will also update the UNTD website, Facebook and Twitter with closing information as soon as it is possible. For more information, please refer to <http://www.untDallas.edu/police/resources/notifications>

Attendance and Participation Policy:

The University attendance policy is in effect for this course. Please refer to Policy 7.005 Student Attendance at <http://www.untDallas.edu/hr/upol>

Diversity/Tolerance Policy: Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive and inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Dean of Students as the instructor deems appropriate. (UNTD Policy 7.001)