## UNIVERSITY OF NORTH TEXAS AT DALLAS Spring 2017 COURSE SYLLABUS

	MATH 1352 Algebra for Teachers 3 Credit Hours				
Department: Mathematics and Information SciencesDivision: Liberal Arts and Life Sciences					
Instructor Name:	Name: Dr. Gwendolyn Johnson				
Office Location:	Bldg 2 room 232				
Office Phone:	972-338-1320				
Email Address:	Gwendolyn.johnson@untdallas.edu				
<b>Office Hours:</b>	Mondays and Wednesdays 11:30 to 1:00 and 2:30 to 3:30 (I can stay later if				
	needed.)				
	Thursdays noon to 2:30 and 4:00 to 5:30				
	Tuesdays and Fridays by appointment				
Class Meeting Times	Mondays and Wednesdays 1:00 to 2:20				
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Course Catalog	intended for individuals seeking EC-6 or Math 4-8 teaching certification. Problem				
Description:	solving, algebraic expressions and equations, patterns, arithmetic and geometric				
	sequences, graphing linear and quadratic functions				
Textbook:	none				
Required Materials	s Graphing calculator, graph paper, ruler				
Prerequisites:	Prerequisites:   TSI-Math complete or MATH 1010 with a grade of C or better				
Learning Resources:	Blackboard Learn:				
	https://learn.unt.edu/				
	Assignments, grades, and PowerPoint presentations will be posted in				
	Blackboard. Students are expected to use this resource.				
	UNT Dallas Math Lab				
	Building I room 336				
	Free math tutoring and homework help				
Course Goals	The goals of this course are to:				
	1. Prepare students to pass the mathematics portion of the Core Subjects				
	certification test.				
	2. Prepare students to teach mathematics in elementary or middle school.				

## **Learning Objectives**

- **1.** Describe what a function is and identify aspects of functions such as domain and range, independent and dependent variables.
- 2. Simplify and solve expressions and equations. Use the distributive property and factoring to generate equivalent expressions and equations. Write and solve systems of linear equations.
- **3.** Graph linear and quadratic functions and identify aspects of graphs such as intercepts, rate of change, and axis of symmetry.
- **4.** Write equations that correspond to word problems; write word problems that correspond to equations.

## **Course Outline**

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

Timeline	Topics	SLO	In-Class Activities	Assignments	
Wednesday	Functions		PowerPoint 1A: Using Mappings and Tables to	Bractice 1A	
January 18	Functions 1		Represent Functions		
Monday	Functions 1	1	PowerPoint 1B: Using Sets of Ordered Pairs	Practice 1B	
January 23		1	and Graphs to Represent Functions		
Wednesday	Functions	1	PowerPoint 1C: Function Tables	Practice 1C	
January 25			Group Activity: Function Tables		
Monday	Functions	1	PowerPoint 1D: Match Equations & Tables	Practice 1D	
January 30			Group Activity: Matching Equations		
Wednesday	Functions	1	PowerPoint 1E: Dep. & Indep. Variables	Practice 1E	
February 1			Group Activity: Defining Variables		
Monday	Sequences	1	PowerPoint 1F: Domain and Range	Practice 1F	
February 6	Sequences		Group Activity		
Wednesday		1	PowerPoint 1G: Sequences	Homework #1 due Friday	
February 8		•	Group Activity	February 10	
Monday			Test #1: Functions and Sequences		
Feb. 13			rest #1.1 diletions and bequences		
Wednesday	Expressions &	2	PowerPoint 2A	Practice 2A	
February 15	Equations	2	Group Activity		
Monday	Expressions & 2	PowerPoint 2B	Practice 2B		
February 20	Equations	2	Group Activity		
Wednesday	Expressions &	2	PowerPoint 2C	Practice 2C	
February 22	Equations	2	Group Activity		
Monday	Inequalities	2	PowerPoint 2D	Bractice 2D	
February 27	mequaines 2	Group Activity			
Wednesday	FOIL and	2	PowerPoint 2E	Practice 2E	
March 1	Factoring	2	Group Activity		
Monday	Systems of	2	PowerPoint 2F	Homework #2 due Tuesday	
March 6	Equations		Group Activity	March 7	
Wednesday		2	Tost #2: Equations and Inequalities		
March 8		2	$1001 \pi 2$ . Equations and inequalities		
Spring Break: March 13-19					

May 8 Final Exame	start Wednesday	( May 1)		
Monday	Review			
May 3		4	Problems	
Wednesday		1	Test #4: Writing Equations to Match Story	
May 1	Equations	4	Group Activity	April 29
Monday	Writing	4	PowerPoint 4F	Homework #2 due Tuesday
April 26	Equations		Group Activity	
Wednesday	Writing	4	PowerPoint 4E	Bractico 4E
April 24	Equations	4	Group Activity	
Monday	Writing	4	PowerPoint 4D	Practice 4C
April 19	Equations	4	Group Activity	
Wednesday	Writing	4	PowerPoint 4C	Practice 4B
April 17	Equations		Group Activity	
Monday	Writing	4	PowerPoint 4B	Practice 4A
April 12	Equations		Group Activity	
Wednesday	Writing	3	PowerPoint 4A	Drastica 44
April 10			Functions	
Monday		2	Test #3: Graphing Linear & Quadratic	
April 5	Quadratics	3	Group Activity	April 7
Wednesday	Graph	2	PowerPoint 3F	Homework #2 due Friday
April 3	Inequalities	3	Group Activity	Practice 3E
Monday	Graph	2	PowerPoint 3E	Practice 3D
March 29	Functions	3	Group Activity	
Wednesday	Graph Linear	3	PowerPoint 3D	Practice 3C
March 27	Functions		Group Activity	
Monday	Graph Linear	3	PowerPoint 3C	Practice 3B
March 22	Functions		Group Activity	
Wednesday	Graph Linear		PowerPoint 3B	
March 20	Functions	3	Group Activity	Practice 3A
Monday	Granh Linear		PowerPoint 3A	

# **Course Evaluation Methods**

Instrument	Points	
Four Tests	600	
Final Exam	175	
Homeworks	125	
Group Activities	100	
Total:	1,000	

## **Grade Determination:**

 $\begin{array}{l} A = \ 90\% \ or \ better \\ B = \ 80 - \ 89\% \\ C = \ 70 - \ 79\% \\ D = \ 60 - \ 69\% \\ F = \ less \ than \ 60\% \end{array}$ 

## **Course Policies**

### Blackboard

You are expected to use Blackboard to check announcements, participate in discussions, check your grades, download documents, and upload your homework. If you need help using Blackboard, please ask the instructor or call the Helpdesk at 972-338-5580.

### **Grades on Tests and Homework**

Tests are usually graded within two business days. Homework is generally graded within one week. You can monitor your progress in the class by checking "My Grades" in Blackboard.

#### **Group Activities**

You will be expected to work in groups and to be an active and respectful group member. If you miss class, you need to download the activity from Blackboard and turn it in before graded activities are passed back to the class. <u>Once graded activities are passed back to the class</u>, you lose the opportunity to receive credit for the group activity.

#### Late Homework

<u>A late penalty will be assessed for work turned in after the due date.</u> No work will be accepted after the final exam. Work will not be accepted more than two weeks after the due date.

## **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 <a href="http://www.untdallas.edu/disability">http://www.untdallas.edu/disability</a>. 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.

**Assignment Policy:** According to the instructor's discretion while working in concert with the program's guidelines.

**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.p

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 <a href="http://www.untdallas.edu/hr/upol">http://www.untdallas.edu/hr/upol</a>

**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)