

**Objectives:**

- The student will reflect on his or her math journey, as evidenced by completing a math autobiography.
- The student will take ownership of the numeracy course, as evidenced by their participation in developing class rules from given principles.
- The student will begin using ALEKS, as evidenced by registering for the system, taking a brief tutorial, and completing a personalized assessment.

Time	Activity
Before Bell	<p style="text-align: center;"><b>DO NOW</b></p> <p>Close the window blinds so that students do not get distracted and to eliminate glare from the board. Put “Readiness Checkers” on the tables so that each student has one at their assigned seat. Put the seating chart transparency on the overhead projector, and write the following “Do Now” on the dry erase board:</p> <ol style="list-style-type: none"> <li>1. Find your seat from the seating chart.</li> <li>2. Take out the required materials for today:             <ul style="list-style-type: none"> <li>• Pencil</li> <li>• Eraser</li> <li>• Binder or Folder</li> <li>• Binder Paper</li> </ul> </li> <li>3. Put your backpack in the back of the classroom, either on or below the desks labeled “Backpack Parking.”</li> <li>4. With your table partner (the person whom you share a table with), quietly answer the following questions:             <ul style="list-style-type: none"> <li>• What is your name?</li> <li>• What are some of your interests (such as sports, books, and movies)?</li> <li>• What do you expect to get out of being a DCP student?</li> <li>• What do you expect to get out of numeracy?</li> <li>• What are you excited about for this year? What are you worried about?</li> </ul> <p>If you finish early, talk about other topics to get to know each other better.</p> </li> </ol> <p>Wait for students at the door and shake their hands as they come into the classroom. Once students are in the classroom, go around and the stamp readiness checkers of students who are working on the “Do Now.”</p>
30 min	<p style="text-align: center;"><b>MATH AUTOBIOGRAPHY</b></p> <p><b>Personal Story About My Math Struggles</b></p> <p>Class will begin with the teacher telling a personal story about his math struggles as a student and how several teachers motivated him to keep working. As a result, he developed a strong work ethic, which made him excel when he finally started understanding math. The teacher should have some “Disruptive Behavior Cards” ready to give students who are talking or being disruptive during the story. That way, the teacher doesn’t have to pause the story to address student misbehavior. The story might sound something like this:</p> <p>“I’m going to begin with a story. It’s a story about a boy named Tom who grew up on the southern tip of East San Jose. Tom was a pretty good kid and tried hard in school. But, in elementary school, he noticed that he was having trouble with math. One time, his third grade teacher gave everyone a worksheet of multiplication problems. All of Tom’s friends finished in 20 minutes. But, when everyone else finished, Tom was only a quarter through the assignment.</p> <p>“In 6<sup>th</sup> grade, Tom again wasn’t doing well. His math teacher, Mr. Fisher, called home saying that Tom had a D- in the class and needed to get his grade up. But, Mr. Fisher had high expectations for Tom and never stopped pushing him. As a result, Tom worked harder and harder and passed the class. When Mr. Fisher recommended students for middle school math, he wanted to give Tom a chance to succeed. He recommended Tom for algebra.</p>

	<p>“In middle school algebra, Tom was once again struggling to keep up. After failing a series of homework assignments and a quiz, his math teacher, Mr. Russell, approached Tom individually and said, ‘If you don’t get at least a C on the next test, I’m going to have to move you down a math level.’ Mr. Russell didn’t say that because he was mean. He said it because he truly cared about his students, and he motivated Tom to try even harder. Tom passed the test, and continued in algebra, eventually passing the class with a B.</p> <p>“The next year, Tom had Mr. Russell again for the next math class. All those years of hard work had paid off, and suddenly Tom was beginning to understand math. In fact, it was even fun! Because Tom continued to work hard, he went to the top of his class. One day, Mr. Russell found Tom around school and said, ‘Do you know what you’re going to be when you grow up? I know what you’re going to be.’ ‘No, what?’ replied Tom, curious of the answer. Mr. Russell stated, ‘You’re going to be a teacher.’ Tom graduated that year with an A in math.</p> <p>“In high school, Tom realized that all the years of hard work in math was paying off. Because math was not easy for him for so long, Tom learned how to study and keep trying. He learned how to ask for help. Now, in high school, math was getting more difficult so the students without good study skills were falling behind. But, Tom kept studying and kept doing well. Eventually, Tom graduated from high school with a 4.0 GPA.</p> <p>“After high school, Tom went to Santa Clara University. He continued working hard, and four years later, he graduated as a triple major in math, physics, and computer science and a minor in urban education.</p> <p>“Today, Tom is here with us. I am Tom.”</p> <p>“We all have a story. I just told you mine, and each of you will have the opportunity to write yours.”</p> <p><b>Student’s Stories</b> Students will begin brainstorming for their stories by working in groups. Explain the “tick system” and put up the “Tick System Poster.” Put students into groups of four, and then write “Math” on the board. Ask students to share in their groups what comes to mind when they think about math. Prompt them to be specific and general, positive and negative. Have one student take notes for the group. Afterwards, have groups share with the class. The teacher should write these thoughts on the board to create a brainstorm web.</p> <p>Pass out the “Math Autobiography” handout, and have students complete step 1 from the brainstorm on the board. Then, give them time to complete steps 2 and 3. Step 4 is their homework assignment.</p>
1 min	<p style="text-align: center;"><b>STRETCH BREAK</b></p> <p>Lead the students through some exercises to refresh them.</p>
15 min	<p style="text-align: center;"><b>CLASS LOGISTICS: SYLLABUS</b></p> <p>Hand out the course syllabus and go over it.</p> <p><b>Developing Rules from Class Principles</b> When you get to the “Class Principles” section, put up a poster with the principles written in the middle. Have students get back into their groups and talk about what it looks like when someone follows these principles. Again, have one student in each group take notes. When the groups are done, have them share out with the rest of the class. As they share, write their ideas on the poster like a web. These behaviors become the class rules, and they stem from the class principles. Later, the teacher will take these rules from all the periods and make one poster.</p> <p><b>Readiness Checkers</b> The syllabus ends by talking about bathroom passes. Since a completed readiness checker becomes a bathroom pass, it is a good time to discuss readiness checkers. It is also important because students need to know their expectations for starting class.</p>

1 min	<p style="text-align: center;"><b>STRETCH BREAK</b></p> <p>Lead the students through some exercises to refresh them.</p>
30 min	<p style="text-align: center;"><b>ALEKS: GETTING STARTED</b></p> <p><b>Computer Use Contract</b> Pass out the “Computer Use Contract” and discuss appropriate and inappropriate uses for the school laptops. Have students sign and return them. Put up the “Computer Use Contract Poster,” which has the main points of the computer use contract, as a reminder throughout the school year. Then, pass out the laptops.</p> <p><b>Registering for an Account</b> Lead students on how to register for an account using the course code.</p> <p><b>Interactive Tutorial</b> Have students go through the brief, interactive tutorial in ALEKS.</p> <p><b>Personalized Assessment</b> Have students complete the personalized assessment, which tells ALEKS what level the student is at.</p>
3 min	<p style="text-align: center;"><b>PAIR SHARE</b></p> <p><b>Review</b> Briefly state that we did the following in class today:</p> <ul style="list-style-type: none"> <li>• Started Math Autobiographies (Finish for Homework)</li> <li>• Discussed Syllabus and Class Principles</li> <li>• Started ALEKS</li> </ul> <p><b>Discuss</b> Have the students pair up with their table partner and discuss their hopes and goals for this school year in math. While they do that, go around and check that the homework assignment (“write math autobiography” and “bring dividers”) was correctly written down on their homework logs.</p>

Name:

Period:

# Numeracy Readiness Checker

When a grid is completely stamped, it becomes a bathroom pass!  
If you lose this paper, you will also lose the stamps that are on this paper.

To be ready for class, you must:

- Be in your seat when the bell rings
- Have your backpack in “backpack parking”
- Have the required, materials out
- Be quietly grading homework or working on the “Do Now”
- Not be distracting to others



<p><b>Disruptive Behavior Card</b></p> <p>Please respect other students' right to learn and my right to teach. You can do this by keeping quiet, paying attention, and not distracting others.</p>	<p><b>Disruptive Behavior Card</b></p> <p>Please respect other students' right to learn and my right to teach. You can do this by keeping quiet, paying attention, and not distracting others.</p>
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# Tick System

## On-Task = +Tick

If *everyone* in a group is on-task, then everyone in the group can get a +tick. So, make sure you're on-task, and remind others to be on-task, too!

## +Tick = +0.5% on HW

For each +tick you get, you gain 0.5% on the next homework assignment. So, if you have five +ticks, you'll get 102.5% on a homework assignment that you'd otherwise get 100% on.

# Off-Task = -Tick

If *anyone* in a group is off-task, or is talking about an off-task topic, then *everyone* in the group gets a -tick. So, watch out for each other and make sure everyone is on-task!

## -Tick = -0.5% on HW

For each -tick you get, you lose 0.5% on the next homework assignment. So, if you have five -ticks, you'll get 97.5% on a homework assignment that you'd otherwise get 100% on.

**Part 1**

What comes to mind when you think about “Math?” As a group, come up with:

Five Positive Things:

1.

2.

3.

4.

5.

Five Negative Things:

1.

2.

3.

4.

5.



## **Part 2**

In our classroom, we are focusing on two class principles:

1. Respect and Responsibility
2. Students have the right to learn and teachers have the right to teach

List 5 ways to promote these principles in the classroom (for example, listening when others are talking):

- 1.
- 2.
- 3.
- 4.
- 5.

List 5 behaviors that violate these principles (for example, name calling):

- 1.
- 2.
- 3.
- 4.
- 5.

**You will be writing your math autobiography, which is your personal story of learning math over the years. This activity will help you understand yourself better. It will also help me get to know you.**

**Step 1:** List 3 to 5 ideas from the brainstorm on the board that you most identify with.

**Step 2:** List all the math teachers you've had (that you can remember). Next to each teacher, write whether you liked the class **and why**.

**Step 3:** Think about your math experiences, and describe any memories that stand out to you. Include both the good and the bad. When were you successful? When did you have trouble? How would you describe yourself as a math student now?

**Step 4:** Now, you're ready to write your math autobiography. On a piece of binder paper, tell your story. Use what you wrote above to help you get started. Use good descriptions. Be honest. Make sure you fill at least  $\frac{3}{4}$  of the page—the more you write, the better I will know you!

# Numeracy Syllabus

## Course Overview

Numeracy is an amazing opportunity to strengthen your foundational math skills. We will do this two ways: general and individual instruction. *General instruction* is when the whole class, as a group, learns each numeracy concept one-by-one. Most math classes use general instruction, and you will get homework, quizzes, and tests for this. *Individual instruction* is when you are taught what you are ready for, and it does not depend on the other students. This is a special feature of numeracy, and we will use a computer system called ALEKS to do this.

## Class Principles

All students at DCP are expected to conduct themselves as college-prep students. In addition, our class will focus on two main principles:

1. Respect and responsibility.
2. Students have the right to learn and teachers have the right to teach.

## Materials

- Pocket folder
- 5-tab dividers
- Plenty of pencils and lead
- Black pen for grading
- Binder paper

## Grading

- 45% ALEKS
- 15% General Instruction Homework
- 15% Quizzes (Every Friday)
- 15% Comprehensive Tests
- 10% Final Exam

## Recoverable Points

Homework will be graded in class, and any errors can be corrected for full credit by the next class. Corrections must be done on a separate sheet of paper and stapled to the original assignment.

Weekly quizzes can also be retaken as many times as necessary until you get full credit. You can only retake a specific quiz once per day, and they must be done during office hours.

Comprehensive tests and the final exam cannot be retaken.

## Office Hours

I am available for math assistance, questions, and general advice on Mondays and Thursdays after school from 4 pm to 5 pm in room 10. You can also make appointments with me for other dates and times.

## Bathroom Passes

Here are three bathroom passes for the first semester. If you lose this paper, you also lose the bathroom passes. You can earn additional bathroom passes by completing readiness checkers. Each unused bathroom pass earns  $\frac{1}{2}$  homework extra credit at the end of the semester.

Bathroom Pass #1	Bathroom Pass #2	Bathroom Pass #3

# Computer Use Contract

"I \_\_\_\_\_ will:  
(print your name)

- **Physically respect the laptops:** Students will be physically gentle with the laptops. This includes, but is not limited to, carrying the laptops with both hands, setting the laptops down gently, and not defacing the laptops by tagging or marking them.
- **Only use the laptops for ALEKS:** Students will only use the laptops to access the ALEKS web site. Personal usage (such as checking e-mail) is not allowed.
- **Report problems to the teacher immediately:** Students will immediately report any problems with the laptops (both physical and with the programs/applications that run on the laptop) to the teacher.
- **Only use the laptops for lawful purposes:** Students will not use the laptops to engage in illegal activity, nor will they attempt to access accounts that do not belong to them.
- **Follow the teacher's instructions:** Students will follow the teacher's instructions when using the laptops. This includes, but is not limited to, closing the lids of the laptops when asked to in order to help students pay attention.

I understand that failure to follow these terms can result in me losing the privilege of using DCP's numeracy laptops. I also understand that I may be responsible for any damages to the laptops that I cause."

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



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- Only use the laptops for ALEKS
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- Only use the laptops for lawful purposes
- Follow the teacher's instructions

