

## **DISTANCE MATH 141: PRECALCULUS I, SPRING 2010**

**Web Page:** <http://webshares.northseattle.edu/mathonline/math141>

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**Office Hours:** Tuesday, 5:30 – 7:30 pm in the Math computer lab ED 2842A.

### **COURSE DESCRIPTION**

This is an online, web-based course. Although we assume you have selected this style of class because it is most convenient for you, we hope you will also find the delivery of the material to be enjoyable.

The material covered, and the outcomes and standards of this course, are the same as that covered in a traditional lecture class course.

This course is presented as a series of lesson units which you will do using the "Interactive Mathematics" software and textbook. When you registered for the course, you paid a fee for the software license and materials, that you will receive at orientation, and a lab fee which entitles you to access any open computer lab.

You will be given a schedule for completing the course, but you may vary from this according to your experience with the course content. You can take longer with material that you find hard, or breeze through content that you are familiar with.

After the initial Orientation session there are no on-campus meetings for this class. We will provide individual instruction as necessary. Additional tutoring is also available in the Math Learning Center.

### **PRACTICAL REQUIREMENTS:**

No special software is needed to run the program. It is completely web-based. You may also use the computers on NSCC campus: in the Math Learning Center, the Open Computer Lab and the library. If you do intend to use any of the school computers to work on, you will need to set up a NET ID account. After the first day of quarter, go to <http://www.northseattle.edu/kiosk/netid/> and click on "Create a new Account."

- PLATO Academic Systems Algebra* text, picked up on the first day of class.
- Internet access
- A scientific calculator
- An email account, for class email.

### **COURSE REQUIREMENTS:**

- Attend class orientation and pick up materials.
- See Starting the Course (page 4) and follow the directions.
- Logon and do the introductory lesson "Getting Started". See Starting the Course (page 4.)
- Consult your course schedule (page 8) and your homework schedule (page 6 & 7) to find out what work needs to be covered each week.
- Work on the program at least 10 hours per week using the program. See "Working through the Course" (page 5)

**COURSE REQUIREMENTS (continued):**

- The lesson (“Explain”), practice exercises (“Apply” and “Explore”) and quizzes (“Evaluate”) are online. You will also complete "pencil & paper" homework and practice test for each lesson from the textbook. Both you and your instructor will monitor your progress in these tasks.
- Take the on-line quizzes or evaluates for each lesson.
- Take the on-campus tests as scheduled. See Taking Tests for more information.

**On-Campus Written Tests**

Four written are tests scheduled. The tests are based on the sections indicated in the course schedule. There is no comprehensive final exam.

Complete the Test Review before taking the written test. The test reviews are linked to the course schedule for your class, just prior to the test.

The schedule for your course indicates the target dates (week) to take tests. Ideally tests will be taken at these times. All classes meet in HT 2842A.

**Test Schedule & Deadlines: see course schedule**

**Times & Locations for taking on-campus tests:**

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					Jennifer DeSoto 8 am - 12:30 pm
Vicky Ringen & Ben Aschenbrenner 12 – 2:20 pm					
	Denise Brannan or Barbara Goldner 5:30 - 7:30 pm				
Pam Lippert 6 - 8:30 pm		Vicky Ringen 6 - 8:30 pm			

**Homework.**

Written practice exercises (“Homework” and “Apply”) are assigned from the textbook (“Personal Academic Notebook”). Complete the homework problems for the lesson and correct your work using the answers at the back of the text. Talk to your instructor if you have any problems. Homework does not get turned in.

### **On-Line "Evaluates" Or Quizzes**

When you have finished working the lesson, and have done the homework, but before you do the online quiz, do the practice test from the textbook. (This is also called "Evaluate".) Grade the practice test from the answers at the back of the textbook. Correct any errors you have made. Talk to your instructor if you have any problems.

Take the online "Evaluate" only after you have completed the practice Evaluate from the text book.

You have 3 chances at each quiz (the original and 2 retakes.) Retaking quizzes does take additional time, and it is a good idea to take the quiz when you are as well prepared as possible.

The online quiz for each section must be completed before proceeding to the next section. At the end of the class, any uncompleted quiz will be scored a 0.

As long as you get better than 75% in the section online evaluate, you should then move on to the next section.

### **ASSESSMENT & GRADING**

Assessment for MAT 141 is based on online quizzes and on-campus written tests, with the following weighting:

On-Line Quizzes ("Evaluates")	30%
Written Tests	70%

### **Grades**

Numerical grades will be awarded according to the following standards:

<b>Grade:</b>	<b>Total %</b>	<b>Grade:</b>	<b>Total %</b>	<b>Grade:</b>	<b>Total %</b>	<b>Grade:</b>	<b>Total %</b>
<b>4.0</b>	95% and above	<b>3.0</b>	80 - 84%	<b>2.0</b>	70 – 74%	<b>1.0</b>	50 - 59%
<b>3.7</b>	90 - 94%	<b>2.7</b>	78 - 79%	<b>1.7</b>	65 – 69%	<b>I</b>	Incomplete
<b>3.3</b>	85 - 89%	<b>2.3</b>	75 - 77%	<b>1.5</b>	60 – 64%	<b>NC</b>	No Credit

## STARTING THE COURSE

1. When you attend the class orientation, you will receive an "Academic Online" student kit containing a textbook shrink-wrapped with a CD labeled "internet Client" and two lesson disks. (You will not be able to resell this book, so write all over it!)
2. Read the course Syllabus. This is also available online.
3. Read the course Schedule. Also available online.
4. Install the program

### Installing the Program on your Home Computer

5. Before you install the "client" you should disable your antivirus protection and personal firewalls. (See the link on the web page ***Installing Academic Online*** for help with this.) When you restart your computer your protection should also be enabled again.
6. Load up the first disk: the "internet client". Follow all directions as they appear. (It's advisable to allow the set-up wizard to put all its pieces where it wants, then modify it after you have completed the installation.)
7. If you are running Internet Explorer 7.0 or using the Windows Vista operating system you will need to download and install the patch. <http://support.plato.com/IM-Vista>

### Beginning the Online Program

8. Open Interactive Mathematics by going to the Start button and clicking on the icon. This will take you to the Interactive Mathematics logon page.
9. From the drop down list of schools, select "North Seattle Community College".
10. Below the schools window, click on "student"
11. When the screen changes (below) select "Do a Lesson".
12. A student login screen (ISS) will load up and appear.
13. Log On

**Your login name is your first initial followed by your surname, no spaces.**

**Your password is the first 5 digits of your student identification number.**

For example, if my name is Joe Smith-Jones, and my student identification number is 123-45-6789, then my login name is JSMITHJONES and my password is 12345.

14. Click on the OK button:
15. You are now ready to begin the program. Go to "Do the Introductory Lessons".

### Doing the Introductory Lessons

16. When you have logged on the lesson screen will appear. This will give the list of topics for your course.
17. Load the first lesson CD (labeled "Part 1")
18. Double click on the preparatory lesson "Starting Out" (or you can select the lesson by clicking on it, then click on "Do a Lesson")
19. Follow all directions and complete all parts of this lesson.
20. You may also do the optional lesson "The Tour".
21. Start the first lesson for your course.

## WORKING THROUGH THE COURSE

### **Step 1: Complete the On-Line "Overview"**

The *Overview* explains what the lesson is about. The overview usually contains a pretest, which you may choose to complete.

### **Step 2: Complete the On-Line "Explain"**

The *Explain* section of the program teaches the concepts and procedures.

Make sure you have some paper and a pencil. It includes some sample problems for you to do, with worked solutions.

### **Step 3: Complete the On-Line "Apply"**

*Apply* assigns practice problems and gives instant feedback on your performance in those problems. Again, you will need paper and pencil - and probably an eraser as well!

### **Step 4: Complete the On-Line "Explore" if it is available**

*Explore* contains real-world applications, and investigations into "real" problems. Not every section has an "Explore". If the icon is not highlighted there is no Explore section.

### **Step 5: Complete "Pencil & Paper" problem sets, or Homework, from the Textbook**

Homework is assigned out of the textbook (Personal Academic Notebook or "PAN"); see next page or Online Math Classes home page for specific problems. Complete only the odd numbered problems assigned and check your answers in the back of your textbook.

Homework is not turned in.

### **Step 6: Get help if you are having any difficulty with the material.**

You may phone or email your instructor to get help, at any time. The Math Learning Center is open for tutoring help, and the adjacent computer lab has PCs loaded with the internet client for this class.

### **Step 7: "Evaluate" or Practice Test, from the Textbook**

When you've finished the homework, complete the practice test from the textbook, called the "Evaluate", for the section you have studied. Grade the practice test from the answers at the back of the textbook. Correct any errors you have made.

### **Step 8: Take the On-Line Quiz or "Evaluate"**

As long as you get better than 75% in the section online *Evaluate*, you should then move on to the next section.

### **Step 9: Take the scheduled topic Test**

When you get through the first few topics (depending on the schedule of the course in which you are enrolled) you are ready to take the on campus test. You may take a test during any of the scheduled classes. All classes meet in HT 2842A.

## DISTANCE MATH 102 HOMEWORK

Work the assigned written problems for each section from the text book.

"Homework" & "Apply": Do odd numbered problems only, unless otherwise stated.

"Practice Test": Do all problems, unless otherwise stated.

Answers to the assigned problems are located at the back of the textbook.

Ignore the "Homework" button in the Plato Learning lessons.

Always complete the Test review from the website before you come in to take your written test.

	<b>Topic</b>	<b>Homework and Apply</b>	<b>Practice Test</b>
EIIIB	Algebraic Expressions	Homework & Apply p. 62 - 63, all odds	page 64, all problems
EIIIC	Equations & Inequalities	Homework & Apply p. 102 - 104, all odds	page 105, all problems
11.1	Functions	Homework & Apply p. 229 - 243, all odds	pages 244 - 247, all
11.2	Algebra of Functions	Homework & Apply, p. 276 - 283, all odds	pages 284 - 285, all
EIIID	Functions	Homework & Apply p. 136 - 140, all odds	page 141, all problems
Test 1 Review			
Test 1			
13.1	Nonlinear Equations	Homework & Apply p. 396 - 397, all odds	page 398, all problems
13.3	Inequalities	Homework & Apply all odds	all problems
14.1	Nonlinear Functions	Homework & Apply, all odds	all problems
14.2	Theory of Equations	Homework & Apply, all odds	all problems
Test 2 Review			
Test 2			
15.1	Circles p. 566 - 572	Homework p. 621 questions 1, 3, 5, 7, 11 Apply p. 624 questions 1, 7	page 626: 1 & 2
12.1	Exponential Functions	Homework & Apply p. 311 - 313, all odds	page 314, all problems
12.2	Logs And Their Properties I	Homework & Apply p. 336 - 339, all odds	page 340, all problems
12.3	Applications of Logarithms	Homework & Apply p. 365 - 368, all odds	page 369, all problems
Test 3 Review			
Test 3		One page of notes allowed	
18	TRIGONOMETRY	Handout <a href="https://frontpage.northseattle.edu/mathonline/Trig/lessons.htm">https://frontpage.northseattle.edu/mathonline/Trig/lessons.htm</a>	
18.1	Geometry Review	all problems	
18.2	Right Triangle Trigonometry	all problems	
18.3	Triangle Trigonometry	all problems	
18.4	Trigonometric Identities	all problems	
Test 4 Review			
Test 4			

## Math 141: Precalculus I - Course Schedule

Week beginning:	Sections to cover online & in the textbook:
Week 1 Monday, April 5	Online Class Orientation Introductory lesson: "Getting Started" EIII.B Algebraic Expressions EIII.C Equations & Inequalities
Week 2 Monday, April 12	11.1 Functions & Graphing 11.2 The Algebra of Functions
Week 3 Monday, April 19	EIII.D Functions Test 1 Review and worked solutions to Test 1 Review TEST 1: covers Topics EIII B, C & D, and Topic 11 13.1 Nonlinear Equations
Week 4 Monday, April 26	13.3 Inequalities 14.1 Nonlinear Functions
Week 5 Monday, May 3	14.2 Theory of Equations Test 2 Review and worked solutions to Test 2 Review TEST 2: covers Topics 13 and 14 15.1 Circles  <i>Deadline to take Test 1: Tuesday May 4</i>
Week 6 Monday, May 10	12.1 Properties of Logarithms 12.2 Properties of Logarithms
Week 7 Monday, May 17	12.3 Applications of Logarithms EIII.E Exponential and Logarithmic Functions  <i>Deadline to take Test 2: Tuesday May 18</i>
Week 8 Monday, May 24	Test 3 Review and worked solutions to Test 3 Review TEST 3: Topic 12 and section 15.1 (circles only) TOPIC 18: TRIGONOMETRY NOTE: This topic is NOT on the lesson CDS Follow the link above to all the online lessons, or use the individual lesson links below. 18.1 Trigonometry Preliminaries and Answers
Week 9 Tuesday, June 1	18.2 Trigonometry of Right Triangles and Answers  <i>Deadline to take Test 3: Tuesday June 1</i>
Week 10 Monday, June 7	18.3 Trigonometry of Other Triangles and Answers Test 4 Review and Solutions to Test 4 Review
Week 11 Monday, June 14	TEST 4: Trigonometry  <i>Deadline to take Test 4: Tuesday, June 15, 5:30 - 7:30</i> Deadline to complete the Online program: midnight, Tuesday June 15.