Precalculus 2, 162

Fall 2018

CRN 40687

Section 100

Tuesday, 6:30 pm - 9:35 pm

Room 204

162 Precalculus 2

SYLLABUS

Catalog description.

Exponential and logarithmic functions, trigonometric functions, identities, inverse trigonometric functions, law of sines, law of cosines, trigonometric form of complex numbers, applications. Prerequisite: MATH 161 with a grade of "C" or better.

Learning outcomes

Upon successful completion of this course, students will be able to:

- 1. Graph and determine properties of exponential and logarithmic functions.
- 2. Graph and determine properties of trigonometric functions
- 3. Graph and determine properties of inverse trigonometric functions
- 4. Solve problems using trigonometric identities
- 5. Use polar coordinates to graph polar equations
- 6. Convert complex numbers between rectangular and polar form
- 7. Perform operations on vectors in the plane

BOOK: James Stuart, Lothar Redlin, Saleem Watson, Precalculus (Mathematics for Calculus). Volume 2. The special edition for CCP, Math 162.

Instructor: Dr. Arkady Kitover Office: 327 Office Hours: TR, 5 pm - 6:25 pm, W 5 pm – 6 pm Email: (the best way to contact me) <u>akitover@ccp.edu</u> or <u>akitover@hotmail.com</u> Web Page: <u>http://faculty.ccp.edu/FACULTY/akitover</u> (the web page contains the syllabus and all the reviews for the course with detailed solutions)

Technology: you will need a scientific calculator of any kind.

CONTENTS

Exponential and logarithmic functions. Chapter 4. Review 1, Test 1

Trigonometric functions. Chapter 5, Sections 5.1 – 5.4 Review 2, Test 2

Analytic Trigonometry. Chapter 7. Review 3, Test 3

Applications of trigonometry. Chapter 6 and Chapter 8: Sections 8.1 and 8.3. Review 4, Test 4

Grading: average of four tests.

90 - 100A80 - 89B70 - 79C60 - 69D

CLASS RULES

- 1. No food in the classroom (you can bring a beverage if you wish).
- 2. You may not use any electronic devices for texting, web browsing and any activities unrelated to the class work. I will subtract 10 points from your total sum for every violation of this rule.
- **3.** Cell phones must be in the vibration mode. During a test you may use your cell phone only as a calculator.
- 4. If you are late more than 30 min. I will mark you as absent. Students missing an equivalent of two weeks without a documented excuse will be dropped from the class.
 - 5. Only students with good attendance records will be allowed to take make-up tests (if needed).

Recommended homework

Section	Pages	Problems
4.1	336 - 337	29, 35, 55, 57.
4.2	341 - 342	11. 13, 21, 25
4.3	351 - 352	3, 7, 21, 23, 29, 43,
		47,65
4.4	358 - 359	5, 11, 19, 23, 29, 31,
		41, 43, 47, 63.
4.5	368	1, 5, 17, 21, 25, 31,
		33, 49, 51.
4.6	378 - 380	5, 13, 15, 19, 23.
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5.1	407 - 408	15, 25, 29, 35, 43
5.2	417 - 418	9, 13, 17, 21, 33, 63,
		65, 67
5.3	429	21, 25, 31, 35
5.4	438	41, 43, 45, 47, 49
5.5	445	5, 9, 19, 31, 33, 39
7.1	543	9, 17, 19, 31, 39, 41,
		53, 57, 59, 61
7.2	551	15, 21, 29, 33, 37, 41,
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7.3	561 - 562	27, 31, 39, 43, 49, 53,
		57, 65, 71, 75, 81
7.4	569	17, 25, 29, 35, 39, 41,
		43, 45, 47, 55
7.5	574 – 575	5, 7, 11, 19, 37, 43,
		55, 59, 61
6.1	478 – 479	7, 11, 15, 19, 33, 35,
		55, 65, 69, 73.
6.2	487 - 488	9, 15, 39, 45.
6.3	498 - 499	3, 15, 17, 59
6.4	506 - 507	15, 19, 27
6.5	514–515	19, 21, 27, 39, 41
6.6	521 - 523	13, 19, 27, 43, 51
8.1	593	27, 37, 51, 55, 57
8.2	610 - 611	31, 43, 47, 51, 55, 63,
		67, 73, 75, 89, 91