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BRAZOSPORT COLLEGE

MATH 2412 – PRECALCULUS

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COURSE SYLABUS

Term: Spring 2012
Course #: 2412
Course Schedule: MW 17:15-18:55
Course Location: HS-113

Instructor: Dr. Calin Agut,
Office: J-202, Department of Mathematics
E-mail: Calin.Agut@brazosport.edu
Phone: 230-3274
Office Hours: (TBA) _____

Final Exam (tentative): 5/07/12, 17:00-19:00
Withdraw last date: 03/30/12

Course Description/Overview

The *Precalculus* course is one of the fundamental and consistent college-level courses in Mathematics. It provides applications of algebra and trigonometry to the study of elementary functions and their graphs, including polynomial, rational, exponential, logarithmic and trigonometric functions. Also will include topics related to circles and other conic sections, vectors, polar and parametric equations.

Credits: 4.

Textbook

The course textbook is *Precalculus* 8th edition, by Larson.

Calculator/Graphing utilities:

A Graphing Calculator, TI-83 or better is suggested to be used. The utility will be used most of the time in class and also for homework. It is the student's responsibility to have basic knowledge about using his/her own calculator. The work performed by calculator will not substitute the steps required for any assignment.

Prerequisites:

MATH 1314 and MATH 1316 or consent of division chair.

Format

The College Algebra course is designed as a regular course.

In the lecture/teaching classes the student will perform regular activities, asked by the instructor. The corresponding lesson/work will be taught at this time.

The homework and/or projects will be performed outside of class.

Assessments:

During the Semester there will be several unannounced quizzes, projects, challenge exercises, Tests and one Final Exam.

Any written open-answer assessment must contain all the steps performed in order to get the solution and must be presented in a mathematical methodical manner.

Grading Policy/Evaluation:

The grades will be counted in the following way:

Quizzes' Average	30%
Tests' Average	40%
Final Exam:	30%

Final Exam

The Final Exam is mandatory and comprehensive. Any possible change will be announced in class and is the student's responsibility to be informed. Missing the Exam might be reflected as failure of the course.

No make-up is allowed for the Final, under any circumstances.

Homework:

The instructor will regularly assign homework (see attach). Even the homework will NOT be collected, it is the students' responsibility to practice on all of the assigned exercises. Most of the questions on any Quiz, Class Assignment or Exam will be chosen from the homework sets, or similar.

The students are expected to prepare the next class' lesson listed on the attached schedule.

Quizzes:

Several unannounced quizzes from the homework can be given at any time during the class. No make-up for quizzes is allowed, under any circumstances.

Test(s)

Several Tests will be administrated in the regular class. They might be on open-answer or multiply-choice format. If the tests will be open-answer tests and the students are required to show all the work performed on the tests' paper in a methodical manner. A poor mathematical presentation on the work may be reflected in a lower grade.

The dates for the Tests are stated on the Schedule (see attached), as tentative; the instructor will announce the exact date and time in the class, prior. For this reason, no make-up test is allowed, unless extraordinary circumstances. If so, the make-up must be completed within 3 days after the regular date for the test (in LAC).

Grading Scale:

Unless an announced in changes is made, the following scale will be applied for this course:

A:	90-100;
B:	80-89;
C:	70-79.
D:	60-69
F:	< 60.

Attendance:

The students are strongly encouraged to attend every lecture class. Each class meeting is considering as an entity. After 4 absences the instructor will consider "excessive absences" and may fail the student.

To avoid unnecessary class disruptions, the students are expected to arrive on time and remain seated until the class is dismissed. If a student is coming late in or is leaving earlier the class, the instructor may consider it as an absence or an obstruction to the academic process.

During the time spent in the class, the student will follow the instructor's directives and will respect the School's student conduct (including academic honesty, see attached). If the instructor will have any question regarding the cheating on any student's work, that student will be removed from the class indefinitely.

Dropping policy

No dropping will be initiated by the instructor at any time, unless extraordinary circumstances, official documented.

To be eligible for a reinstatement, the student must bring official documents and have an average of at least 70% in his/her class participation.

Time requirement:

Taking into account the volume of the information and the homework assigned, a minimum of 6 hours a week outside of class is required.

Students with disabilities:

Please address any request to the School Staff so that we can arrange for proper accommodation. It is my policy and priority to allow equal opportunity for every student.

Miscellaneous

No electronic recording device is allowed in the class. The students may only take written notes from the class.

No cell phones are allowed to be used during the class, quizzes, tests or exams. Please turn off any electronic device which may disturb the class activity.

No food is allowed to be brought into the class and be consumed, at any time.

No other electronic device, including laptop, palm, iPod is allowed to be brought and used in class, at any time.

If the student does not comply with those requirements, an academic action may be immediately taken by the instructor (mark absent for the entire meeting, grade of 0 for the assignment, invite to leave the class, removed from the class indefinitely, etc).

IMPORTANT:

Any further information will be presented in class by the instructor and is the student's responsibility to be informed.

It is at the instructor's discretion to provide a Diagnostic Test at any time during the semester; this one will not be graded.

Course Outcomes:

Upon completion of the course, the student will be able to:

1. Evaluate and graph of piecewise function.
2. Find the vertical, horizontal and/or oblique asymptotes of a rational function.
3. Decompose a rational expression into the sum of partial fractions.
4. Define geometrical representation of vectors
5. Perform the operations of addition, subtraction, and scalar multiplication, with vectors
6. Graph a parametric equations
7. Graph and give important features of ellipses and hyperbolas
8. Plot and convert between rectangular and polar coordinates
9. Evaluate difference quotient
10. Find the distance and the midpoint in 3-D rectangular system
11. Find the equation of a rotated conic
12. Solving equations in polar coordinates
13. Find the polar equation of conics
14. Factor expressions containing negative and rational exponents

Academic Honesty:

Brazosport College assumes that students eligible to perform on the college level are familiar with the ordinary rules governing proper conduct including academic honesty. The principle of academic honesty is that all work presented by you is yours alone. Academic dishonesty including, but not limited to, cheating, plagiarism, and collusion shall be treated appropriately. Please refer to the BC Student Guide for more information, this is available online at <http://www.brazosport.edu> , click on the link found on the left side of the homepage.

Students with disabilities:

Brazosport College is committed to providing equal education opportunities to every student. Brazosport College offers services for individuals with special needs and capabilities including counseling, tutoring, equipment, and software to assist students with special needs. Please contact Phil Robertson, Special Populations Counselor, 979-230-3236 for further information.

Other student Services Information:

Your course on WebCT: <http://webster.brazosport.edu>

Information about study skills and tutoring for math, reading, writing, biology, chemistry and other subjects is available in the Learning Assistance Center (LAC), see www.brazosport.edu/~lac or call 979-230-3253.

The Student Services provides assistance in the following:

Counseling and Advising	979-230-3040
Financial Aid	979-230-3294
Student Activities	979-230-3355

To reach the Information Technology Department for computer, email, or other technical assistance call the Help Desk at 979-230-3266.

Precalculus

MATH 2412

LESSONS/HOMEWORK SUMMARY

Lesson	Homework	Schedule (Tentative)
1.6	57-64 (odd)	Week 1-15
2.5	1-117	Week 1-15
2.6	1-79	Week 1-15
6.3	1-99	Week 1-15
6.4	1-77	Week 1-15
7.1	1-79	Week 1-15
7.2	1-54	Week 1-15
7.3	1-75	Week 1-15
7.4	1-47	Week 1-15
5.3	1-74	Week 1-15
Review	Will be provided	Week 1-15
Test 1		3/7/2012
8.1	1-84	Week 1-15
8.2	1-56	Week 1-15
8.4	1-52	Week 1-15
10.2	1-77	Week 1-15
10.3	1-71	Week 1-15
10.4	1-69	Week 1-15
10.6	1-65	Week 1-15
10.7	1-109	Week 1-15
10.8	1-48	Week 1-15
10.9	1-34	Week 1-15
Objective 9	Handout	Week 1-15
Objective 10	Handout	Week 1-15
Objective 14	Handout	Week 1-15
Review	Will be provided	Week 1-15
Test 2		4/25/2012
Final Review	Will be provided	Week 15
Final Exam		5/7/2012

Note: All the sections/lessons are from the book:
Precalculus 8th edition, by Larson.

Note: All exercises will be counted as **4n+1**,
starting with Ex #1 (n=0):
1, 5, 9, 13, 17, ...