Math 120 – Elementary Functions

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Text: Precalculus: Graphical, Numerical, Algebraic 8th Ed; Demana, Waits, Foley & Kennedy
Course Website: http://www4.wittenberg.edu/academics/mathcomp/shelburne/math120/index.html

An Overview of Math 120 Content

Algebra Review
Functions and their Properties; Composition of Functions; 1:1 Functions; Inverse Functions; Graphical Transformations
Linear Functions; Quadratics; Polynomials; Rational Functions
Exponential and Logarithmic Functions
Right Triangle Trig; Circular Functions: sin(x), cos(x), tan(x); Sinusoid functions; Inverse Trig Functions; Basic trig identities; Double angle formulas; Law of Sines; Law of Cosines

Course Mechanics

Grading

[Early] Review Test: 50 points
Three 100 point tests: 300 points
Homework: up to 75 points (Hwk. Ave. × 75)
Quizzes: up to 75 points (Quiz Ave. × 75)
Final Exam: 200 points
Total: 700 pts

Homework & Quizzes
Due each class – may be handed in 1 class late
Homework answers are in back of book or are given or can be checked!
Homework Rules: in pencil; name & homework number must appear on top; use clean ruled 3-hole notebook paper etc.
may pair up with another and hand in single homework assignment.
homework assignment sheet handed out every other Monday – sheet will also be on line at course web-site

Course Mechanics (cont.)

Quizzes taken directly from (are) homework problems
no make-ups but you can take a quiz early if I'm contacted first
lowest quiz grade dropped

Class Attendance Policy
20 point bonus if no more than 3 unexcused absences
One-Time Test Retake Option
may re-do an in-class test as a take home; grade will be averaged with in-class grade.
one time only offer!

Academic Integrity
zero for test or quiz & report made to Honor Council
in addition if a violation on a quiz, 10 points deducted from 75 quiz grade

Course Mechanics (cont.)

For each class I will hand out copies of the notes!
copies can be found on web-site
bring your graphing calculator and your textbook to class!
generally I will not go over homework questions – however if you have homework questions e-mail before class and I'll see what I can do. I'm more than willing to go over homework outside of class!
my expectations are that you will have done the reading before coming to class (see homework assignment sheet for readings)
i will ask for volunteers or call on people to present problems done "in-class" (you talk – I'll write)

Classroom Behavior
1. switch off cell phones – no texting in class
2. Please do not get up in the middle of class to visit the water fountain or rest room (one of my pet peeves)!

Course Mechanics (cont.)

Figure out your learning style – when you need to learn something – what works and what doesn’t?
Keep Up with the Homework!
Don’t memorize! Understand! Be able to explain it!
Use Mental Hooks and Simple Examples!
Study the Notes handed out in class!

[Here's the Small Print]
Math 120 is a one semester course in which a certain amount of material must be and will be covered. Reducing the amount of material covered is not an option.
Finally – Your learning in this course is important to me. I invite you to talk with me about ways to ensure your full participation in this course. Please be aware that Wittenberg is committed to providing reasonable accommodations for students with documented disabilities. If you are eligible for course accommodations because of a disability, you need to register with the Academic Services Office, 206 Recitation Hall. After you register, give me your self-identification memo from Academic Services and arrange to talk with me about your learning needs privately in a timely manner. Early identification at the start of the term is essential to ensure timely provision of services. If you have questions or would like more information about services for students with disabilities, please contact the Academic Services, 206 Recitation Hall, extension 7891 or by e-mail at rperry@wittenberg.edu

Math 120 – Elementary Functions
- answer these questions –

1. What are the six basic algebraic operations?
2. Addition is to ________ as ________ is to division.
3. Exponentiation is repeated ________.
4. If $x^3 = 64$ what is $x^{1/3}$?
5. True or False: $4^{1/2} = 1/2$
6. True or False: $\sqrt{a^2 + b^2} = a + b$
7. Factor $6x^2 - 5x - 6$
8. Reduce $\frac{x^2 + 2x + 1}{x + 2}$
9. Solve for $y$: $\frac{2y + 1}{y + 2} = \frac{x^2 + x - 2}{x + 1}$