

AGR 399 Agriculture Calculations Online Fall 2016

Instructor:

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Office Hours:

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Objective:

To help students become familiar with basic math concepts and calculations often used in future agriculture classes at Missouri State University and various agricultural fields.

At the completion of this course the student should be able to:

- Add, subtract, multiply, and divide whole numbers, decimals, and fractions
- Work with percent, exponents, proportions, scientific notation, and simple logarithms (pH scale)
- Convert scientific units in and between both the metric and standard number systems
- Know the order of operations for more complex equations (i.e. adjusted weaning weights, etc)
- Calculate dilutions, DM and As-Fed of feeds, and nutrient content of fertilizer
- Calculate averages
- Solve simple algebraic equations and those with two variables
- Use Pearson Square for feed formulation
- Identify given information and solve mathematical equations in real-world applications

Text:

No text is required for this course. All materials, worksheets, quizzes, practice problems, and lectures will be provided on Blackboard for the students' convenience. Students will need some form of a calculator for in person exams (discussed below).

Grading:

Quizzes/Exams	Points	% of grade
5 quizzes @ 15 pts each	75 pts	20%
Week #4 "midterm" exam	150 pts	40%
Week #8 "final" exam	150 pts	40%
Total Possible Score	375 pts	

90%≤	A
80%-89%	B
70%-79%	C
60%-69%	D
≥59%	F

Lessons:

Each week a new lesson will open on 12:00 a.m. Monday morning with lectures (Mediasite posted to Bb), practice problem (Word document problems with key), and a 25 point quiz will open. The lesson

will remain open until Sunday night at 11:59 p.m. Once the lesson is closed the quiz will no longer be available.

Quizzes:

You are allowed to take each quiz a maximum of **THREE** times for a better grade if you so wish. Quizzes will be timed. You will be required to take the current lesson's quiz by the submission date. You will not be able to go back and take quizzes from previous lessons or work ahead and take quizzes from later lessons.

It is a must that you use a reliable computer where access to the internet and Blackboard are available to complete quizzes. It is advised that practice problems be printed out and worked out by hand showing all work for the final exam will be a paper exam requiring the student to show all of his or her work.

Exams:

Both the "Midterm" and the "Final" exams are worth 150 points. They will need to be taken, in person and on paper, during the 4th week (Midterm) and the 8th week (final) to receive full credit. Students can come to one of the study sessions during the week of the exam to take their exam. Once started the entire exam must be completed before leaving. Exams cannot be spread out over multiple study sessions. If a student cannot attend one of the weekly study sessions, they must set up a time with the instructor during the week the exam is available to take it in person. If the student fails to set up a time to take their exam and the exam is not taken during the study sessions, the student will receive a zero for that exam.

On these exams, students will be required to show all of their work to receive full credit for the problems. Therefore, it is highly advised that students work all practice and quiz problems out on paper to be prepared for the two exams in this course.

Study Sessions:

Study sessions will be made available on the following days/times each week (days/times) where a student will have access to either the instructor or a graduate student to obtain help with practice problems, types of problems, and/or mathematical concepts. Also, during these times of the 4th week of class and the 8th week of class students can come and take their "midterm" and final exams.

WILLIAM H. DARR SCHOOL OF AGRICULTURE EXPECTATIONS: As mentors and teachers we are committed to providing a high quality learning experience that prepares students for successful career and fulfilling lives, we have the expectation of the ethical behavior, a teachable attitude, and respect to be demonstrated in the classroom and beyond.

Tobacco Use Policy: As of August 15, 2012, Missouri State University is a **smoke-free campus**. KARLS Hall, Pinegar Arena and Bond Learning center are all **TOBACCO FREE** facilities.

Make-up Policy:

1. Permission for making up any missed work will only be granted for personal injury/illness or death/illness in the family with proper documentation and cause for not completing online course work by the due date. In the case of emergency, illness or a death in the family, it is the responsibility of the student to notify the instructor as soon as possible.

3. Assignments/quizzes must be completed/submitted by the date the assignment/quiz is due to receive full credit. Work missed due to an unauthorized cause will receive a grade of zero. Exceptions will be made with verifiable emergencies. Be sure to email or call me as soon as possible if an emergency should arise. (i.e. forgetfulness to complete assignments/quizzes by the due date will receive a zero.)

Communication: The easiest way to contact me is by email or to come to the Darr Agriculture Center. I do have a phone but I am not as good about checking messages on it as I am emails. Be sure to identify yourself clearly on your email so I know who I'm visiting with. I am at, or around, the Darr Center Monday-Friday from _____

UNIVERSITY POLICIES:

Academic Integrity Policy: Missouri State University is a community of scholars committed to developing educated persons who accept the responsibility to practice personal and academic integrity. You are responsible for knowing and following the university's student honor code, [Student Academic Integrity Policies and Procedures](#) and also available at the Reserves Desk in Meyer Library. Any student participating in any form of academic dishonesty will be subject to sanctions as described in this policy.

Cell Phone Use Policy: As a member of the learning community, each student has a responsibility to other students who are members of the community. When cell phones or pagers ring and students respond in class or leave class to respond, it disrupts the class. Therefore, the Office of the Provost prohibits the use by students of cell phones, pagers, PDAs, or similar communication devices during scheduled classes. All such devices must be turned off or put in a silent (vibrate) mode and ordinarily should not be taken out during class. Given the fact that these same communication devices are an integral part of the University's emergency notification system, an exception to this policy would occur when numerous devices activate simultaneously. When this occurs, students may consult their devices to determine if a university emergency exists. If that is not the case, the devices should be immediately returned to silent mode and put away. Other exceptions to this policy may be granted at the discretion of the instructor.

Disability Accommodation: To request academic accommodations for a disability, contact the Director of the Disability Resource Center, Plaster Student Union, Suite 405, 417-836-4192 or 417-836-6792 (TTY), www.missouristate.edu/disability. Students are required to provide documentation of disability to the Disability Resource Center prior to receiving accommodations. The Disability Resource Center refers some types of accommodation requests to the Learning Diagnostic Clinic, which also provides diagnostic testing for learning and psychological disabilities. For information about testing, contact the Director of the Learning Diagnostic Clinic, 417-836-4787, <http://psychology.missouristate.edu/ldc>.

Emergency Response Statement: Students with disabilities impacting mobility should discuss the approved accommodations for emergency situations and additional options when applicable with the instructor. For more information go to <http://www.missouristate.edu/safetran/51597.htm> and <http://www.missouristate.edu/safetran/erp.htm>.

Statement of Nondiscrimination: Missouri State University is an equal opportunity/affirmative action institution, and maintains a grievance procedure available to any person who believes he or she has been discriminated against. At all times, it is your right to address inquiries or concerns about possible discrimination to the Office for Institutional Equity and Compliance, Park Central Office Building, 117 Park Central Square, Suite 111, 417-836-4252. Other types of concerns (i.e., concerns of an academic nature) should be discussed directly with your instructor and can also be brought to the attention of your instructor's Department Head. Please visit the OED website at www.missouristate.edu/equity/.

Policy Regarding Dropping a Class: It is your responsibility to understand the University's procedure for dropping a class. If you stop attending this class but do not follow proper procedure for dropping the class, you will receive a failing grade and will also be financially obligated to pay for the class. For information about dropping a class or withdrawing from the university, contact the Office of the Registrar at 836-5520.

Student Grievance Procedure: Please make every effort to resolve any problems/issues with your instructor. If you are unable to resolve the situation with your instructor, you may contact the Director of First-Year Programs, Dr. Mike Wood, at (417) 836-8343 or visit the office of First-Year Programs, located in University Hall 205.

Other important dates and deadlines: Academic Calendar: <http://calendar.missouristate.edu/academic.aspx>

Title IX Information: Information to be included on the Blackboard page for the course.

Tentative Fall 2016 Schedule (Subject to Change)		
Week #1	10/13 - 10/23	Intro, Syllabus, Course Expectations, Basics: Fractions, Decimals, Percentages, Handling Money, Interest, Story Problems, Rounding, Order of Operations in Equations (205 Adj. WW). Quiz #1
Week #2	10/24 - 10/30	Conversion of Units, calculate area, volume, etc. Quiz #2
Week #3	10/31 - 11/6	Simple Feed Calculations: DM, As-Fed conversions, % Nutrients, Cost per lb/ton/cwt, etc. Simple Fertilizer Calculations, Quiz #3
Week #4	11/7 - 11/13	Review practice problem worksheet available <u>Week #4 "Midterm" Exam</u>
Week #5	11/14 - 11/20	Diet formulations with two constituents, (equations with 2 variables; Pearson square) forage analysis calc. Quiz #4
Week #6	11/21 - 11/27	Thanksgiving Break, No Classes, No Lessons, No Quizzes
Week #7	11/28 - 12/4	Ratios and Proportions, Exponents, Inbreeding Coefficient, Scientific Notation, Logarithms, pH Scale Quiz #5
Week #8	12/5 - 12/11	Review practice problem worksheet available <u>Week #8 Final Exam.</u>