Casper College Course Syllabus

Course Number/Title: Math 0900  PreAlgebra Section 05
Semester/Year: Spring 2016
Lecture Hours: Four
Lab Hours: N/A
Credit Hours: Four
Class Time: Monday & Wednesday, 7 PM – 9 PM
Meeting Days: Monday, Wednesday
Building/Room: Physical Science, room PS 107
Instructor’s Name: Mark Hladik (MLC code name: “Eta”)*

Contact Information
Office: Wold Physical Science Building, Room 104A (PS 104A)
Office Hours: generally 7 AM – 3 PM (same hours as the Math Learning Center, PS 104)
Phone: (307) 268 – 2738
e-mail: mhladik@caspercollege.edu

* At present, there are multiple individuals named “Mark” working in PS (Dr. Mark Kuhlman, Dr. Mark Mehn, Mark Wilkinson “Omega”); be specific when looking for “Mark”

Course Description: The study of Real Number Sets, including Rationals, Irrationals, Integers, the operations on Real Numbers of addition, subtraction, multiplication, division, without a calculator, the Order of Operations, elementary Algebra and Linear Equations, some elementary Geometry, percents, operations with Exponents

Prerequisite(s): ACT Math 0 -18; COMPASS placement PreAlgebra 44 or less; completion of this class permits the successful candidate to take Math 1000 (“Problem Solving”), Math 0920 (“Elementary Algebra”), or Math 0934 (“Elementary and Intermediate Algebra”)

Course Goal(s): By the end of this course of study, the successful student will be able to:

1) be able to perform limited arithmetic operations mentally;
2) operate on Integers correctly;
3) use the Order of Operations to simplify expressions and combine similar mathematical/algebraic terms;
4) use fractions in calculations and combine fractions correctly;
5) develop competence in elementary Geometry and geometric formulae;
6) be able to solve linear equations;
7) be able to construct linear equations from story problem descriptions, and solve those equations

Outcomes: The successful student will be able to:

1) demonstrate effective oral and written communication in relation to Mathematics;
2) use the Scientific Method;
3) solve unique problems using critical thinking and creativity;
4) use appropriate technology and information sources to conduct research, solve problems, present results to others;
5) use quantitative analytical skills to evaluate and process numerical data

**Course Objectives:** Successful candidates should be able to:

1) develop and demonstrate skills listed in the **Outcomes** section;
2) learn to work abstractly with mathematical symbols and functions, including the ability to simplify and solve expressions (as appropriate);
3) develop problem-solving and group-study/group-work skills;
4) develop confidence in their ability to use Mathematics, symbolic manipulation, abstract thinking, and logic;
5) be able to perform some addition, subtraction, multiplication, and division, with Rational Numbers and Integers, **without** a calculator (*i.e.* using **mental Math** to an appropriate extent);
6) be able to solve percent and proportion problems;
7) be able to convert between English and Metric units of measurement

**Methodology:** Any of the following methods and materials may be employed in the presentation of this class:

- lecture, including demonstration and examples; student practice (in-class);
- underlying Mathematical Theory;
- use of the Math Learning Center (PS 104) and computer lab (PS 106); individual tutoring (as needed; the MLC is a walk-in facility, and free to CC students);
- group study, cooperative learning (student-initiated methods);
- on-line delivery of ancillary instructional materials, including but not limited to: publisher videos, public videos, or other materials you may find on-line;
- homework assignments;
- quizzing;
- tests;
- **unannounced** in-class quizzes;
- written assignments (with fixed due dates);
- your own class participation;
- ‘Practice’ exam(s);
- Final Exam

This instructor believes in and encourages any type of group study and cooperative learning, or other paired or partner study. Keep in mind that in the final analysis, you must be evaluated as an individual. You will, eventually, sink or swim on your own.

Each class will begin with an ‘open forum’ for questions on assigned problems which are causing difficulty; bring these questions forward, as it is likely others are having the same
problem. “The only stupid question, is the one which is not asked.” Questions can also be submitted via e-mail, or phone calls to my office.

Once all questions have been resolved, there will be a presentation of new material for that class session. Any unannounced quizzes will be administered at the end of the class period (after which you are freely dismissed). Attendance is not taken, but you are expected to attend every class (see ‘Participation’ below), or make arrangements to obtain needed handouts, class notes, missed quiz(izes), or other material(s).

**Evaluative Criteria:** The following are used to assign a final grade at the end of this class:

- participation in the whole of the class, equal to one Chapter score (100 points);
- MML homework assignments, including any listed quizzes and tests; each Chapter is equivalent to 100 points towards your grade [these two categories contribute 35% towards your final grade]
- unannounced in class quizzes [contributing 30% towards your final grade]
- a Practice Final Exam [10% towards your final grade]
- a proctored, comprehensive Final Exam [25% towards your final grade]

“Participation” is my subjective evaluation of your attendance, and interest in the class. Consistently missing class (see Class Policies and Procedures, below) or constant attention to cell phones, iPads/iPods, or other ‘non-academic’ electronics sends a clear message that class instructional time is not of value to you. Obviously, some students have certain competencies in various Mathematical areas, and class instruction may be redundant, but lack of eye-contact and/or attention to course material will affect this grade. Please respond to instructional questions; take notes as they are being given (including little ‘hints’ about typical problem areas); work example problems with your instructor; ask questions when you are confused (you are probably NOT alone!); make a positive contribution to your class; be active in your class, since you might be paying for it yourself. Please find me, or some other Math faculty, or make time at the Math Learning Center, and get some type of help before a serious problem exists. Casper College is committed to student success, and other faculty are more than happy to assist with a Math question/problem. Please use our expertise.

You may earn up to 100 points for attendance/participation.

MML (My Math Lab) is an on-line Math homework delivery system, operated by Pearson Publishing. Access to MML is required to complete this class. There are ‘homework’ assignments (and, yes, some student do their ‘homework’ in class, during lecture; in general, this is NOT a problem), and some quizzing. Students are permitted unlimited attempts at problems, but due dates are enforced (except at provided in Class Policies and Procedures, below). Each Chapter of completed work is scaled to 100 points possible.
These two categories contribute **35%** towards your final course grade.

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**Unannounced** in-class quizzes will be used to force review of previous material and keep skills at peak level. Each quiz will be short, nominally five questions or problems, closed-book, closed notes, and *comprehensive* (*i.e.*, any previous material is ‘fair game’ for being used as a question/problem). Expect quizzes to be administered at the end of class; you are dismissed upon completion of the quiz. This category of Evaluation will be **30%** of your final grade, so *keep previous material at the fore, for this is the essence of Mathematics!*  

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A Practice Final exam on the MML website is the last item in the assignment list. Because of the unlimited time frame on the Practice Final, it is more difficult, and longer, than the actual Final Exam. It is designed to let you find weak areas where you need to review more, and act as a kind of ‘safety valve’ for the Final itself. If you are unable to make a passing grade on the Practice Final, your success in the class is in doubt.

The Practice Final will contribute **10%** to your final course grade.

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**Comprehensive Final Examination**: The Final Exam is delivered as a proctored test, either in class at the time of Final Examinations, through the Academic Testing Center, or by appointment with me, at my discretion. The Final is closed-book, closed-notes, paper-and-pencil; you should prepare a ‘help sheet’ of important information that you may need (geometry formulae, special factorizations, … … ) throughout the semester. Guidance on material will be provided during instructional time.

The Final Exam is **25%** of your final course grade.

*Note that Casper College may collect anonymous samples of student work demonstrating achievement of any or all of the above Goals, Outcomes, Objectives, Methods, and/or Evaluative Criteria*  

**Required Materials:**  My Math Lab (www.mymathlab.com). We are using the e-text *Martin-Gay, Elayn, Algebra Foundations*. Subscription to MML includes the on-line version of the text; you may purchase the hard copy at additional expense, but this will be discouraged. Any references to the text can be printed at will; use of a color printer will be at the student’s discretion. Access to MML is **required**.
Course Evaluation: Feedback provided to Casper College on methods and procedures through the Course Evaluation process improves instructional delivery, by giving the Administration, Department Chairs, and Faculty valuable information. Please plan to participate in this important tool for educational experience improvement. Faculty retention is keenly tied to Course Evaluation; the invitation to participate will be delivered through your official Casper College e-mail account.

Class Policies and Procedures:

Electronic devices (other than laptops, or tablets, in use for topics germane to Mathematics):

Please keep all devices turned off/silent and away from your immediate person (e.g., in a backpack) unless an exception has been granted due to extraordinary circumstances. Please see me privately if there is any question. ADA devices are automatically exempt from this policy.

First infraction: request for the device to be secured
Second infraction: dismissal from the remainder of class (which might include missing an unannounced quiz, for which you would take a zero); return to the next regularly scheduled class without the offending device.

Attendance, and Extra-Curricular Activities:

Attendance is not formally taken in this class, as missing class tends to have natural consequences. You may make alternative arrangements for any missed material due to college-related activities, illness, or other, unexpected and unforeseen emergencies. There is an automatic excuse and permitted make-up time for medical issues.

Do not expect the Math Learning Center to be a substitute for missed classroom instructional time. The purpose and design of the MLC is to help students with individual Math problems on a walk-in basis, and to be available for all CC students. If you miss a class, you should obtain notes and other materials from a classmate or your instructor, review this material, then seek assistance with any problems or issues.

Consult with me before class, after class, by e-mail, phone, in the MLC (during my regular day hours [7 AM – 3 PM, Mon – Fri], or by appointment. All other Math faculty are also available for consultation. Other than material available on MML (video lectures and demos), there are websites which specialize in Math instruction, and some have found valuable; e.g., www.khanacademy.org, www.mathtv.com, www.justmathtutoring.com, among others. Do not hesitate to make use of these resources; they have a lot of traffic because they are excellent ancillaries to formal Math instruction. Please be sure to share with your group, any additional websites you may find.
Waiting until the ‘last minute’ to do MML assignments is often a recipe for disaster. If Pearson’s servers “crash” for a period of time, and you are trying to ‘cram’ a number of assignments, you may find yourself in a world of hurt. Plan to spend some time each day on some MML assignment or material. Depending upon your background, you may find that you need as much as several hours per day on different assignments. If you end up with just a few minutes for an assignment, so much the better. But here is the key:

Your progress and amount of time spent on assignment(s) is tracked on MML. Consistently ‘putting it off’ and ‘need an extension on due date(s)’ will result in no mercy from me. Consistent effort, finishing most assignments before a deadline, steady progress, gets exceptions from me, when “life” happens (as it does to all of us).

BIG BROTHER IS WATCHING!!!!!!!

Grading Scale:

Your eventual grade is calculated with the weighting factors listed above (35-30-10-25) applied to the total number of points accumulated. Your Mid-term, and Final grade are assigned according to this scale:

<table>
<thead>
<tr>
<th>Course Letter Grade</th>
<th>Percentage Range</th>
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<tbody>
<tr>
<td>A</td>
<td>&gt; 90.3%</td>
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<tr>
<td>B</td>
<td>80.2% to 90.2%</td>
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<tr>
<td>C</td>
<td>70.1% to 80.1%</td>
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<tr>
<td>D</td>
<td>60.0% to 70.0%</td>
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<tr>
<td>F</td>
<td>&lt; 60.0%</td>
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Last date to change to Audit, or Withdraw from this course:

Thursday, 14 April 2016

Student Rights and Responsibilities: Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College student.

Academic Chain of Command: If a problem arises in this class, you should first plan to contact your instructor, and make a good-faith attempt to resolve the issue. Very often, all that is involved is a mis-understanding, or some mis-communication (e-mails get lost or undelivered, typos in hand-outs, etc). Be polite, be respectful, and above all, be ready for a resolution of the problem. If you are not satisfied with the solution offered by your instructor, you should make contact with the appropriate Department Chair (Dr. Debra Swedberg, PS 343; (307) 268 – 2251;
The next level is the Dean of the School of Science (Dr. Grant Wilson, PS 132A; (307) 268 – 2593; or gwilson@caspercollege.edu). The next hierarchy in the Chain of Command is the Vice-President for Academic Affairs. An appointment may not be necessary, as many Administrators have ‘open-door’ policies.

**Academic Dishonesty:** Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed, or expulsion from Casper College. Please refer to the Casper College Student Code of Conduct for more information on this topic.

**Official Means of Communication:** Casper College faculty and staff will employ the student’s assigned Casper College e-mail account as a primary method of communication. Students are responsible for checking their account on a regular basis. This is also the place you will receive course evaluation links during end-of-the-semester course evaluation periods. A facility exists to have your CC e-mail forwarded to a mailbox of your choice. Contact I. T. if there is any problem establishing a forward-service (x-3648).

**ADA Accommodations Policy:** If you are in need of accommodations, please see me privately as soon as possible, or make your request with Casper College’s Disability Services Counselor, Brent Heuer, in Gateway 344; phone (307) 268 – 2557, or bheuer@caspercollege.edu. His responsibility is to review any documentation provided by the student, determining eligibility for accommodations, assisting students in obtaining needed accommodations, and notifying the student’s instructors. In most cases, reasonable accommodations will be provided. If an accommodation cannot be supplied, please explore with me other means of allowing you to complete coursework in a timely fashion. **A problem is simply an opportunity seeking a solution!**

**Tentative Calendar/Due Dates/Closing Dates:**

MML exercises and quiz/test closing dates are approximate, and subject to change as needs dictate. **Changes are the norm; expect them and plan accordingly.** Steady progress on material tells your instructor that you are participating on a regular basis. “Crammers”, who wait until the day before the due date to complete assignments, will NOT be granted extensions for … … … ‘late’ work … … …

- Number of class meeting days: 28*
- Number of Martin-Gay sections: 47

We need to cover about two sections (on average) per class meeting, weather notwithstanding.
<table>
<thead>
<tr>
<th><strong>Assigned Study Material</strong></th>
<th><strong>Tentative Closing Date</strong></th>
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<tbody>
<tr>
<td>Orientation</td>
<td>24 January 2016</td>
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<tr>
<td>Chapter One</td>
<td>31 January 2016</td>
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<tr>
<td>Chapter Two</td>
<td>14 February 2016</td>
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<td>Chapter Three</td>
<td>28 February 2016</td>
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<td>Chapter Four</td>
<td>20 March 2016</td>
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<td>Chapter Five</td>
<td>03 April 2016</td>
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<td>Chapter Six</td>
<td>17 April 2016</td>
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<tr>
<td>7.3; 8.4; 8.5; 8.6; 8.7</td>
<td>01 May 2016</td>
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<tr>
<td>12.1; 12.5</td>
<td>08 May 2016</td>
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<tr>
<td>Practice Final Exam</td>
<td>11 May 2016</td>
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<tr>
<td>Final Exam</td>
<td>11 or 12 May 2016</td>
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*Keep the option open for using Monday, 07 May 2016, as a ‘class day’*

**Official campus holidays/no classes:**

- Monday, 18 January 2016  MLK Day
- Monday, 15 February 2016 President’s Day
- Mon – Fri, 14 March – 18 March “Spring Break”
- Friday, 25 March 2016 Spring Holiday
- Friday, 08 April 2016 advising day -- -- campus open
CV for Mark Hladik

University degrees in Physics, Geology, Math

Casper resident since 1980

Unocal Corporation, Staff Geophysicist 1980 – 1990
Independent Consultant, 1988 –

Air Taxi Pilot, Big Horn Airways; operated Casper satellite base 1998 – 2008

Math Adjunct, Casper College; 1992 – (not continuously until 2009)
Math Learning Center Specialist, Casper College; 2009 –

Total logged flight time: 11,000 hours; 9,900 MEL; 2,000 instrument

Wyoming Professional Geologist # 2504
Society of Exploration Geophysicists, Certified Petroleum Geophysicist #009
American Association of Petroleum Geologists, DPA Member
Wyoming Geological Association
Utah Geological Association

My wife and I are raising four grandchildren (b. 2003, 2005, 2008, 2009)
1) Basic Math Facts
   Addition
   Subtraction
   Multiplication
   Division

2) To a limited extent, be able to perform simple arithmetic operations mentally (i.e., “in your head”), principally with single digits;
   calculator use is discouraged (until such time as it is appropriate)
   paper/pencil, mental Math, or multiplication table
   memorization of the “Math Facts” pays large dividends in the long run

3) Identify parts of a Fraction

4) Know and use the various subsets of the Real Numbers (see H/O)

5) Math Vocabulary (most are handled at the beginning of a section)

E-text reference pages 1402 – 1407 may prove useful

Student Resource pages 1450 – 1466 provide excellent Study Guide material, and methods
(it is strongly recommended that these pages are printed out, and used with each Chapter included in this class)