MTH065 - Elementary Algebra – Winter 2015
CRN 32585 (Mon & Wed 5:30-7:20pm)
Sweet Home Center Room: SHC101

INSTRUCTOR: Paul Rowton

Also Math65 Classroom Based Course Materials Module Packet (NOT self directed)

OFFICE: SHC101
OFFICE HOURS: MW 7:30pm-8:00pm
PHONE: (541) 367-6901 (SHC leave me a message)
E-mail: paul.rowton@linnbenton.edu or rowtonp@linnbenton.edu

PREREQUISITES: MTH 20 & MTH60 or equivalent or by LBCC Placement Exam

COURSE DESCRIPTION: MTH 65 is an introductory course in algebra for students who have some previous algebra experience or who need a thorough review. It assumes some familiarity with algebra, all operations over the rational numbers, combining like terms, order of operations, problem solving, and solving simple equations. The course formally introduces linear equations and inequalities, relations and functions, graphing equations, quadratics and square roots, as well as exponential functions. Additionally solving quadratics and regressions are looked at. Problem solving is emphasized throughout the course. Application problems are realistic with some data to be collected, analyzed and discussed in a group setting with results submitted in written form. The use of a graphing calculator is an integral part of this course so you must purchase or rent a TI83plus or better graphing calculator. (83+ or 84+)

Note: A minimum competency level is required to pass this course. You MUST pass all four module tests and a proficiency test to pass the class. (See later explanations)

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

1. Define and identify relations, functions, linear functions and apply function notation.
2. Demonstrate understanding and knowledge of lines and linear models and their important features as related to their equations and graphs.
3. Identify and distinguish between different types of functions and demonstrate comprehension of the important features of each type such as linear, quadratic, square root, exponential.
4. Solve quadratic equations using a variety of methods including graphing, square roots, and the quadratic formula.
5. Explain mathematical concepts, processes and solutions

Success in mathematics requires a serious commitment on your part. Class attendance as well as regular reading and homework practice are critical to your success in this course. Plan to spend at least 8 hours per week outside of class studying for this class. Consider the course like a part-time job which requires a minimum of 12 hours per week (4 hours of class plus at least 8 hours of study.) If you are unable to attend class due to illness, accident, or some other legitimate reason, you are expected to complete any scheduled work on your own and e-mail the instructor. This course will include both lecture and small-group work, and you will be expected to take an active role in your study of mathematics. Making up small group activities is nearly impossible so attendance is critical.

GRADING: Your letter grade for this course will be based upon your percentage of the total number of points accumulated from the following. You must pass all four module tests with 70% or more (over 60% is passing for module 4) and the proficiency test with 95% or better in order to receive a passing grade in this course.

<table>
<thead>
<tr>
<th>Component</th>
<th>Points Possible</th>
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</thead>
<tbody>
<tr>
<td>Module tests: 4 x 100</td>
<td>400</td>
</tr>
<tr>
<td>Activities and activity</td>
<td>75</td>
</tr>
<tr>
<td>Toolkit check</td>
<td>10</td>
</tr>
<tr>
<td>HW quizzes (10, drop 1)</td>
<td>90</td>
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</tbody>
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TOTAL = 575 points possible

GRADING SCALE: A: 90-100%; B: 80-89%; C: 70-79%; D: 60-69%
NP: Not all of the module tests and proficiency test have taken and/or been passed. Incompletes are not usually given in this class (only under extremely special circumstances).
A NP grade doesn’t affect your GPA (like an F would). However, it is a non-completion grade requiring retaking the class, and may have adverse effects on your financial aid status or athletics eligibility.
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HOMEWORK ASSIGNMENTS: Timely practice is important. You would never have someone simply show and explain to you how to drive a car and then hand you the keys and say go for it and walk away without having you practice! Shooting free throws is not something that you just step up and do without practice – Just ask Shaq! Learning mathematics is the same way. Your homework assignments are your practice. Doing all of your homework when we learn the material is a must.

Each evening in class we cover the sections listed for that date on the calendar. The homework for that date is the problems shown in the module packet for those specific sections, and should be completed and checked (so you know what to ask questions about) by the next class session so you can ask questions. You should do the homework as soon after class as you can (while the information is fresh in your mind), refer to your class notes and the book for similar problems, get help in the math lab or learning center if you need it, ask questions the next day in class, and then finish/revise the homework for the homework quiz. *Always check your answers from appendix E.*

Guidelines for homework assignments: you should use these guidelines for all homework.

1. Put your name, course, date, section number, page numbers, and assigned problems on assignment in the top right hand corner of all homework assignments.
2. Put problems in sequential order and clearly identify them by section and problem number so they are easy to find in the pages. Neatness will be critical for the homework quizzes. Don’t try to cram everything into the smallest space possible…leave room to work and ask questions and fix issues.
3. ALWAYS COPY the ORIGINAL PROBLEM - Except in long word problems give a brief summary of the problem showing that you have gathered the critical information from the problem. I will model my expectations in class when we do examples and I expect that you show your work as I do.
4. Show your work in an organized fashion - do not just give answers. Doing the homework is not about getting an answer but HOW you get that answer. Clearly show all steps in your process. If you do it in your head or on a calculator, please record the process you used in your head or on the calculator in writing on the page. The things we are learning in this class have far more to do with the process than getting an answer to a problem. You will be copying specific items onto homework quizzes and I will give NO credit unless process is shown.
5. Identify your answers in a conspicuous way: enclose them in a box, highlight them, or underline them twice. Problems using units (like feet, inches, balls, etc.) must always be labeled with units. *Answers to word problems must be written in a sentence answering the question asked and include appropriate units.*
6. Have everything ready for the homework quiz each Monday – you won’t have much time to copy things.
7. STAY CAUGHT UP – Don’t get behind as it is very difficult to catch up.

Homework Collection and Quizzes: Homework will be turned in weekly and assignments will be checked off on your module test ticket based on completion, but homework will actually be graded using “homework quizzes.” These quizzes will be weekly typically on a Monday for previously completed and reviewed homework (see calendar). A homework quiz will ask you to copy several of the homework problems from your homework. You will only be given the section and number of the problem, not the problem itself, and only a short time in class to copy the problems. You will use your homework as reference, but not your text – remember you are simply copying what you have completed not doing or working out a problem. That means you will need to have your homework completed and well-organized so that you can find the problem and copy it over on the quiz. You are expected to copy the original problem, and show your complete process and answer (with units if appropriate), not just an answer. Keeping up on the homework is essential for success in this class since collectively over the term it counts nearly the same as a test in your overall final grade. There will be 10 homework quizzes worth 10 points each. The lowest score will be dropped from your grade. If you miss a homework quiz it cannot be made up, that one will be the one dropped so don’t miss more than one as these are only given at the beginning of class on the scheduled date.

ACTIVITIES: You will be doing at least three and maybe four activities in class depending on time. They will be done in groups, but you will turn in your reports individually. Each activity counts 25 points. *You must be in class on activity day in order to count the activity.* Activities will be graded on completion of the activity, active participation in the activity, completeness, correctness, clarity, and neatness. Activity write-ups will be due approximately 2 class days (i.e. 1 week) after we do them in class (except for the final activity on the final day of class – it is due the same night). There will be a 4 point deduction from the total score earned for each class day that an activity write-up is late. If we do all 4 activities as scheduled the lowest score of the four will be dropped. We have four on the calendar, but the last one is optional and will be treated as such when the time comes. Depending on class advancement through the course we may or may not do activity 4 so DO NOT assume one will be dropped and skip an earlier one. Activities for Modules 2 & 3 are critical for meeting outcome expectations.

TESTS: You will have four module tests. *You must have all homework finished including the reviews to get permission to take the module test.* There is a target date and a deadline date for taking each test. If you do not take a module test by the deadline it will count as a retest with a maximum score of 80%. Modules 1-3 tests must be passed with a score of 70% or better, and the module 4 test must be passed with a 60% or better. If a test is not passed the student must retest in order to pass the test and complete the course. If the student passes the test (the first time) with less than 80%, a retest may
be taken with instructor's permission to raise the grade up to 80%. **All module tests are taken in the Sweet Home Math Lab Learning Center, SHC 102 or by special arrangement with instructor.** You must have picture ID and your signed test ticket to take a test. No test may be started any later than one hour before the Learning Center closes, by their clock. Do not cut it close!

**RETESTING:** If you do not receive a 70% or better on a module test, you must retest. You need to go over your test with your instructor or a tutor before retesting. In order to receive permission to retest you will need to do some more work on the module material. The maximum score on a retest is 80%. The retest is graded just as a first test is graded, but any score above 80% is recorded as 80%. If the retest is not passed then a second re-test may be available with instructor’s permission with a maximum score of 70%. Any more than 1 retest per module is at instructor’s discretion based on potential completion of the other three modules.

**PROFICIENCY TEST:** There is a proficiency test that you must take and pass with a 95% or better in order to receive credit for this course. **YOU MAY NOT USE A CALCULATOR ON THE PROFICIENCY TEST!** It may be taken up twice a week until you pass it but not more than once per day. The first one will be given in class at the end of the sixth week of the term. After that you must re-test in the Sweet Home Math Lab or by special arrangement with the instructor. You must have your proficiency test ticket and photo ID. Remember that you must pass this test to receive a passing grade and it must be done prior to finals week, as no proficiency tests are allowed during finals week.

**Toolkit:** As an organizational aid, for developing study skills, and for success in this course, the following items are required tools for your toolkit. Remember having this is worth 10 points the 3rd class meeting!

**Required items:**
- 3 ring notebook in which you'll keep your Module Packets, class-notes, and homework
- MTH065 Packets: all 4 Modules and tickets and Syllabus *(in the notebook!)*
- MTH065 LBCC Printed Textbook
- Blank loose leaf paper and/or engineering paper *(in the notebook!)*
- Calculator – TI83+ OR TI84+  graphing calculator *(It may be a TI83)*
- pencil, preferably a mechanical pencil
- Eraser, and a spare pencil OR spare leads for the above mechanical pencil
- Ruler with both metric and English units
- Small protractor
- graph-paper or engineering pad paper

**Optional:** Dividers for each module (in the notebook), Colored pencils, Post-it or sticky notes, Highlighter

*** Remember, HW quizzes, toolkit, learning checks, and the activities together count in your grade equal to nearly two tests. Do not miss them unless it is absolutely unavoidable. Attendance is critical for success, and it is difficult to make things up. ***

**HELP!** You can get help from me, the tutors in the Sweet Home Center or Lebanon Center Math Lab, or in the Learning Center on Main Campus
- If my office hours do not fit your schedule, we can arrange another appointment time. Just ask! I will help you whenever I can.
- The Math Lab, SHC102, is an excellent place to study, staffed with a math tutor to answer your questions Tu/Th 5:30-8:30 pm.
- The Learning Center on Main Campus has a math helper at most times, a good place to study, can arrange for private Tutors. There is no charge for these services. The Lebanon Center also has math help.

**ACADEMIC DISHONESTY:** *First offense:* if you are caught cheating on a test, you will be given a grade of "0" on that test and may retest according to the retest policy above. The incident will be reported to the college's administration for possible disciplinary action. *Second offense:* you will be issued a grade of "F" for the course. The incident will be reported to the college's administration with a recommendation for disciplinary action. **Special Situations:** Students who may need accommodations due to documented disabilities, who have medical information which the instructor should know, or who need special arrangements in an emergency, should speak with the instructor during the first week of class. If you have not accessed services and think you may need them, please contact Disability Services, 917-4789. If you have documented your disability, remember that you must complete a Request for Accommodations form every term in order to receive accommodations, and those accommodations must be formally provided to the instructor in writing by disability services. ODS may be reached by email at ODS@linnbenton.edu or by calling (541) 917-4789.

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. (for further information [http://po.linlbenton.edu/BPandARs/](http://po.linlbenton.edu/BPandARs/))

The LBCC community is enriched by diversity. Everyone has the right to think, learn, and work together in an environment of respect, tolerance, and goodwill. I actively support this right regardless of race, creed, color, personal opinion, gender, sexual orientation, or any of the countless other ways in which we are diverse. (related to Board Policy #1015)