OAKLAND UNIVERSITY COLLEGE OF ARTS AND SCIENCES DEPARTMENT OF MATHEMATICS AND STATISTICS

COURSE INFORMATION SHEET

COURSE: MTH 0661, Elementary Algebra, 4 Credits

CATALOG DESCRIPTION

Order of operations; algebra of exponents; variable expressions; linear equations and inequalities in one variable; graphing and lines; linear system of equations in two and three variables; polynomial arithmetic; factoring; solving equations by factoring; applications and problem solving.

For the workshop portion of the course, you will work cooperatively in groups to solve problems based on the preceding topics. Computational and theoretical mathematics will be learned through discovery rather than by lecture.

PREREQUISITE

In order to succeed in this course, you need to have a working knowledge of fractions; addition, subtraction, multiplication, and division of positive and negative numbers; and the commutative, associative, distributive, identity, and inverse properties of real numbers.

In college courses, more emphasis is placed on understanding and applying concepts, as opposed to learning to perform routine computations. Understanding mathematical concepts and their applications are the central issues of college-level work. Students who have not been in such courses often underestimate the amount of time and hard work needed to succeed.

COURSE OBJECTIVES

MTH 0661 is a skill development course specially designed to aid incoming students who need additional preparation prior to entering one of the university's standard mathematics sequences.

REQUIRED TEXT

Elementary and Intermediate Algebra by Tussy and Gustafson, 5e, published by Brooks/Cole, with an access code for Enhanced Web Assign.

SYLLABUS

For a day-to-day list of topics, see "MTH 0661 Schedule."

COURSE COMPONENTS

The course is composed of three components:

- IENTS Lectures or exams, which will be given every Tuesday in the lecture hall.
 - Workshops, three times per week, which includes group problem-solving.
 - Assigned work via Web Assign.

WEB ASSIGN

Enhanced Web Assign is a computer based learning software. The access code is included with the purchase of a NEW textbook from the campus bookstore. The access code can also be purchased from the website.

ONLINE VIDEOS

There are online videos corresponding to most topics. Most topics will consist of three videos, each approximately 12 minutes in length. They will be posted on the lecture section of Moodle, as well as the website for the Tutoring Center. On the lecture section of Moodle, you will also find guided notes that you can print and fill out as you watch the video. It is recommended that you watch these videos *before* attending the workshop. The schedule for viewing the online videos will be posted on the lecture section of Moodle.

THE ONLINE VIDEOS ARE NOT INTENDED AS A REPLACEMENT FOR ATTENDING THE WORKSHOP, AND SHOULD NOT BE USED AS SUCH. THEY ARE MEANT AS AN AID TO HELP YOU PREPARE FOR THE WORKSHOP, OR FURTHER EXPLAIN A CONCEPT. THEY ARE DESIGNED TO HELP YOU ATTAIN A BETTER UNDERSTANDING OF THE MATERIAL.

MOODLE

The first day handouts will be posted on Moodle, as well as the course code and registration information for Web Assign. You will also find instructor office hours, reviews, and worksheets corresponding to online videos. It is advisable you check Moodle for daily updates.

DSS ACCOMMODATION:

Students with disabilities who may require special considerations should contact the Office of Disability Support Services. Such students should also notify both their workshop and main lecture instructor as soon as possible.

When the student recieves the official DSS accommodation letter they should contact their instructor to schedule a brief meeting to review and explain how accommodations will be provided. No accommodations can be provided until the official letter from the DSS office has been given to the main lecture instructor and the student and main lecture instructor have met.

DROPPING THE COURSE

The Department of Mathematics and Statistics is committed to achieving the goal of an academically sound freshman and sophomore mathematical sciences curriculum in which most conscientious Oakland University students can expect to be successful. If you are considering dropping the course and wish to discuss the matter further, you are encouraged to contact your instructor.

EMERGENCY CLOSING

If the University is closed at the time of a scheduled examination (for example, because of snow), the exam will be given in the next lecture period when the university reopens. For example, if the university is closed on Tuesday, January 16, the exam will be given in the next scheduled Tuesday lecture meeting on January 23.

The Oakland University emergency closing number is 370-2000.

ATTENDANCE

Workshop attendance and participation are vital for success in this course. Students are expected to participate based on the guidelines below. To be in attendance means:

- Be on time for each workshop.
- Stay on task during each workshop.
- Stay the full period. (Do NOT leave early.)
- · Do not take or receive calls, messages, etc.
- No electronics should be out during the workshop. (No cellphones, laptops, tablets, etc.)
- Come prepared. Arrive with a pencil, textbook, and paper.
- Students should not regularly leave the workshop.

STUDY HABITS

Cultivating good work and study habits is necessary for doing well in mathematical sciences courses. You should keep on top of the subject by doing large amounts of homework (frequently working on problems not assigned), regularly reviewing earlier material, asking questions in class, and making good use of your instructor's office hours and The Tutoring Center hours for free peer tutoring. If you are having difficulty with a topic, get it clarified as soon as possible.

If you make mistakes on exams or drills, rework these problems so you will not make similar mistakes later. Regular review of previous material help you avoid cramming, and the usual non-retention problems students encounter at the end of the course. Expect that you should spend at least two hours outside of class for each hour in class.

ACADEMIC HONESTY

Cheating is a serious academic crime. Oakland University policy requires that all suspected instances of cheating be reported to the Academic Conduct Committee for adjudication. Anyone found responsible for academic misconduct may get a 0.0 in addition to any penalty assigned by the Academic Conduct Committee. You must read the <u>Academic Conduct Regulations</u> of Oakland University. Working with others on homework is not cheating unless indicated by the instructor; handing in an assignment that has essentially been copied from someone else is cheating. Looking at someone else's work during an exam is cheating. Receiving help from someone else or consulting unauthorized material during an exam is cheating. Giving such assistance, even unintentionally, also constitutes cheating.

Drill & Exam Technology and Dress Requirements:

Bring a photo I.D. with you to each drill and exam. Do not wear hoodies, hats or ball caps. Your ears and face must be visible during drills and exams. (Religious exemptions may be allowed, e.g. kippah, coif/whimple/veil, hajib, etc.) While taking exams or drills wearing ear buds or iWatches is prohibited. Phones and all other technology must be turned off and placed out of sight.

GRADING CRITERIA

GRADING CRITERIA	<u>Grading Criteria</u>	<u>Scale</u>		
AND	Exam 1:	100 pt	95% - 100%: 4.0	
SCALE	Exam 2:	100 pt	80% - 94.9%: 3.0 - 3.9	
	Exam 3:	100 pt	65% - 79.9%: 2.0 - 2.9	
	Exam 4:	100 pt	50% - 64.9%: 1.0 - 1.9	
	Exam 5:	100 pt	Less than 50%: 0.0	
	Exam 6:	100 pt		
	Drills:	100 pt		
	Final Exam:	250 pt		
	Online Assignments:	50 pt		

EXAMS

There will be six 50-minute exams. The dates for these exams are **January 16**, **January 30**, **February 13**, **March 6**, **March 20**, **and April 3**. Each will be worth 10% of your grade. These exams may include prerequisite material or material from previous exams. All exams will:

- · Be closed book and closed note;
- Reflect both the content and general objectives of the course; and
- Be given in the scheduled lecture portion of the course, on Tuesday.

Your responsibilities after an exam:

- Understand every solution. Even if you obtained the "right" answer, it is essential that you understand the presented solution. It highlights the essence of the problem and the key element tested.
- If you find an error in the grading (or think you have found an error) you must notify your workshop instructor immediately and return the exam to your instructor before leaving the workshop. If you leave the workshop with the exam no adjustments will be made.

DRILLS

The drill is designed to test your knowledge of the basic concepts presented in the workshop. The drills will either be given at the beginning or end of the workshop with the exception of Course Info Drill which will be posted on the Lecture Moodle page. **Drills must be taken in the workshop only. Drills cannot be taken early or late. There are no make-up drills.**

The content of each drill will be based on the concepts from that workshop or previous workshops. Each drill will consist of 3 to 10 questions. Each question will be worth one point. No partial credit will be awarded. The maximum number of points you may earn toward your drill grade is 100. The number of drill points available will be approximately 125.

FINAL EXAM

The final exam is comprehensive and is worth 25% of the course grade. The material covered after the last exam may have a greater weight on the final exam than previous material. The final exam will reflect both the specific content and broad educational objectives of the course. The final exam is **Friday, April 20th** from 8:00 a.m. to 10:45 a.m. The location will be announced.

CALCULATOR USAGE

You will be permitted to use a scientific calculator on some exams, some drills and all homework assignments, but it is important to learn to use it effectively. To receive full credit on exams, be sure to show all the mathematical work necessary for setting up a calculation before using the calculator.

If you are unsure if your calculator can be used please review the TI-30XIIS guidebook for a list of functions that your calculator is allowed to have. You are not required to purchase a TI-30XIIS, you can use a calculator with the same functions but you may not use a calculator that has functions not listed in the TI-30XSII guidebook!

The list of approved and not approved calculators is posted in the Calculator Information section of the Lecture Moodle page. Any calculator not listed as approved cannot be used on exams. If your calculator is not on the list you should schedule a meeting with Dr.Connolly so the calculator can be reviewed.

ONLINE ASSIGNMENTS

WebAssign is a computer-based learning software. WebAssign is worth 5% of your final grade. It is included with the purchase of a new textbook. It can be purchased separately, both at the bookstore and online at webassign.net. This software uses your browser (such as Firefox, Chrome, or Explorer) so you do not have to download anything, but you need Internet access.

- Go to www.webassign.net
- Click on "I have a class key"
- Enter the class key:

The day of each workshop meeting there will be an assignment in Web Assign. Each assignment will consist of problems from the workshop and problems dealing with current topics. The assignments are graded immediately. Each assignment will be posted at 1:10 p.m. the day of the workshop, and will be due the night before the next workshop at 11:59 p.m. There will also be review assignments for each exam. The average of the assignments will contribute 5% to your grade. DO NOT WAIT UNTIL THE LAST MINUTE TO DO THE ASSIGNMENTS!

Understand that internet access can sometimes fail. Maybe there is a storm that knocked out cables; maybe your computer crashed. This is not a problem for students who do their homework in a timely manner. It is a problem for students who wait until the last minute to do the problems. No extension will be given, for any reason whatsoever. If you are unable to complete an assignment as a result of technical issues, lack of access to a computer or a misunderstanding of the deadline no adjustments will be made.

To help mitigate potential computer-related issues, the lowest 8 Web Assign homework will be dropped.

In case of technical problems with WebAssign, do not ask your instructors. Use https://webassign.com/support/student-support/ or 1.800.955.8272, option 1

DRILL AND EXAM MOODLE GRADE VERIFICATION

Students should regularly check that drill and exam grades have been accurately entered on the Moodle page.

Any inaccuracies with recorded scores must be reported to the workshop instructor immediately. For any adjustment to be considered, you must provide the original graded work to verify that the score was incorrectly recorded.

MAKE-UP POLICY

No make-up exams or drills will be given.

There are no make-up exams and exams may not be taken early. You do not need to give a reason for missing an exam and you do not need to get my permission. I will enter zero for the missed exam. The final exam score, as a percent, will replace the score of the lowest (or two lowest) regular exam(s).

Therefore, your final exam score as a percent will replace the score of one (or two) missed regular exam(s) if it is higher. This policy applies to regular exam scores for all students whether the exam is missed or the exam is taken and the score is lower than desired. **Even if the final exam replacement applies, the regular exam scores on Moodle will not be changed.** The replacement score(s) will be used in the calculation of your course grade at the end of the semester.

Final exams cannot be taken before the date scheduled by the registrar's office. If you have an **approved**, **documented reason** to miss a final exam (a medical emergency sent you to the E.R., for instance), you will get a grade of INCOMPLETE and will be required to make arrangements with your instructor to take a final exam to complete the course and get your grade.

No make-up drill or exam and no adjustment will be given to a student who enrolls in the course after the date that a drill or exam is scheduled.

IMPORTANT DATES

January 17: The last day for 100% tuition reimbursement, registration, to add a class, and a "no-grade" drop.

March 14: Last day official withdrawal.

February 19 - 23: Winter Recess - No Classes

April 17: Last day of class

April 20: Final Exam: 8:00 am - 10:45 am

Text: Elementary and Intermediate Algebra by Tussy/Gustafson, 5th edition

Note the following:

Wednesday, January 17: Last Day for 100% Tuition Refund; Last Day for a No-Grade Drop Wednesday, March 14: Last Day for Official Withdrawal Monday, February 19 through Friday, February 23: Winter Recess – No Classes Schedule is subject to change.

Date		Day	Sections	Topics
January	3	W	5.1	Rules for Exponents – Part I
	5	F	5.1	Rules for Exponents – Part II
	8	М	5.2	Zero and Negative Exponents
	9	т		Course Introduction; Lecture
	10	W	5.3	Scientific Notation
	12	F		Review for Exam I
	15	М		Martin Luther King Day – No Classes
	16	т		Exam I: Sections 5.1 to 5.3
	17	W	5.4	Polynomials
	19	F	5.5	Addition and Subtraction of Polynomials
	22	М	5.6	Multiplication of Polynomials
	23	Т		Lecture
	24	W	5.7	Special Products
	26	F	5.8	Monomial Division; Long Division
	29	М		Review for Exam II
	30	Т		Exam II: Chapter 5
	31	W	6.1	GCF; Factoring by Grouping
February	2	F	6.3	Factoring Trinomials of the Form $ax^2 + bx + c$
	5	М	6.4	Factoring Perfect-Square Trinomials; Difference of Two Squares
	6	Т		Lecture
	7	W	6.5	Factoring a Sum and Difference of Two Cubes
	9	F	6.6	A Factoring Strategy
	12	М		Review for Exam III
	13	Т		Exam III: Chapter 5; Sections 6.1 to 6.6

Date		Day	Sections	Topics	
	14	W	2.1, 2.2	Solving Equations	
	16	F	2.2	Solving Equations	
	26	М	6.7	Solving Quadratic Equations by Factoring	
	27	Т		Lecture	
	28	W	2.3	Applications of Percent	
March	2	F	2.4	Formulas	
	5	М		Review for Exam IV	
	6	Т		Exam IV: Chapter 6; Sections 2.1 to 2.4	
	7	W	2.5	Problem Solving	
	9	F	2.6	More about Problem Solving	
	12	М	2.7	Solving Inequalities	
	13	т		Lecture	
	14	W	3.1-3.3	Graphing Linear Equations; Intercepts	
	16	F	3.4	Slope and Rate of Change	
	19	М		Review for Exam V	
	20	т		Exam V: Sections 2.5 to 2.7, 3.1 to 3.4; Chapter 6	
	21	W	3.5	Slope-Intercept Form	
	23	F	3.6	Point-Slope Form	
	26	М		Summary of Equations of Lines	
	27	Т		Lecture	
	28	W	3.7	Graphing Linear Inequalities	
	30	F	3.8	An Introduction to Functions	
April	2	М		Review for Exam VI	
	3	Т		Exam VI: Chapter 3; Chapter 6	
	4	W	4.1	Solving Systems of Equations by Graphing	
	6	F	4.2	Solving Systems of Equations by Substitution	
	9	М	4.3	Solving Systems of Equations by Elimination	
	10	Т		Lecture	
				Durbland Cabring Hair Contains of Faculting	
	11	W	4.4	Problem Solving Using Systems of Equations	
	11	W F	4.4	Solving Systems of Linear Inequalities	