

ACADEMIC FREEDOM STATEMENT

Brooks Institute is committed to protecting and encouraging the principles of academic freedom. Academic freedom provides the foundation for scholarship, teaching and learning, and reflects the Institutes fundamental mission to promote collaboration, critical thinking, and creativity. Essential elements for the intellectual vitality of a college include: the ability to exchange ideas and concepts freely, to explore and disseminate new knowledge, and to speak openly as a professional and as a private citizen. All are encouraged to promote a learning environment that provides opportunities for the free exchange of ideas between faculty, staff and students.

Programmatic Student Learning Outcomes/Mission

The **Liberal Arts** program prepares graduates who will connect their lives as artists to a world of constant change with an historically informed and global perspective. Through the Liberal Arts curriculum, students receive the breadth of learning that forges links between reflective thought, creative endeavor, and ethical practice. Courses in the humanities, social sciences and sciences provide a foundation of creativity, an appreciation of other cultures and ways of living, communication skills, information literacy, and a love of learning. The Liberal Arts aims to create graduates who will thrive in their personal and professional lives.

Upon Completion of Liberal Arts, students should be able to:

- Assess themselves as individuals and global citizens (Visual Literacy, Global, Ethics, Problem Solver)
 - Evaluate history and the arts (Adept, Visual Literacy, Global)
 - Produce imaginative and innovative work. (Adept, Problem Solver)
 - Evaluate ideas critically to formulate their own conclusions.
 - Generate written work across various contexts (Problem Solver)
 - Create prepared, purposeful oral presentations (Problem Solver)
 - Apply quantitative reasoning to solve problems in practical situations (Adept, Problem Solver)
 - Develop a habit of reflection on prior learning to enhance their knowledge throughout their life-times (Ethics)
 - Analyze information and sources critically (Problem Solver)
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Course Title **Mathematics Fundamentals**

Course Code **MAT099**

Credit Hours 3 Semester

Contact Hours 3 Hours

Prerequisites None

Course Type Lecture

Instructor Dawn Piccoletti

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Term Start/End Date September 8 – December 18, 2015

Course Syllabus

Course Description

Mathematics Fundamentals is a foundational mathematics course designed to enhance the student's ability to work with numbers and operations and to solve application problems. This course focuses on the development of mathematical problem-solving techniques through the examination of whole numbers, fractions, decimals, ratios, proportion, percent's, measurement, signed numbers, statistics, algebraic and geometric principles.

Note: This course does not count for graduation credit.

Learning Objectives:

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

1. Work with operations involving signed numbers, fractions, mixed numbers and decimals
2. Work with percentages
3. Work with exponents
4. Work with square roots
5. Work with ratios and proportions as related to fractions
6. Translate words into mathematical expressions
7. Solve linear equations
8. Work with operations on polynomials
9. Solve application problem

Required Textbook(s) Introductory Algebra, Tussy and Gustafson,
ISBN #: 0-534-40735-8

Course Outline

Week 1: Orientation. Introduction to Algebra, fractions, and decimals.

Week 2: Foundations of arithmetic: signed numbers, fractions, mixed numbers and decimals.

Quiz 1. HW 1 Due.

Week 3: Foundations of arithmetic: signed numbers, fractions, mixed numbers and decimals.

Quiz 2. HW 2 Due.

Week 4: Solving equations, percent and problem solving.

MT #1. HW 3 Due.

Week 5: Simplifying algebraic expressions and solving equations.

Quiz 3. HW 4 Due.

Week 6: Basic perimeter, area formulas and problem solving.

Quiz 4. HW 5 Due.

Week 7: Integers and exponents.

Quiz 5. HW 6 Due.

Week 8: Scientific notation and polynomials.

Quiz 6. HW 7 Due.

Week 9: Adding, subtracting, and multiplying polynomials.

Quiz 7. HW 8 Due.

Week 10: Factoring out the GCF and factoring by grouping.

MT #2. HW 9 Due.

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Week 11: Factoring trinomials and solving proportions.

Quiz 8. HW 10 Due.

Week 12: Square roots and simplifying radical expressions.

Quiz 9. HW 11 Due.

Week 13: Extensive course review.

Quiz 10. HW 12 Due.

Week 14: Extensive course review.

Quiz 11. HW 13 Due.

Week 15: Post Assessment Exam

HW 14 Due.

GENERAL ASSESSMENT CRITERIA AND METHODS OF EVALUATING STUDENTS

Pass/Fail

The student's overall grade for this class is derived from a combination of online instructional activity, class participation, assignments, quizzes and exams, projects, and final project/final exam. A student's grade will be adversely affected by being tardy to class and by any unexcused absence. Only the instructor can authorize exceptions to class policies, deadlines or grades. Students must confirm (in writing) any exceptions to class policies or deadlines with the instructor. Class work is weighted as follows:

Grade Weighting		Grading Scales		
		Percent	Letter	Numeric
Homework	15%	73-100	P	2.00-4.00
Groupwork	15%	0-72	F	0-1.99
Quizzes	20%			
Exams	25%			
Final	25%			
Total	100%			

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DEFINITIONS OF CRITERIA USED IN GRADING

Outstanding = A	Outstanding work, showing insight and demonstrating excellence in skill and craft. Work goes well beyond what is required
Superior = A-, B+	Superior work, shows clear understanding and thorough demonstration of skill and craft
Good = B, B-	Competent work, clear understanding, often showing creativity and good use of skills
Satisfactory = C+, C, C-	Adequate understanding, inconsistent demonstration of skills, some elements missing or problems with priorities
22222222Unsatisfactory = D, F	Lacks understanding, inadequate amount of time and effort demonstrated, many missing elements, inconsistent participation, skill and craftsmanship not demonstrated

ATTENDANCE POLICY

Faculty takes attendance for each class period and posts it to the student's record through the campus management system. Upon reaching three unexcused absences, faculty may lower the final grade for the course one full grade and may drop the grade again for each absence after the fourth one. Students may review their attendance through the Student Portal under each course the student is enrolled in.

Students who do not attend during the first week of class may be subject to withdrawal. Brooks Institute may also withdraw any student who has not been in attendance for 14 consecutive days. However, the institute will withdraw any student who has had non-attendance for 35 consecutive days; this timeframe may be extended due to extraordinary circumstances that affect the entire student population. Students will be responsible for all financial obligations incurred if and when they are withdrawn for lack of attendance

Regular classroom attendance is not only an essential ingredient for academic achievement, but it is also a fundamental building block for success. As part of the course requirements, students must attend at least 80 percent of the scheduled time for each course in order to achieve satisfactory attendance. Students in any of the internship courses are required to complete all scheduled hours and record attendance throughout the scheduled course to achieve satisfactory attendance. Students who do not achieve satisfactory attendance may earn a failing grade on their transcripts and may be required to repeat the course. Absences will include tardiness or early departures. Students who are not in attendance for any portion of a class will accrue time absent calculated in percentage increments of 25, 50, or 100 percent of the class period as reflected on each daily roster. Students who have been absent from all their scheduled classes for more than 14 consecutive calendar days, not including scheduled Institutional holidays or breaks, and/or students who officially withdraw from all current courses may be administratively withdrawn from the Institution.

Course Syllabus

Academic Integrity

Brooks Institute expects all students to exemplify integrity in all academic work. Brooks Institute will not permit students to engage in the following dishonest acts:

- **Cheating** – Cheating includes, but is not limited to, the following: using unauthorized notes, study aids, electronic or other devices not authorized by the instructor. Using or borrowing information from another person, or submitting someone else’s work as one’s own work including images and motion clips. Using work previously submitted for another purpose, without the instructor’s permission, is prohibited. Duplicated use of copyrighted material in violation of federal copyright laws is prohibited.
- **Plagiarism** – Submitting as one’s own work, in whole or in part, words, ideas, art, designs, text, drawings, images, motion clips, etc. that were produced by another person without attributing that person as the rightful source of the work. Plagiarism includes, but is not limited to: using words, word passages, pictures, etc. without acknowledgement; paraphrasing ideas without quotation marks or without citing the source.
- **Accessory to Dishonesty** – Knowingly and willfully supplying material or information to another person for the purpose of using the material or information improperly.
- **Falsification or Alteration of Records and Official Documents** - The following are examples of acts under this category, but the list is not exhaustive: altering academic records, forging a signature or authorization on an academic document, or falsifying information on official documents, grade reports, or any other document designed to attest to compliance with school regulations or to exempt from compliance.
- **Software Code of Ethics** – Unauthorized duplication of copyrighted computer software violates the law and is contrary to our organization’s standards of conduct. Brooks Institute disapproves of such copying and recognizes the following principles as a basis for preventing its occurrence:
 - Brooks Institute will neither engage in nor tolerate the making or using of unauthorized software copies under any circumstances.
 - Brooks Institute will only use legally acquired software on our computers.
 - Brooks Institute will comply with all license or purchase terms regulating the use of any software we acquire or use.
 - Brooks Institute will enforce strong internal controls to prevent the making or using of unauthorized software copies, including effective measures to verify compliance with these standards and appropriate disciplinary measure for violation of these standards.
- **Communication Devices**-To maintain academic integrity and to eliminate distractions for other students the use of electronic devices in the classroom is dictated by the instructor.

Course Syllabus

CREDIT ASCRIPTION ADDENDUM

MAT099 – Math Fundamentals - 3 semester credit hours

Type: Lecture

Credit Ascription- The amount of hours spent outside of class and assignment alignment with Course Learning Objectives

Course Learning Objectives:

1. Work with operations involving signed numbers, fractions, mixed numbers and decimals
2. Work with percentages
3. Work with exponents
4. Work with square roots
5. Work with ratios and proportions as related to fractions
6. Translate words into mathematical expressions
7. Solve linear equations
8. Work with operations on polynomials
9. Solve application problem

The following indicates the **minimum** number of hours per assignment:

	Assignment Title	Homework Hours	Assignment Objectives
Week 1	Homework #1, Study for Q1	6	1
Week 2	Homework #2, Study for Q2	6	1,3
Week 3	Homework #3, Study for MT #1	8	1,3,6
Week 4	Homework #4, Study for Q3	6	1,2,3,6,7,9
Week 5	Homework #5, Study for Q4	6	1,2,3,6,7,9
Week 6	Homework #6, Study for Q5	6	1,2,3,6,7,9
Week 7	Homework #7, Study for Q6	6	1,2,3,6,7,8,9
Week 8	Homework #8, Study for Q7	6	1,2,3,6,7,8,9
Week 9	Homework #9, Study for MT #2	8	1,3,6,7,8,9
Week 10	Homework #10, Study for Q8	6	1,2,3,6,7,8,9
Week 11	Homework #11, Study for Q9	6	1,3,5,8
Week 12	Homework #12, Study for Q10	6	1,3,4
Week 13	Homework #13, Study for Q11	6	1 – 9
Week 14	Homework #14, Study for Final	8	1 – 9
Week 15	Post Assessment		1 – 9
Total		90	