
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 a 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	College Mathematics
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Course Code	MAT101
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Credit Hours	3 Semester
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Contact Hours	3 Hours
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Prerequisites	MAT099 or Accuplacer Placement
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Course Type	Lecture
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Course Syllabus

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

Course Description

This course introduces students to fundamental theory and analysis of college level mathematics. Principles of Algebra, Geometry, and Trigonometry are explored in order to support analytical thinking.

Learning Objectives Upon completion of this course, the student will be able to apply their understanding of arithmetic, algebra, trigonometry and geometry to solve problems relevant to everyday life and to their careers as photographers. Students will be exposed to areas of math that they may have no experience with, such as non-decimal counting systems and calculus. Students will gain an appreciation for how mathematics is done, including the importance of proving theorems in a logical and rigorous manner.

Required Textbook(s): None

Course Expectations

- Must show work for credit on homework, quizzes, and test problems
- HOMEWORK...
 - o due at the start of class (or upon your tardy arrival)
 - if you turn in HW during or following class after you've already been in attendance then it will not be accepted
 - o past Wednesday morning, late work will have to be scanned and emailed to me (I am only on campus on Wednesday mornings!)
 - o 15pts off for each day late
 - o the Saturday following, by noon, is the latest HW can be turned in
 - o Questions about HW will be tended for up to the first 30 minutes of class
- QUIZZES...
 - o Each quiz will be scheduled for up to 30 minutes, following HW review
 - o Each quiz will cover only what was on the most recent HW, except for Quizzes 4 & 8
 - o Each quiz is open-note, limited to a single index card
 - o If you complete your test ahead of time, check over your work thoroughly then sit quietly until time is up; no cell phone / tablet / laptop usage during this time
 - o If everyone finishes ahead of the time scheduled, then lecture will begin
 - o If you arrive tardy in the middle of the quiz, no additional time will be granted
 - o If you arrive tardy after the quiz, you will receive 0% on the quiz (unless you arrive with a doctor's note, in which case you must schedule a makeup)
 - o If you miss a quiz via an *excused* absence, you may take the makeup quiz during the next available office hours (the following week)
 - o Makeup quizzes will not be exactly the same as the original corresponding quiz
- PARTICIPATION...

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- It's for your benefit; participate, even if you think you may be incorrect
- We only meet once a week, so make it count
- No more than 50% Participation for the day if tardy by 15 minutes or more
- 0% Participation for the day if tardy by 30 minutes or more
- Participation points will be deducted for cell phone usage and talking during class
- MIDTERM and FINAL EXAM
 - Each test is closed-book/closed-note/closed-e-device
 - Midterm and Final are worth 20% and 25% of your overall grade, respectively
 - Each of these tests will be administered in two parts
 - Part 1 for the first hour of class, which will subsequently be collected
 - Part 2 is also for an hour, but administered after a 15-minute break
 - Part 2 will be relatively easier than Part 1 but of equal grade weight
 - Both Parts must be taken to receive credit for the exam
 - The Midterm will cover the majority of what's been covered thus far
 - The Final will cover roughly 25% of what's on the midterm and roughly 75% of the material that comes after the midterm
 - If you complete your test ahead of time, check over your work thoroughly then sit quietly until time is up; no cell phone / tablet / laptop usage during this time
- CLASS STRUCTURE, typically
 - 30 minutes – Homework Review
 - 30 minutes – Quiz
 - 15 minutes – Quiz Review
 - 30 minutes – Lecture Introduction
 - 15 minutes – Break
 - 60 minutes – Lecture
 - Class Dismissed
 - *60 minutes – Office Hour*

Course Outline

Week 1: Orientation / Overall Tips for Math

Numbers and Quick Math Techniques / Decimals / Fractions / Ratios / Percents

Week 2: HW 1 Due.

Unit Conversion / Scientific Notation

Square Roots / Exponents

Week 3: HW 2 Due. Quiz 1.

What is Algebra?

Types of Functions and Graphing

Systems of Linear Equations

Week 4: HW 3 Due. Quiz 2.

Quadratic Solving (Factoring & Completing the Square)

Logarithms and Exponentials (Growth / Decay Trends)

Week 5: HW 4 Due. Quiz 3.

Exponentials and Finance Math

Week 6: HW 5 Due. Quiz 4.

Midterm Review, Part 1

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Week 7: HW 6 Due.

Midterm Review, Part 2

Week 8: Midterm Exam

Week 9: HW 7 Due.

Probability and Possibility

Week 10: HW 8 Due. Quiz 5.

Geometric Shapes and Relationships

Week 11: HW 9 Due. Quiz 6.

Pythagorean Theorem

Trigonometry: Angles and the Unit Circle / Degrees and Radians

Polar vs. Cartesian Coordinates

Week 12: HW 10 Due. Quiz 7.

Trigonometry, continued and Snell's Law Optics

Week 13: HW 11 Due. Quiz 8.

Final Review, Part 1

Week 14: HW 12 Due.

Final Review, Part 2

Week 15: Final Exam

GENERAL ASSESSMENT CRITERIA AND METHODS OF EVALUATING STUDENTS

Letter grades (A, A-, B+, B, etc.)

The student's overall grade for this class is derived from a combination of online instructional activity, class participation, assignments and exams. 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			Points
		Percent	Letter	Numeric	
Class Participation	15%	93-100	A	4.00	597 - 645
		90-92	A-	3.70	
Homework	20%	87-89	B+	3.30	560 - 577
Quizzes	20%	83-86	B	3.00	533 - 559
		80-82	B-	2.70	513 - 532
Midterm Exam	20%	77-79	C+	2.30	494 - 512
Final Exam	25%	73-76	C	2.00	469 - 493
		70-72	C-	1.70	449 - 468
Total	100%	67-69	D+	1.30	429 - 448
		63-66	D	1.00	404 - 428
		0-62	F	0.00	403

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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
Unsatisfactory = 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.

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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.

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CREDIT ASCRIPTION ADDENDUM

MAT101- College Mathematics 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. Apply one's understanding of arithmetic, algebra, trigonometry and geometry to solve problems relevant to everyday life and to their careers as photographers.
 2. Be exposed to areas of math that one may have no experience with, such as non-decimal counting systems and calculus.
 3. Gain an appreciation for how mathematics is done, including the importance of proving theorems in a logical and rigorous manner.
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The following indicates the **minimum** number of hours per assignment:

	Assignment Title	Homework Hours	Lesson Objectives
Week 1	Reading	5	1
Week 2	Reading, Homework	5	2
Week 3	Reading, Homework	5	3
Week 4	Reading, Homework	5	4
Week 5	Reading, Homework	6	1,2,3,4,5
Week 6	Reading, Homework	6	1,2,3,4,5
Week 7	Reading, Homework	8	1,2,3,4,5
Week 8	Midterm	8	1,2,3,4,5
Week 9	Reading, Homework	5	6
Week 10	Reading, Homework	5	7
Week 11	Reading, Homework	5	8
Week 12	Reading, Exam 3	5	9
Week 13	Reading, Homework	6	6,7,8,9,10
Week 14	Reading, Homework	8	1-10
Week 15	Final	8	1-10
Total		90	