

Course Syllabus

Course Number: MAT1010 & MAT1010L

Course Title: College Geometry & Geometry Lab

Course Description: Study of plane (2D) geometry and solid (3D) geometry. Topics include points, lines, planes, angles, triangles, quadrilaterals, perimeter, area, circles, circumference, volume, surface area, prisms, pyramids, cylinders, cones, and spheres. Additional topics: Pythagorean theorem, translations, reflections, rotations, symmetry, similarity, scaling, and congruence. A review of basic mathematics and algebra is included.

Course Length: 11 Weeks

Contact Hours: 44 Hours

Lecture: 44 Hours

Lab: 0 Hours

Credit Values: 4 Credits

Quarter Credit Hour Definition

A quarter credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than:

(1) One hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for 10-12 weeks, or the equivalent amount of work over a different amount of time; or

(2) At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, studio work, and other academic work leading to the award of credit hours.

Learning Objectives:

Upon successful completion of the course, the student should be able to:

1. Apply basic geometry (lines, angles and shapes)
2. Apply proportional reasoning including similarity
3. Apply the abstract materials of geometry to various fields of design
4. Apply the concepts of sine, cosine, tangent to triangles
5. Apply the Pythagorean theorem
6. Calculate areas, perimeters, surface area, circumferences, arc lengths, segment areas
7. Determine the size of exterior and interior angles, the sum of exterior and interior angles of an polygon
8. Evaluate quadrilaterals including parallelograms, rectangles, and trapezoids
9. Use the properties of circles including radius, chord, diameter, secant, and tangent
10. Use geometry as a resource for design principles

Course Prerequisite(s): None

Methods of Assessment: See Instructor's *Syllabus Addendum* for details.

Textbooks: None

Academic Dishonesty and Plagiarism:

Students are expected to maintain the highest standards of academic honesty while pursuing their studies at The Art Institute. Academic dishonesty includes but is not limited to: plagiarism and cheating, misuse of academic resources or facilities, and misuse of computer software, data, equipment or networks.

Plagiarism is the academic equivalent of theft, and can occur in any type of course. If you use someone else's words, ideas, facts or work in anyway, you must identify them as a source. Duplication of someone else's work while handing in your own is intentional plagiarism. Anyone caught plagiarizing material will be required to meet with the Dean of Academic Affairs, and will be subject to immediate disciplinary action. Plagiarism is grounds for dismissal from school. Instructors must immediately refer suspected cases of plagiarism to the Dean.

Cheating is to gain an unfair advantage on a grade by deception, fraud, or breaking the rules set forth by the instructor of the class. Cheating may include but is not limited to: copying the work of others; using notes or other materials when unauthorized; communicating to others during an exam; and any other unfair advantage as determined by the instructor.

Disability Policy Statement:

It is Ai policy not to discriminate against qualified students with documented disabilities in its educational programs, activities, or services. The Art Institute of Seattle provides accommodations to qualified students with disabilities. The Department of Disability Support Services assists qualified students with disabilities in acquiring reasonable and appropriate accommodations and in supporting equal access to services, programs and activities at The Art Institute of Seattle.

Students who seek reasonable accommodations should notify Disability Support Services at 1-855-855-0567 or dss@aii.edu of their specific limitations and, if known, their specific requested accommodations. Students will be asked to supply medical documentation of the need for accommodation. Classroom accommodations are not retroactive, but are effective only upon the student sharing approved accommodations with the instructor. Therefore, students are encouraged to request accommodations as early as feasible with Disability Support Services to allow for time to gather necessary documentation. If you have a concern or complaint in this regard, please contact Student Resolution at studentresolution@edmc.edu. Complaints will be handled in accordance with the school's Internal Grievance Procedure for Complaints of Discrimination and Harassment.