SCHOOL	Innovative Art Technologies
ACADEMIC YEAR	THREE-YEAR PROGRAM I - 2025/2026
SUBJECT	1161 Tecniche di modellazione digitale 3D - I (Maya) A
TYPE OF SUBJECT	Theoretical-Practical
NUMBER OF HOURS PER LESSON	3
NUMBER OF ECTS CREDITS	6
DISTRIBUTION OVER THE ACADEMIC YEAR	II SEMESTER

EDUCATIONAL OBJECTIVES AND EXPECTED RESULTS

The objectives to be pursued are the acquisition of skills in creating virtual objects, three-dimensional environments, and digital characters, tailored to meet the diverse requirements of numerous applications, including communication, video games, video, and other sectors. Digital modeling techniques constitute a fundamental basis for new technologies, subsequently enabling the development of diverse artistic and creative pathways. Students will be required to demonstrate proficiency in creating any digital volumetric form necessary for a creative pathway.

Knowledge and understanding	Students will be able to create any creative figure at their request for multiple purposes, from advertising to video games, utilizing digital tools for three-dimensional modeling.
Applying knowledge and understanding	Students will be able to demonstrate a professional approach to the preliminary development of ideas for forms, volumes, and aesthetics.
Making judgements	Students must possess the capability to gather and interpret the needs of potential clients, thereby determining the work plan for the creation of 3D models.
Communication skills	Students are required to demonstrate proficiency in discussing the appropriate modeling solution for each 3D virtual project.
Learning skills	Students must have developed the capacity for learning and autonomy to continuously develop software solutions for digital modeling.

CONTENTS	The course will cover topics related to digital modeling with Autodesk Maya for various purposes. It will also be supplemented with foundational knowledge of rendering. The course includes exercises for the practical learning of various 3D techniques. The course will cover topics related to polygonal modeling and NURBS surface modeling, enabling the creation of three-dimensional models of any shape. Upon completion of the course, the student will be proficient in the basic functionalities of the software and will be capable of creating high-quality virtual environments and characters for any future multimedia purposes. Course Content and Program: Introduction to 3D Modeling: An introduction to the theory of 3D modeling and its application in applied graphic arts. Demonstration of the resources required for 3D modeling. AUTODESK MAYA INTERFACE: Acquire proficiency with the Autodesk Maya interface: menu configuration, visualization, project setup, and scene saving. Initial Steps in Modeling: Acquiring knowledge of the fundamental 'Channel' and 'Attribute' menus. Initial Polygonal Modeling Commands with Parameter Control Polygonal Modeling: Construction of 3D Objects through Polygonal Modeling NURBS Surface Modeling: Construction of 3D Objects through Surface Modeling (NURBS) 3D Sculpting: Construction of 3D objects through modeling with 3D sculpting tools Construction of Organic Objects: Basic utilization of commands for the generation of tissues and hair Basic Rendering: Simple materials and light points for creating basic renderings using Maya software
ADOPTED METHODOLOGY	[X] In Person The lessons will be conducted in a workshop format, with theories supported by practical exercises. Students will engage in tutorials accompanied by technical descriptions of the software for the creation of three-dimensional projects. In certain lessons, modeling exercises with complex levels will be assigned to foster independent work.
ASSESSMENT METHODS	The student is required to create a scene using 3D modeling in Maya, as assigned by the instructor at the commencement of the educational module. During the initial lessons, the categories of difficulty will be presented, which will establish the foundation for the evaluation. The result must be achieved by the student in accordance with the criteria that will be acquired throughout the course.