



STEAM Scope & Sequence

Student Learning Outcomes

Universal Curricular Student Learning Outcomes

1) Students will be able to demonstrate fluency with formal vocabulary, artistic techniques and procedures of two dimensional and three-dimensional studio art practice. **2) Students will** be able to critique and analyze works of art and visual objects. **3) Students will** be able to communicate their knowledge of artistic production and styles in a clear and articulate manner. **4) Students will be** able to analyze, interpret and report on the societal impact of artistic creation through multiple contexts. **5) Students will** be able to apply critical thinking and analytical skills to solve scientific, mathematic, artistic and engineering based problems. **6) Students will be** able to work in groups and be part of an effective team. **7) Students will** increase their capacity for social emotional competence (Self-awareness,Self-management, Social awareness, Relationship skills, and Responsible decision-making).

Targeted Learning Outcomes

Advanced Art

Industrial Design

Digital Media

Animation

Virtual Worlds

Course Mission & Synopsis

Students will be prepared for high school curriculum through portfolio development and rigorous study that matches Advanced Placement coursework.

Students will learn the history and hands on technical skills of professional design, working for clients, marketing, and real world job market applications.

Students will learn fundamental concepts of digital creation, as well as essential technology-based background knowledge.

Students will be introduced to professional grade 3d modeling and post production techniques that match industry standards for video game, film, and animation careers.

Students will learn how to create highly interactive virtual spaces on the OpenSIM platform. They use 3d modeling basics combined with LSL scripting to make interactive and immersive art in a digital makerspace-sandbox environment.

Studio Practices & Inquiry Based Technology

Students will be able to demonstrate fluency with formal vocabulary, artistic techniques and procedures related, but not limited to; Traditional and digital arts creation, Visual Culture based pedagogy, Portfolio development, Independent artistic thinking, Art history & aesthetics

Students will be able to demonstrate fluency with formal vocabulary, artistic techniques and procedures related, but not limited to; Architecture,Fashion design,Interior design Prop making & fabrication, Jewelry fabrication, Product prototype creation & engineering, Marketing/ Advertising/ Sales, Logo design & corporate branding HTML / Javascript coding, Video production

Students will be able to demonstrate fluency with formal vocabulary, artistic techniques and procedures related, but not limited to; Drawing, computer graphics, Commercial arts, web design, color theory, image /text relationships, Elements & Principles of art and design, history of technological advancements, Hardware & Software / IT troubleshooting, Digital art and design basics, Animation Basics, Introduction to Scratch Coding, Photography

Students will be able to demonstrate fluency with formal vocabulary, artistic techniques and procedures related, but not limited to; Drawing, 3D animation, audio art, computer graphics, film & video art, virtual world & game creation, Elements & Principles of design.

Students will be able to demonstrate fluency with formal vocabulary, artistic techniques and procedures related, but not limited to; video game level design,3d Sculpting,LSL scripting, collaborative play theory, Polygon & Mesh texture skinning

Reflection, SEL, & Social Justice

Students will be able to apply critical thinking and analytical skills to assess works of art, and utilize this knowledge for the purpose of self monitoring.

Students will be able to demonstrate written, visual, and/or oral presentation skills to communicate the artistic process related to marketing and real world applications for clients & target audiences, and ensure that said communication upholds issues of equity, ethical justice and civic engagement.

Students will be able to recognize and respond appropriately to ethical and regulatory dilemmas regarding the creation and consuming of online content.

Students will be able to write, or produce artwork that clearly and persuasively communicates a stance related to an ethical aspect of contemporary digital media (i.e. Violence, stereotyping, and gender roles present in film & video games.)

Students will be able to demonstrate written, visual, and/or oral presentation skills to communicate relationships between identity, artwork, and social capital.

Art/Science/ Math/Engineering History & Context

Students will demonstrate in-depth knowledge of artistic periods used to interpret works of art including the historical, social and philosophical contexts.

Students will demonstrate in-depth knowledge and understanding of contemporary design forms and artists.

Students will be able to acquire and synthesize scientific and mathematic information from a variety of sources in order to solve artistic problems.

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