

IAA Curriculum

Content Area	Digital Arts	Grade	9-12
Course Name	Digital Arts Major Level IV		

Unit	Unit 1: Motion Graphics and Animation
Concepts	Students will learn to design and create motion graphics for multimedia, building projects appropriate both for Internet applications and for film and video. Students will also learn how to use Animate, a vector-based animation program, and After Effects, an animation and visual effects compositing program to create narratives through the use of storyboards.
Big Ideas	How are motion graphics and animation the same? How are they different? What career paths are open to a designer specializing in motion graphics and animation? Why is storytelling so important in these fields?
Essential Understandings	This unit will teach students the fundamental principles of working in 2D digital software with an emphasis on animation, story, sound, timing and execution. Students will learn how to transition from traditional hand-drawn animation techniques and creative processes into the digital realm. Production-flow, scheduling and pipeline will be integral to the understanding of how these principles work together in a creative project. Students will learn how to plot, script, storyboard, present, and create animations using the principles of animation and basic techniques including staging, timing, mechanics and kinetics. Drawing skills, techniques for original character design, storytelling, mechanics of motion and animation camera techniques will be an integral part of the course. Throughout the course students will also explore the international history and evolution of animation and motion graphics.
Competencies	<ul style="list-style-type: none"> ● Learn visual techniques to solve movement and compositional problems and challenges ● Use the visual art elements of line, value, shape & form, color, and texture to organize an animated sequence of images ● Learn how the design principles of balance, movement, rhythm, contrast & emphasis, proportion and unity are used in the design process of animating a scene ● Develop original pencil sketches in thumbnail, storyboard, rough and cleaned-up formats ● Be able to recognize the basic types of materials and processes used in creating animation projects ● From an historical perspective, understand how animated works of art have been shaped and molded by the materials & processes of the time period ● Create an animation in After Effects ● Create compositions through the use of transparency ● Analyze complex visual effects in movies ● Create workflows for the creation of basic visual effects ● Demonstrate using layers, keyframes, and masking, and media management

Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary
(1 Quarter)	Understand how to create and develop a narrative with storyboarding	Various teaching methods will be used during the course. Handouts and discussion will be used, however, most of the instruction of this course will be a hands on instruction, in groups and individually. Live demonstrations will be made by the instructor then repeated and practiced by the students with one-on-one interaction to check for understanding. Real-time lessons will take place in a large group with the teacher on the computer using the projector or Apple TV, students working on their own computers with the teacher. Individual proofing and consulting will take place after demonstrations take place and art projects begin. Group critiques and individual evaluation will take place upon completion of art projects. During the course of the year students will be given the opportunity to review design books and magazines, as well as review websites for potential ideas for new projects.				Adjustment Layer Alpha Channel Animation Camera Pan Effects Expressions Flow Chart Frames Frame Rate Green Screen Keyframe Layer Masking Motion Blur Onion Skinning Parallax Parenting Path of Action Precomposing Puppet Tool Real Time Preview Rendering Rotoscoping Sequence Storyboard Timecode Tween
	Analyze motion and recreate realistic movement					
	Use tweening and keyframe animation					

	Modify properties and adjust motion paths					
	Create and apply effects to compositions in After Effects					
	Export animation to the correct format and share it on the web					
Resources	Adobe Creative Cloud, PBS, YouTube, AIGA, 99designs.com, The Noun Project, Behance, Adobe Color, Niice, Unsplash, Drawkit, Dafont, Print Magazine, Communication Arts					
Formative Assessments	Class participation, design trivia, one on one interactions and critiques, class critiques, design projects, quizzes, and tests.					
Summative Assessments	Completion of projects showing mastery of the covered unit topics, quizzes, and tests.					
Strategies for ELL and IEP Support	One on one instruction, Check in's and translations, Verbal/non verbal cues to stay on task, Modified independent practice, Modified exit ticket, Modified Assessment, Extended time if necessary					

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Unit	Unit 2: Web Design					
Concepts	An introduction to the design of interfaces for the Web using HTML and CSS. The course also addresses the issues of fluid design in interactive media, as well as an introduction to Adobe Dreamweaver.					
Big Ideas	What are the design principles used when creating web pages? What is HTML and CSS and how are they different from each other? What are the criteria for evaluating the quality of websites? How does technology affect society, business and communication? How does effective page layout and consistent navigation lead to usability? How does interactivity make Web pages different from other sources of information?					
Essential Understandings	This unit is an introduction to the design, creation, and maintenance of web pages and websites. Students will learn how to critically evaluate website quality, learn how to create and maintain quality web pages, learn about web design standards and why they're important, and learn to create and manipulate images. Students will learn HTML (website markup language), CSS (code that controls how your website looks), and JavaScript (powerful programming language that can make your website interactive). We will cover what a web host is, how to register a domain name, and how to get a website online, as well as how to make a website mobile-friendly, the difference between websites and mobile applications, and how to develop mobile applications for iPhones and Androids. Adobe Dreamweaver CC is the leading software in the industry for professional web development, and is an essential tool for any web designer. In this unit students will learn the basics of this software as well as essential practices for professional web design and site development. This course will cover how to use Dreamweaver to manage site files, insert text and images, link pages together, and incorporate and apply basic CSS (Cascading Style Sheets) to font elements. Students will utilize Dreamweaver's built in CSS Layouts for positioning elements within web pages. Use of tables for laying out tabular data will be covered. Emphasis will be placed on creating intuitive web structures on a basic level.					
Competencies	<ul style="list-style-type: none"> • Understand the history of the Internet and World Wide Web • Understand the role of Internet technologies in society, business and communication • Knowledge of UX (user experience) and visual design principles • Basic knowledge of HTML/CSS and how websites work • Insight into the opportunities and challenges of a career in web design • A final website showcasing their work 					
Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary

(1 Quarter)	Analyze and critique web based user interfaces and examples of net based artwork	Various teaching methods will be used during the course. Handouts and discussion will be used, however, most of the instruction of this course will be a hands on instruction, in groups and individually. Live demonstrations will be made by the instructor then repeated and practiced by the students with one-on-one interaction to check for understanding. Real-time lessons will take place in a large group with the teacher on the computer using the projector or Apple TV, students working on their own computers with the teacher. Individual proofing and consulting will take place after demonstrations take place and art projects begin. Group critiques and individual evaluation will take place upon completion of art projects. During the course of the year students will be given the opportunity to review design books and magazines, as well as review websites for potential ideas for new projects.				<ul style="list-style-type: none"> Internet World wide web Web browser Web site Web page Home page Multimedia Hyperlink Interaction design Information design Keyword Output device Software Operating system GUI Network Local area network Wide area network Server Clients Folder Subfolder Root folder Subpages Protocol TCP/IP HTTP Intranet Extranet URL Domain name Search engine External hyperlink Netiquette Shareware CSS HTML HTML tags Ending tag Graphic link
	Design and prototype a fully interactive website					
	Correctly use Meta description and keyword tags					

	Control position of web page elements using Cascading Style Sheets					
	Place image and text elements within a web page					
	Create forms with common input elements					
	Apply intuitive and consistent navigation between pages on a website					
Resources	Adobe Creative Cloud, PBS, YouTube, AIGA, 99designs.com, The Noun Project, Behance, Adobe Color, Niice, Unsplash, Drawkit, Dafont, Print Magazine, Communication Arts					
Formative Assessments	Class participation, design trivia, one on one interactions and critiques, class critiques, design projects, quizzes, and tests.					
Summative Assessments	Completion of projects showing mastery of the covered unit topics, quizzes, and tests.					
Strategies for ELL and IEP Support	One on one instruction, Check in's and translations, Verbal/non verbal cues to stay on task, Modified independent practice, Modified exit ticket, Modified Assessment, Extended time if necessary					

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Unit	Unit 3: Senior Graphic Design Seminar
Concepts	This unit focuses on the development of a professional portfolio, resume, preparing for the interview process, as well as professional business practices.
Big Ideas	How do the skills and knowledge I am learning in this class get applied within a job setting? How can I work with a team to develop an answer to a question or solution to a problem? How do I apply the skills that my future employers will value? How can I create a professional portfolio based off of my previously learned design skills? What are time management and multitasking in the design world, and why do they matter?
Essential Understandings	As the culminating unit in the Graphic Design curriculum, Senior Graphic Design Seminar is a comprehensive design course allowing students the opportunity to apply the combined understanding gained from earlier courses and projects to more fully realized work. “Fine-tuning” will allow students to re-work earlier select pieces to the level of professional presentation quality. This may include finalizing projects from previous quarters. Analysis of design strengths and weaknesses and personal interests will direct each student’s individual work. The class is intended to increase and focus the student’s skills in research, problem identification, planning and execution of multi-faceted levels of visual information and meaning. The complexity and scope of these projects will challenge the student to expand his/her abilities of creating visual form with integrity and meaning. Students will then have the opportunity to develop their work into a comprehensive presentation portfolio for application to either undergraduate school or employment in the field of graphic design. At this point the portfolio must consist of no fewer than 12 pieces (not including a series or system). Students will develop a portfolio book that tells their story, presents their work, process and thinking as well as shows off their cumulative design skills. Exploration of portfolio presentation options (the form) will be examined in addition to the development of related collateral such as a resume and self-promotion materials. Professional business practices, organizations, and related design issues are examples of topics for ongoing class discussion.
Competencies	<ul style="list-style-type: none"> ● The use of a portfolio in the graphic arts industry ● Preparation techniques ● Presentation techniques ● Industry standards for portfolios ● Creating resumes ● Time management and multitasking ● Diversity of media ● Interviewing ● Describe and speak articulately and critically about their work and the field of visual communications ● Analyze creations on the basis of historical and contemporary influence of on the culture, graphic design, and visual communications ● Create art that incorporates the fundamental elements and principles of design and select materials that express issues such as content and

	subject matter <ul style="list-style-type: none"> • Apply and use analog and digital processes in the creation of their work • Analyze and integrate a variety of methods to evaluate an assignment • Produce work that demonstrates creative thinking in order to express a personal vision/point of view that communicates a personal voice 					
Dates (estimates only)	Smart Objectives	Instructional Strategies and Activities	PA CC Standards	Keystone or PSSA Anchors	Keystone / PSSA Eligible Content	Vocabulary
(2 Quarters)	Exhibit an advanced understanding of the relationship between visual form and content	Various teaching methods will be used during the course. Handouts and discussion will be used, however, most of the instruction of this course will be a hands on instruction, in groups and individually. Live demonstrations will be made by the instructor then repeated and practiced by the students with one-on-one interaction to check for understanding. Real-time lessons will take place in a large group with the teacher on the computer using the projector or Apple TV, students working on their own computers with the teacher. Individual proofing and consulting will take place after demonstrations take place and art projects begin. Group critiques and individual evaluation will take place upon completion of art projects. During the course of the year students will be given the opportunity to review design books and magazines, as well as review websites for potential ideas for new projects.				Portfolio Visual Presentation Resume Interview Professional Practices Time Management Multitasking Diversity Industry Standards Cognitive Cultural Social Stylistic Self Promotion Business Skills
	Exhibit an advanced understanding					

	of the theories of visual communication as influenced by physical, cognitive, cultural, social, historical and stylistic factors					
	Create a self-promotional Visual Identity as a graphic design professional					
	Develop effective typographic and image-making solutions					
	Reworking of existing projects as well as filling in holes in the portfolio by developing new projects or extensions of existing project					
	Develop personal portfolio of work on a professional level of quality					
	Construct professional graphic design business practices					
	Demonstrate proficiency in communication, presentation, and business skills necessary to engage in professional practice in graphic design					
	Demonstrate ability to form and defend value judgments about graphic design and to communicate art ideas, concepts, and requirements to professionals and laypersons related to the practice					
Resources	Adobe Creative Cloud, PBS, YouTube, AIGA, 99designs.com, The Noun Project, Behance, Adobe Color, Niice, Unsplash, Drawkit, Dafont, Print Magazine,					

	Communication Arts
Formative Assessments	Class participation, design trivia, one on one interactions and critiques, class critiques, design projects, quizzes, and tests.
Summative Assessments	Completion of projects showing mastery of the covered unit topics, quizzes, and tests.
Strategies for ELL and IEP Support	One on one instruction, Check in's and translations, Verbal/non verbal cues to stay on task, Modified independent practice, Modified exit ticket, Modified Assessment, Extended time if necessary

