

**DGMA - 1333 Survey of Animation & Visual Eff, 3.00 Credits**

Level: Lower

This course will take students through a comprehensive history of animated films beginning with their conception in the early 1900's through the present. Students will learn how the medium reflects social issues, political views as well as human creativity. The various types of animation and how they were created in different countries and cultures will be the major focus. The screenings and discussions will span various genres and styles of animation including anime, experimental, commercial, computer, and independent film as well as gaming.

**DGMA - 1401 Freshman Seminar, 1.00 Credit**

Level: Lower

This introductory course prepares students with basic skills that will help them succeed in the Graphic & Media Design or Digital Media & Animation programs. These skills include but are not limited to: file management, time management, research practices, effective critique strategies, and online portfolio management.

**DGMA - 1403 Digital Foundations I, 3.00 Credits**

Level: Lower

This is an introductory digital media course that focuses on the manipulation of both raster and vector-based imagery. Students will learn the basics of Photoshop as well as digital imaging and use the software to develop their skills in the visualization of motion and time. The course will have a strong emphasis on principles of lighting, layout and composition.

**DGMA - 1413 Foundations:Form/Space Rltshp, 3.00 Credits**

Level: Lower

This is a visual rendering course in the Digital Media and Animation major. Broad experience is emphasized with diverse graphic tools and techniques to develop observation of and analyze visual information. This course is designed to deconstruct preconceived ideas of form/space relationships and replace them with objective understandings.

**DGMA - 1423 Intro to Visual Communication, 3.00 Credits**

Level: Lower

This is a course that focuses on creative, technical, and environmental/collaborative issues involved in visual communication. Building on the elements and principles of design/communication the students work through increasingly difficult projects to their final cumulative piece. An investigation of color theory as it applies to traditional and computer generated images is also pursued.

**DGMA - 2403 Introduction to 3D Animation, 3.00 Credits**

Prerequisite(s): DGMA 1403 with C or better

Level: Lower

Applied Learning-Practicum

This course provides an introduction to 3D modeling, texturing, lighting, and animating. Students will use a variety of tools and techniques to create various hard and soft surface models that address specific design problems.

**DGMA - 2503 Digital Foundations II, 3.00 Credits**

Prerequisite(s): DGMA 1403 with C or better

Level: Lower

Applied Learning-Practicum

This course expands upon the fundamental concepts behind visual communications introduced in previous courses. Emphasis will be placed on the creative process and design thinking using multiple models of visual communication. Students will explore technical and conceptual ideas associated with digital media communications through the production of time based and interactive projects.

**DGMA - 2603 Media Forge I, 3.00 Credits**

Prerequisite(s): DGMA 1403 with C or better

Level: Lower

Applied Learning-Practicum

This course provides an introduction to media design studio practice. Students work within design teams on real-world media design problems, with emphasis on video production, motion graphics and project management.

**DGMA - 3111 Japanese Media, 1.00 Credit**

Level: Lower

This course is an overview of Japanese art, cinema, animation and digital media. Students will explore Japanese media in native and transnational contexts through a series of lectures and research projects. Special emphasis is given on communication strategies for art and digital media collaboration across cultures, with the goal of participation in a short-term study abroad program.

**DGMA - 3113 Studio Tokyo, 3.00 Credits**

Prerequisite(s): DGMA 3111 with D or better and JAPN 1203 with D or better

Level: Lower

Applied Learning-Int/Dom Trvl

Students will explore Japanese art, cinema, animation and digital media through a study-abroad program based in Tokyo. Students will create animation and digital media projects in collaboration with local artists, and expand upon their research from Japanese Media (DGMA 3111) through screenings and site visits.

**DGMA - 3203 Interactive Authoring, 3.00 Credits**

Prerequisite(s): CIAT 2403 with C or better or DGMA 2403 with C or better

Level: Lower

This is a course that introduces the student to the art of creating cartoon-style animation applicable to industry needs in graphic design, interactive media, the internet, film, and television using Macromedia Flash. The course emphasizes student acquisition production with both cameraless and computer-based techniques.

**DGMA - 3303 Digital Photography, 3.00 Credits**

Level: Lower

In this course, students will be introduced to digital photography covering basic to advanced techniques necessary for the production of art work, as well as learning about the visual arts, how to look at and critique photography, photographic vocabulary, and be introduced to works by well known photographers. Students will also gain a better understanding of the use of external hardware such as lenses, flashes, lights, and other equipment and their impact on photography.

**DGMA - 3403 Intermediate 3D Animation, 3.00 Credits**

Prerequisite(s): DGMA 2403 with C or better

Level: Lower

This course delves deeper into 3D computer animation while reinforcing the modeling, texturing, and lighting techniques learned in DGMA 2403. Various animation techniques will be explored and applied through object and character animation, as well as rigging that addresses specific animation problems. There will be a strong focus on the study of human and animal anatomy and how they influence motion.

**DGMA - 3503 Typography, 3.00 Credits**

Level: Lower

This course introduces students to the fundamentals of typography. Students combine research and design principles to move projects from concept to execution. Emphasis is given to new technologies and modes of delivery.

**DGMA - 3603 Production I, 3.00 Credits**

Level: Lower

Applied Learning-Creative Work

This course will introduce the student to the use of current non-linear editing technology. Class projects will develop an understanding of the methods used for creating, sampling and storing digital video and audio and the constraints placed on these media assets when used for media based products. Emphasis is placed upon the technology of digital video and audio, including: formats, data rates and compression algorithms.

**DGMA - 3703 2D Game Design, 3.00 Credits**

Prerequisite(s): DGMA 1403 with C or better and CISY 1113 with C or better

Level: Lower

This course will introduce concepts fundamental to game design in a hands-on studio setting. Through a series of experiments and projects, students will explore character design, level design, behaviors, game mechanics, risk/reward balancing and testing processes. Additional focus will be given to asset design and animation in 2D environments, including the principles of animation and game-engine animation tools.

**DGMA - 4003 2D Animation, 3.00 Credits**

Prerequisite(s): DGMA 1333 with C or better or FNAT 2433 with C or better

Level: Lower

Applied Learning-Creative Work

This course covers techniques for 2D animation production. Topics include character design, preproduction techniques, physical forces, the principles of animation, soundtrack synchronization, and performance for animation. Students will use industry-standard software to complete exercises and projects of their own design.

**DGMA - 4103 Interactive Design, 3.00 Credits**

Prerequisite(s): DGMA 1403 with C or better

Level: Lower

This course is an exploration of visual communication through interactive media and interface design. Students will explore the fundamental concepts of interactivity and visual perception concerning computer interfaces, focusing on design for websites, online media, and digital games. Students will complete interactive titles of their own design with intuitive interfaces that incorporate concepts covered in class.

**DGMA - 4203 Color Theory, 3.00 Credits**

Level: Lower

Students will explore the history and theories associated with the use of color in graphic design, and develop design practices that utilize concept driven color solutions for projects. Students will gain experience in the techniques and color management practices necessary for the production of effective screen-based and print-based design.

**DGMA - 4303 3D Game Design, 3.00 Credits**

Prerequisite(s): DGMA 2403 with C or better and DGMA 3703 with C or better

Level: Lower

Applied Learning-Creative Work

This course will expand students' understanding of game design and 3D interactive environments. Topics will include 3D character and level design, procedural generation in level design, development of game mechanics, complex behaviors, engine-based physics and development for virtual reality systems. Students will be required to create a game utilizing a 3D game engine and principles covered in class.

**DGMA - 4443 Advanced 3D Animation, 3.00 Credits**

Prerequisite(s): DGMA 3403 with C or better

Level: Lower

Applied Learning-Practicum

This course focuses on rigging and animation for 3D. Students will continue their work with modeling, texturing, lighting, rigging, and animation from previous courses, and apply it towards creating an animated short.

**DGMA - 4900 Directed Study, 1.00 TO 4.00 Credits**

Level: Lower

A student may contract for one to four credit hours of independent study through an arrangement with an instructor who agrees to direct such a study. The student will submit a plan acceptable to the instructor and to the department chairperson. The instructor and student will confer regularly regarding the process of the study.

**DGMA - 5103 Production I, 3.00 Credits**

Prerequisite(s): ( CIAT 4103 with C or better or DGMA 4103 with C or better ) or ( CIAT 4423 with C or better or DGMA 4423 with C or better )

Level: Upper

Applied Learning-Creative Work, Upper Level

This course will introduce the student to the use of current non-linear editing technology. Class projects will develop an understanding of the methods used for creating, sampling and storing digital video and audio and the constraints placed on these media assets when used for media based products. Emphasis is placed upon the technology of digital video and audio, including: formats, data rates and compression algorithms.

**DGMA - 5113 Studio Tokyo II, 3.00 Credits**

Prerequisite(s): DGMA 3111 with D or better and JAPN 1203 with D or better and ( DGMA 3113 with D or better or DGMA 6203 with D or better )

Level: Upper

Applied Learning-Intl/Dom Trvl, Upper Level

In this course, students will explore Japanese art, animation and digital media through a study-abroad program based in Tokyo. Students will schedule and lead teams in the creation of animation and digital media projects. Students will also conduct and present individual research into topics introduced in Japanese Media (DGMA 3111). Special emphasis will be given to linguistic, cultural and industrial differences in media production in Japan.

**DGMA - 5303 Sound Design, 3.00 Credits**

Prerequisite(s): DGMA 2503 with C or better

Level: Upper

Upper Level

This course explores fundamental concepts of sound as a creative medium. Emphasis will be placed on concurrent development of theory and practice of sound and how it contextualizes visual experience. Students will learn about waveform synthesis, expanded foley techniques, electronics, performance, acoustics and theories of listening. By the end of this course, students will create both stand alone and integrated sonic artworks for use in film, interactive and other digital media applications.

**DGMA - 5333 Special Topics in Art & Design, 3.00 Credits**

Prerequisite(s): DGMA 1403 with C or better

Level: Upper

Upper Level

This is an upper-level course, which focuses on a topic of special interest to the instructor and relevance to Digital Media & Animation and/or Graphic & Media Design students. Students will utilize the study of a special topic as a catalyst in the generation of aligned project(s). Faculty and topic may vary each time the course is offered.

**DGMA - 5403 Advanced Modeling, 3.00 Credits**

Prerequisite(s): DGMA 2403 with C or better

Level: Upper

Applied Learning-Creative Work, Upper Level

This course develops a refinement of skills from the preceding semesters work with modeling and a focus on photo-realistic models. The student will build upon their knowledge of 3D and provide an in depth study of modeling coupled with lighting and texturing. The course shows students how to visualize an object and effectively build it in the 3D world using various surface types and communicate scenarios and moods through the use of textures and light to surface interactions.

**DGMA - 5543 Asset Production, 3.00 Credits**

Prerequisite(s): DGMA 2403 with C or better

Level: Upper

Upper Level

In this course, students will create video game assets for both 2D and 3D interfaces. Students will expand on their use of the principles of animation, character design, 3D modeling, texturing and rigging, and will be introduced to sound recording and production techniques. Emphasis will be given to cohesive design strategies across group production.

**DGMA - 5603 Interactive Media, 3.00 Credits**

Prerequisite(s): DGMA 1403 with C or better

Level: Upper

Upper Level

In this course, students expand their skills in interactive design as they are introduced to new control systems and developing interactive technologies. Students will create applications that communicate with viewers through text, image and sound, utilizing skills developed in previous courses. Particular emphasis will be given to incorporating video and animation in interactive environments. Students will explore communication possibilities through interactive media in studio experiments and complete interactive titles of their design that incorporate concepts covered in class.

**DGMA - 5900 Directed Study, 1.00 TO 4.00 Credits**

Prerequisite(s): DGMA 1403 with D or better

Level: Upper

Upper Level

A student may contract for one to four credit hours of independent study through an arrangement with an instructor who agrees to direct such a study. The student will submit a plan acceptable to the instructor and to the department chairperson. The instructor and student will confer regularly regarding the process of the study.

**DGMA - 6103 Production II, 3.00 Credits**

Prerequisite(s): DGMA 3603 with C or better

Level: Upper

Applied Learning-Creative Work, Upper Level

This is an advanced course that expands upon the fundamental concepts involved in time based visual communications. Emphasis will be placed on the creative process of making images that can convey ideas and information to others. Students will learn advanced cinematography, editing and collaborative workflow techniques while incorporating expanded theoretical concepts from the history of narrative and non-narrative media to their projects.

**DGMA - 6203 Motion Graphics, 3.00 Credits**

Prerequisite(s): DGMA 5103 with C or better or DGMA 3603 with C or better

Level: Upper

Applied Learning-Practicum, Upper Level

From experimental video and film title sequences to revolutionary TV commercials, broadcast design and motion graphics are used to inspire and influence. Through a series of exercises and projects, students will develop skills in motion design and compositing, utilizing techniques developed in previous courses.

**DGMA - 6303 Special Topics Media Design I, 3.00 Credits**

Prerequisite(s): DGMA 4103 with C or better

Level: Upper

Upper Level

This course focuses on current issues in media design and explores the latest techniques and processes. Students will evaluate emerging technologies and the changing role of media design. Students will utilize research-based practices as a catalyst in the generation of project(s) aligned with a special topic. Topics may vary each time the course is offered.

**DGMA - 6413 Advanced Animation, 3.00 Credits**

Prerequisite(s): DGMA 3403 with C or better

Level: Upper

Applied Learning-Creative Work, Upper Level

This course is a continuation of the sequence of animation, focusing on more in depth and complex character animation as well as the animation of organic and non-organic shapes and object. Areas covered in this class include: pre-visualization, advanced character set-up and animation, facial animation, soundtrack synchronization, and advanced animation principles and techniques.

**DGMA - 6503 Interface Design, 3.00 Credits**

Prerequisite(s): DGMA 4103 with C or better

Level: Upper

Upper Level

This course will examine the theory, design and evaluation of digital game User Interface/User Experience (UI/UX). Students will explore game feel and UI/UX best practices through a series of case studies and studio experiments. Students will analyze existing professional interfaces and construct UI/UX of their own design focused on game feel and player immersion. Emphasis will be put on design for digital games using various input methods in addition to historical and current research in player experience.

**DGMA - 6533 Game Design Studio 1, 3.00 Credits**

Prerequisite(s): DGMA 4303 with C or better and CISY 1113 with C or better

Level: Upper

Applied Learning-Creative Work, Upper Level

In this course, students will collaborate in game production. Focus in this course will be placed on Agile software development. Production emphasis will include behavior design and scripting, asset design, interface testing, and effective professional communication. Students will be introduced to distribution processes for independent games.

**DGMA - 6603 Media Forge II, 3.00 Credits**

Prerequisite(s): DGMA 2603 with C or better or DGMA 5103 with C or better

Level: Upper

Applied Learning-Practicum, Upper Level

This course continues to develop the students' media design studio practice. Students in this upper level course lead design teams on real-world media design problems, with emphasis on video production, motion graphics, and project management.

**DGMA - 7203 Senior Seminar, 3.00 Credits**

Level: Upper

Upper Level

This seminar will serve two purposes. The first is to enhance students' understanding of opportunities in the field of animation and digital media through presentations, workshops and discussions. The second is to generate new techniques for problem solving in digital media projects. The course will include in-class exercises, discussions and responses to visiting artist presentations.

**DGMA - 7403 Senior Studio 1, 3.00 Credits**

Prerequisite(s): DGMA 6103 with C or better and DGMA 6413 with C or better

Level: Upper

Applied Learning-Creative Work, Upper Level

In this course, students will integrate aspects of their studies from the previous three years in a semester-long production. Students will use this semester to create a short animation, video or interactive piece from start to completion. Students will be responsible for all aspects of this project, including conceptualization, design, pre-production, animation, cinematography, sound design, post production and final delivery.

**DGMA - 7503 Digital Media & Anmntn Internsh, 3.00 Credits**

Level: Upper

Applied Learning-Internship, Pass/Fail, Upper Level

This course provides the students with practical application of skills in the Digital Media and Animation major. The internship provides valuable real-life experience while extending the skills of the student towards various businesses, organizations, and professionals. The student will be responsible for all aspects of the project for a business or organization.

**DGMA - 7603 Advanced Motion Graphics, 3.00 Credits**

Prerequisite(s): DGMA 6203 with C or better

Level: Upper

Applied Learning-Creative Work, Upper Level

This course builds on the knowledge and skills gained in Motion Graphics. Focus is on 3D motion graphics, special effects, and compositing. Students will complete projects using Motion Graphics software.

**DGMA - 7703 Adv Topics Interactive Design, 3.00 Credits**

Prerequisite(s): DGMA 5603 with C or better

Level: Upper

Upper Level

In this course students will expand on skills developed in Interactive Media, and apply them in interactive design projects that work across platforms. Students will build interactive projects both individually and in groups that visualize complex data sets and respond to active and passive user input. Special emphasis will be given to development of media for emerging technologies.

**DGMA - 7803 Professional Practices, 3.00 Credits**

Prerequisite(s): DGMA 6103 with C or better

Level: Upper

Upper Level

In this course there will be an exploration of the importance of integrity in professional relationships, which lies in all aspects of the design process. Students will examine multiple communication paths and how to maintain coherent communication that follows the design process from conception to completion. Forms, documents and ethical issues of the business relationship shall be covered.

**DGMA - 8003 Senior Studio Project II, 3.00 Credits**

Prerequisite(s): DGMA 6103 with C or better or DGMA 6403 with C or better or DGMA 6203 with C or better

Level: Upper

Upper Level

In this course, students will integrate aspects of their studies in a semester-long production. Students will use this semester to create a work from start to completion. Students will be responsible for all aspects of this project, including conceptualization, design, pre-production, post-production and final delivery.

**DGMA - 8103 Portfolio, 3.00 Credits**

Prerequisite(s): CIAT 7403 with C or better or DGMA 7403 with C or better

Level: Upper

Upper Level

This course will prepare students for the task of finding the next opportunity to advance their professional career be it graduate school, employment in industry, exhibition and/or freelance work. The students will develop a strategy to promote skills in an ever-changing field. Instruction will be given to develop a professional identity that is conveyed in the design of their portfolio. Current print and web design software will be utilized to produce an electronic portfolio detailing their work.

**DGMA - 8106 Senior Studio Project II, 6.00 Credits**

Prerequisite(s): CIAT 7403 with C or better or DGMA 7403 with C or better

Level: Upper

Applied Learning-Creative Work, Upper Level

This is a cumulative two-part course where students will integrate aspects from their studies of the previous three years. Students will use this semester to create one of the following: a 3D animated film; a 2D animated film; and Experimental Animation film (Stop Motion, Mixture of 3D and 3D animation or a fully Interactive/Informative Media project). Students will produce all pre-production work including proposal, storyboards and animatics. Students will also generate all post-production work including editing, sound mixing and final delivery format (using current technology) prior to a film screening.

**DGMA - 8203 Media Design Seminar, 3.00 Credits**

Prerequisite(s): DGMA 6103 with C or better

Level: Upper

Upper Level

This seminar will prepare Graphic Media and Design seniors to transition into the professional world by focusing on critical self-evaluation. Students will examine their own body of work as well as the work of professionals in the field. Special focus will be given to a designer's responsibilities in social, cultural, and environmental contexts. This course will include field trips and lectures from visiting artists.

**DGMA - 8303 Game Design Studio 2, 3.00 Credits**

Prerequisite(s): DGMA 6533 with C or better

Level: Upper

Applied Learning-Creative Work, Upper Level

In this course students will develop and lead a team in the production of an innovative computer game. Students will expand on their use of Agile software development methodology, focusing on management. Students will be responsible for organizing and overseeing all aspects of game design, including programming, visual development and user testing. Special emphasis will be placed on narrative design, original mechanic design and art direction.

**DGMA - 8403 Sr Studio Proj - Media Design, 3.00 Credits**

Prerequisite(s): DGMA 6103 with C or better

Level: Upper

Applied Learning-Creative Work, Upper Level

In this course, students will identify an existing design problem and complete the design process towards a successful solution.

**DGMA - 8503 Special Topics Media Design II, 3.00 Credits**

Prerequisite(s): DGMA 6103 with C or better

Level: Upper

Upper Level

This course focuses on current issues in media design and explores the latest techniques and processes. Students will evaluate emerging technologies and the changing role of media design. Students will utilize research-based practices as a catalyst in the generation of large scale project(s) aligned with a special topic. Topics may vary each time the course is offered.