

Creative Arts & Technology

DIVISION OF
CREATIVE ARTS &
TECHNOLOGY

In addition to the courses below, students in the Creative Arts & Technology major are also required to take the following General Education courses (see pages 54-58).

- ENG 106 Argumentative Writing
 ENG 107 Academic Writing
 ENG 208 Sophomore Core – Social Responsibility
 ECN 200 Introduction to Economics (0.5 c.u.)
 MTH 103 Understanding our Quantitative World
 or
 MTH 105 Abstract Reasoning (Required for Game Development Design Track)
 or
 MTH 114 Precalculus
 HUM GELS Humanities GELS (1 c.u.)
 NAT SCI GELS Natural Sciences GELS (2 c.u.s)
 SOC SCI GELS Social Science GELS (2 c.u.s)
 General Education Electives (2 c.u.s)

Many courses have prerequisites which are listed in the course description. Please be sure that necessary prerequisites have been taken before enrolling in any course.

Students wishing New Jersey Teaching Certification must be admitted into the B.A. in Education and satisfy the courses listed in the Arts and Visual and Performing Arts co-concentrations (see pages 140 & 149). Should a student decide to major in the discipline exclusively, he/she will need to submit a change of major declaration and satisfy the requirements listed below. Students who wish to double major must complete the requirements of both majors.

Admissions Procedure and Standards

Freshmen Admission to the CAT Major:

1. Freshmen entering Bloomfield College may declare themselves as "Pre-CAT's."

2. Admission to CAT is based on successful completion of 3 CAT courses, an admissions essay, portfolio review and an interview with a CAT Discipline Coordinator.

- A freshman applying to CAT must have earned a minimum 2.7 average in CAT 110 and 112 (Digital Media Studio I and II) and one other full-course unit CAT course. Applicants must have a minimum GPA of 2.3.

- The admissions essay topic is "Describe yourself as a creative person. What are your creative ambitions and what do you want to learn as a CAT major?" This essay may describe work submitted in the portfolio.

- The portfolio must be the applicant's best work.

Please contact the Creative Arts and Technology Division (Ext. 507) to receive instructions for portfolio submissions.

Transfer Students and Admission to CAT:

Transfer students are not automatically admitted to the CAT major. All transfer students must write an essay describing their creative work and aspirations. They must meet with a discipline coordinator for portfolio review, which is used to assess technical and artistic proficiencies.

Transfer students with an AA degree, a minimum 2.7 average in a CAT concentration, and a successful interview and good portfolio will be admitted to the major.

Since transfer students often work in a new concentration, it may take more than four years total (junior college and Bloomfield College) to graduate with the B.A. in CAT.



Required of all majors: (except those enrolled in the Art and Visual and Performing Arts Teacher Education programs)

- CAT 110 Digital Media Studio I: Computer Art
- CAT 112 Digital Media Studio II: Time-Based Media
- CAT 140 Art in New York (0.5 c.u.)
- CAT 220 Multimedia for CD-ROM, DVD & the World Wide Web
- or
- CAT 270 Web Design I
- or
- CAT 273 Interactive Flash Design (Required for Animation & Game Development Design Concentrations)
- or
- CAT 242 Flex for Web & Games (Required for Game Programming Concentration)

(All three required for the Interactive Multimedia & the World Wide Web Concentration)

- CAT 262 The Ultimate Arts Experience
- CAT 380 Internship I
- CAT 420 Capstone Project

And one course selected from the following:

- CAT 116 Movement for Animators and Filmmakers (Required for Animation Concentration)
- CAT 124 Dance Jam I
- CAT 125 Dance Jam II
- CAT 190 Movement Theater Project
- CAT 193 Introduction to Acting (0.5 c.u.)
- CAT 195 Circus Arts
- CAT 213 Music Improvisation (0.5 c.u.) (Required for Music Technology Concentration)
- CAT 299 Performing Arts Production I

In addition, each student will specialize in one of the following areas and be required to take the additional course units listed under their chosen area of specialization.

All courses listed below are worth one course unit unless otherwise indicated.

GAME DEVELOPMENT CONCENTRATION

- Game Design Track
- Game Programming Track

There are two tracks with the required courses listed below.

Students should select one concentration or the other. Taking both would be allowed but would likely necessitate needing (and paying for) more than 33 course units to graduate.

GAME DESIGN TRACK

The required courses are:

- CAT 108 Introduction to Game Design
 CAT 198 Design I
 or
 CAT 194 3D Design
 CAT 208 Illustration & Graphic Design for Games
 CAT 209 Game Design Methodology
 CAT 225 Visual Design in Video & Animation
 CAT 237 Group Game Project I
 CAT 264 Computer Imaging
 CAT 308 Group Game Project II
 CAT 408 Group Game Project III

And four courses selected from the following:

- CAT 107 Introduction to Music Technology
 CAT 134 Drawing for 2D Animation
 CAT 215 Level Design I
 CAT 241 Pre-Production & 2D Animation
 CAT 286 Sound Design I:
 Audio for Video I
 CAT 290 Basic Video Production
 CAT 305 Sound Design II:
 Audio for Video II (0.5 c.u.)
 CAT 314 Level Design II
 CAT 317 Studio Drawing
 CAT 361 3D Modeling
 CAT 372 3D Animation
 CAT 385 Visual Effects

GAME PROGRAMMING TRACK

The required courses are:

- CAT 108 Introduction to Game Design
 CAT 237 Group Game Project I
 CAT 238 Introduction to Game Programming
 CAT 308 Group Game Project II
 CAT 408 Group Game Project III
 CMP 126 Programming I
 CMP 225 C++ Programming
 CMP 228 Data Structures
 CMP 248 Introduction to Microprocessors
 CMP 300 System Analysis & Design
 CMP 330 Database Management
 MTH 221 Calculus & Analytic Geometry I

And two courses selected from the following:

- CAT 318 Game Architecture & the 2D Game Engine
 CAT 328 Artificial Intelligence for Games
 CMP 226 Programming II
 CMP 334 Network Programming
 MTH 332 Discrete Mathematics
 PHY 105 General Physics I

Creative Arts & Technology Courses

NOTE: Courses marked with an asterisk (*) require special fees. See page 14.

■ General Education Course (Primary Competency Addressed)

• Arts As Catalyst General Education Course (Primary Competency Addressed)

CAT 101 CREATIVE ARTS WORKSHOP* • (Aesthetic Appreciation)

Come alive as a dancer, singer, actor or artist in a short course where you collaborate with others, try out a new art form, develop your talents, and learn a great deal about being creative and expressive. This is a rotating series of half-courses that fulfill the Arts as Catalyst requirement for General Education. May be repeated for credit. 0.5 c.u.

CAT 105 FRIDA KAHLO AND THE MEXICAN FOLK TRADITION* • (Aesthetic Appreciation)

This is a studio art course that focuses on making things from simple materials: papier-maché, wire, clay, wood, string, paper, cloth, cardboard and everyday objects that are often thrown away. It is the ultimate re-cycling, green course. So, you should bring in anything that you think can be used to make art. 1 c.u.

CAT 106 EXPERIMENTS IN DIGITAL/ANALOG MEDIA*

Explore ways to bring “real” media into your computer and how to bring your computer-generated work to life in the studio. Use scanners, digital cameras, printers, paint, clay, and found objects to push your creative envelope. 1 c.u.

CAT 107 INTRODUCTION TO MUSIC TECHNOLOGY*

This course will provide hands-on experience recording, editing and mixing digital audio. Pro Tools and Digital Performer will be the primary software programs used on the Macintosh computer platform. The student will work with files that contain spoken work, sound effects and music files. In addition the student will be given the opportunity to work with audio files and QuickTime movie files. 1 c.u.
Students should be prepared to spend lab time out of class.
For CAT majors only.
Corequisite: CAT 112.

CAT 108 INTRODUCTION TO GAME DESIGN* • (Aesthetic Appreciation)

This course covers the broader aspects of the games industry such as its history, its current state and potential future evolution, and the team-based development environment. It then focuses on core game design concepts and their application as students create documentation and work in collaborative groups to develop analog games. 1 c.u.

CAT 110 DIGITAL MEDIA STUDIO I: COMPUTER ART*

An introduction to the computer as a multi-purpose, art-making tool that utilizes software application programs. This is a hands-on course that integrates the conceptual, technical, and aesthetic concerns that makes digital technology an exciting and evolving artistic environment. Students use the computer to develop a variety of two-dimensional imagery, animated and interactive artworks. Multiple output media and distribution options are explored. This course consists of lecture and recitation. 1 c.u.

Successful completion of CAT 110 with a grade of C or better qualifies students for entrance to CAT 112.

Prerequisite: Pre-CAT or E-Commerce majors only.

CAT 112 DIGITAL MEDIA STUDIO II: TIME-BASED MEDIA*

Introduction to time-based media. Explores sound, animation, video and interactivity. Focus on skills needed to realize intended projects through discussions and examples of processes, techniques and aesthetic issues. We will look at multi-media, computer effects and digital audio. We will move from traditional narrative to experimental and performative/installation work. This course consists of lecture and recitation. 1 c.u.

Successful completion of CAT 112 with a grade of C or better qualifies students for entrance to CAT major.

Prerequisite: CAT 110.

CAT 113 AFRICAN/AMERICAN TRADITION WORKSHOP*

(Also AFS 113)

• (Aesthetic Appreciation)

Hand, heart and spirit have been an intrinsic part of the process of creativity, survival and enthusiasm in the African/American community. This studio course will draw inspiration from the rich artistic traditions in the African/American visual arts. We will engage in creative processes such as improvisation, quilting, and collage—concepts and techniques used by Betye Saar, Faith Ringgold, and Romare Bearden. We will study narrative in the works of Ringgold, Jacob Lawrence and others. With this foundation, students will create their own personal narratives. 1 c.u.

CAT 115 MEDIA TOOLS*

• (Aesthetic Appreciation)

Whether you are a scientist or a small business owner, a teacher or a journalist, you need to communicate with your target audience as effectively as possible. This course offers hands-on training in the latest new media tools including digital photography, DVD production, web design, blogging, internet radio, and podcasting. 1 c.u.

*Corequisite: ENG 106.***CAT 116 MOVEMENT FOR ANIMATORS AND FILMMAKERS***

This course explores the movement of both humans and inanimate objects through the study of Commedia Dell Arte, mime, acrobatics, stage combat and street theatre. This knowledge is used in the creation of animation and film pieces, with special attention to such advanced technologies as motion capture and green screen. 1 c.u.

*Prerequisite: CAT major or consent of the Instructor.***CAT 118 TAP DANCE**

• (Aesthetic Appreciation)

Learn the basics of tap dancing. Steps and routines will be taught along with some history of this American art form. Film clips of legendary tap performers will be shown in class. No dance experience necessary, beginners are welcome. Tap shoes will be needed. 1 c.u.

CAT 124 DANCE JAM I

• (Aesthetic Appreciation)

A participatory class offering an introduction to beginning jazz, hip-hop and theater dance technique. The technique focuses on yoga breathing through movement as fundamentals of ballet, jazz and modern elements are combined in class to reflect dance styles ranging from the street to the Broadway stage. The art of dance develops self-confidence in a fun, supportive environment. 1 c.u.

CAT 125 DANCE JAM II

• (Aesthetic Appreciation)

An intensive level class, building upon technique learned in Dance Jam I. It will include knowledge of the muscular skeletal system, student choreography and improvisation. At end of the semester, students will be required to complete a performance project for faculty and students. 1 c.u.

*Prerequisites: CAT 124.***CAT 134 DRAWING FOR 2-D ANIMATION***

• (Aesthetic Appreciation)

This hands-on studio course will emphasize the importance of drawing skills specifically used in the animation and cartooning industry. Basic construction, line of action, exaggerated perspective, force, rhythm, gravity, design, volume and physics will all be addressed along with the 12 principles of animation. 1 c.u.

CAT 140 ART IN NEW YORK*

• (Aesthetic Appreciation)

Classroom talks, readings, and visiting artists will prepare students for 4-5 trips into New York City to see museums and art galleries and to attend live performances of theater, music, dance, and new media. Students will write about their reactions to the shows and art works they see. 0.5 c.u.

*This course may be repeated once for credit with permission from the Instructor.***CAT 189 ELEMENTARY CHORUS***

• (Aesthetic Appreciation)

Introduces students to basic choral participation which will enable them to: find their singing voice; match pitches in specific ranges and learn to follow a score of written music. The repertoire will include music from all periods from European classical to contemporary American popular styles 0.5 c.u.

*This course may be repeated once for credit.***CAT 190 MOVEMENT THEATER PROJECT ***

• (Aesthetic Appreciation)

This course offers a semester-long project in one particular form of movement theatre, ranging from ballet to modern dance to stage combat to mime to physical comedy. All projects involve full participation of mind, body, and spirit and culminate in a small public performance. 1 c.u.

This course may be repeated once for credit.

CAT 191 BEGINNING PIANO I*

• (Aesthetic Appreciation)

Group instruction offered in the electronic piano lab for students who have had no previous piano training. The emphasis will be on playing simple pieces, reading, basic keyboard harmony and elementary keyboard technique. 0.5 c.u.

This course does not carry General Education elective credit.

CAT 192 BEGINNING PIANO II*

• (Aesthetic Appreciation)

A continuation of CAT 191. 0.5 c.u.

Prerequisite: CAT 191.

This course does not carry General Education elective credit.

CAT 193 INTRODUCTION TO ACTING

(Formerly CAT 291)

• (Aesthetic Appreciation)

A hands-on practical introduction to basic techniques and concepts of acting. Theater games, movement exercises, and character improvisations serve as a foundation for later work on scripted scenes. Attendance, participation, and energy are essential, as most of the work and grade are based on what happens in the class. 0.5 c.u.

CAT 194 3D DESIGN

• (Aesthetic Appreciation)

The study of sculpture begins with an understanding of three-dimensional forms in space: how to imagine, draw, construct or shape them using a range of scale and materials. We will explore the concepts of volume, shape, form, time, and light, and sound in a series of group and individual creative design projects. 1 c.u.

CAT 195 CIRCUS ARTS*

• (Aesthetic Appreciation)

Learn physical skills and performance skills in this participatory crash course in basic circus technique. Skills may include juggling, unicycling, wirewalking, tumbling, rolling globe, rola-bola, object balancing and partner acrobatics. This course ends with a public performance. No experience needed, just a sound body and rugged determination. 1 c.u.

This course does not carry

General Education elective credit.

CAT 198 DESIGN I*

Design is the study of how to organize the formal art elements of color, line, space, texture, time and motion into a unified whole. This course trains your eye and develops your aesthetic appreciation of excellent design in fine art and commercial art forms. Using traditional art materials and the computer, it taps your creativity and develops your ability to communicate effectively through organizing structure.

Prerequisite: CAT or

1 c.u.

E-Commerce majors only.

CAT 199 DESIGN II*

Building on the studio concepts introduced in CAT 198, Design II challenges you to develop your design sense and to build your graphics portfolio. You will learn about design theory and the history of graphics. 1 c.u.

Prerequisite: CAT 198.

CAT 200 MUSIC THEORY I*

The fundamentals of music including: notation, intervals, scales and chords are explored. Emphasis is placed on demonstrating the results of study realized through the successful completion of projects designed to exhibit the students' understanding of the topics presented. The following software packages will be used: Pro Tools, Reason, Digital Performer and Finale. 1 c.u.

Prerequisite: CAT 107 and placement exam given in keyboard and musical literacy.

Student without any previous musical experience in notated music may be required to take CAT 191.

CAT 201 MUSIC THEORY II*

A continuation of Music Theory I. 1 c.u.

Prerequisite: CAT 200.

CAT 202 WORLD THEATRE*

(Formerly CAT 105)

■ (Aesthetic Appreciation)

The history of the theater, as both a literary form and as a living, breathing art. Major styles of theater are surveyed and plays by such great writers as Shakespeare, Sophocles, Moliere, and Beckett are read, discussed, and viewed on film or in live performance. 1 c.u.

Prerequisite: ENG 107.

CAT 203 WORLD ART I***■ (Aesthetic Appreciation)**

Great works of art give clues to the meanings and values of a culture. We will explore and compare the obvious and the hidden meanings of the art and architecture of the world's great cultures, from prehistoric time to the Gothic (12th century) period of European art. Special attention to the ancient cultures of Egypt, Greece, Rome, India, China, Africa, Mexico, and Peru. 1 c.u.

Prerequisite: ENG 106.

CAT 204 WORLD MUSIC*

(Formerly CAT 104)

■ (Aesthetic Appreciation)

A survey course designed to stimulate the interest in and understanding of the music of representative world cultures including: Native American, Sub-Saharan Africa, India and China. The focus will be on the comparison and contrast of both classic forms and more the contemporary forms as they continue to evolve and function in their individual cultures. The student is responsible for outside listening, research projects and field trips. 1 c.u.

Corequisite: ENG 106.

CAT 205 BASIC SEQUENCING*

(Formerly CAT 109)

■ (Aesthetic Appreciation)

Explores the MIDI programming language as it applies to digital music production on the Macintosh system platform. Course content and projects are designed to aid students in establishing both a comprehensive and creative approach to computer music composition. Software applications include Reason, Live, Pro Tools and Logic. 1 c.u.

Prerequisite: CAT 107.

CAT 206 SCREENWRITING I

The focus is on writing a feature-length film and the basic elements of plot, protagonist, turning point, and resolution. You will be expected to complete a step outline of your story and the first act of your screenplay. 1 c.u.

CAT 207 INTRODUCTION TO THE VISUAL ARTS*

(Formerly CAT 100)

■ (Aesthetic Appreciation)**• (Aesthetic Appreciation)**

Why did prehistoric people paint on cave walls? What is the secret behind the Mona Lisa's famous smile? And how can you use your hidden artistic talents? Learn all you ever wanted to know about art's masterpieces while you create your own first works of art in a lively mix of art history and studio art. 1 c.u.

Corequisite: ENG 106.

CAT 208 ILLUSTRATION AND GRAPHIC DESIGN FOR GAMES*

Techniques derived both from traditional illustration, comic books, and the latest computer graphics software to create visual representations of characters, environments, props, and textures. 1 c.u.

Prerequisite: CAT 108.

CAT 209 GAME DESIGN METHODOLOGY*

This course introduces game design methodologies. Topics include: the documentation process and standard tools of the trade, application of MDA concepts, and interactive design. Students will design their own play experience, and also contribute within a collaborative group project while giving weekly critical analysis and feedback of other students' work. 1 c.u.

Prerequisite: CAT 108.

CAT 210 DIGITAL AUDIO ENGINEERING I (RECORDING)*

(Formerly CAT 119)

Working in a critical and collaborative environment, students learn and put to use the fundamentals of sound recording. Acoustics, microphone usage, studio techniques, and advanced sequencing are stressed. Students achieve proficiency in equalization, compression and reverb. CAT 210 is a hands-on audio recording course which emphasizes, listening, creativity, and critical discourse around the past, present and future of recorded sound.

Prerequisite: CAT 107.

1 c.u.

Prerequisite or Corequisite: CAT 205.

CAT 211 ARTISTS OF THE 20th CENTURY***■ (Aesthetic Appreciation)**

Paris as the bustling artistic and cultural nexus and the birthplace of Modernism. A study of the art and culture of France from 1870 to 1945, with focus on artists who changed our way of seeing: Manet, Degas, Monet, Renoir, Cezanne, Morisot, Cassatt, Van Gogh, Gauguin, Rodin, Claudel, Vuillard, Bonnard, Braque, Matisse, and Picasso. 1 c.u.

Prerequisite: ENG 107.

CAT 213 MUSICAL IMPROVISATION***• (Aesthetic Appreciation)**

Focus on the musical ensemble skills associated with improvisation. Course will be participatory, and the bulk of the time in class will be spent playing music. Diverse cultural approaches to improvisation –African/American, South Indian, and European –will be explored. 0.5 c.u.

CAT 214 MODERN ART OF LATIN AMERICA: 1900-1950

■ (Aesthetic Appreciation)

Important works of Latin American painting and sculpture from 1900-1950, emphasizing stylistic analysis and the relationship of the art to its socio-cultural context. 1 c.u.
Prerequisite: ENG 107.

CAT 215 LEVEL DESIGN I*

Like a good game, level design is easy to learn and difficult to master. There are many aspects to consider such as player ergonomics, flow, difficulty, boundaries, storytelling, tension, risk/reward, and game balancing. This course teaches you the basics, and helps you develop the requisite skills of good level design. 1 c.u.
Prerequisite: CAT 209.

CAT 216 THE HISTORY OF AFRICAN/AMERICAN ART (Also AFS 216)

■ (Aesthetic Appreciation)

Emma Amos, Betty Saar, Sam Gilliam, Jacob Lawrence. Do you recognize the names of these artists? Study the achievements of artists of color. How have they integrated their cultural identity with their self-expression? Where and when have African, European, Latino and Caribbean influences affected their art? How have African/American artists established strong, creative communities? Visits to museums, galleries, and cultural centers in New Jersey and New York. 1 c.u.
Prerequisite: ENG 107.

CAT 217 DRAWING*

● (Aesthetic Appreciation)

Drawing is often considered a preliminary step towards achievement of an artist's final work in sculpture or painting. However, drawing is also an independent art form and is valued as the most direct, personal expression of the artist. Both aspects of drawing are studied in works by the world's old and modern masters. Students will gain greater understanding of drawing materials and formal problems by experimentation with chalk, charcoal, pen and ink, pencil, and pastels. 1 c.u.

CAT 218 PAINTING*

● (Aesthetic Appreciation)

Studio work in composition and color in acrylic or oils. 1 c.u.

CAT 220 MULTIMEDIA FOR CD-ROM, DVD AND THE WORLD WIDE WEB*

(Formerly CAT 308 Multimedia)

Students combine their prior experience in computer graphics, music technology, and video production to create interactive multimedia documents for output on CD-ROM, DVD and the World Wide Web. Using Macromedia Director and other multimedia programs, students create digital portfolios, animations, and even their own games as a final project. 1 c.u.

Students are required to register for laboratory time.

Prerequisite: CAT 112.

CAT 221 THE ART OF EDITING*

The aesthetics of traditional and non-traditional editing are studied through film screenings, and then applied to creative video projects using Final Cut Pro's advanced editing capabilities. 1 c.u.

Prerequisite: CAT 290.

Corequisite: ENG 107.

CAT 222 GLOBAL ART HISTORY*

■ (Aesthetic Appreciation)

■ (Multicultural Awareness)

The course includes at least a week of intensive group travel and study abroad. Our goal is to increase your appreciation of art history, to develop your communication with the enjoyment of people in another country, and to make you an experienced traveler. The best way to understand works of art and architecture is to see the originals in their country of origin. This course prepares you to study art history abroad by familiarizing you in advance in class with art in its cultural context. Students have found this course to be a life-changing experience. 1 c.u.

Corequisite: ENG 107.

CAT 223 DIGITAL PHOTOGRAPHY*

● (Aesthetic Appreciation)

Study the history of photography and explore the aesthetic opportunities of digital cameras. Practice storytelling through the development of single and sequential images. Learn about the operational functions of a digital single lens reflex (SLR) camera, digital editing, digital retouching, color management and output, and lighting for studio shots. 1 c.u.

Prerequisite: CAT 110.

CAT 224 MUSIC IN THE UNITED STATES: THE AFRICAN/AMERICAN INFLUENCE*
(Also AFS 224)

■ (Aesthetic Appreciation)

Musical traditions brought to our country from abroad. The development of American musical culture from colonial times to the present, including a survey of African/American music from its tribal and colonial origins to the present. The sociological impact of jazz upon Western music and culture. 1 c.u.
Prerequisite: ENG 106.

CAT 225 VISUAL DESIGN IN VIDEO AND ANIMATION*

Elements of cinematography—including frame composition, color, camera angles, and lighting—play a key role in translating your screenplay to the storyboard you will create to maximize the visual impact of your movie. 1 c.u.
Prerequisite: ENG 107.

CAT 227 SILKSCREEN*

A water-based ink, environmentally friendly course that teaches the stencil method, mono-print approach, and photo-emulsion based processes for creating images in silkscreen. Historical and contemporary examples of silkscreen as art works. Students are encouraged to develop art ideas that begin in silkscreen or ideas previously explored in other media. 1 c.u.

CAT 228 3D STOP-MOTION ANIMATION*

This course will explore the basics of motion animation using clay, puppets and many other 3D objects. Students will learn how to pitch an idea, develop a concept and work up a production schedule for exercises using cutouts, collage and clay, in 3D stop-motion techniques with digital cameras. 1 c.u.
Prerequisite: CAT 290.

CAT 230 HISTORY OF ANIMATION*
(Formerly CAT 114)

■ (Aesthetic Appreciation)

This class will explore the history and development of animation throughout the 20th century. Major social and technological movements and the effects they had on animators working at the time will be analyzed and discussed. This work will be examined to see how animation has developed as an art form. The class will read related texts and view historic and contemporary animation work. 1 c.u.

CAT 231 CHINESE CULTURE AND LANGUAGE*

■ (Aesthetic Appreciation)

It is often said that we have just finished the American Century, and that the 21st will be the Chinese Century. With 1.3 billion people, the longest and arguably richest history of any country ever to exist, and the fastest growing economy in the world, China is poised to play a dominant role in shaping your future. This course will provide an overview of Chinese culture within the context of Chinese history and politics, including such topics as calligraphy, king fu, Beijing Opera, cuisine, literature, architecture, and contemporary film and music. Each class session will include lessons in speaking basic conversational Mandarin.
Corequisite: ENG 107. 0.5 c.u.

CAT 232 JAPANESE CULTURE AND LANGUAGE*

■ (Aesthetic Appreciation)

Be it anime, judo, sushi, the films of Kurosawa, the cars of Toyota, or the latest game from Nintendo, Japanese culture is very much a part of the American way of life. This course offers a fascinating look at both traditional and contemporary Japanese art forms within the context of Japanese politics, history, and lifestyle. Test, film, multimedia, guests, and class trips will inspire and prepare you for a visit to Japan, and each class session will include lessons in speaking basic conversational Japanese.
Corequisite: ENG 107. 0.5 c.u.

CAT 233 KOREAN CULTURE AND LANGUAGE*

■ (Aesthetic Appreciation)

On the cutting edge of new media innovation yet drawing upon a rich cultural heritage, Korea is clearly a country on the move. The land of Buddhist temples, *tae kwon do*, *kim chee*, *hanji* papermaking, and other exquisite traditional crafts is also Asia's most wired nation. Readings, movies, guest speakers, and class trips provide an overview of Korean culture within a historical and political context. Each class session will include lessons in speaking basic conversational Korean, which is accessible to West-erners because it uses a conventional alphabet (*han'geul*) of vowels and consonants rather than pictographic characters. 0.5 c.u.
Corequisite: ENG 107.

CAT 235 WORLD ART II***■ (Aesthetic Appreciation)**

European art and architecture from the Renaissance to the late nineteenth century, taught from the perspective of international travel, trade, and cultural interactions. We will study works of art first-hand in New York and local museums and see the influence of key artists on each other, the evolution of their styles, technical practices, and content. 1 c.u.

Corequisite: ENG 107.

CAT 237 GROUP GAME PROJECT I*

This course focuses on the core processes for making a game as a collaborative group. Learn valuable preproduction and documentation skills that go beyond the initial Game Design Document. Manage the project with schedules, milestones, and an iterative development process that includes intensive testing, version control, and effective communication strategies. 1 c.u.

Prerequisite: CAT 108.

CAT 238 INTRODUCTION TO GAME PROGRAMMING*

Learn about the methodologies and tools that are used to program games. Topics include: Repositories/Revision Control, Paired/Extreme Programming, SCRUM/Agile Development, Rapid Prototyping, Multiple Processors/Threads, Client/Server Basics, Debugging, and Remote Programming. You will also learn how to evaluate and choose the proper game engine for a project. 1 c.u.

Prerequisite: CMP 225.

CAT 241 PRE-PRODUCTION AND 2D ANIMATION*

The basic concepts and techniques of storyboard and layout including visualization and script-writing are important to the pre-production process of animation and are emphasized in this course. The student will learn continuity and basic story structure in a storyboard form, from rough sketches to a finished presentation. 1 c.u.

Prerequisite: CAT 134.

Corequisite: CAT 361.

CAT 242 FLEX FOR WEB & GAMES*

Learn how to use the versatile Flash/Flex platform to create Rich Internet Applications (RIAs). This class will show you how Flex, Flash, Air, and ActionScript can be utilized to make anything from a quick, Web form to well-polished games and cross-platform desktop applications. 1 c.u.

Prerequisite: CAT 238.

CAT 248 HISTORY OF THE CINEMA***■ (Aesthetic Appreciation)**

The development of motion pictures as an art from 1895 to the present. The course discusses how cinema has been influenced by aesthetic theories, technology, business, political climate, cultural trends, and historical events. Emphasis on the analysis of important films by such directors as Griffith, Chaplin, Eisenstein, Dreyer, Lang, Renoir, Welles, Rossellini, Kurosawa, Kazan, Godard, Penn, Bergman, and Lee. 1 c.u.

Prerequisite: ENG 107.

CAT 249 SPECIAL TOPICS IN CINEMA***■ (Aesthetic Appreciation)**

A number of different course offerings that concentrate on specific genres, directors, periods, movements, or themes, such as "Contemporary Independent Cinema," "Developments in Black Film from WWII to the Present," "British and American Cinema in the 1960s," "International Political Cinema," "Three Directors: Welles, Hitchcock, Bergman." Emphasis is on film analysis. 1 c.u.

Prerequisite: ENG 107.

CAT 251 HIP HOP THEORY***■ (Aesthetic Appreciation)**

An in-depth study of the elements of the various styles of American music that were to become hip-hop. Includes examination of how to formulate hip-hop lyrics and beats. Hands-on experience with sequencing software, computers and samplers and opportunities to rhyme and free-style to beats made by class members will also be provided. 1 c.u.

Prerequisites: CAT 107 and CAT 109.

CAT 262 THE ULTIMATE ARTS EXPERIENCE**■ (Aesthetic Appreciation)**

The Ultimate Arts Experience is an interdisciplinary study of theatre, the visual arts, music, and related arts, of how works are created within each discipline and the vocabulary of forms and ideas that creative artists from all fields share. You will meet artists, attend performances and art shows, read, debate, and write, and learn how creative people—painters, designers, film and video directors, multimedia specialists, composers, musicians, playwrights, actors—focus on and practice their own disciplines but are constantly aware of, involved with, and stimulated by other art forms, past, present and futuristic. 1 c.u.

Corequisite: ENG 107.

CAT 263 GRAPHICS I*

The foundation course for the study of graphic design. Students conceptualize visual solutions to communications problems by conducting research and creating preliminary sketches. Students participate in peer/instructor project review sessions. 1 c.u.

A portfolio of printed projects is produced at semester end.

Prerequisites: CAT 110, CAT 198.

CAT 264 COMPUTER IMAGING *

Students will use the latest version of Adobe PhotoShop, an essential tool for any visual artist working with computers-animators, graphic designers, web makers, special effects artists, multimedia and design professionals. This course teaches the advance principles of digital imaging and manipulation, including digitizing, editing, color correction, special effects and transformation techniques used by PhotoShop Pros. It will emphasize the methods used to scan and collage images from photographs, to retouch and alter these images and to create complex design solutions and illustrations. 1 c.u.

Students are required to register for laboratory time.

Prerequisite: CAT 112.

Corequisite: CAT 198 or CAT 225.

CAT 266 AFRICAN/AMERICAN PERFORMANCE HISTORY

(Also AFS 266)

■ (Aesthetic Appreciation)

An overview of the contributions African/Americans have made to American performance culture. Exploration of black performance traditions and the social contexts in which they were developed. A useful sampling of information for students interested in American Studies, African/American Studies, Theatre, Dance, Drama, History, Music, Popular Culture and related areas. 1 c.u.

Prerequisite: ENG 107.

CAT 268 GRAPHICS II*

In this second graphic design course, students will advance their knowledge of typography and the Adobe Creative Suite applications, work on print production skills and develop their abilities to work with “real-life” clients. *A portfolio of printed projects is produced at semester end.* 1 c.u.

Prerequisite: CAT 263.

CAT 270 WEB DESIGN I*

The foundation course for the study of graphic design for the World Wide Web. This course teaches the student the language of the WWW (XHTML), its visual presentation (CSS), and how to communicate with one’s audience. Focus is placed on including multimedia information in an interactive environment. 1 c.u.

Prerequisite: CAT 112.

CAT 273 INTERACTIVE FLASH DESIGN*
(Formerly CAT 373)

Learn to design, animate, and program in Macromedia Flash. Students will utilize graphics, text, audio, video, and multimedia design skills to create dynamic, interactive projects for the Web and digital distribution via CD-ROM. 1 c.u.

Prerequisite: CAT 112.

CAT 279 STUDIO SCULPTURE*

Students will explore the potential of traditional sculptural media and new digital media to create three-dimensionally. They will work to develop a technical skill base, a critical sense, and a personal creative vision. 1 c.u.

Prerequisite: CAT major or consent of the Instructor.

CAT 282 DESKTOP PUBLISHING FOR PRINT MEDIA AND THE WORLD WIDE WEB*

(Formerly CAT 252 and Desktop Publishing Workshop I)

Students form production teams as they produce their own original newsletters and PDF web documents. Using such programs as Quark and Acrobat on the Macintosh platform, students learn to match content with design while meeting impossible deadlines. 1 c.u.

Prerequisites: ENG 107.

CAT 286 SOUND DESIGN I: AUDIO FOR VIDEO I*

Through project-based work, students will learn the process of creating audio for multimedia productions including film television, games, and the web. Topics include recording, mixing, editing, Foley, worldizing, and dialogue replacement. The class will also examine the interplay between sound design and music and how to successfully create scores and ambiences. Aesthetics as well as technology will be discussed throughout the semester, and at the end, students will compile a reel of their work. 1 c.u.

Prerequisite: CAT 107.

CAT 288 IMPROVISATIONAL ENSEMBLE ACTING

• (Aesthetic Appreciation)

Students in this course become better members of the College's improvisational acting troupe. They develop improvisational approaches to acting that are then put to use in performing a wide variety of scenarios—some involving audience participation—on current issues of particular concern to college students. There are frequent performances during the semester both on and off campus. 0.5 c.u.

This course may be repeated for credit.

CAT 289 INTERMEDIATE CHORUS*

• (Aesthetic Appreciation)

A continuation of Elementary Chorus, the experience will provide the student basic choral participation enabling them to: develop the quality of their singing voice, match pitches in specific ranges, learn to follow a score of written music, improve their concentration, perform more complex harmonies and rhythms. The repertoire will include music from all periods from European classical to contemporary American popular styles. 0.5 c.u.

This course may be repeated once for credit.

Prerequisite: CAT 189.

CAT 290 BASIC VIDEO PRODUCTION*

• (Aesthetic Appreciation)

Instruction in the basic production methods of video in a hands-on course: scripting, camera work, editing and sound. We will work toward the production of tapes which will be shown on campus and on cable television. The news-making and communications aspects of the medium and its artistic values will be explored. This is a demanding course that requires individual and collaborative effort and additional hours of work outside the class. 1 c.u.

CAT 292 PRINTMAKING*

Printmaking allows artists to change and develop images in stages, creating a visual record of creativity. This course will introduce many techniques, both traditional and experimental. 1 c.u.

CAT 293 STUDIO MUSIC I*

• (Aesthetic Appreciation)

Private instruction in piano, voice, other orchestral instruments such as trumpet, saxophone and guitar. At least one year of prior instruction on the selected instrument or the consent of the instructor is required. Enrollment on the basis of audition. This course may be repeated twice for a total of three semesters 0.5 c.u.

CAT 294 STUDIO MUSIC II*

• (Aesthetic Appreciation)

Continuation of Studio Music I; course may be repeated twice for a total of three semesters.

Prerequisite: CAT 293.

0.5 c.u.

CAT 299 PERFORMING ARTS PRODUCTION I*

• (Aesthetic Appreciation)

Rehearsal for and actual production of a full-length play, to be performed at the College and perhaps elsewhere as well. Students may become involved as performers or as stage managers, designers, costumers, or any combination thereof. 1 c.u.

CAT 300 MIDI COMPOSITION AND PRODUCTION I*

Students will explore compositional techniques through a survey of strategies of various musical parameters, through analysis and original composition and production projects. Students will create original compositions and these will be critiqued in class and revised. Orchestration and arranging techniques will also be addressed. 1 c.u.

Prerequisite: CAT 201 or consent of the Instructor.

CAT 301 COMPOSITION AND MIDI PROGRAMMING II*

A continuation of CAT 300, focusing on form and arrangement, including song form. 1 c.u.

Prerequisite: CAT 300 or consent of the Instructor.

CAT 302 PATCHWORK: A QUILTER'S LOOK AT THE WORLD*

(Also WMS 302)

■ (Aesthetic Appreciation)

A hands-on quilting bee and a global look at women, past and present, as artists and workers in fabric. 1 c.u.

Prerequisite: ENG 107.

CAT 303 TELEVISION AND FILM ACTING

Acting for film and television places different demands upon an actor. Working in conjunction with the video classes and the course in TV Studio, aspiring performers experiment with such areas as drama, commercials, and news broadcasting. 1 c.u.

Prerequisite: CAT 193.

CAT 304 MOTION GRAPHICS*

Be a part of the motion graphics craze – learn how to create bugs, lower thirds, opening animations – all the elements that are in demand for the NYC Metropolitan broadcast industry. Work on projects and become proficient at using AfterEffects, the state-of-the-art special effects digital video editing software. 1 c.u.

Prerequisites: CAT 112 , CAT 263 or CAT 264, CAT 290.

CAT 305 SOUND DESIGN II: AUDIO FOR VIDEO II*

(Formerly CAT287)

A continuation of the first semester, this course is focused on longer, more in-depth work. Through individual development as well as group projects, students will gain insight into the experience of working on a production team that will carry into the workplace. Further discussion of aesthetics and the role of sound in our visual world and sound and music in media will be explored. 0.5 c.u.

Prerequisite: CAT 286.

CAT 306 SCREENWRITING II

Students complete a full-length screenplay begun in CAT 206 Screenwriting I. 1 c.u.

Prerequisite: CAT 206.

CAT 308 GROUP GAME PROJECT II*

This course continues the focus on core methodologies for collaborative game development. The interactive development process will be enhanced through online communication strategies, version control and a rigorous review process. In addition, students will gain a better understanding of the art pipeline for both 2D and 3D game engine environments. 1 c.u.

Prerequisite: CAT 237.

CAT 310 DIGITAL AUDIO ENGINEERING II (MIXING)*

(Formerly CAT 229)

Working in a critical and collaborative environment students develop advanced recording projects and learn the art of mixing. Through focused listening, reading, discussion, group critique and disciplined studio practice, students begin to achieve professional quality in their work. Students learn advanced mixing techniques including customized effect, 3D listening, and precision editing. CAT 310 is a hands-on studio production course which emphasizes development of the ear, attention to detail, creativity, and critical discourse in sonic manipulation. 1 c.u.

Prerequisite: CAT 210.

CAT 311 BUSINESS OF GRAPHICS*

This course was designed to provide you with the information and tools needed to begin a freelance or full-time career. Some of these include a comprehensive overview of business practices, systems and interpersonal skills. Among the subjects to be covered are the studio set-up, portfolio, résumé, how to research and identify markets, promotion, taxes, copyright, negotiation and contracts. 1 c.u.

Prerequisites: CAT 282, CAT 263.

CAT 313 TOPICS IN ARTS AND WESTERN CIVILIZATION*

(Also ENG 313)

(Formerly CAT/ENG 255)

■ (Aesthetic Appreciation)

The period between the end of the 19th century and the end of the 20th century is a time-frame whose events, images, and words resonate with our experience of the world now. Wars, political decisions, industrialization, globalization, and the emergence of what we call “modern” life in the West—all affect our present. Themes like “War and Peace,” “Art as Social Protest,” “Revolution” are chosen as a way of studying the work of American and European artists, playwrights, and writers who lived and worked during this time. 1 c.u.

Prerequisite: ENG 107.

CAT 314 LEVEL DESIGN II*

The core skills learned in Level Design I are further refined and used to create a more immersive player experience. Advanced skills are taught such as controlling world physics, creating particle effects, building custom user interfaces, generating real-time camera effects, using post-processes to transform a scene’s aesthetic, and creating in-game cinematics.

Prerequisite: CAT 215.

1 c.u.

CAT 315 ART METHODS K-12

This course prepares future K-12 art teachers. It focuses on methods to create a stimulation creative environment that is appropriate to students at different stages of their development. It investigates educational methods and curriculum content and engages the future teacher in hands-on studio work to develop his/her own technical and aesthetic skills. How to manage a studio class, assessment strategies, and educational theories and practices are examined. 1 c.u.

Prerequisite: EDC 304.

CAT 317 STUDIO DRAWING*

You will learn how to see and how to draw from direct observation of nature and life. You will use a variety of media to create self-portraits, figure drawings, object studies, still lifes, interior scenes, landscapes, depending on Instructor. Use drawing as part of the planning process for prints, paintings, and digital works, and as a finished work in its own right.

Prerequisite: CAT 198. 1 c.u.

CAT 318 GAME ARCHITECTURE AND GAME ENGINES*

Apply your programming knowledge to the use and modification of a game engine with algorithms and optimizations. Learn to control graphics rendering, animations, terrain, sound, collision, physics, and game agents to build an intelligent, coherent, and reactive game environment. 1 c.u.

Prerequisite: CAT 238.

CAT 320 MULTIMEDIA II: INTERACTIVE DESIGN AND PROGRAMMING*

A continuation of CAT 220, this course focuses on high-end interactivity. Students will learn to make creative use of the advanced features of Lingo, Director's programming language, including lists, parameters, creating our own behaviors, file I/O, MIAWs, Xtras, Net Lingo, and parent/child scripting. Issues in interactive design are studied in theory and in practice. Topics will include interface metaphors, navigation, prototyping, computer game design, learning approaches, and virtual environments. 1 c.u.

Prerequisite: CAT 220.

CAT 323 MUSIC INDUSTRY ESSENTIALS*

Exploration of the function, responsibilities and entitlements of an artist manager. Consideration of artist, producer, management contracts and master recording leases. Overview of the copyright law and how it applies to the arts. Application for copyright registration, mechanical and synchronization licenses, music publishing, performing rights organizations and the issue of public domain will also be discussed. 1 c.u.

Prerequisite: ENG 107.

CAT 328 ARTIFICIAL INTELLIGENCE FOR GAMES*

This is the all-important element that breathes life into those seemingly thinking creatures found in today's games. See how state machines, decision making, path finding, and bot construction all play a role in making them believable. 1 c.u.

Prerequisite: CMP 238.

CAT 330 ADVANCED PAINTING WORKSHOP*

Intensive studio work in students' choice of painting media and style. Teachers continue to develop students' technical mastery and "eye" and assist them in defining their unique goals as painters. Drawing and painting from observation, memory, model (the figure, still life), frequent individualized critiques, required museum and gallery trips. 1 c.u.

For CAT and Fine Arts Education majors only.

his course may be repeated for credit.

Prerequisite: CAT 317 or consent of the Instructor.

CAT 331 LIFE DRAWING/PAINTING*

A systematic study of drawing from the live model at rest and in motion. We examine the body as a working system, while drawing the main skeletal, muscular and structural forms. Demonstrations and individualized critiques enable the student to see and to draw the figure with growing knowledge, self-assurance, and mastery of line, perspective, light, and shading. Informative for science and nursing students, essential for artists. 1 c.u.

Prerequisites: CAT 217, CAT 317, or consent of the Instructor.

CAT 332 LIFE DRAWING FOR MOTION***• (Aesthetic Appreciation)**

Through a series of critical concerns in the analysis of an action and motion drawing, the student will be able to understand the difference between drawing for animation and drawing for illustration. The art of conveying gestures while learning the construction and mechanics of the human figure will be examined. 1 c.u.

CAT 333 GLOBAL ARTS: UP-CLOSE AND IN PERSON***■ (Aesthetic Appreciation)**

Each spring semester, this course will study in depth the classical art and the contemporary arts scene of a major international city, and then visit that city during spring break. A broad spectrum of arts will be covered, including whenever possible music, film, painting, literature, sculpture, architecture, photography, animation, theatre, and new media, as well as cuisine and traditional crafts. Artistic creativity will be examined in relationship to the history, politics and culture that shape it. Cities to study and visit will be selected from such art centers as Paris, Berlin, Rome, Barcelona, Mexico City, Athens, London, Beijing, Kyoto, Marrakesh, and Rio de Janeiro. Each student will choose a specific topic to focus on and will conduct their own research on it during their visit to the city. 1 c.u.

Prerequisite: Grade of "B" or better in a CAT GEL and permission of the Instructors.

CAT 338 ADAPTING TO THE GAME INDUSTRY*

Find out what else is out there. Hear experts speak about the technologies used in the field by computers and consoles alike. Learn about OpenGL, DirectX, network gaming, and client/server architecture. Delve into the complexities involved in developing a 3D interactive world, manipulating 3D characters, and the importance of frame rates. Explore handheld devices like the GameBoy Advance and wireless cellular phones. 1 c.u.
Prerequisite: CAT 328.

CAT 340 PRODUCING THE SHORT FILM

Within the framework of lectures, screenings and case studies, this course takes a comprehensive look at the challenges and skills needed to produce the short narrative, documentary or animated film/video/DVD. The course will cover story considerations, budgets, casting, production issues, license, copyright and distribution. 1 c.u.
Prerequisite: ENG 107.

CAT 350 SPECIAL TOPICS IN THE FINE AND PERFORMING ARTS***■ (Aesthetic Appreciation)**

In-depth study of a topic in the fine and performing arts. Topics may be interdisciplinary or focus on one field in the arts (e.g., Far Eastern Art; Rock & Rap; The 60's). Some attendance at performances and art exhibits required. 1 c.u.
This course may be repeated once for credit.
Corequisite: ENG 107.

CAT 352 SPECIAL TOPICS IN TECHNOLOGY*

In-depth study of the latest developments in technology and the arts (digital video, 3-D animation, the Internet). 0.5 c.u.
This course may be repeated once for credit.
Prerequisite: CAT 112 or computer experience.

CAT 360 SPECIAL TOPICS IN TECHNOLOGY*

In-depth study of the latest developments in the technical aspects of communications and the arts (e.g., virtual reality, hypertext, etc.). 1 c.u.
This course may be repeated once for credit.

CAT 361 3D MODELING*

(Formerly Computer Imaging II and 3-D Graphics and Animation)

Students will learn to construct CG 3D models by breaking down complex shapes into simpler components that can be modified, transformed and animated using the industry standard software in 3D computer generated model building and animation. 1 c.u.
Prerequisite: CAT 264.

CAT 362 TYPOGRAPHY*

Study the historical development of type, typeface design, and the use of type as an expressive image. This course will teach you the typographical skills to succeed as a graphic designer. 1 c.u.
Prerequisite: CAT 263.

CAT 363 ADVERTISING CONCEPTS AND DESIGN*

Learn the methods graphic designers use to give products a brand identity. Explore ways to creatively and effectively execute the brand concept in print and digital design. Invent your own product and produce an ad campaign for it. 1 c.u.
Prerequisites: CAT 263, CAT 264.

CAT 370 ADVANCED WEB DESIGN*

This course provides the web site Creative Director with a working knowledge of the latest Internet technologies necessary for sophisticated interactivity and business-related functions. Topics include managing a web server, DHTML, XML, Java Script, CGI, FTP, Telnet, and databases. This course will keep pace with the most recent developments in the field. 1 c.u.
Prerequisite: CAT 270.

CAT 371 ACTING II: SCENE STUDY

A continuation of Introduction to Acting. Students work extensively with texts, both classic and contemporary. The course develops practical skills in script analysis, developing a character, study and training methods, working with a director, rehearsal technique, and performance. 1 c.u.
Prerequisite: CAT 193.

CAT 372 3D ANIMATION*

(Formerly CAT 334 Character Animation II)

This course continues with the latest industry standard software exploring more advanced 3D modeling construction along with a strong emphasis on the theories and principles of motion for animation. 1 c.u.
Prerequisite: CAT 361.

CAT 380 INTERNSHIP I

A semester-long internship required of CAT majors in their junior year. Placement will be in professional settings appropriate to the student's area of specialization and where the student will have ample opportunity to actually use their new skills: theatres, art galleries, music production companies, television, video, and radio studios, design firms, service bureaus, publishing houses, community service organizations, small businesses, and corporations. Field placement is required. 1 c.u.
Prerequisites: CORE CAT courses, Junior standing, consent of the departmental chair.

CAT 385 VISUAL EFFECTS*

(Formerly CAT 285)

Technology has made it possible for filmmakers to wrap and reinvent traditional narrative concepts of time, space, and personal identity. Using CAT's Green Screen Studio and AfterEffects, Commotion, and Combustion software, you will learn such techniques as track mattes, animated masks, motion morphs, time remapping, green screen production, particle systems, rotoscoping, and 3D compositing. Drawing on such diverse art forms as surrealism, physical comedy, science fiction, and music video, you will experiment with these effects in your own short movies. 1 c.u.

*Prerequisites: CAT 112, CAT 290.***CAT 390 ADVANCED VIDEO PRODUCTION***

Builds upon the basics introduced in CAT 290. Each student will create a 10-15 minute musical, documentary or narrative video. Students will form crews to work on each other's productions. 1 c.u.

*Prerequisite: CAT 290.***CAT 392 STUDIO MEDIA WORKSHOP***

In stimulating workshop atmosphere, students are free to experiment and to combine their work in mixed media: traditional and digital. The goal of the course is to create works that expand and eventually represent the student's creative outlook. There will be frequent individual and group critiques. Experimental, collaborative, and interdisciplinary projects are possible and are encouraged. Highly recommended as a pre-Capstone prep elective for CAT majors. 1 c.u.

*This course may be repeated once for credit.**Prerequisites: CAT major, certificate candidate, or permission required.***CAT 399 PERFORMING ARTS PRODUCTION II***

Continuation of CAT 299. 1 c.u.

*Course may be repeated for credit.**Prerequisite: CAT 299.***CAT 400 PRE-CAPSTONE STUDIO***

This is an advanced imaging/print production class, designed to prepare students to conceptualize a Capstone project. Students tackle advanced creative challenges, acquire advanced production skills, and write and gain approval of a Capstone proposal. 1 c.u.

*Prerequisites: CAT 263, CAT 264, CAT 270 or CAT 220.***CAT 401 ADVANCED SYNTHESIZER PROGRAMMING & ELECTRONIC MUSIC***

(Formerly CAT 321)

Students learn the history, musical impact, and technical fundamentals of electronic music with an emphasis on analog synthesizers and their digital counterparts. Through directed listening, reading, and sonic experimentation, students become conversant in the history of electronic music and skillful in the exploration of sonic possibilities. 0.5 c.u.

*This course may be taken three times for credit for a maximum 1.5 c.u.s.**Prerequisite: CAT 310.**Prerequisite or Corequisite: CAT 201.***CAT 402 DEVELOPING A RECORDING PROJECT***

(Formerly CAT 351)

This is a project based class, and can serve as a preparation for the capstone preparation. Students focus on creativity and logistics of an audio production, through process of class-critiques. 0.5 c.u.

*Prerequisite or Corequisite: CAT 410, CAT 300.***CAT 408 GROUP GAME PROJECT III***

This is the culmination course for collaborative game development methodologies. It is also the first half of the Capstone experience and incorporates several new preproduction tasks. Students will enter into a developer/publisher relationship with their faculty advisor and go through to the necessary steps to get their projects green lighted. Then they will utilize all of their skills to create a working game prototype that is ready for detail and polish. 1 c.u.

*Prerequisite: CAT 308.***CAT 410 DIGITAL AUDIO ENGINEERING III (PRACTICUM)***

Working in a critical and collaborative environment students develop and complete a semester-long recording project of professional caliber. As a culmination of the DAE series, CAT 410 emphasizes project management, problem solving, originality and technical precision. Students direct the flow of the course which is tailored to meet the specific needs of their projects. Group critique, student-to-student feedback and collaboration are essential elements of the course. CAT 410 is a hands-on studio production course which serves as a bridge to a creative and professional working dynamic. 1 c.u.

Prerequisite: CAT 310.

CAT 420 CAPSTONE PROJECT*

A final, major independent project undertaken by senior CAT majors under the supervision of departmental faculty. The intention is to create a work that will in some shape become part of the student's portfolio, to be used to market themselves after graduation from the program. Projects take many forms, depending on the student's talents and area of specialization: e.g., production of a videotape or audio tape; design and construction of a book; gallery exhibition of a significant number of works; performance of a solo show. The student must not only complete the project, but also publicize and market it in true entrepreneurial fashion. This course is required of departmental majors and all projects must be approved by a meeting of the departmental faculty. 1 c.u.
Prerequisites: Music majors must complete CAT 410 or CAT 351; all other CAT majors must have permission from their Advisor.

CAT 430 INTERNSHIP II

This course has the same goals and requirements as Internship I, but the intention is to place the student in a situation at a higher technical level and with even more professional responsibility. 1 c.u.
Prerequisites: CAT 312 and consent of the Instructor required.

CAT 471 ADVANCED 3D ANIMATION*

This course is a continuation of CAT 372 3D Animation, with further explanation and detailed understanding of the advanced functioning within industry standard 3D software. The emphasis will be on constructing intricate 3D models and complex animated scenes. The student will be required to produce, from start to finish, an original collaborated short animation utilizing technical and experimental effects learned throughout the semester. 1 c.u.
Prerequisite: CAT 372.