

Area: Fine & Applied Arts
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Degree: A.A. - Art New Media
 A.A. - Technical Communication
 Certificates: Graphic Design
 Illustration
 3D Animation
 Web Design
 Technical Communication

Art New Media Degree

The Art New Media program emphasizes visual arts produced in a digital environment. While all new media are intimately linked to new technology, it is essential for a designer or artist to have a strong foundation in the fundamentals of visual art. Course work includes a wide spectrum of studies in traditional and new media fundamentals relevant to art and design.

| Requirements for Degree | | 40.5 Units |
|--|---|------------|
| ART 300 | Elementary Drawing and Composition | 3 |
| ART 320 | Design: Fundamentals (3) | 3 |
| or ARTNM 310 | Design: Fundamentals (3) | |
| ART 323 | Design: Color Theory | 3 |
| ARTH 310 | Modern Art | 3 |
| ARTNM 302 | Digital Basics for Art New Media | 1.5 |
| ARTNM 305 | History of Graphic Design | 3 |
| <i>And a minimum of 24 units from the following:</i> | | 24 |
| ART 306 | Facial Expression and Anatomy (3) | |
| or ARTNM 320 | Facial Expression and Anatomy (3) | |
| ARTNM 303 | Graphic Design: Typography (3) | |
| ARTNM 324 | Digital Design (3) | |
| ARTNM 325 | Intermediate Digital Design (3) | |
| ARTNM 326 | Digital Painting (3) | |
| ARTNM 328 | Digital Photo Imagery - PhotoShop Basics (3) | |
| ARTNM 330 | Intermediate Digital Photo Imagery (3) | |
| ARTNM 332 | Digital Video (3) | |
| ARTNM 352 | Design for Publication (3) | |
| ARTNM 354 | Digital Prepress (3) | |
| ARTNM 356 | Advanced Projects in Graphic Design (3) | |
| ARTNM 358 | College Magazine: Art Selection and Editing (1) | |
| ARTNM 359 | College Magazine: Design and Production (3) | |
| ARTNM 370 | Introduction to Illustration (3) | |
| or ART 314 | Introduction to Illustration (3) | |
| ARTNM 401 | Introduction to Web Development and Design (3) | |
| or CISW 307 | Introduction to Web Development and Design (3) | |
| ARTNM 402 | Intermediate Web Design (3) | |
| ARTNM 404 | Interactive Multimedia Basics (3) | |
| ARTNM 405 | Digital 2D Animation (3) | |
| ARTNM 410 | Interactive Multimedia Projects (4) | |
| ARTNM 420 | Introduction to Digital 3D Modeling (3) | |
| ARTNM 421 | 3D Character Modeling and Rigging (3) | |
| ARTNM 422 | 3D Character Animation (3) | |
| ARTNM 423 | Special Effects and Texturing in 3D Animation (3) | |
| ARTNM 425 | Short Film in 3D Animation (3) | |
| ARTNM 450 | Portfolio for Art New Media (3) | |
| ARTNM 496 | Teaching Assistant in Art New Media (1-3) | |
| ARTNM 497 | Internship in Art New Media (1-4) | |
| CISW 300 | Web Publishing (3) | |

Associate Degree Requirements: The Art New Media Associate in Arts (A.A.) Degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Graphic Design Certificate

The Graphic Design certificate offers a curriculum utilizing software applications, industry-standard hardware as well as developing the typographic/fundamental and technical skills necessary for today's workplace. This certificate focuses on visual communication through layout design, typography, and the dynamic relationship between image and type; it meets current marketplace demands by incorporating print/non-print media and the effect new technologies have on a changing communications field. Students are encouraged to continue their studies in graphic design at a four year college, or encouraged to choose an entry level position in the graphic design industry.

| Requirements for Certificate | | 38.5-41.5 Units |
|------------------------------|--|-----------------|
| ART 323 | Design: Color Theory | 3 |
| ARTNM 302 | Digital Basics for Art New Media | 1.5 |
| ARTNM 303 | Graphic Design: Typography | 3 |
| ARTNM 305 | History of Graphic Design | 3 |
| ARTNM 310 | Design: Fundamentals (3) | 3 |
| or ART 320 | Design: Fundamentals (3) | |
| ARTNM 324 | Digital Design | 3 |
| ARTNM 325 | Intermediate Digital Design | 3 |
| ARTNM 328 | Digital Photo Imagery - PhotoShop Basics | 3 |
| ARTNM 330 | Intermediate Digital Photo Imagery | 3 |
| ARTNM 352 | Design for Publication | 3 |
| ARTNM 354 | Digital Prepress | 3 |
| ARTNM 356 | Advanced Projects In Graphic Design | 3 |
| ARTNM 450 | Portfolio for Art New Media | 3 |
| ARTNM 497 | Internship in Art New Media | 1 - 4 |

Illustration Certificate

The Illustration certificate combines a strong foundation of traditional fine arts courses and courses using digital media. Illustration skills are used in animation and concept and character development as well as the traditional areas of editorial, advertising, technical and book illustration. This certificate focuses on drawing and painting skills in both the traditional and digital environments. Students are encouraged to continue their studies in illustration at a four year college, or encouraged to choose an entry level position in the illustration industry.

| Requirements for Certificate | | 37.5 Units |
|------------------------------|------------------------------------|------------|
| ART 300 | Elementary Drawing and Composition | 3 |
| ART 304 | Figure Drawing and Composition | 3 |
| ART 323 | Design: Color Theory | 3 |
| ART 327 | Painting (3) | 3 |
| or ART 336 | Watercolor Painting (3) | |
| ARTH 310 | Modern Art | 3 |
| ARTNM 302 | Digital Basics for Art New Media | 1.5 |
| ARTNM 310 | Design: Fundamentals (3) | 3 |
| or ART 320 | Design: Fundamentals (3) | |

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|------------|----------------------------------|---|
| ARTNM 324 | Digital Design | 3 |
| ARTNM 326 | Digital Painting | 3 |
| ARTNM 370 | Introduction to Illustration (3) | 3 |
| or ART 314 | Introduction to Illustration (3) | |
| ARTNM 404 | Interactive Multimedia Basics | 3 |
| ARTNM 405 | Digital 2D Animation | 3 |
| ARTNM 450 | Portfolio for Art New Media | 3 |

3D Animation Certificate

The 3D Animation certificate combines a strong foundation of traditional fine arts courses and courses using digital media. 3D animation skills are used in the film, game, broadcast, and web industries. This certificate focuses on drawing, sculptural, and photographic skills in both the traditional and digital environments. Students are encouraged to continue their studies in 3D animation at a four year college, or encouraged to choose an entry level position in the 3D animation industry.

| Requirements for Certificate | | 43.5-46.5 Units |
|-------------------------------------|---|------------------------|
| ART 300 | Elementary Drawing and Composition | 3 |
| ART 304 | Figure Drawing and Composition | 3 |
| ART 375 | Figure Sculpture | 3 |
| ART 411 | Photography | 3 |
| ART 420 | Film Making | 2 |
| ARTNM 302 | Digital Basics for Art New Media | 1.5 |
| ARTNM 320 | Facial Expression and Anatomy (3) | 3 |
| or ART 306 | Facial Expression and Anatomy (3) | |
| ARTNM 326 | Digital Painting | 3 |
| ARTNM 328 | Digital Photo Imagery - PhotoShop Basics | 3 |
| ARTNM 420 | Introduction to Digital 3D Modeling | 3 |
| ARTNM 421 | 3D Character Modeling and Rigging | 3 |
| ARTNM 422 | 3D Character Animation | 3 |
| ARTNM 423 | Special Effects and Texturing in 3D Animation | 3 |
| ARTNM 425 | Short Film in 3D Animation | 3 |
| ARTNM 450 | Portfolio for Art New Media | 3 |
| ARTNM 497 | Internship in Art New Media | 1 - 4 |

Web Design Certificate

The Web Design certificate incorporates graphic design, multimedia, and web technology through the fundamentals of design and industry standard software applications. This certificate focuses on the visual aspect of web design. Web design skills are used in business, government, educational institutions, and the entertainment industry. Students are encouraged to continue their studies in interactive design at a four year college, or encouraged to choose an entry level position in the web design industry.

| Requirements for Certificate | | 42.5-45.5 Units |
|-------------------------------------|--|------------------------|
| ARTNM 302 | Digital Basics for Art New Media | 1.5 |
| ARTNM 310 | Design: Fundamentals (3) | 3 |
| or ART 320 | Design: Fundamentals (3) | |
| ARTNM 324 | Digital Design | 3 |
| ARTNM 325 | Intermediate Digital Design | 3 |
| ARTNM 328 | Digital Photo Imagery - PhotoShop Basics | 3 |
| ARTNM 330 | Intermediate Digital Photo Imagery | 3 |
| ARTNM 332 | Digital Video | 3 |
| ARTNM 352 | Design for Publication | 3 |
| ARTNM 401 | Introduction to Web Development and Design (3) | 3 |
| or CISW 307 | Introduction to Web Development and Design (3) | |
| ARTNM 402 | Intermediate Web Design | 3 |
| ARTNM 404 | Interactive Multimedia Basics (3) | 3 |
| or CISW 365 | Interactive Multimedia Basics (3) | |

| | | |
|-------------|-------------------------------------|-------|
| ARTNM 410 | Interactive Multimedia Projects (4) | 4 |
| or CISW 471 | Interactive Multimedia Projects (4) | |
| ARTNM 450 | Portfolio for Art New Media | 3 |
| ARTNM 497 | Internship in Art New Media | 1 - 4 |
| CISW 300 | Web Publishing | 3 |

Technical Communication Degree

| Requirements for Degree | | 42.5 Units |
|--|---|-------------------|
| ART 320 | Design: Fundamentals (3) | 3 |
| or ARTNM 310 | Design: Fundamentals (3) | |
| ART 323 | Design: Color Theory | 3 |
| ARTNM 303 | Graphic Design: Typography | 3 |
| CISA 305 | Beginning Word Processing | 2 |
| CISA 306 | Intermediate Word Processing | 2 |
| CISC 320 | Operating Systems | 1 |
| CISW 300 | Web Publishing | 3 |
| ENGWR 342 | Introduction to Technical/Professional Communication | 3 |
| ENGWR 344 | Technical/Professional Communication: Writing Reports (1.5) | 1.5 |
| or ENGWR 348 | Technical/Professional Communication: Plain English (1.5) | |
| or ENGWR 350 | Technical/Professional Communication: Proposal Writing (1.5) | |
| ENGWR 352 | Technical/Professional Communication: Writing Technical Manuals | 3 |
| <i>And a minimum of 6 units from the following:</i> | | 6 |
| ENGW 450 | College Literary Magazine (3) | |
| ENGWR 330 | Writing for Publication (3) | |
| ENGWR 331 | Writing for Publication (3) | |
| ENGWR 354 | Introduction to Careers in Technical Communication (1) | |
| ENGWR 356 | Writing Formal Reports (1) | |
| ENGWR 358 | Writing Training Materials (1) | |
| JOUR 300 | Newswriting and Reporting (3) | |
| JOUR 401 | College Newspaper Production (2) | |
| SPEECH 321 | Interpersonal Communication (3) | |
| or SPEECH 331 | Group Discussion (3) | |
| <i>And a minimum of 12 units from the following:</i> | | 12 |
| ARTNM 324 | Digital Design (3) | |
| ARTNM 328 | Digital Photo Imagery - PhotoShop Basics (3) | |
| ARTNM 330 | Intermediate Digital Photo Imagery (3) | |
| ARTNM 352 | Design for Publication (3) | |
| or CISA 330 | Desktop Publishing (2) | |
| and CISA 331 | Intermediate Desktop Publishing (2) | |
| ARTNM 354 | Digital Prepress (3) | |
| ARTNM 402 | Intermediate Web Design (3) | |
| ARTNM 404 | Interactive Multimedia Basics (3) | |
| CISA 315 | Introduction to Electronic Spreadsheets (2) | |
| CISA 340 | Presentation Graphics (2) | |
| CISW 310 | Advanced Web Publishing (4) | |

Associate Degree Requirements: The Technical Communications Associate in Arts (A.A.) Degree may be obtained by completion of the required program, plus general education requirements, plus sufficient electives to meet a 60-unit total. See ARC graduation requirements.

Technical Communication Certificate

| Requirements for Certificate | | 20.5-21.5 Units |
|-------------------------------------|---|------------------------|
| ARTNM 352 | Design for Publication (3) | 3-4 |
| or CISA 330 | Desktop Publishing (2) | |
| and CISA 331 | Intermediate Desktop Publishing (2) | |
| CISA 305 | Beginning Word Processing | 2 |
| CISA 306 | Intermediate Word Processing | 2 |
| ENGWR 342 | Introduction to Technical/Professional Communication | 3 |
| ENGWR 344 | Technical/Professional Communication: Writing Reports (1.5) | 1.5 |
| or ENGWR 348 | Technical/Professional Communication: Plain English (1.5) | |
| or ENGWR 350 | Technical/Professional Communication: Proposal Writing (1.5) | |
| ENGWR 352 | Technical/Professional Communication: Writing Technical Manuals | 3 |

And a minimum of 6 units from the following:

| | | |
|-----------|--|---|
| ARTNM 324 | Digital Design (3) | 6 |
| ARTNM 328 | Digital Photo Imagery - PhotoShop Basics (3) | |
| ARTNM 330 | Intermediate Digital Photo Imagery (3) | |
| ARTNM 402 | Intermediate Web Design (3) | |
| ARTNM 404 | Interactive Multimedia Basics (3) | |
| CISA 340 | Presentation Graphics (2) | |
| CISW 300 | Web Publishing (3) | |
| CISW 310 | Advanced Web Publishing (4) | |

ARTNM 302 Digital Basics for Art New Media 1.5 Units

Course Transferable to CSU

Hours: 18 hours LEC; 27 hours LAB

This course is an introduction to the digital environment for Art New Media. Topics of MAC OS, digital vocabulary, scanning, saving and file formats will be included. Distinctions between vector, bit-map, and page layout applications will be made using Adobe Illustrator, Adobe Photoshop, and Adobe InDesign.

ARTNM 303 Graphic Design: Typography 3 Units

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

Graphic design is the art of visual communication and this course introduces the tools and concepts of visual thinking, with an emphasis on the potential of typography as an effective communications tool. Historical overviews, portfolio development and client presentation paired with the terminology and visual language of design are applied through the creation and evaluation of individual projects.

ARTNM 305 History of Graphic Design 3 Units

General Education: AA/AS Area I; CSU Area C1

Course Transferable to CSU

Hours: 54 hours LEC

This course covers the history of visual communications as developed by ancient cultures through the present with an emphasis on commercial design, illustration, typographic development and technological invention. It includes modern graphic design movements of the 20th century through the expansive media innovations of today. An analysis of design from a wide range of sources and cultures is a primary focus.

ARTNM 310 Design: Fundamentals 3 Units

Same As: ART 320

Advisory: ENGWR 102 or 103, and ENGRD 116; OR ESLR 320 and ESLW 320; OR placement through assessment process.

General Education: AA/AS Area I; CSU Area C1

Course Transferable to UC/CSU

Hours: 36 hours LEC; 54 hours LAB

This course focuses on the fundamentals of design, establishing a foundation for intermediate and advanced art courses as well as developing a visual and verbal vocabulary essential to understanding and appreciating art and design esthetics. Design principles are applied through a series of studio projects that are derived from the study of both historical schools of art as well as contemporary theory. The elements of line, shape, form, spatial relationships, value and color are analyzed in concert with their use by artists throughout history. Projects utilize a wide range of tools, media, and presentation techniques. This course is not open to students who have completed ART 320.

ARTNM 320 Facial Expression and Anatomy 3 Units

Same As: ART 306

Advisory: ART 304

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course covers human facial expression and anatomy using live models, anatomical references and imagination. Issues of expres-

sion as it relates to skeletal and muscular anatomy will be addressed through a series of 2D and 3D projects. Not open to students who have taken ART 306.

ARTNM 324 Digital Design 3 Units

Advisory: ART 300 or 320 and CISC 300 (Macintosh) and ENGWR 102 or 103 and ENGRD 116 or ESLR 320, ESLL 320, ESLW 320, or placement through assessment process.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is an introduction to computer based design using the basic operating principals of Adobe Illustrator. Design skills and the tools of the software application will be applied to produce individual portfolio quality projects. A field trip is required. This course may be taken four times on different versions.

ARTNM 325 Intermediate Digital Design 3 Units

Prerequisite: ARTNM 324 with a grade of "C" or better.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is a continuation of ARTNM 324. It defines the elements of graphic design, such as typography, gestalt, dominance, hierarchy, balance, and color. These issues are applied to the typographic tools and imaging capabilities of Adobe Illustrator. Concepts emphasize typographic design and the relationship between type and image.

ARTNM 326 Digital Painting 3 Units

Advisory: ARTNM 302, ART 300.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces the basic operating principles of Corel Painter to create and manipulate images. The fundamental skills of drawing and painting will be applied to individual portfolio quality projects. This course may be taken four times on different platforms.

ARTNM 328 Digital Photo Imagery - PhotoShop Basics 3 Units

Advisory: ART 320, CISC 300 (Macintosh), ENGWR 102 or 103, and ENGRD 116 with a grade of "C" or better; or ESLR 320, ESLL 320, ESLW 320 with a grade of "C" or better; or placement through assessment process.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is an introduction to computer-based photographic imaging using the basic operating principles of Adobe PhotoShop. Topics include color field variation, retouching, and the integration of graphics and photographs. The tools of the software application are applied to produce individual portfolio quality projects. This course may be taken four times for credit on a different version.

ARTNM 330 Intermediate Digital Photo Imagery 3 Units

Prerequisite: ART 419 or ARTNM 328 with a grade of "C" or better; or placement through the assessment process.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course addresses the intermediate techniques of digital photo imagery. Topics include the terminology of digital photo imaging, intermediate masking, channel and curve techniques, photomontage history and techniques, intermediate black and white techniques, issues surrounding dynamic range, color correction, features of the Action and History palettes, exploration of Layer Blending Modes, printing and/or transferring images onto various different media, working with large format images and commercial printers. This course may be taken four times for credit on a different software package or version.

ARTNM 332 Digital Video**3 Units***Advisory: Art New Media 302 and 328.**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course applies the principles of cinematography to the production of digital video. Software applications such as Adobe Premiere and Adobe After Effects, will be employed to capture/import, edit and produce high-end visual productions. The course includes transitions, multiple layers, alpha channels and composite blue screen segments. Evaluation of multimedia projects containing video segments in terms of design esthetics and technical and technical competence will also be included. This course may be taken four times on a different software package or version.

ARTNM 352 Design for Publication**3 Units***Advisory: ART 320 and ARTNM 302**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course introduces the basic operating principles of digital page layout software using Adobe InDesign. Principles of typography and the development of the printed page are applied to individual portfolio quality projects. Areas of focus include book, magazine and newspaper design, as well as publications such as newsletters, journals and catalogs. An overview of promotionals such as fliers, posters and brochures is also included. This course may be taken four times on different software versions.

ARTNM 354 Digital Prepress**3 Units***Advisory: ARTNM 350 and CISC 300 (Macintosh).**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course introduces digital prepress for graphic design. Areas of focus will include desktop production for one-color and multi-color printing as well as the language necessary to properly communicate with service bureaus and commercial printers. Field trips are required.

ARTNM 356 Advanced Projects in Graphic Design**3 Units***Advisory: ARTNM 324, 328, and 352.**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course covers project development and multiple software applications. Emphasis will be placed on project analysis, research, production, and presentation. Projects will be produced through the integration of major graphics applications in page layout, vector based graphics and digital imaging. A portfolio of professional level projects will be developed and presented.

ARTNM 358 College Magazine: Art Selection and Editing**1 Unit***Advisory: ARTH 300 and ARTNM 302.**Course Transferable to CSU**Hours: 18 hours LEC; 54 hours LAB*

This course provides the production techniques for art submissions for a college level magazine. Techniques for print quality photography of art are demonstrated. Criteria for the selection of artwork is defined and applied to the editing process. Art works such as drawing, painting, photography, sculpture, jewelry, ceramics and digital media are selected and digitized for production. These files are used as visual content for the American River Review. This course may be taken two times for credit.

ARTNM 359 College Magazine: Design and Production**3 Units***Advisory: ARTNM 302, 324, 328, 352, or 354.**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course is for the design and production of the American River Review. It incorporates creative writing from the English program and visual art from Fine Arts and Art New Media as the content for the college magazine, American River Review. Practical experience with layout is offered, establishing an esthetic relationship between the literary content and the visual image. Print production issues are addressed through the digital preparation of the magazine for print distribution. This course may be taken twice for credit.

ARTNM 370 Introduction to Illustration**3 Units***Same As: ART 314**Prerequisite: ART 300 with a grade of "C" or better**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course will survey the history of the art of illustration. The course defines areas of specialization and the illustrator's role in visual communication. This course will evaluate the appropriate use of materials, tools and methods. Illustration will be analyzed as a method of visual problem solving through a series of projects with varied applications. Not open to students who have taken ART 314.

ARTNM 400 Imaging For The Web**1 Unit***Same As: CISW 350**Advisory: CISC 306 or CISW 300**Course Transferable to CSU**Hours: 18 hours LEC; 18 hours LAB*

This course takes an in-depth look at designing graphics for the Web. Industry standard graphic software is used to create original graphics as well as to manipulate found imagery. Topics include developing graphic elements for a Web site using a visual theme, creating buttons and intuitive navigational elements, making background textures and images, understanding Web file formats, scanning, presenting to a client, and simple animation. May be taken twice for credit on a different platform or graphics software package.

ARTNM 401 Introduction to Web Development and Design**3 Units***Same As: CISW 307**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course covers the strategies for the development and design of web sites. Using an industry standard web authoring tool, the course integrates both artistic and technical concepts. Topics include assembling, designing and publishing web pages using strategies, principles and processes universally practiced by the professionals in this field. This course, in combination with CISW 307, may be taken four times for credit on a different software package or version.

ARTNM 402 Intermediate Web Design**3 Units***Prerequisite: ARTNM 328, ARTNM 401, or CISW 307 with a grade of "C" or better; or placement through the assessment process.**Advisory: ARTNM 330 and CISW 300**Course Transferable to CSU**Hours: 36 hours LEC; 54 hours LAB*

This course covers production and intermediate design processes for the web with an emphasis on visual design. Various industry standard software applications are employed to create original graphics, control layout and type, process images, and publish professional web pages and/or sites. Topics include an in-depth discussion on the processes and the strategies of combining text, images, animation, video and audio elements to create compelling visual experiences for web users. This course may be taken four times on a different software package or version.

ARTNM 404 Interactive Multimedia Basics 3 Units

Same As: CISW 365

Advisory: ARTNM 324, ARTNM 402, CISW 300, or CISW 310

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course demonstrates how to create simple vector-based graphics, animation, buttons, movies and raster files in a web environment. Topics include drawing tools, time-line effects, sound and video integration and basic interactivity. ARTNM 404 and/or CISW 365 may be taken a total of 4 times on different platforms or software versions.

ARTNM 405 Digital 2D Animation 3 Units

Advisory: ART 300 and ARTNM 302.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

The course studies techniques in 2D animation and 2D character animation incorporating sound and effects, using industry standard software. Animation topics include 2D animation structure and concepts on the development of a story and storyboard, the use of the timeline and stage, the development of content, imagery and graphics, frame by frame animation (cell animation), rotoscope, digital tweening, camera moves, camera angles, cuts and transitions. Character animation techniques include movement and walk cycles, facial expressions and lip-sync. Projects can be published on the Web, CD-Rom, and video. The course may be taken four times for credit on a different software version.

ARTNM 410 Interactive Multimedia Projects 4 Units

Same As: CISW 471

Prerequisite: ARTNM 402, ARTNM 404, CISW 300, CISW 310, or CISW 365 with a grade of "C" or better

Advisory: ARTNM 328, CISW 410, and CISW 420

Course Transferable to CSU

Hours: 54 hours LEC; 54 hours LAB

This course focuses on interactive multimedia project development. Emphasis is placed on the project development cycle including design specification, research, production, modification, and presentation. Projects assigned are multifaceted, approaching the complexity that individuals would be expected to encounter in the interactive multimedia development industry. This course is not open to students who have completed CISW 471.

ARTNM 420 Introduction to Digital 3-D Modeling 3 Units

Advisory: ART 300, 320, 370, or 411.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces computer 3D modeling and rendering, using industry standard software. Areas of focus include the modeling of 3D objects, camera use, and lighting techniques. The tools of the software application are applied to produce images for use in fine art, design, broadcast, film, and the Web. This course may be taken four times for credit on different software versions.

ARTNM 421 3D Character Modeling and Rigging 3 Units

Prerequisite: ARTNM 420 with a grade of "C" or better.

Advisory: ART 375.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course is a continuation of ARTNM 420. Human character modeling techniques are analyzed and applied. Techniques for creating animation controls, commonly known as rigging, are applied to create a digital marionette. Full body and facial character animation controls are examined. Industry issues, such as the topology flow of

human anatomy and rig interfacing for animators, are developed. This course may be taken four times for credit on different software packages or versions.

ARTNM 422 3D Character Animation 3 Units

Prerequisite: ARTNM 420 with a grade of "C" or better.

Advisory: ART 375; DANCE 330.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides complex character animation techniques using industry standard software. Characters walk, breathe and act within a developed context. This course may be taken four times for credit on different software packages or versions.

ARTNM 423 Special Effects and Texturing in 3D Animation 3 Units

Prerequisite: ARTNM 420 with a grade of "C" or better.

Advisory: ART 411 or 419; ARTNM 326.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides complex texturing techniques and special effects using industry standard software. Scenes are created using texture mapping and shader trees, and atmospheres created using particles and volumetrics. Animation topics such as explosions and the breaking of objects are included. This class may be taken four times for credit on different software packages or versions.

ARTNM 425 Short Film in 3D Animation 3 Units

Advisory: ARTNM 420 or TA 310.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course introduces 3D computer animated story telling using the short film genre. The 3D animation production pipeline is examined and used in the creation process. Short films are created in a team format. The short films are prepared for a portfolio DVD quality presentation.

ARTNM 450 Portfolio for Art New Media 3 Units

Prerequisite: Completion of 9 units from one Art New Media Certificate with a grade of "C" or better.

Course Transferable to CSU

Hours: 36 hours LEC; 54 hours LAB

This course provides the fundamentals of designing and assembling an Art New Media portfolio of art and/or graphic works. Topics include techniques for presenting and photo-documenting the work and developing a resume.

ARTNM 497 Internship in Art New Media 1-4 Units

Prerequisite: Completion of 12 units of Art New Media (ARTNM) courses with a "C" or better.

Course Transferable to CSU

Hours: 18 hours LEC; 60-240 hours LAB

This course provides supervised internship in the field of Art New Media which includes graphic design, multimedia and web graphics. It also includes essential aspects of project development and management.