

**HORT359****\$ Alt (3)*****Greenhouse Environment and Construction***

Controlling the plant environment to enhance plant growth and optimal development through temperature, humidity, light, nutrients, sanitation and carbon dioxide levels. Structures, coverings and mechanical systems used are explored to produce the most cost-effective horticultural crops. Weekly: 2 hours lecture and a 3-hour lab. *Fall*

**HORT360****\$ Alt (3)*****Arboriculture***

Care of shade and ornamental trees living under environmental stress of urbanization, their legal protection and value. Includes tree anatomy and physiology, soils, nutrition and water relationships, transplanting, disease and insect control, mechanical injury and pruning to develop a healthy tree. Weekly: 2 lectures and a 3-hour lab. *Fall*

**HORT365****\$ Alt (3)*****Urban Landscape Design***

Designing landscapes to meet the environmental challenges and conditions of urban spaces. Circulation patterns for conducting business, aesthetic and functional aspects of design for corporate/institutional, governmental agencies and municipal areas. Weekly: 2 lectures and a 3-hour lab. Recommended: HORT135. *Spring*

**HORT375****Alt (3)*****Landscape Estimating***

An introduction to the estimating process for landscape design, construction and maintenance work. Various schedules and forms are used to assign costs of equipment, plants, hardscape materials, labor and overhead. The many variables from project to project are explored and then formulas are applied to arrive at making landscape installations an efficient and profitable business. *Spring*

**HORT378****Alt (4)*****Integrated Pest/Disease Management***

Study of significant diseases and pests of agricultural and horticultural plant materials, including life cycles and influence of environmental conditions; determination of effective control methods for crop, ornamental and turfgrass production. *Spring*

**HORT429****\$ Alt (3)*****Computer Landscape Design***

Principles and practices of computer-aided landscape design, including creating scale perimeter plot plans, using drawing tools, plant/site relationships, and graphic imaging leading to a computer-generated landscape drawing. Laboratory emphasizes skill development and proficiency in integrating software and hardware to create CAD-generated landscape designs. Prior landscape drawing course work is recommended. *Spring*

**HORT448****\$ Alt (4)*****Advanced Landscape Design and Graphics***

Landscape design concepts relating to the more challenging problems of residential design. Field application of grading relating to contours, specifications, exploring deck design, planting combinations, and exercises in graphics and rendering for presentations. Weekly: 3 lectures and a 3-hour lab. Recommended: HORT135. *Spring*

# DIGITAL MEDIA AND PHOTOGRAPHY

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Academic Programs	Credits
Bachelor of Fine Arts:	
Multimedia Arts	72–75
Photography (Commercial or Fine Art)	72–75
Video Production	72–75
Associate of Fine Arts: Digital Media	38–40
Minors	
Digital Media	20
Photography	20
Other BFA Options at Andrews University	
Art Direction/Advertising	
Pre-Art Therapy	
Fine Art	

**Computer Policy.** The Department of Digital Media and Photography regards the computer as a tool integral to the success of the visual communicator in their professional development. All students are required to purchase a laptop computer and software meeting the department guidelines. Because computer technology is continually changing, a revised policy is drafted in the fall semester, outlining the specific requirements for each year. Laptop purchases should be made by mid-fall semester of the student's freshman year. Use of the computer in the curriculum varies by course.

**Multiple Majors & Degrees.** The Department of Digital Media and Photography allows students to graduate with a double BFA. Credits cannot be duplicated within the 36 credit emphasis track.

## Undergraduate Programs

### Bachelor of Fine Arts (BFA)

The three closely related departments of Art and Design, Communication, and Digital Media and Photography offer students an exciting opportunity to earn a collaborative Bachelor of Fine Arts degree (BFA). The BFA degree encompasses three areas: Photography, Visual Communication and Visual Art.

Each of the BFA degree emphases has a 4-part curriculum:

- (1) Art History and Theory Core
- (2) Studio Core
- (3) Foundation Courses, and
- (4) Concentration Areas.

Additional cognates along with the General Education requirements complete the specifications for graduation for the BFA degrees.

Upon completion of the Studio Core and Foundation Courses the student must arrange for a BFA review. The BFA review should happen no later than the end of the sophomore year. The BFA review is a critique of the student's portfolio by the combined faculty of the Department of Digital Media and the Department of Art & Design. All work created in the Studio Core and Foundation program should be available for review. Once accepted into the BFA program students must maintain a 3.00 GPA in all BFA coursework. No courses with a final grade below a C will be accepted toward the completion of the BFA. The completion of the BFA includes a senior exhibition and portfolio of the student's work.

### Bachelor of Fine Arts Degree (BFA)—72–75

#### BFA Core Courses

##### Art History and Theory Core—12 credits

ARTH235	Prehistoric to Medieval Art	3
ARTH236	Renaissance to Modern Art	3
ARTH440	Art Since 1945	3
PHTO210	History of Photography	3

##### Studio Core—12–13 credits

ART104	Intro to Drawing	3
ART207	Basic Design	3
DGME130	Intro to Digital Graphics	3
PHTO 115	Intro to Photo	3
or PHTO 116	Intro to Digital Photo	4

#### Foundation Courses

##### Choose 4 additional intro classes from this list—12–13 credits

ART105	Intro to Painting	3
ART106	Intro to Printmaking	3
ART107	Intro to Ceramics	3
ART108	Intro to Sculpture	3
ART214	Intro to Graphic Design	3
DGME175	Digital Imaging	4
DGME250	Web Design I	3
MKTG310	Principles of Marketing	3
VDEO 130	Intro to Video	3

**36-credit portfolio tracks include:** Fine Art, Graphic Design, Art Direction/Advertising, Pre-Art Therapy, Commercial Photography, Documentary Video, Fine Art Photography and Web Design.

### Choose a BFA Major from:

- Visual Art Emphasis
- Visual Communication Emphasis
- Photography Emphasis

#### Visual Art Emphasis

(Resides in the College of Arts and Sciences)

The Visual Art Emphasis is recommended for students who wish to become professional artists, illustrators, craftsmen, or art teachers on a college level. It is the first step toward acceptance into an MFA program, which is the necessary degree for pursuing a teaching position at the college level. It is also the first step toward acceptance in an MA program in Art Therapy. After an exploratory period students will be encouraged to concentrate the majority of their credits in a single area: painting, ceramics, or printmaking. At least 18 credits in one area are recommended in order to achieve a professional portfolio of work and senior exhibition.

#### Visual Communication Emphasis

The Visual Communication Emphasis is recommended for those wishing to work in the design professions. There are three portfolio tracks available: Art Direction & Advertising, Graphic Design Multimedia Arts and Web Design. The degree programs combine the study of art, communication, design, and technology as mediums for visual communication and/or personal artistic expression. The Visual Communication student will become prepared to understand visual dialogue and to communicate effectively and creatively. Visual Communication students are required to complete at least 1 credit of internship (ART490) before graduation.

#### PHOTOGRAPHY EMPHASIS

The Photography Emphasis is recommended for those wishing to work in the creation of still or moving visual images. There are three portfolio tracks available: Commercial Photography, Documentary Video and Fine Art Photography. The degree encompasses elements of digital, commercial, and fine arts imaging, focusing on individual creativity and photo-journalism. The photography student will study the methods used to create effective and aesthetically pleasing imagery.

### Majors within the College of Technology:

- Multimedia Arts
- Photography
- Video Production
- Web Design

#### Multimedia Arts

The multimedia arts degree major prepares students to produce corporate interactive marketing and advertising materials. Students learn to creatively produce and integrate multiple promotion products such as interactive DVDs, and interactive CDs for commercial and corporate applications.

#### Major in Multimedia Arts—36

COMM405; DGME185, 225, 347; MDIA390, 495; MKTG368; VDEO210, 390 plus 7 upper division credits of electives chosen in consultation with an advisor from Art Direction/Advertising,

or Communication, Digital Media, Fine Art, Graphic Design, Photography, Video Production.

## Photography

Photography fosters creativity in the production of visual images. The subject of these images and the method used to create them is the focus of this study. The emphases encompass elements of digital, commercial, and fine arts imaging, focusing on individual creativity and photo-journalism. Students may choose a Commercial or Fine Arts direction in consultation with advisor.

### **Major in Photography—36**

MDIA495; PHTO200, 220, 285, 385, plus 17 credits of electives, chosen in consultation with advisor, from Art & Design, Business, Communication, Journalism, Marketing, Multimedia Arts, Photography, Video.

## Video Production

Students learn to design and integrate digital video and 3-D animation to produce creative advertising, documentary, promotional products, and TV graphics.

### **Major in Video Production—36**

ENGL467, JOUR230, MDIA390, VDEO216, 320, 340, 390, plus 15 credits of electives, chosen in consultation with advisor, from Art and Design, Business, Photography, Communication, Journalism, Marketing, Multimedia Arts, Video, 3-D Modeling, 3-D Animation.

## Web Design

The Web Design major focuses on principles of aesthetics, content, delivery, user interface, web animation, screen design, and multimedia for the creation of web pages.

### **Major in Web Design—36**

ART214, 414; BSAD355; DGME250, 335, 350; JOUR465; MDIA390 plus 7 credits of electives, chosen in consultation with advisor, from Digital Media, Computer Science, Video Production, Graphic Design, or Communication.

## Associate of Fine Arts: Digital Media—38–40

### **Sequence of Two-Year and Four-Year Programs**

The Department of Digital Media and Photography plans programs using the "ladder concept," allowing students to complete as much education as desired before entering the workforce. Two- and four-year programs are available. Students completing the two-year program may go directly into a four-year program in the same area without the loss of credits. The ladder concept allows students to reach the educational goals that best fit their specific needs.

### **Core requirements for AFA in Digital Media—18–20**

#### **Art History (Choose 2 courses from this list)—6 credits**

ARCH390; ARTH235, 236, 440; JOUR455, PHTO210, 300

#### **Studio Core—6 credits**

ART207, DGME130

#### **Foundation Courses (Choose 3 additional courses from this list)—6–8 credits**

ART105, 106, 107, 214; DGME175\*, 215; MKTG310\*, PHTO115 or 116; VDEO130

\*Prerequisite class

## **Major—20**

DGME185, 215, 225, 250; MDIA495, VDEO210, plus 3 credits of electives in related area.

## **Minors**

A minor can be a powerful complement to a main career focus. Minors are designed with flexibility to accommodate students' major(s).

## **Digital Media—20**

DGME130, 175, plus 13 credits of electives, chosen in consultation with advisor, from Art Direction/Advertising, Communication, Digital Media, Fine Art, Graphic Design, Photography, Video Production.

## **Photography—20**

DGME175; PHTO115 or 116; MDIA275-002 or PHTO200; PHTO220, 285

## **Individualized Programs of Study**

For students who have career goals or special interests in areas other than those listed above. The special individualized program is available in the following degrees: Bachelor of Science, Bachelor of Technology, and Associate of Technology. The student, with the assistance of his or her advisor, prepares a proposed program of study (examples are available). The program must then be approved by a department faculty and the College of Technology Academic Policies and Curricula Committee.

## **BFA Majors Within the College of Arts and Sciences**

- Fine Art Portfolio Track
- Illustration Portfolio Track
- Pre-Art Therapy Portfolio Track
- Art Direction/Advertising Portfolio Track
- Graphic Design Portfolio Track

## **Fine Art Portfolio Track**

The Fine Art track cultivates the individual voice and vision of the Fine Arts student and prepares them to sustain their professional lives as practicing artists.

**36 Total Credits:** 27 credits chosen from ART304 Drawing, ART305 Painting, ART307 Ceramics, ART306 Printmaking, ART308 Sculpture, ART380 Topics in Art, (all 300 level ART courses are repeatable), Senior Exhibition and Portfolio (3). With 6 additional elective credits to be chosen with your advisor from ART, ARTH, ARCH, PHTO, DGME, COMM, VDEO, MDIA, JOUR, or MRKT courses.

## **Illustration Portfolio Track**

The Illustration track prepares students to enter a career in professional illustration. The successful illustrator is able to convey emotions, interpret events, tell a story or market a product or idea through the use of artistic concepts and images. Illustrators must master a wide range of drawing media and techniques to meet the objectives of a wide range of employers and projects.

**36 Total Credits:** ART304 Drawing (3), ART305 Painting (12), ART306 Printmaking (4), ART414 Design for Visual Communication (4), Senior Exhibition and Portfolio (3). With 10 additional elective credits to be chosen with your advisor from ART, ARTH, ARCH, PHTO, DGME, COMM, VDEO, MDIA, JOUR, or MRKT courses.

### Pre-Art Therapy Portfolio Track

The Pre-Art Therapy Emphasis is recommended for those planning to do graduate work in art therapy and to enter that profession. Work as an art therapist requires a master's degree in Art Therapy. The Pre-Art Therapy Emphasis may require additional semesters of course work. The Pre-Art Therapy Emphasis is the Bachelor of Fine Arts Degree with a concentration in Fine Arts. In addition to the BFA degree most graduate programs require up to 15 credits of Psychology course work. We recommend PSYC101, 220, 410, 454 and 460. Because course requirements vary, the Pre-Art Therapy student should check the prerequisite requirements of the schools to which they intend to apply. Most art-therapy master's programs also require up to one year of work experience with mentally or physically disadvantaged people prior to acceptance.

## VISUAL COMMUNICATION EMPHASIS

The Visual Communication Emphasis is recommended for those wishing to work in the design professions. There are three portfolio tracks available: Art Direction & Advertising, Graphic Design and Web Design. The degree programs combines the study of art, communication, design, and technology as mediums for visual communication and/or personal artistic expression. The Visual Communication student will become prepared to understand visual dialogue and to communicate effectively and creatively. Visual Communication students are required to complete at least 1 credit of internship (ART490) before graduation.

### Art Direction/Advertising Portfolio Track

The Art Direction/Advertising track prepares students for work in the advertising professions. It combines both tools for visual dialogue and tools for written communication. The Art Direction/Advertising student will become prepared to understand visual dialogue and to communicate effectively and creatively

**36 Total Credits.** Including: ART414 Design for Visual Communication (8), JOUR140 Introduction to Mass Communication (3), JOUR230 Beginning Media Writing (3), MKTG368 Advertising and Promotion (3), COMM405 Persuasion (3), COMM456 Group Dynamics and Leadership (3), Senior Exhibition, Portfolio (2), ART496 Internship (1). With an additional 10 credits to be chosen with your advisor from ARTH, PHTO, DGME, COMM, VDEO, MDIA, JOUR, or MRKT courses. Suggested electives include: JOUR465 Topics: Scriptwriting, COMM425 Media Literacy, COMM454 Topics: Organizational Communication.

### Graphic Design Portfolio Track

Graphic Design is a multifaceted discipline which encompasses many types of content and media. Projects include book design, poster design, identity design, packaging, exhibit design, magazine design, interface design, broadcast design and film graphics. The Graphic Design track provides a comprehensive education

within this ever-expanding discipline and strives to prepare accomplished, resourceful graphic designers with critical minds to evaluate their own work, its place in the professional and in the larger community it is meant to serve.

**36 Total Credits.** Including: ART414 Design for Visual Communication (16), PHOTO300 Media Ethics (3), Senior Exhibition, Portfolio (2), ART487 Internship (1). With an additional 14 credits to be chosen with your advisor from ART, ARTH, ARCH, PHTO, DGME, COMM, JOUR, MDIA, VDEO or MRKT courses.

<b>Courses</b>	<b>(Credits)</b>
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See inside front cover for symbol code.

### Digital Media and Photography

<b>DGME130</b>	<b>\$ (3)</b>
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#### *Introduction to Digital Media*

An introductory survey of the discipline of digital media. Students are introduced to electronic publishing, basic printing principles, sound digitizing, vector and raster graphics, interactive multimedia, image acquisition and output, web publishing and e-mail. Understanding the Macintosh computer is also covered. Lab required. *Fall, Spring*

<b>DGME165</b>	<b>\$ (4)</b>
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#### *Principles of Print Production*

A study of the publishing and screen graphics industries including prepress concepts, color science, digital printing, textile printing, digital image capture and color management. Also covers more traditional methods in design, layout, text and page composition, film assembly, imposition, and many different printing techniques to produce images on a substrate. Some business will be explored. Open to all students. *Fall*

<b>DGME175</b>	<b>\$ (4)</b>
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#### *Digital Imaging*

A study of raster graphic fundamentals as they apply to scanned images. Emphasis on image manipulation, restoration, tonal enhancement, on-screen graphics, and image acquisition and output. Visual and procedural problems relating to digital imaging will be covered, along with techniques of aesthetic and efficient image enhancement. Prerequisites: DGME130 with a C or better; and ART207. PHTO115 recommended. Lab required. *Fall, Spring*

<b>DGME185</b>	<b>\$ (3)</b>
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#### *Desktop Publishing I*

Students learn to produce publications on desktop computers, including: brochures, magazine covers, corporate stationery, book covers, etc. Course topics incorporate: effective page layout, basic color theory, monitor calibration, gray balance, tone compression, GCR and UCR, digital proofing, image acquisition, and final output. Applications of color theories and color separation are stressed. Lab required. Prerequisite: DGME175. *Fall*

<b>DGME215</b>	<b>\$ (2)</b>
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#### *Digital Sound*

An introduction to digital sound acquisition, manipulation and storage techniques. Students learn fundamentals of sound terminology, audio digitizing and nonlinear editing. Students will then apply this knowledge to various video, interactive and web applications. Lab required. Prerequisite: DGME130. *Fall, Spring*

<b>DGME225</b>	\$ (4)	<b>MDIA495</b>	(1-4)
<b>Digital Vector Graphics</b>		<b>Portfolio Development in:</b> _____	
A study of digital vector graphic imaging emphasizing graphic production for print, digital multimedia, and web publishing. Lab required. Prerequisite: DGME130 or equivalent. <i>Fall</i>		Helps students develop a traditional or digital portfolio for employment or continuing educational purposes. Emphasis in direction, development, and refinement of the individual portfolio. Repeatable to 4 credits. Prerequisites: minimum of 30 credits in a major and permission of the instructor. <i>Fall</i>	
<b>DGME250</b>	\$ (3)	<b>MDIA597</b>	(1-3)
<b>Web Publishing</b>		<b>Independent Study</b>	
Exploration of the design, storage, retrieval, and delivery of electronic information using text and graphic images. Emphasis on publishing via the Web, kiosks, HTML authoring, and digital formats. Effective organization and planning of data for delivery, efficient design, and ethics are examined. Lab required. Prerequisite: DGME130 or INFS110. <i>Fall, Spring</i>		Individual study or research under the direction of an instructor. Repeatable to 6 credits. Prerequisite: Permission of department chair.	
<b>DGME305</b>	\$ (3)	<b>PHTO115</b>	\$ (4)
<b>Desktop Publishing II</b>		<b>Introduction to Photography</b>	
An advanced study of desktop publishing principles including: grid based layout, typographic applications, layout techniques for printing and web publications, effective electronic file preparation, preflighting, and tips for consistent color reproduction. Lab required. Prerequisite: DGME185. <i>Spring</i>		Basic introduction to the principles of the camera and darkroom techniques with consideration toward composition, psychological, and aesthetic attitudes in black-and-white photography. Lab required. <i>Fall, Spring</i>	
<b>DGME335</b>	\$ (4)	<b>PHTO116</b>	\$ (3)
<b>Web Animation</b>		<b>Introduction to Digital Photography</b>	
A course of study designed to develop the skills necessary for producing effective animation for the Web. Lab required. Prerequisites: ART104; DGME130 or equivalent. <i>Fall, Spring</i>		Students are introduced to photography through the use of digital tools. Digital SLRs and Quadtone printers are used to explore the technical and aesthetic issues involved in the process of making images. Consideration will be given to digital workflow, managing data, and creating visually appealing photographs. Lab required. <i>Fall, Spring</i>	
<b>DGME350</b>	\$ (4)	<b>PHTO200</b>	\$ (4)
<b>Web Publishing II</b>		<b>Advanced Photography I</b>	
Advanced study of current web development technologies with emphasis in Java scripting, animation, site quality and efficiency. The class also stresses meeting customer needs, and new methods of web development. Lab required. Prerequisite: DGME250. <i>Fall, Spring</i>		Develops the art of photographic perception and use of photography as a visual language. Emphasizes craftsmanship and awareness of tools available, as well as aesthetics, and the art of seeing creatively. Developing skills beyond introductory camera usage is emphasized. Lab required. Prerequisite: PHTO115. <i>Fall, Spring</i>	
<b>GRPH345</b>	\$ (4)	<b>PHTO210</b>	(3)
<b>Advanced Screen Graphics</b>		<b>History of Photography</b>	
An in-depth study on making process, simulated process, index and spot separations for screen printing. Other decorating methods will be explored such as transfers, foil, athletic numbering, glow-in-the-dark, puff and UV. Non-textile applications will also be explored such as decorating substrates like plastics (binders, CDs, etc.) and glass (simulated etch, etc.) and many other substrates. Prerequisite: DGME165. <i>Spring</i>		Historical study of significant contributors in the development of photography, and their influence on art and society. <i>Fall, Spring</i>	
<b>MDIA194/494</b>	(1-4)	<b>PHTO220</b>	\$ (4)
<b>Project Course/Independent Study</b>		<b>Color Photography I</b>	
Development of a skill or independent study in a given area by working independently under the supervision of an instructor. Repeatable to 12 credits. Prerequisite: Permission of instructor. <i>Fall, Spring</i>		Designed to acquaint students with color materials, their handling and exposure. Aesthetic and communicative aspects of color photography are stressed in producing visually effective color transparencies. Lab required. Prerequisite: PHTO115 or by permission of instructor. <i>Fall</i>	
<b>MDIA390</b>	(1-4)	<b>PHTO285</b>	\$ (4)
<b>Internship</b>		<b>Studio</b>	
On-the-job internship experience for students seeking industrial experience which cannot be simulated in a classroom setting. A range of 120-150 clock hours of work are required for each credit. Selected in consultation with the advisor. May be repeated.		Study of lighting techniques in standard-equipped studio, emphasizing portraiture, commercial illustration, and experimental techniques in black-and-white and color mediums. Lab required. Prerequisite: PHTO200. <i>Spring</i>	
<b>MDIA275/485</b>	(1-4)	<b>PHTO300</b>	(3)
<b>Topics in:</b> _____		<b>Media Ethics</b>	
Repeatable in various areas.		An exploration and discussion of the media and its effect on society, covering such issues as body image, violence, politics, etc. Students study how to recognize the way moral values of media professionals influence themselves and society. <i>Spring</i>	

<b>PHTO320</b>	\$ (4)	
<b><i>Color Photography II</i></b>		
An image-oriented course, drawing on the student background in the use of color comprehension, photographic technical and aesthetic understanding, and working knowledge of emulsion and digital photography. Information in this class is for the sole purpose of comprehensive color image. Lab required. Prerequisites: DGME175; PHTO220. <i>Fall</i>		sequencing and continuity, use of visual effects, color correction, audio editing, media management, narration and industry terminology. Lab required. Prerequisites: DGME175, VDEO130. <i>Fall</i>
<b>PHTO365</b>	\$ (4)	
<b><i>Advanced Digital Imaging</i></b>		
In-depth manipulation using leading industry software, emphasizing high quality image acquisition and output. Students learn to produce duotones, create raster graphic collages, perform critical image enhancement, create custom palettes, and alpha channels for image compositing. Repeatable to 8 credits. Lab required. Prerequisites: ART207; DGME175 (with a B- or better); PHTO115. <i>Fall, Spring</i>		An introductory course covering the essential components in video compositing. Students learn how to create innovative visual effects and motion graphics for video. Emphasis on text animation, keyframing, masks, alpha channels, 3-D compositing, rendering, application integration, advanced visual and artistic effects. Lab required. Prerequisites: DGME215, VDEO210.
<b>PHTO385</b>	\$ (4)	
<b><i>Advanced Studio</i></b>		
An individual approach to an advanced level of studio photography. Students choose a concentration in the following areas: Portraiture, People/Fashion, Still-Life, Advertising/Illustration, and Location Photography. This course is designed specifically to learn visual concepts and solve visual problems of the commercial photo industry. Repeatable to 12 credits. Lab required. Prerequisite: PHTO285. <i>Fall, Spring</i>		An advanced study in digital video, exploring professional level cameras, lighting, sound and other equipment necessary to make good video, aesthetic issues of creating visual and audio stories, and developing skills and knowledge beyond an introductory level. Lab required. Prerequisites: ART214; JOUR230; VDEO130, 210. <i>Spring</i>
<b>PHTO400</b>	\$ (4)	
<b><i>Digital Photographic Processes</i></b>		
This class explores methods of digital photographic manipulation while emulating traditional technique. A high level of photographic output and the art of seeing will be stressed. Digital capture, processing RAW files and fine manipulation of the digital file will also be highlighted. Lab required. Prerequisites: PHTO220, 365. <i>Fall</i>		A study of basic 3-D modeling principles and techniques. Students learn 3-D modeling terminology and how to create 3-dimensional models using polygonal, nurbs, and subdivision techniques. Students also learn basic lighting and surfacing. Lab required. Prerequisites: ART104; DGME175. <i>Fall</i>
<b>PHTO410</b>	\$ (4)	
<b><i>Advanced Photography II</i></b>		
A course designed for the advanced photographer to investigate personal potential in visual exploration, experimentation, and technical excellence. Discussion involves expanding personal vision and exploring new techniques to achieve goals. Repeatable to 8 credits. Prerequisite: PHTO285. <i>Spring</i>		A study of 3-D animation techniques implementing key frame, forward and inverse kinematics, dynamics, lighting, paint effects, rendering and more. Lab required. Prerequisites: DGME215; VDEO210, 360. <i>Spring</i>
<b>PHTO425</b>	(4)	
<b><i>Travel Photography</i></b>		
Designed to be done in conjunction with on-location photography, and provides a background in the specific needs related to travel. Photographing people and their land in foreign environments is emphasized. Unique materials and equipment are discussed as they relate to travel photography. Repeatable to 8 credits. Prerequisite: PHTO115.		A course emphasizing production of interactive DVD-Video, DVD authoring, work flow, story boarding, navigation, menu design, bit budgeting, video and audio encoding, DVD video navigational structures, web linking, proofing, pre-mastering, and recording to DVD-R. Lab required. Prerequisite: DGME347. <i>Spring</i>
<b>VDEO130</b>	\$ (2-3)	
<b><i>Introduction to Video</i></b>		
An introductory course in videography emphasizing the terminology, aesthetics, and methods of video production. PHTO115 recommended. Lab required. <i>Fall</i>		Study and application of documentary storytelling techniques. Students will explore the technical and creative use of digital video cameras in documentary filmmaking. Emphasis on interview techniques, story selection and structure. One lab required. Prerequisites: VDEO130, 210, 340. <i>Fall</i>
<b>VDEO210</b>	\$ (3)	
<b><i>Digital Video Editing</i></b>		
An introductory class covering the fundamental techniques and concepts of nonlinear editing. Students explore the process of video editing from conceptualization to final output. Emphasis on		VDEO320
		\$ (3)
		<b><i>Video Compositing</i></b>
		An introductory course covering the essential components in video compositing. Students learn how to create innovative visual effects and motion graphics for video. Emphasis on text animation, keyframing, masks, alpha channels, 3-D compositing, rendering, application integration, advanced visual and artistic effects. Lab required. Prerequisites: DGME215, VDEO210.
		VDEO340
		\$ (3)
		<b><i>Video Shooting</i></b>
		An advanced study in digital video, exploring professional level cameras, lighting, sound and other equipment necessary to make good video, aesthetic issues of creating visual and audio stories, and developing skills and knowledge beyond an introductory level. Lab required. Prerequisites: ART214; JOUR230; VDEO130, 210. <i>Spring</i>
		VDEO360
		\$ (4)
		<b><i>3-D Imaging</i></b>
		A study of basic 3-D modeling principles and techniques. Students learn 3-D modeling terminology and how to create 3-dimensional models using polygonal, nurbs, and subdivision techniques. Students also learn basic lighting and surfacing. Lab required. Prerequisites: ART104; DGME175. <i>Fall</i>
		VDEO370
		\$ (4)
		<b><i>3-D Animation</i></b>
		A study of 3-D animation techniques implementing key frame, forward and inverse kinematics, dynamics, lighting, paint effects, rendering and more. Lab required. Prerequisites: DGME215; VDEO210, 360. <i>Spring</i>
		VDEO390
		\$ (3)
		<b><i>DVD Authoring/Design</i></b>
		A course emphasizing production of interactive DVD-Video, DVD authoring, work flow, story boarding, navigation, menu design, bit budgeting, video and audio encoding, DVD video navigational structures, web linking, proofing, pre-mastering, and recording to DVD-R. Lab required. Prerequisite: DGME347. <i>Spring</i>
		VDEO465
		\$ (3)
		<b><i>Video Documentary</i></b>
		Study and application of documentary storytelling techniques. Students will explore the technical and creative use of digital video cameras in documentary filmmaking. Emphasis on interview techniques, story selection and structure. One lab required. Prerequisites: VDEO130, 210, 340. <i>Fall</i>