

covered. Safety will be strictly enforced. Corequisites: DIME-138. Offered: Spring.

DIME-138 HVAC 5 cr.
Theory and operation of mobile heating, ventilation, and air conditioning systems in equipment and medium/heavy duty trucks. Safety will be strictly enforced. Corequisites: DIME-137. Offered: Spring.

DIME-211 Bio Diesel 2 cr.
Instructor facilitated student research into bio diesel. The class is designed as a research of the manufacturing, benefits, problems with bio diesel, and basic bio diesel chemistry and manufacturing chemistry. Issues and infrastructure for bio diesel will be introduced. Safety will be strictly enforced. Offered: Fall.

DIME-213 Advanced Electrical 5 cr.
Basic theory and operation of vehicle/equipment electrical systems including starting, charging, and monitoring components. Safety will be strictly enforced. Prerequisites: AUTE-113 or DIME-115. Corequisites: DIME-129. Offered: Spring.

DIME-230 Advanced Brakes & Drivetrains 5 cr.
Theory and operation of hydraulically operated/assisted drive trains including torque converters, transmissions, differentials, final drives, and foundation brake components for off-highway equipment. Safety will be strictly enforced. Corequisites: DIME-123, DIME-124. Offered: Spring.

DIME-250 Advanced Steering and Suspension 4 cr.
This course will be based on the study of steering systems and suspension systems for off highway equipment. Safety will be strictly enforced. Prerequisites: DIME-125 and DIME-126. Offered: Fall.

DIGITAL MEDIA ARTS AND DESIGN

DMAD-110 Introduction to Multimedia 3 cr.
A general introduction to the concepts and software used in creating multimedia. Course focuses on how each individual element plays an important role in communicating messages and how use of multiple media can increase and change messages. This hands on survey introduces relevant multimedia technologies, with a focus on interactive media platforms such as the web, DVD's, CD's, electronic documents and examines current multimedia trends. Prerequisites: Completion of Math-050, ENGL-099 and RDNG-050 or appropriate Math, English and Reading Accuplacer scores. Offered: Fall & Spring.

DMAD-170 Intro to Digital Image Editing 2 cr.
A general introduction to digital image editing using Adobe Photoshop. This course introduces the workspace and focuses on the programs tools for image editing and retouching. Projects in this class will be optimized for both print, web, and video distribution. Prerequisites: Completion of Math-095, ENGL-099 and RDNG-095 or appropriate Math, English and Reading Accuplacer scores. Corequisites: DMAD-172 Offered: Fall.

DMAD-172 Digital Image Editing Inter. Techniques 2 cr.
This course focuses on intermediate digital image editing techniques using Adobe Photoshop. Students will begin to work

with selection tools, layers and basic image compositing. Projects in this class will be optimized for print, web and video distribution. Prerequisites: Completion of Math-095, ENGL-099 and RDNG-095 or appropriate Math, English and Reading Accuplacer scores. Corequisites: DMAD-170 Offered: Fall.

DMAD-174 Digital Image Editing Adv. Compositing 2 cr.
This course is an introduction to advanced digital image editing techniques using Adobe Photoshop. Students will learn how the image editing software integrates into areas of web, video, animation, and multimedia design. ImageReady will be used to create animations for web delivery. Students will also become familiar with how to create automatic actions to increase work efficiency. Prerequisites: DMAD-170 and DMAD-172. Corequisites: DMAD-176. Offered: Spring.

DMAD-176 Digital Image Editing Apps 2 cr.
This course is an application of advanced digital image editing techniques using Adobe Photoshop. Students will use knowledge from previous DMAD 170, DMAD 172, and DMAD 174 in weekly projects that introduce and emphasize the principles of 2 dimensional design. Prerequisites: DMAD-170 and DMAD-172. Corequisites: DMAD-174. Offered: Spring.

DMAD-200 Intro to Web Design using DW 2 cr.
This course is an introduction to web design using the Dreamweaver HTML editor. Students will learn how to create and manage a website and modify content using cascading style sheets. The course also examines how to understand the code that is generated by HTML editing programs. Prerequisites: DMAD-110, ARTS-151, and COME-120. Corequisites: DMAD-202. Offered: Fall.

DMAD-202 Creative Web Design 3 cr.
This course covers aspects of creative web design. Topics include graphic design, HTML, site management, typography, theory, e-commerce, and web development tools. Projects will be created by identifying a target audience, addressing accessibility issues and adhering to current web design standards. Offered: Fall.

DMAD-210 Intro to Non-Linear Video 2 cr.
This course is an introduction to digital video editing using Adobe Premiere. Students will learn how to create simple and complex video sequences in a non-linear video editing system. Video projects will be optimized for web, mobile devices, and DVD distribution. Offered: Fall.

DMAD-212 Digital Video Production 3 cr.
This hands-on course focuses on the process required to create video compositions. Students will be studying composition, lighting, recording and sound recording techniques, and various script styles. Student teams will work using electronic field production techniques to create numerous projects. Offered: Fall.

DMAD-220 Intro to Digital Layout & Design 2 cr.
This course is an introduction to digital layout and design using Adobe InDesign. Students will learn how to create multi-column and multi-page layouts in a digital environment. Techniques of type formatting, digital image management, layers, and vector drawing will be explored. Design projects will be optimized for print and web distribution. Prerequisites: DMAD-110, ARTS-151, COME-120, and ARTS-152. Corequisites: DMAD-222. Offered: Fall.

DMAD-222 Adv Digital Layout and Design 3 cr.

This course focuses on creating effective digital layout and design. There is an emphasis on projects that are found in work environments such as creating advertising, promotional, and newsletter materials. The techniques and skills covered can also be applied to creative projects where principles of design and typography are needed. Projects will be optimized for both print and web distribution. Prerequisites: DMAD-110, ARTS-151, COME-120, and ARTS-152. Corequisites: DMAD-220. Offered: Fall.

DMAD-230 Intro to Vector Animation 2 cr.

This course is an introduction to vector graphics and two dimensional animation. Students will learn how to use and integrate Flash and Adobe Illustrator to create animations for web delivery. Non-animated vector graphics and illustrations for print and web delivery will also be created. Prerequisites: DMAD-110, ARTS-151, and COME-120. Take PHOT-150 or PHOT-160. Corequisites: DMAD-232. Offered: Fall.

DMAD-232 Interactive 2D Animation 3 cr.

This hands-on course focuses on the process required to create interactive two dimensional animations for multimedia. Students will create animations using project planning, scriptwriting and storyboard techniques. There is an emphasis on creating animated works that adhere to principles of design and composition. Prerequisites: DMAD-110, ARTS-151, and COME-120. Take PHOT-150 or PHOT-160. Corequisites: DMAD-230. Offered: Fall.

DMAD-241 3D Design and Animation 4 cr.

This hands-on introductory course focuses on the process required to create 3D graphics and animation. Students will learn concepts of working in 3D space, modeling, image maps and lighting. Animation techniques include working with keyframes and creating jointed hierarchies. Projects will be optimized for web and video delivery. Prerequisites: DMAD-110, ARTS-151, COME-120 and MATH-115. Take PHOT-150 or PHOT-160. Offered: Fall.

DMAD-280 Cooperative Education 3 cr.

Supervised cooperative work program. Student is employed in an individualized digital media arts and design field. Student will be supervised and rated by the employer and instructor. Offered: On Demand.

DMAD-284 Digital Media/Design Portfolio Developmt 3 cr.

This course is to be taken during the final semester of the DMAD program. Students will use past work created during the course of the DMAD Program as part of developing a professional portfolio and resume to use in entering the digital media and design profession. Discussions will cover aspects of creating and marketing a brand identity to potential employers. Portfolios will be created in areas of specified career paths including video, web and print media. Prerequisites: DMAD-200, DMAD-210, DMAD-222, or DMAD-232. Offered: Spring.

DMAD-286 Multimedia Project Management 3 cr.

An introduction to project management, as it relates to the design and production of multimedia. Students will work on team and individual projects that focus on creating integrated advertising materials for promotional campaigns. Effective methods for

managing large multimedia projects and coordinating efforts with clients and stakeholders will also be covered. Prerequisites: DMAD-202, DMAD-212, DMAD-222, or DMAD-232. Offered: Spring.

DRAFTING**DRFT-110 Technical Drafting I 3 cr.**

A study of the basic techniques of drafting and the preparation of drawings using traditional drafting methods and CAD. Prerequisites: Completion of Math-095 or appropriate Math Accuplacer score. Offered: Fall & Spring.

DRFT-111 Drafting for Industry 3 cr.

A study of the techniques of drafting and the reading and preparation of drawings from tradesmen. The graphic language of industry is covered in the areas of multi-view projection, dimensioning and sections. Offered: Spring.

DRFT-112 Materials and Processes 3 cr.

This introductory course in materials science will give the student a basic knowledge of industrially significant materials and commonly employed processing and manufacturing methods. Offered: Spring.

DRFT-113 Materials and Processes Lab 2 cr.

Exposes the drafting student to the theory and application of commonly employed manufacturing methods through experiences in a manufacturing environment. Corequisites: DRFT-112. Offered: Spring.

DRFT-115 Technical Drafting II 4 cr.

This course comprises the use of auxiliary views, geometric tolerancing, threads, fasteners and springs, dimensioning, axonometric projection, oblique projection and perspective drawing in the production of drawings. Prerequisites: DRFT-110 and DRFT-150. Offered: Spring.

DRFT-119 Surveying 4 cr.

Elementary plane surveying to include concepts, field work, and computation. Prerequisites: Completion of MATH-096 or appropriate Math Accuplacer score. Offered: Fall.

DRFT-120 Descriptive Geometry 3 cr.

The study of points, lines and planes and their spatial relationships. Problems in finding their true positions, lengths and shapes in space are solved by the principles of orthographic projection. Offered: Spring.

DRFT-121 Engineering Graphics 3 cr.

This course comprises a study of engineering graphics using the AutoCAD software package. Basic two-dimensional drafting techniques as well as wireframe, surface and solid modeling methods are employed in the production of technical drawings. Offered: Spring.

DRFT-150 Computer-Aided Drafting (CAD) 4 cr.

Instruction in the use of computer-aided drafting workstations to produce drawings in two-dimensional format, using the basic draw and edit commands. Corequisites: DRFT-110. Offered: Fall & Spring.