

DM 107 Digital Media Design

Units: 2.0 **Hours:** 1.5 lecture 1.5 Laboratory
Transferable: CSU

Fundamentals of design for visual, time-based, interactive, and sound arts as applied to digital media. Includes basic storytelling, graphic design, information architecture, and human factors. Page layout, scriptwriting, storyboards, and flow charts will be used as tools applicable to the design and development of business presentations, interactive media, educational multimedia, animation, web sites, video games, and film/video. This course has the option of a letter grade or pass/no pass. Also listed as ART 107 and CSIS 107. **ADVISORY:** CSIS 1 or CSIS 2/2L or equivalent computer experience

DM 108 Digital Media Lab

Units: .5 TO 3.0 **Hours:** 1.5 TO 9.0 Laboratory
Transferable: CSU; GAV-GE:C1

Supervised practice and individualized computer assisted learning or software applications and techniques commonly found in the design and production of digital media (e.g., digital art and imaging, digital photography, digital print, digital audio/video, web design design/authoring, DVD/CD ROMs, animation). Supplements lecture courses. Open entry/exit, so may be added anytime during the semester. This is a pass/no pass course. Also listed as ART 108 and CSIS 108. May be repeated three times for credit. **ADVISORY:** CSIS 1 or CSIS 2/2L or equivalent computer experience.

DM 109 Interactive Animation and Authoring: Director

Units: 3.0 **Hours:** 2.0 lecture 3.0 Laboratory
Transferable: CSU

Use of animation/interactive multimedia development software (Macromedia Director) and techniques for designing business presentations, interactive multimedia, educational materials, interactive web animation, computer games, and video animation. The study of interactivity and integration of multiple types of art content such as 2D and 3D animation, digital video, graphics, and sound. Applicable to the design and production of CD-ROMs and web sites. This course has the option of a letter grade or pass/no pass. Also listed as CSIS 109. **ADVISORY:** CSIS 1/1L Computer Literacy (& Lab) or CSIS 2/2L Computers in Business (& Lab); CSIS 77 Intro. to Digital Media and its Tools.

DM 110 Interactive Animation: Flash

Units: 3.0 **Hours:** 2.0 lecture 3.0 Laboratory
Transferable: CSU; GAV-GE:C1

The production of vector graphics, animation, and interactive multimedia in Shockwave-Flash format for web pages and other digital media. Design of highly interactive web site interfaces and animated games using Flash actions (scripting). Useful for web designers/developers, animators, and multimedia authors. This course has the option of a letter grade or pass/no pass. Also listed as ART 110 and CSIS 110. May be repeated three times for credit. **ADVISORY:** CSIS 1, CSIS 2/2L, CSIS 124 or basic computer knowledge.

DM 111 Sound Design for Digital Media

Units: 3.0 **Hours:** 2.0 lecture 3.0 Laboratory
Transferable: CSU

Study and practice of the techniques and aesthetics of sound design especially for digital media (i.e., digital video/film, DVD, video games, WWW, and presentations.) Recording (including live audio), mixing and processing of Foley effects, ADR, voice-overs, sound tracks, and narration. This is not a music composition course, but use of sampled and electronic music/loops for creating background music will also be studied. This course has the option of a letter grade or pass/no pass. **ADVISORY:** CSIS 1 or CSIS 2/2L or equivalent computer knowledge.

DM 113 Introduction to Digital Video

Units: 3.0 **Hours:** 2.0 lecture 3.0 Laboratory
Transferable: CSU; GAV-GE:C1

Introduction to the aesthetic and technical aspects of digital video recording, non-linear editing, special effect generation, and production of video (and associated audio) using the personal computer equipped with specialized software such as iMovie, Final Cut Pro, and After Effects. Also considered will be the preparation of digital video for use in interactive media such as CD, DVD, and the World Wide Web. Students will produce a final digital video project on DVD. This course has the option of a letter grade or pass/no pass. May be repeated 2 times for credit. Also listed as ART 113 and CSIS 113. **ADVISORY:** CSIS 1 or CSIS 2/2L or equivalent computer experience

DM 114 Digital Media Production

Units: 2.0 **Hours:** 2.0 Lecture
Transferable: CSU

A team oriented practicum that focuses on the application of learned skills to the production of digital media and digital print projects, such as web sites, CD ROM, and DVDs. Project development will be accomplished according to team derived master schedules. Lectures will be on project management, work coordination and production techniques, client-team interface, asset management and integration, budget estimates, testing, and copyright infringement. Please note that this is very much a team oriented class. This course has the option of a letter grade or pass/no pass. This course is also listed as ART 114 and CSIS 114. **ADVISORY:** At least one of the following: ART 75, CGE 2, JOUR 18A, MUS 21, CSIS 7, CSIS 71, OR CSIS 77. or possess equivalent skills from any one of the following areas: digital media, computer graphics, digital print, film, TV/video, journalism (publishing), drawing or illustration, web design/ development, business/marketing, or programming.

DM 116 DVD Authoring

Units: 2.0 **Hours:** 1.5 lecture 1.5 Laboratory
Transferable: CSU

Study of the artistic and technical aspects of authoring interactive DVDs (Digital Video/Versatile Disk). Special attention will be given to interactive design and the integration and conversion (encoding) of time-based media (e.g., multi-angle video, animation, Dolby sound) special to this media format. Students will be able to produce their own DVD of video, slide shows, and/or interactive games. This course has the option of a letter grade or pass/no pass. May be repeated two times for credit. Also listed as ART 116 and CSIS 116. **ADVISORY:** CSIS 1 or CSIS 2/2L or equivalent computer experience

DM 117 Visual Effects-Motion Graphics

Units: 3.0 **Hours:** 2.0 lecture 3.0 Laboratory
Transferable: CSU, UC

Study of the design of motion graphics and special effects used in digital video and film, web, multimedia, and interactive games. Includes video/graphics compositing techniques, 2D animation, basic 3D animation, and special effects commonly generated in digital post-production. Software such as Adobe After Effects or Apple's Motion will be used. May be repeated three times for credit. This course has the option of a letter grade or pass/no pass. This course is also listed as ART 117 and CSIS 117. **ADVISORY:** DM/ART/CSIS 113 or DM/ART/CSIS 140 or DM/ART/CSIS 77 or THEA 17A or basic knowledge of digital video/film editing.

DM 140 Basic Digital Film/Video Production

Units: 1.0 **Hours:** 1.0 Lecture
Transferable: CSU, UC; GAV-GE:C1

An on-line self-paced course covering the basics of film/video production and post production (editing) using "easy to use" computer software such as Apple's iMovie. Beneficial for students who are producing a video/film project as a requirement for another college course, extra skills development, or for self interest. Completion of the associated class or personal project in DVD format using either personal video equipment or the equipment in the Digital Media Studio is required. May be repeated twice for credit. This course has the option of a letter grade or pass/no pass. This course is also listed as ART 140 and CSIS 140.

Drama: See MCTV, Theatre Arts

DRYWALL-LATHING**DRLT 200 Introduction to the Trade**

Units: 2.0 **Hours:** 36.0 Lecture
Transferable: No

This course is an introduction to drywall/lathing apprenticeship, state and federal apprenticeship laws, apprenticeship record keeping, apprentice evaluation procedures, general safety, work ethic, sexual harassment issues, and basic tools of the trade.

DRLT 202 Basic Applications

Units: 1.5 **Hours:** 21.0 lecture 18.0 Laboratory
Transferable: No

This course is an introduction to basic gypsum wall covering and ceiling applications. Topics include knot recognition and application to rigging on construction job-sites.

DRLT 205 Mathematics for Drywall/Lathing

Units: 2.0 **Hours:** 36.0 Lecture
Transferable: No

This course covers mathematics applications to drywall and lathing trades with specific focus on mathematical processes related to construction. Basic topics include whole numbers, fractions, decimal fractions, ratios, proportions, percentages, areas and volumes. This course has the option of a letter grade or pass/no pass. May be repeated three times for credit.

DRLT 210 Residential Metal Framing

Units: 1.5 **Hours:** 21.0 lecture 18.0 Laboratory
Transferable: No

This course covers basic residential metal framing. It includes framing of floors, walls, doors, windows, roofs, trusses and stairs. This course has the option of a letter grade or pass/no pass. May be repeated three times for credit.

DRLT 212 Doors, Windows, Exterior Systems/Building Documents

Units: 1.5 **Hours:** 21.0 lecture 18.0 Laboratory
Transferable: No

This course covers doors, windows, door and window framing, and exterior wall covering systems. Topics include an introduction to blueprints and building codes. This course has the option of a letter grade or pass/no pass. May be repeated three times for credit.

DRLT 220 Blueprint Reading I

Units: 1.5 **Hours:** 21.0 lecture 18.0 Laboratory
Transferable: No

This course covers job specifications, blueprint structure and basic blueprint reading and interpretation. Topics include an introduction to construction drawings and sketching. This course has the option of a letter grade or pass/no pass. May be repeated three times for credit.

DRLT 221 Blueprint Reading II

Units: 1.5 **Hours:** 21.0 lecture 18.0 Laboratory
Transferable: No

This course is a continuation of Blueprint Reading I (DRLT 200). Topics include interpretation, problem solving, correlating specifications, prints, addenda, notes, sections and mathematics used with blueprints. This course has the option of a letter grade or pass/no pass. May be repeated three times for credit.

DRLT 222 Blueprint Reading III

Units: 1.5 **Hours:** 21.0 lecture 18.0 Laboratory
Transferable: No

This course is a continuation of Blueprint Reading II (DRLT 221). Topics include take-offs, material estimates, material requisition, job costs and layout from blueprints. This course has the option of a letter grade or pass/no pass. May be repeated three times for credit.

DRLT 230 Welding I

Units: 1.5 **Hours:** 21.0 lecture 18.0 Laboratory
Transferable: No

This course covers welding and welding concepts for construction job sites. Topics include welding safety, basic welding terms, definitions, positions, and cutting operations. This course has the option of a letter grade or pass/no pass. May be repeated three times for credit.

DRLT 231 Welding II

Units: 1.5 **Hours:** 21.0 lecture 18.0 Laboratory
Transferable: No

This course is a continuation of Welding I (DRLT 230). Topics include welding safety, concepts, process, symbols, and certification performance. This course has the option of a letter grade or pass/no pass. May be repeated three times for credit.

DRLT 240 Exterior/Advanced Fire Control System and Partitions

Units: 1.5 **Hours:** 21.0 lecture 18.0 Laboratory
Transferable: No

This course covers safety, principles, theory, and application of advanced fire control systems. Topics include principles and applications of partitions and metal framing. This course has the option of a letter grade or pass/no pass. May be repeated three times for credit.

DRLT 242 Exterior Systems and Trims

Units: 1.5 **Hours:** 21.0 lecture 18.0 Laboratory
Transferable: No

This course covers safety, principles, and application of exterior wall framing, coverings, and trims. This course has the option of a letter grade or pass/no pass. May be repeated three times for credit.

DRLT 250 Interior Metal Lathing System and Sound Control

Units: 1.5 **Hours:** 21.0 lecture 18.0 Laboratory
Transferable: No

This course covers materials, principles, theory, and application of lath and plaster interior hollow walls and partitions. Topics include principles, and application of sound control systems and an introduction to mathematics and layout for building arches. This course has the option of a letter grade or pass/no pass. May be repeated three times for credit.

DRLT 260 Ceilings, Shaft Protection and Demountable Partitions

Units: 1.5 **Hours:** 21.0 lecture 18.0 Laboratory
Transferable: No

This course covers safety, materials, principles, theory, and installation of ceiling systems, demountable partitions, and shaft systems. This course has the option of a letter grade or pass/no pass. May be repeated three times for credit.

DRLT 262 Arches, Furring and Advanced Systems

Units: 1.5 **Hours:** 21.0 lecture 18.0 Laboratory
Transferable: No

This course covers safety, materials, principles, theory, and installation of furring, arch systems, and fire retardant materials. This course has the option of a letter grade or pass/no pass. May be repeated three times for credit.

DRLT 270 Advanced Construction Techniques

Units: 1.5 **Hours:** 21.0 lecture 18.0 Laboratory
Transferable: No

This course covers safety, materials, principles and theory of advanced construction techniques. Topics include following written and verbal directions, construction directly from blueprints, and research techniques. This course has the option of a letter grade or pass/no pass. May be repeated three times for credit.

All courses listed here are part of Gavilan College's approved curriculum. All courses are not offered every semester. Check the Class Schedule for current offerings.



DRLT 290 Occupational Work Experience/Drywall-Lathing**Units:** 1.0 TO 4.0 **Hours:** 5.0 TO 20.0 Laboratory**Transferable:** No

College credit for learning experience obtained on the job in accordance with a training plan developed cooperatively between the employer, college and student. 75 hours per semester per unit or 60 hours per semester for unpaid experience. This is a pass/no pass course. May be taken for a maximum of 16 work experience units. **PREREQUISITES:** Required: Declared vocational major. Concurrent enrollment in seven or more units (including CWE units, except for summer school. For summer school, enrollment in one other class is required.) Minimum 2.00 GPA.

Early Childhood Education: See Child Development

Earth Science: See Geology, Geography

ECOLOGY**ECOL 1 Conservation of Natural Resources****Units:** 4.0 **Hours:** 3.0 lecture 3.0 Laboratory**Transferable:** CSU, UC; CSU-GE:B2, B3, IGETC:5B; GAV-GE:B2, B3

This course examines the fundamentals of ecology (the study of the relationships between organisms and their environment) with special emphasis on human effects on the environment. Topics of discussion will include ecosystem dynamics, resources, pollution, population growth, and the clash between economic and political policy and the environment. **ADVISORY:** Eligible for English 250 and English 260.

ECONOMICS**ECON 1 Principles of Macroeconomics****Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU, UC; CSU-GE:D2, IGETC:4B; GAV-GE:D2; CAN:ECON2

Introduction to the principles of macroeconomics, social organization of the economy; supply and demand; the determinants of national income and production, economic growth, the global economy and trade, employment, prices, savings and investment; the nature and effectiveness of monetary and fiscal policy. This course has the option of a letter grade or pass/no pass. **ADVISORY:** Eligible for English 1A and Mathematics 233.

ECON 2 Principles of Microeconomics**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU, UC; CSU-GE:D2, IGETC:4B; GAV-GE:D2; CAN:ECON4

Introduction to microeconomic principles and theory; supply, demand; product and factor price determination, resource allocation, costs, revenues, and profits under different competitive situations; international trade; government regulation and taxation. Note: Economics 1 is not a prerequisite for Economics 2. This course has the option of a letter grade or pass/no pass. **ADVISORY:** Eligible for English 260, English 250 and Mathematics 233.

ECON 10 Fundamentals of Economics**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU, UC; CSU-GE:D2, IGETC:4B; GAV-GE:D2

A survey of economic concepts and systems. Topics to be covered include production and consumption, pricing and competition, economic growth, inflation, employment, money and banking, and international trade. Not open to students with credit in Economics 1 or 2. This course has the option of a letter grade or pass/no pass. **ADVISORY:** Eligible for English 250, English 260.

ECON 11 Statistics for Business and Economics**Units:** 4.0 **Hours:** 4.0 Lecture**Transferable:** CSU, UC; CSU-GE:B4, IGETC:2A; GAV-GE:B4

Statistical methods for business/economics analysis; descriptive statistics, inference, correlation and regression, probability, time series analysis. This course has the option of a letter grade or pass/no pass. This course is also listed as BUS 11. **PREREQUISITE:** Mathematics 233.

ECON 14 Personal Finance**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU

This course is designed to assist individuals to analyze their financial affairs for lifelong decision making. Elements and concepts of financial planning and decision making in the areas of budgeting, taxes, borrowing, money management, insurance, investments, retirement, and estate planning will be examined. This course is also listed as BUS 14. This course has the option of a letter grade or pass/no pass. **ADVISORY:** Math 400

Education: see Child Development, Liberal Arts, Liberal Arts with Elementary Education Emphasis

ENGINEERING**ENGR 1 Engineering Graphics****Units:** 3.0 **Hours:** 2.0 lecture 3.0 Laboratory**Transferable:** CSU, UC; CAN:ENGR2

An introduction to the graphical and visual communication of the engineering design process. Topics will include the design process, visualization, free-hand sketching, orthographic projection, multi views, auxiliary views, section views, dimensioning and tolerances. Computer-aided-drafting (CAD) software will be used extensively in conjunction with traditional methods to highlight the strengths of multiple communication methodologies. **ADVISORY:** Eligible for English 250 and English 260; Mathematics 1A - may be concurrent, and CSIS 10 - May be concurrent.

ENGR 2 Statics**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU, UC; CAN:ENGR8

Vector statics. Force, moment, couple, system isolation, adequacy of constraint, concentrated and distributed loads, fluid statics, flexible cables, friction and virtual work. Bridge design project. **PREREQUISITE:** Mathematics 1A and Mathematics 1B and Physics 4A with a grade of 'C' or better.

ENGR 3 Electrical Circuits/Devices and Systems**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU, UC; CAN:ENGR12

Natural, forced, and steady-state response by impedance, exponential, pole-zero and phasor methods; solid state; digital circuits and laplace transform methods are introduced. **PREREQUISITE:** Mathematics 1A with a grade of 'C' or better. May be taken concurrently. **ADVISORY:** Physics 4B with a grade of 'C' or better and Mathematics 2C.

ENGR 4 Properties Of Materials**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU, UC; CAN:ENGR4

Basic principles of physics and chemistry are used to determine the quantitative relationships which describe the behavior of solids. Particular emphasis is placed upon the relationship between the structure and mechanical properties of crystalline solids. Applications consider control of properties as an engineering design variable. A term paper based upon review of the periodical technical literature is required. **PREREQUISITE:** Chemistry 1A and Physics 4A.