

ART 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 of 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/authoring, DVD/CD ROMs, animation). Supplements lecture courses. Open entry/exit, so may be added at anytime during the semester. This is a pass/no pass course. May be repeated three times for credit. Also listed as DM 108 and CSIS 108. **ADVISORY:** CSIS 1 or CSIS 2/2L or equivalent computer experience.

ART 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 CSIS 110 and DM 110. May be repeated three times for credit. **ADVISORY:** CSIS 1, CSIS 2/2L, CSIS 124 or basic computer knowledge.

ART 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 two times for credit. Also listed as CSIS 113 and DM 113. **ADVISORY:** CSIS 1 or CSIS 2/2L or equivalent computer experience

ART 114 Digital Media Production

Units: 2.0 **Hours:** 2.0 Lecture
Transferable: CSU; GAV-GE:C1

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 estimate, 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 CSIS 114 and DM 114. **ADVISORY:** At least one of the following: ART 75, GBUS 80, CGD 2, JOUR 18A, MUS 21, CSIS 7, CSIS 71 OR CSIS 77. or students must possess equivalent skills from any one of the following areas: digital media, computer graphics, digital print, journalism (publishing), film, TV/video, drawing or illustration, web design/development, business/marketing, or programming.

ART 116 DVD Authoring

Units: 2.0 **Hours:** 1.5 lecture 1.5 Laboratory
Transferable: CSU; GAV-GE:C1

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 CSIS 116 and DM 116. **ADVISORY:** CSIS 1 or CSIS 2/2L or equivalent computer experience

ART 117 Visual Effects-Motion Graphics

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

Study of the design of visual effects and motion graphics used in digital video, film, web, multimedia, and interactive games. Includes video/graphics compositing techniques, 2D animation, basic 3D animation, and effects commonly done in digital post-production. Software such as Adobe After Effects and Apple's Motion and Shake will be used. May be repeated 3 times for credit. This course has the option of a letter grade or pass/no pass. This course is also listed as CSIS 117 and DM 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.

ART 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 DM 140 and CSIS 140.

ART 190 Occupational Work Experience/Commercial Art

Units: 1.0 TO 4.0 **Hours:** 5.0 TO 20.0 Laboratory
Transferable: CSU; GAV-GE:C1

The application of learned theory, knowledge, and skills to a practical job setting related to the student's educational/occupational goal. Employment must be directly related to the student's college educational/occupational goal. Periodic interviews of the students and employers or their representatives will be required. Each student shall be assisted in the development of individualized performance objectives, toward which the learning experience shall be directed. **REQUIRED:** Enrollment in a minimum of seven (7) units, including Cooperative Work Experience, during regular semesters; enrollment in at least one other class in summer session.

ASTRONOMY**ASTR 1 Introduction to General Astronomy**

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU, UC; CSU-GE:B1, IGETC:5A; GAV-GE:B1

An introduction to the realm of astronomy and space science. Topics to be covered include the historical development of astronomy, the physics of gravitation and radiation, the solar system, stellar astronomy, galactic and extragalactic astronomy, and cosmology. **ADVISORY:** Mathematics 205 and eligible for English 250 and English 260.

Athletics: see Physical Education (PE)

AVIATION FLIGHT TECHNOLOGY**AFT 121 Aviation Fundamentals**

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU

Principles of aerodynamics and flight, radio communications, aircraft engines and systems and aircraft performance characteristics including federal aviation regulations and air navigation. Students who satisfactorily complete the course will be eligible to take the Federal Aviation Administration Private Pilot Airplane written test. **ADVISORY:** Eligible for English 250, English 260 and Mathematics 205.

AFT 122 Instrument Flight Technology

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU

Flight instrument usage, regulations, meteorology, chart reading and flight planning to prepare the student to begin flight training in flight solely by reference to flight instruments. **ADVISORY:** AFT 121 or 131, or have passed the FAA Private Pilot written exam

AFT 133 Commercial Flight Operations

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU

Air traffic control procedures, meteorology, regulations, aircraft performance, and aerodynamics for students preparing for their Federal Aviation Administration (FAA) commercial pilot's license. **ADVISORY:** Hold private pilot certificate or AFT 121 with a grade of "C" or better. Eligible for English 250 and 260.

AFT 134 Aviation Flight Technology

Units: 3.0 **Hours:** 3.0 Lecture
Transferable: CSU

This course includes all aerodynamics, navigation, regulations, airport and airspace requirements, meteorology, and emergency procedures necessary to qualify for a private pilot certificate. **ADVISORY:** Completion of English 250 and English 260.

AVIATION MAINTENANCE TECHNOLOGY

AMT 100 General Aircraft Technology

Units: 7.5 **Hours:** 5.0 lecture 7.5 Laboratory
Transferable: CSU

This course will provide the student with a thorough understanding of the use of basic hand tools and measuring devices, aircraft hardware, materials, and processes, mathematics and physical science for aircraft, aircraft weight and balance, aircraft drawing and blueprint reading. Both theory and practical application to aircraft systems is taught. **ADVISORY:** Mathematics 205 Meets at Gavilan College Aviation Department, 490 Skylane Drive, Hollister Airport, Hollister. Basic hand tools required. Details at the first class meeting.

AMT 101 General Aircraft Technology

Units: 7.5 **Hours:** 5.0 lecture 7.5 Laboratory
Transferable: CSU

This course will provide the student with a thorough understanding of the use of maintenance publications, maintenance forms and records with emphasis on A & P mechanic privileges and limitations. Basic electricity for aircraft from Ohm's Law through transistor theory will be taught as well as ground operation and servicing of aircraft. **ADVISORY:** Mathematics 205 Meets at Gavilan College Aviation Department, 490 Skylane Drive, Hollister Airport, Hollister. Basic hand tools required. Details at the first class meeting.

AMT 110 Airframe Maintenance Technology

Units: 13.5 **Hours:** 9.0 lecture 13.5 Laboratory
Transferable: CSU

Study of aircraft aerodynamics, rigging and assembly, aircraft sheet metal structures and welding technology. Also the study of cabin atmosphere systems, fuel systems, and line maintenance, level information on aircraft instruments. Each of these areas will be accompanied with appropriate laboratory time. Meets at Gavilan College Aviation Department, 490 Skylane Drive, Hollister Airport, Hollister. Basic hand tools required. Details at the first class meeting.

AMT 111 Airframe Structures

Units: 13.5 **Hours:** 9.0 lecture 13.5 Laboratory
Transferable: CSU

Aircraft wood, fiberglass construction, fabric covering, testing and repair, aircraft inspection, painting techniques and procedures. Also the study of basic hydraulic systems of anti-skid systems, pneumatic, fixed landing and retractable landing gear systems. Basic aircraft systems familiarization along with advanced laboratory projects from topics covered in AMT 110 are a part of this course. Meets at Gavilan College Aviation Department, 490 Skylane Drive, Hollister Airport, Hollister. Basic hand tools required. Details at the first class meeting.

AMT 120 Aviation Powerplant Technology

Units: 14.0 **Hours:** 9.0 lecture 15.0 Laboratory
Transferable: CSU

This course is part of the curriculum required by the Federal Aviation Administration to obtain certification as an aircraft powerplant maintenance technician. This certificate allows the rated technician to perform maintenance, preventive maintenance repairs and alterations to USA FAA certificated aircraft powerplants. This Section covers the theory and practical application of operation, overhaul practices, inspection, installation, testing and troubleshooting techniques covering the subject areas of reciprocating and turbine engines, ignition, induction, supercharging, cooling and exhaust systems. **ADVISORY:** Successful completion of AMT 101 and AMT 111. Basic hand tools required. Details at the first class meeting.

AMT 121 Aviation Powerplant Systems Technology

Units: 14.0 **Hours:** 9.0 lecture 15.0 Laboratory
Transferable: CSU

The theory of operation, maintenance, repair, and trouble-shooting procedures of powerplant systems and their relationship to the total powerplant package. To include lubrication, electrical, instrument, fuel metering, fire protection, starting, control systems, and the aerodynamics, theory and maintenance of propellers and their control systems. **ADVISORY:** Successful completion of AMT 120. Meets at Gavilan College Aviation Department, 490 Skylane Drive, Hollister Airport, Hollister. Basic hand tools required. Details at the first class meeting.

AMT 190 Occupational Work Experience/Aviation

Units: 1.0 TO 4.0 **Hours:** 5.0 TO 20.0 Laboratory
Transferable: CSU

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 units of work experience units. **REQUIRED:** Declared vocational major. Concurrent 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 G.P.A. Meets at Gavilan College Aviation Department, 490 Skylane Drive, Hollister Airport, Hollister.

Beauty School: see Cosmetology

BIOLOGICAL SCIENCE

BIO 1 General Biology

Units: 4.0 **Hours:** 3.0 lecture 3.0 Laboratory

Transferable: CSU, UC; CSU-GE:B2, B3, IGETC:5B; GAV-GE:B2, B3; CAN:BIOL2, BIOL SEQ A

A general biology course with an emphasis on the structure and function of cells, cell respiration, photosynthesis, cell cycle, Mendelian and non-classical genetics, evolution and diversity of life. The course is required for students majoring in biology and/or its subcategories (e.g., plant or animal sciences). **PREREQUISITE:** Biological Science 10 with a grade of 'C' or better and Mathematics 233 with a grade of 'C' or better. **ADVISORY:** Chemistry 30A; eligible for English 250 and English 260.

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.

