

Handbook

Animal Science



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WELCOME TO MT. SAN ANTONIO COLLEGE ANIMAL SCIENCE PROGRAM AND AGRI-TECHNOLOGY PROGRAM

The Animal Science Program at Mt. San Antonio College is one of the largest in California and the most comprehensive in Southern California. The College serves Los Angeles, San Bernardino, Orange and Riverside counties. Located in Los Angeles County, which is one of the largest dollar volume counties, utilizing animal products in the world.

BENEFITS OF ATTENDING MT. SAC THE ANIMAL SCIENCE PROGRAM

A PRACTICAL APPROACH to Animal Science with hands on experience and interaction with the animal science industry. We utilize the nearby industries for numerous field trips and job placement.

DIVERSE CLASS SCHEDULING allows individuals to maintain employment while studying towards a degree or certificate. Most classes are offered in block mode (meet one or two days per week).

WORK EXPERIENCE PROGRAM earn units of credit while gaining on-the-job experience.

INDIVIDUALIZED AND PERSONALIZED INSTRUCTION with low student-to-teacher ratio.

FULL-TIME AND PART-TIME FACULTY with over 90 years of practical industry experiences.

STUDENTS ASSIST with the production and marketing of animals produced on the 250 acre school farm maintained by the College. Most of the land is used to produce feed for the animals raised by the College.

FACILITIES

**Small Animal Facilities
Classrooms**

THE COLLEGE FARM CONSISTS OF:

- | | |
|-------------------|---|
| BEEF UNIT | Consists of feed storage buildings, covered pen area, dry lots, natural pasture and irrigated pastures. The College maintains a breeding herd of approximately 20 breeding crossbred females used to breed project animals for our students. |
| SHEEP UNIT | Consists of two barns, a project barn with a shearing area and a lambing barn with pens for holding the ewes and lambs after they exit the jalls. We also have a working corral with cutting chutes and sorting pens. We have 30 acres of pasture for our flock of 45 ewes, Suffolk and Hampshire's, and two stud rams. Lambs are raised and sold through a club lamb sale that is put on by the student. The lambs go to 4-H and F.F.A. students where many champions have been purchased for the flock. |
| SWINE UNIT | A modern confinement Swine Unit with a farrow to finish program. The College maintains several sows and a boar for students to gain experience in swine production. |
| HORSE UNIT | Consists of an eight stall barn with two foaling stalls and a stallion barn and paddock with plenty of paddocks for young horses. Training facilities include a bull pen, goose neck arena, hot walker and plenty of trails to ride on. An Artificial Insemination Lab is housed in the barn. There are eight broodmares and a stallion on campus along with numerous offspring for students to work with to get experience. |

COURSE OFFERINGS

Courses are offered which lead to an Associate in Science Degree in Animal Science with specialization in Livestock Management, Horse Ranch Management, Pet Science and Agri-Technology.

In addition, certificates are offered in Livestock Management, Horse Ranch Management and Pet Science.

CAREER OPTIONS IN ANIMAL SCIENCE:

Note: Job titles in all caps are from the "targeted occupations" list. Also, some jobs may require local and/or state certification, licensing, or advanced degrees.

Agricultural Product Inspector
Animal Breeder
Animal Control Officer
Animal Health Products Warehouse Person
Animal Nursery Worker
Animal Research Scientist
Animal Shelter Attendant
Animal Shelter Clerk
Announcer/Ringmaster/Ring Steward
ARTIFICIAL INSEMINATION TECHNICIAN
AUCTION YARD MANAGER/MARKETER
AUCTION YARD WORKER
Auctioneer
Beef Cattle Improvement Association Bull Test Manager
Beef Ranch Herdperson/Manager
Beef Ranch Owner/Operator
Beef Scientist
Boarding Stable Manager
Bookkeeper
Brand Inspector
Breed Association Field Representative
College Professor
Commodity Grader (including meat, poultry, dairy, wool)
Computer Operator/Analyst
Dairy Calf Feeder
Dairy Cow Feeder
Dairy Equipment Repair Person
Dairy Farm Herdperson/Manager
Dairy Inspector
Dairy Scientist
Dairy/Milk Processor
Embryo Transplant Technician
Equitation Instructor
Fair Manager
Farm Accountant
FARM ADVISOR/CONSULTANT
FARRIER (Horse Shoer)
Federal Meat Grader
Federal Meat Inspector
FEED BATCH PROGRAMMER
Feed Field Person
Feed Lot Crew Foreperson
FEED MILL OPERATOR/MANAGER
Feed Salesperson/Representative

CAREER OPTIONS IN ANIMAL SCIENCE (continued)

Feed Store Clerk
Feed Analysis Technician
Feedlot Manager
FIELD REPRESENTATIVE
Financial Loan Officer
Fish Farmer
Game Bird Farmer
GENERAL MANAGER
Geneticist
Government Agriculture Agency: Administrator/Manager/Supervisor
HERDSPERSON/FOREPERSON
Horse Agent/Trader
HORSE BREEDING FARM MANAGER
Horse Ranch Manager
Horse Ranch Owner/Operator
Horse Scientist
Horse Stable Attendant
Horse Stable Manager
Horse Trainer
Insurance Agent
Kennel Manager
Livestock Advertiser
Livestock Appraiser
Livestock Buyer/Broker
Livestock Consultant/Analyst
Livestock Equipment Manufacturer Sales Representative
Livestock Groomer/Fitter
Livestock Journalist
Livestock Marketing Agent
Livestock Ranch Tenant
Livestock Transportation Owner
Livestock/Poultry Researcher
Meat Cutter (Retail)
Meat Inspector/Grader
Meat Marketing (Wholesale)
Milk Tester
NUTRITIONIST
Pet Store Jobs
Pharmaceutical Sales Representative
PHONE SALESPERSON/TELEMARKETER
Range Management Specialist
Range Manager
SALESPERSON, LIVESTOCK SUPPLIES
SALESPERSON, SEMEN
Semen Collector
Sheep Ranch Herdsperson/Manager
Sheep Ranch Owner/Operator
Sheep Scientist
SHEPHERD
Slaughter House Manager
State Dairy Analyst

CAREER OPTIONS IN ANIMAL SCIENCE (continued)

Swine Farm Herdsperson/Manager

Swine Farm Owner/Operator

Swine Scientist

TEACHER, ANIMAL SCIENCE

USDA Animal Health Inspector

USDA Meat Inspector

WAREHOUSE SUPERVISOR

Weigh Master/Clerk

ASSOCIATE IN SCIENCE DEGREE MAJORS IN AGRI-TECHNOLOGY (20101)

The major in Agri-Technology is primarily for those people who want to follow a career path in teaching at the high school level in agriculture. The program will prepare students to transfer to Cal Poly Pomona, Cal Poly SLO, Chico State or Fresno State to complete their studies.

❖ Requirements for the Major:

AGAB 20	Microcomputer Applications in Agriculture
AGAG 1	Food, Land Use and Politics—A Global Perspective
AGAG 91	Agricultural Calculations
AGAN 1	Animal Science
AGOR 1	Horticultural Sciences
AGOR 32	Landscaping and Nursery Management
AGOR 56	Engine Diagnostics
AGOR 71	Landscape Construction Fundamentals

PLUS

Select three (3) courses from the following:

AGFR 20	Conservation of Natural Resources
AGLI 14	Swine Production
AGLI 16	Horse Production
AGLI 17	Sheep Production
AGLI 30	Beef Production
AGOR 12	Environmental Vegetable Gardening
AGOR 24	Integrated Pest Management
AGOR 62	Landscape Irrigation Design and Installation
AGPE 70	Pet Shop Management
AGPE 71	Canine Management

ASSOCIATE IN SCIENCE DEGREE MAJORS IN LIVESTOCK MANAGEMENT (20103)

❖ Requirements for the Major:

AGAB 20	Microcomputer Applications in Agriculture
AGAG 1	Food, Land Use and Politics—A Global Perspective
AGAG 59 <u>or</u> 60 <u>or</u> 61 <u>or</u> 62	Work Experience in Agriculture
AGAG 91	Agricultural Calculations
AGAN 1	Animal Science
AGAN 2	Animal Nutrition
AGAN 94	Animal Breeding
AGLI 14	Swine Production
AGLI 16	Horse Production
AGLI 17	Sheep Production
AGLI 30	Beef Production
AGLI 34	Livestock Judging and Selection
AGLI 96	Animal Sanitation and Disease Control

PLUS

Select six [6] units from the following:

AGOR 53	Small Engine Repair 1
AGOR 71	Landscape Construction Fundamentals
BUSM 20	Principles of Business
BUSM 66	Small Business Management
BUSS 35	Professional Selling
BUSS 36	Principles of Marketing

CERTIFICATES OFFERED IN LIVESTOCK MANAGEMENT (60103)

This certificate program is designed to give students basic skills in livestock management for employment opportunities on farms, ranches, and agriculture sales and services. All courses are applicable for degree requirements.

❖ Requirements for the Certificate:

AGAB 20	Microcomputer Applications in Agriculture
AGAG 1	Food, Land Use and Politics—A Global Perspective
AGAG 91	Agricultural Calculations
AGAN 1	Animal Science
AGAN 2	Animal Nutrition
AGAN 94	Animal Breeding
AGLI 14	Swine Production
AGLI 16	Horse Production
AGLI 17	Sheep Production
AGLI 30	Beef Production
AGLI 34	Livestock Judging and Selection
AGLI 96	Animal Sanitation and Disease Control

PLUS

Select six [6] units from the following:

AGOR 71	Landscape Construction Fundamentals
BUSM 20	Principles of Business
BUSM 66	Small Business Management
BUSS 35	Professional Selling
BUSS 36	Principles of Marketing

ASSOCIATE IN SCIENCE DEGREE MAJORS IN HORSE RANCH MANAGEMENT (20102)

❖ Requirements for the Major:

AGAB 20	Microcomputer Applications in Agriculture
AGAG 59 <i>or</i> 60 <i>or</i> 61 <i>or</i> 62	Work Experience in Agriculture
AGAN 2	Animal Nutrition
AGAN 94	Animal Breeding
AGLI 16	Horse Production <i>or</i>
AGLI 81	Light Horse Management
AGLI 18	Horse Ranch Management
AGLI 19	Horse Hoof Care
AGLI 20	Horse Behavior and Training
AGLI 96	Animal Sanitation and Disease Control
AGLI 97	Artificial Insemination of Livestock

PLUS

Select six [6] units from the following:

AGHE 84A	Applied Animal Health Procedures
AGOR 53	Small Engine Repair 1
AGOR 71	Landscape Construction Fundamentals
BUSM 20	Principles of Business
BUSM 66	Small Business Management

CERTIFICATES OFFERED IN HORSE RANCH MANAGEMENT (60102)

This certificate program is designed to give students basic skills on horse ranches and agriculture sales and services. All courses are applicable for degree requirements.

❖ Requirements for the Certificate:

AGAB 20	Microcomputer Applications in Agriculture
AGAG 59 <i>or</i> 60 <i>or</i> 61 <i>or</i> 62	Work Experience in Agriculture
AGAN 2	Animal Nutrition
AGAN 94	Animal Breeding
AGLI 16	Horse Production <i>or</i>
AGLI 18	Horse Ranch Management
AGLI 19	Horse Hoof Care
AGLI 96	Animal Sanitation and Disease Control
AGLI 97	Artificial Insemination of Livestock

ASSOCIATE IN SCIENCE DEGREE MAJORS IN PET SCIENCE (20104)

❖ Requirements for the Major:

AGAB 20	Microcomputer Applications in Agriculture
AGAN 1	Animal Science
AGAN 2	Animal Nutrition
AGAN 51	Animal Handling and Restraint
AGAN 94	Animal Breeding
AGLI 96	Animal Sanitation and Disease Control
AGPE 70	Pet Shop Management
AGPE 71	Canine Management
AGPE 72	Feline Management
AGPE 73	Tropical and Cold Water Fish Management
AGPE 74	Reptile Management
AGPE 76	Aviculture: Cage and Aviary Birds

CERTIFICATES OFFERED IN PET SCIENCE (60104)

This certificate program is designed to give students basic skills in production and marketing of pets at the wholesale and retail level. All courses are applicable for degree requirements.

❖ Requirements for the Certificate:

AGAB 20	Microcomputer Applications in Agriculture
AGAN 1	Animal Science
AGAN 2	Animal Nutrition
AGAN 51	Animal Handling and Restraint
AGAN 94	Animal Breeding
AGLI 96	Animal Sanitation and Disease Control
AGPE 70	Pet Shop Management
AGPE 71	Canine Management
AGPE 72	Feline Management
AGPE 73	Tropical and Cold Water Fish Management
AGPE 76	Aviculture: Cage and Aviary Birds
BUSM 66	Small Business Management

AGRICULTURE: AGRI-BUSINESS

AGAB 20—MICROCOMPUTER APPLICATIONS IN AGRICULTURE

54 hours lecture

3 UNITS

Degree Appropriate, CSU, UC

Advisory Prerequisite: Eligibility for ENGL 68.

Use of word processing, data base, spreadsheets, and graphic programs for students interested in agricultural business, nursery and landscape, equipment, and farm management.

AGRICULTURE: GENERAL SUBJECTS

AGAG 1—FOOD PRODUCTION, LAND USE AND POLITICS - A GLOBAL PERSPECTIVE

UNITS

3

54 hours lecture.

Degree Appropriate, CSU, UC

Surveys the world's food producing systems in terms of economic, political and cultural forces. Emphasizes ethical, sustainable food producing agriculture.

AGAG 59, 60, 61, 62—WORK EXPERIENCE IN AGRICULTURE

1-4 UNITS

Degree Appropriate

(May be taken four times for credit.)

(May be taken for Credit/No Credit only.)

Prerequisite: Compliance with Work Experience regulations as designated in the College Catalog.

This course is designed to provide majors with actual on-the-job experience in an approved work station which is related to classroom instruction. A minimum of five hours per week of supervised work (minimum 75 paid clock hours or 60 non-paid clock hours per semester) is required for each one unit of credit.

AGAG 91—AGRICULTURAL CALCULATIONS

54 hours lecture.

3 UNITS

Degree Appropriate

Prerequisite: Eligibility for MATH 51.

Calculating the proper rates of application of veterinary drugs, fertilizers, irrigation water, farm chemicals and pesticidal materials. Practical field work in calibrating application equipment, plotting production rates and feed conversion, determining proper concentrations and dilutions, and standardizing butterfat and solids non-fat.

AGRICULTURE: ANIMAL SCIENCE - GENERAL

AGAN 1—ANIMAL SCIENCE

54 hours lecture.

3 UNITS

Degree Appropriate, CSU, UC

Fundamental problems and essential concepts of animal production. Includes a study of the types of domestic animals and their utilization by humans.

AGAN 2—ANIMAL NUTRITION

54 hours lecture.

3 UNITS

Degree Appropriate, CSU

Composition of feeds and their utilization by domestic animals, including digestive physiology, animal assessment, feed appraisal and compiling of rations.

AGAN 51—ANIMAL HANDLING AND RESTRAINT

36 hours lecture, 54 hours lab.

3 UNITS

Degree Appropriate, CSU

This course will cover the methods of properly handling large and small animals and will include chemical and physical techniques of restraint.

AGAN 94—ANIMAL BREEDING

3 UNITS

54 hours lecture.

Degree Appropriate

The science of animal breeding, including fundamentals of inheritance, reproduction, and breeding systems for domestic animals. Artificial insemination, embryo manipulation and current topics in reproductive biotechnology will also be included.

AGRICULTURE: FORESTRY, CONSERVATION

AGFR 20—CONSERVATION OF NATURAL RESOURCES

3 UNITS

54 hours lecture.

Degree Appropriate, CSU, UC

Prerequisite: Eligibility for ENGL 68.

Natural resources and their conservation. The effects of man on the natural conditions and resources. History and present day conservation agencies and laws affecting conservation of natural resources.

AGRICULTURE: ANIMAL HEALTH TECHNOLOGY

AGHE 84A and B—APPLIED ANIMAL HEALTH PROCEDURES

1 UNIT

54 hours lab.

Degree Appropriate

Fall or spring field study course in the collection, handling, and analysis of feces, urine, and blood samples of pet and domestic animals. Practical experience in applied clinical procedures and techniques, including treatments and minor surgical procedures with school domestic farm animals. Experiences with animals will vary due to seasonal changes and different husbandry practices between Fall and Spring semesters.

LIVESTOCK PRODUCTION

AGLI 12—EXOTIC ANIMAL MANAGEMENT

3 UNITS

54 hours lectures.

Degree Appropriate

Care and management of exotic and alternative livestock species with emphasis on identification, health maintenance, handling techniques, nutrition and reproduction. Includes analysis of industry trends and principal marketing uses of exotic animals.

AGLI 14—SWINE PRODUCTION

3 UNITS

Spring Semester

Degree Appropriate, CSU

36 hours lecture, 54 hours lab.

A study of the various types of swine enterprise and the ways and means of entering them. Includes work in all major areas of swine management including handling, feeding, breeding, farrowing, butchering and marketing. Practical skills are taught by the use of college farm. Required of all animal husbandry majors.

AGLI 16—HORSE PRODUCTION

4 UNITS

Fall Semester

Degree Appropriate, CSU, UC

54 hours lecture, 54 hours lab.

Selection, utilization, and management of the light horse emphasizing recreational aspects of the modern horse. Laboratory work includes experience in the care of horse and tack.

AGLI 17—SHEEP PRODUCTION

3 UNITS

Spring Semester

Degree Appropriate, CSU

36 hours lecture, 54 hours lab.

A study of the various types of sheep enterprises and the ways and means of entering them. Includes class, laboratory and project work concerning all phases of sheep management, sheep handling, feeding, shearing, breeding, lambing and marketing. Practical skills taught on the school farm and sheep farms in the area. Required of all animal husbandry majors.

AGLI 18—HORSE RANCH MANAGEMENT

54 hours lecture, 54 hours lab.

4 UNITS

Degree Appropriate, CSU

Advisory prerequisite: AGLI 16

Skills and knowledge to work on or manage a modern equine ranch, including management of the breeding farm, farm lay out, estrous cycles, breeding problems and stallion care.

AGLI 19—HORSE HOOF CARE

18 hours lecture, 54 hours lab.

2 UNITS

Degree Appropriate, CSU

Emphasizes proper horse hoof care; shoeing, trimming and disease recognition and control.

AGLI 20—HORSE BEHAVIOR AND TRAINING

18 hours lecture, 54 hours lab.

2 UNITS

Degree Appropriate

Co requisite: AGLI 16 or AGLI 18 (may have been taken previously) or equivalent experience with horses.

Breaking and starting young horses. Concentrates on halter training of foals, ground work on yearlings, and green breaking two-year olds and up. Includes lunging techniques, driving, and breaking to a saddle. Training in collection, turning, backing, leads, and trailer loading.

AGLI 30—BEEF PRODUCTION

Fall Semester

36 hours lecture, 54 hours lab.

3 UNITS

Degree Appropriate, CSU

Principles and practices in the selection and management of feeder, market and breeding beef cattle. Economics of production, utilization of farm-grown feeds and feedlot operations will be stressed.

AGLI 34—LIVESTOCK JUDGING AND SELECTION

18 hours lecture, 54 hours lab.

2 UNITS

Degree Appropriate, CSU, UC

A study of the form and appearance of farm animals as they relate to their function. Laboratory section includes judging of livestock.

AGLI 96—ANIMAL SANITATION AND DISEASE CONTROL

54 hours lecture.

3 UNITS

Degree Appropriate, CSU

Prevention and control of infectious diseases affecting domestic animals, including basic disease concepts, transmission of infectious diseases, principles of sanitation, and the fundamentals of immunology.

AGLI 97—ARTIFICIAL INSEMINATION OF LIVESTOCK

Spring Semester

18 hours lecture, 54 hours lab.

2 UNITS

Degree Appropriate

Theory and application of artificial insemination of livestock, including semen evaluation and processing. Pregnancy diagnosis will be covered as an aid to the inseminator.

AGRICULTURE: ORNAMENTAL HORTICULTURE**AGOR 1—HORTICULTURAL SCIENCE**

54 hours lecture.

3 UNITS

Degree Appropriate, CSU

The basic horticulture skills and techniques for use in gardening, nursery and landscape applications. Emphasis on propagation, cultural practices and the study of plant relationships, structure, growth and development.

AGOR 24—INTEGRATED PEST MANAGEMENT**3 UNITS**

36 hours lecture, 54 hours lab.

Degree Appropriate, CSU

Identifies common agricultural pests in Southern California and analyzes physical, biological and chemical pest control principles and practices. Stresses use, safety, equipment, laws and regulations of pesticides.

AGOR 32—LANDSCAPING AND NURSERY MANAGEMENT**3 UNITS**

Fall Semester

Degree Appropriate, CSU

36 hours lecture, 54 hours lab.

Operation and management of wholesale and retail nurseries. Includes site location and layout of areas; greenhouse management; soil mixes and proper use of fertilizers, insecticides, fungicides, herbicides, and growth regulators; irrigation; mechanization; financing; personnel management, retail displays, advertising, and customer relationships; federal, state and local laws and regulations. Field trips are included.

AGOR 53—SMALL ENGINE REPAIR 1**3 UNITS**

36 hours lecture, 54 hours lab.

Degree Appropriate, CSU

(May be taken for option of letter grade or Credit/No Credit.)

Principles and repair of small engines used in landscape, industrial and agricultural applications. Includes repairs of lawnmowers, chainsaws, 2-cycle engine, 4-cycle engine, spraying equipment, all-terrain vehicles, and other related gas powered equipment.

AGOR 62—LANDSCAPE IRRIGATION - DESIGN AND INSTALLATION**3 UNITS**

36 hours lecture, 54 hours lab.

Degree Appropriate, CSU

(May be taken for option of letter grade or Credit/No Credit.)

Design and application of turf and ornamental irrigation systems. Design techniques, sprinkler system components and hydraulic principles used in nursery management, interior design, residential and commercial landscaping. Special emphasis is given to water conservation incorporating controlled flow technologies.

AGOR 71—LANDSCAPE CONSTRUCTION FUNDAMENTALS**3 UNITS**

36 hours lecture, 54 hours lab.

Degree Appropriate, CSU

(May be taken for option of letter grade or Credit/No Credit.)

Advisory Prerequisite: Eligibility for ENGL 68.

Fundamentals of construction techniques and tools used in landscaping. Students will gain skills in construction projects that include utilities (gas, water, electricity), woodworking, masonry, and surveying techniques as applied to landscaping.

AGRICULTURE: PET SCIENCE**AGPE 70—PET SHOP MANAGEMENT****3 UNITS**

Fall Semester

Degree Appropriate

54 hours lecture.

A study of the pet industry, pet shop operations and the economic aspects of the retail/wholesale pet business. Includes topics related to the organization and operation of pet shops, animal husbandry practices for species commonly sold in the industry, and sound business management skills.

AGPE 71—CANINE MANAGEMENT**3 UNITS**

36 hours lecture, 54 hours lab.

Degree Appropriate

Selection, feeding, housing, breeding and management of dogs, including commercial aspects of the dog as a domestic pet. Laboratory work will include practical experience in the handling, training and grooming of dogs.

AGPE 72—FELINE MANAGEMENT**3 UNITS**

Spring Semester

Degree Appropriate

54 hours lecture.

Advisory Prerequisite: Eligibility for ENGL 68.

Covers the care and management of cats. Includes breed identification and characteristics, grooming and showing, feeding and nutrition, practical care, behavior, breeding, and housing kittens.

AGPE 73—TROPICAL AND COLDWATER FISH MANAGEMENT

2 UNITS

Fall Semester

Degree Appropriate

36 hours lecture (9 week course)

Advisory Prerequisite: Eligibility for ENGL 68.

Covers the care and keeping of marine and freshwater aquarium fishes, plants, and invertebrates. Includes guidance on setting up aquariums, choosing compatible species, feeding, health care, breeding and raising fish.

AGPE 74—REPTILE MANAGEMENT

2 UNITS

Fall Semester

Degree Appropriate

36 hours lecture (9 week course)

Advisory Prerequisite: Eligibility for ENGL 68.

Covers the care and keeping of reptiles, including snakes, lizards, turtles, tortoises, newts, salamanders, and frogs. Includes identification and characteristics of reptiles commonly kept as pets. Guidance regarding the housing, feeding, health maintenance, breeding, and raising of reptiles will be offered.

AGPE 76—AVICULTURE - CAGE AND AVIARY BIRDS

3 UNITS

Spring Semester

Degree Appropriate

54 hours lecture.

A study of cage and aviary birds which are marketed in the wholesale and retail pet trade including identification, nutrition, breeding, disease prevention and control, aviary construction and providing the proper environment. The course will include information on psittacines, soft bills, finches, game birds and ornamental waterfowl.

BUSINESS: MANAGEMENT

BUSM 20—PRINCIPLES OF BUSINESS

3 UNITS

54 hours lecture.

Degree Appropriate, CSU, UC

Prerequisite: Eligibility for ENGL 68

Study of business and its functions, background, development, organization, and opportunities. Business terms, current trends, methods, contemporary and future problems, and current business practices are covered.

BUSM 66—SMALL BUSINESS MANAGEMENT

3 UNITS

54 hours lecture.

Degree Appropriate

Practical problems encountered in organizing and operating a small business enterprise. Included are units in initiating the business, financial and administrative control, legal and government relationships and other related considerations.

Mt. San Antonio College. Students may be awarded multiple Associate degrees. Each additional Associate degree requires 18 units of course work beyond the 60 units required for the first degree, including the satisfactory completion of all the required courses of the second major. Students awarded additional degrees must meet or complete the current general education requirements in effect at the time of re-entry.

Residency Requirement

The Residency Requirement for Mt. San Antonio College can be met in either of two ways: (1) twelve (12) units in residence and enrollment in the last semester or (2) forty-five (45) units in residence, if the last semester is not at Mt. San Antonio College.

GPA Requirement

A Mt. San Antonio College degree total grade point average and all college total grade point average of 2.0.

Physical Well-Being Requirement

Complete at least one of the physical education activity courses with the following prefixes: DNCE, PE-A, PE-F, PE-I, PE-L, PE-S, PE-X.

GENERAL EDUCATION REQUIREMENTS

Philosophy Statement

The general education component of the associate degree introduces students to the humanities, social sciences, natural sciences, applied sciences, and technology. It exposes students to different areas of study; demands the acquisition and use of reading, writing, and critical thinking skills at appropriate post-secondary levels; imparts a sense of our shared cultural heritage and how to function as responsible, ethical individuals in a complex society; and instills a level of intellectual curiosity and self-awareness conducive to lifelong learning and personal growth.

Together with other Mt. San Antonio College degree requirements, the general education component of the associate degree prepares students to:

- transfer to and function successfully in a baccalaureate degree granting institution;
- enter the work force as a competent, productive citizen;
- live a richer, more rewarding life.

General education is the distinguishing feature of higher education. It is a broadly-based core of humanistic knowledge and abilities, acquisition of which is the distinctive characteristic of the educated person. General education courses emphasize the ability to reason, to examine issues from different perspectives, to challenge authority, and to communicate ideas logically and confidently. They instill open-mindedness, respect for differences among people, and knowledge of self. They provide an understanding of the human condition and of human accomplishments and encourage a lifelong interest in learning.

General education courses are not primarily skills-based, nor are they limited to, or more appropriate for, majors in a specialized field of study.

Courses that fulfill general education requirements must:

1. Require post-secondary level skills in reading, writing, computation, and critical thinking.
2. Improve students' abilities to:
 - communicate oral and written ideas effectively;
 - define problems, design solutions, critically analyze results;
 - work effectively and cooperatively with others;
 - work independently;

- develop and question personal and societal values, make informed choices, and accept responsibility for one's decisions;
- function as active, responsible, ethical citizens;
- acquire the curiosity and skills essential for lifelong learning.

3. Impart understanding, knowledge, and appreciation of:

- our shared scientific, technological, historical, and artistic heritage, including the contributions of women, ethnic minorities, and non-western cultures;
- the earth's ecosystem, including the processes that formed it and the strategies that are necessary for its maintenance;
- human social, political, and economic institutions and behavior, including their inter-relationships;
- the psychological, social and physiological dimensions of men and women as individuals and as members of society.

Criteria for inclusion in each of the above categories are itemized below:

Courses that fulfill general education requirements must fall into one of the content categories listed below:

- A. Communication and Critical Thinking
- B. Science and Math
- C. Arts and Humanities
- D. Social Sciences
- E. Lifelong Understanding and Self-Development

A. Communication and Critical Thinking

These courses emphasize both the content and form of communication. They teach students the relationship of language to logic, as well as how to analyze, criticize, and advocate ideas, to reason deductively and inductively, and to reach sound conclusions. Courses fulfilling this requirement:

- provide understanding of the psychological and social significance of communication;
- illustrate how communication operates in various situations;
- focus on communication from the rhetorical perspective: reasoning, advocacy, organization, accuracy; the discovery, critical evaluation, and reporting of information; reading, listening, speaking, and writing effectively;
- provide active participation and practice in written and oral communication.

B. Science and Mathematics

These courses impart knowledge about living and non-living systems, and mathematical concepts and quantitative reasoning with applications. Courses fulfilling this requirement:

- promote understanding and appreciation of the methodologies and tools of science;
- emphasize the influence of scientific knowledge on the development of civilization;
- impart appreciation and understanding of basic concepts, not just skills;
- offer specific inquiry into mathematical concepts, quantitative reasoning and application. (See Mt. SAC degree competency requirements.)

C. Humanities

These courses cultivate intellect, imagination, sensibility and sensitivity. They encourage students to respond subjectively as well as objectively, and to develop a sense of the integrity of emotional and intellectual responses. Courses fulfilling this requirement:

- study great work of the human imagination;
- increase awareness and appreciation of the traditional humanistic disciplines such as art, dance, drama, literature, and music;
- impart an understanding of the interrelationship between creative art, the humanities, and the self;
- provide exposure to both Western and non-Western cultures;
- may include a foreign language course that contains a cultural component as opposed to a course that focuses on skills acquisition.

D. Social Sciences

These courses explore, at the micro and macro-level, the social, political, and economic institutions that underpin society. Courses fulfilling these requirements:

- promote understanding and appreciation of social, political, and economic institutions;
- probe the relationship between these institutions and human behavior;
- examine these institutions in both their historical and contemporary context;
- include the role of, and impact on, non-white ethnic minorities and women;
- include both western and non-western settings.

E. Lifelong Understanding and Self-Development

These courses facilitate an understanding of human beings as integrated physiological, social and psychological organisms. Courses fulfilling this requirement:

- provide selective consideration of human behavior, sexuality, nutrition, health, stress, implications of death and dying, and the relationship of people to the social and physical environment.

Adapted from CSU Executive Order 595 and Title 5 Section 40405.1

GENERAL EDUCATION REQUIREMENTS FOR 2004-2005

AREA A: Communication in the English Language (6 units):

Select two (2) courses from the following:

ENGL 1A	Freshman Composition, <i>or</i>
ENGL 1AH	Freshman Composition – Honors
	<i>and</i>
SPCH 1A	Public Speaking, <i>or</i>
SPCH 1AH	Public Speaking – Honors

AREA B: The Physical Universe and Life (3 units):

Select one (1) course from the Physical Sciences or Life Sciences:

Physical Sciences

ASTR 5	Introduction to Astronomy
ASTR 6	Astronomical Observing
CHEM 1A	General Chemistry
CHEM 1B	General Chemistry
CHEM 2A	Fundamentals of Chemistry
CHEM 2B	Fundamentals of Chemistry
GEOG 1	Elements of Physical Geography
GEOL 1	Physical Geology
GEOL 7	Geology of California
GEOL 8	Earth Science
GEOL 8H	Earth Science – Honors
GEOL 8L	Earth Science Laboratory
GEOL 9	Environmental Geology
GEOL 10	Natural Disasters
GEOL 13	Evolution of the Earth
METO 3	Weather and the Atmospheric Environment
METO 3L	Weather and the Atmospheric Environment - Laboratory
OCEA 10	Introduction to Oceanography
OCEA 10H	Introduction to Oceanography – Honors
OCEA 10L	Introduction to Oceanography – Laboratory
PHSC 7	Physical Science
PHSC 7L	Physical Science Laboratory
PHYS 1	Physics
PHYS 2AG	General Physics
PHYS 2BG	General Physics
PHYS 4A	Engineering Physics

Life Sciences

AGOR 1	Horticultural Science
ANAT 10A	Introductory Human Anatomy
ANAT 10B	Introductory Human Physiology
ANAT 35	Human Anatomy
ANTH 1	Biological Anthropology
ANTH 1H	Biological Anthropology – Honors
ANTH 1L	Biological Anthropology Laboratory
BIOL 1	General Biology
BIOL 2	Plant and Animal Biology
BIOL 3	Ecology and Field Biology
BIOL 4	Biology for Majors
BIOL 4H	Biology for Majors – Honors
BIOL 6	Humans and the Environment

Life Sciences (*continued*)

BIOL 6L	Humans and the Environment Laboratory
BIOL 17	Neurobiology and Behavior
BIOL 20	Marine Biology
BIOL 21	Marine Biology Laboratory
MICR 1	Principles of Microbiology
PSYC 1B	Biological Psychology
ZOOL 1	Invertebrate Zoology
ZOOL 2	Vertebrate Zoology

AREA C: Arts and Humanities (6 units):

Select two (2) courses, six (6) units minimum, with at least one (1) course from the Arts and one (1) from Humanities:

Arts

ARTA 1	Understanding the Visual Arts
ARTA 1H	Understanding the Visual Arts – Honors
ARTA 2	Topics in Visual Art and Culture
ARTA 2H	Topics in Visual Art and Culture – Honors
ARTA 3	Survey of Women and Gender in Art
ARTA 3H	Survey of Women and Gender in Art - Honors
ARTA 4	History of Western Art: Prehistoric Through Gothic
ARTA 4H	History of Western Art: Prehistoric Through Gothic – Honors
ARTA 5	History of Western Art: Renaissance Through Modern
ARTA 5H	History of Western Art: Renaissance Through Modern – Honors
ARTA 6	History of Modern Art
ARTA 6H	History of Modern Art - Honors
ARTA 9	Asian Art
ARTA 11	Arts of Africa, Oceania, and Native America
ARTA 12	Pre-Columbian Art of the Americas
ARTA 12H	Pre-Columbian Art of the Americas - Honors
ARTB 14	Introduction to Art Fundamentals
ARTD 15A	Drawing: Beginning
ARTD 20	Design: Two Dimensional
ARTS 22	Design: Three Dimensional
ARTD 25A	Painting: Beginning
ARTS 30A	Ceramics: Beginning
ARTS 40A	Sculpture: Beginning
DN-T 20	History and Appreciation of Dance
ID 180	History of Interior Architecture and Furnishings 1
MUS 7	Fundamentals of Music
MUS 11A	Music Literature Survey
MUS 11B	Music Literature Survey
MUS 12	History of Jazz
MUS 13	Introduction to Music Appreciation
MUS 13H	Introduction to Music Appreciation – Honors
MUS 14	World Music
MUS 15	Rock Music History and Appreciation
PHOT 15	History of Photography
THTR 9	Introduction to Theatre Arts
THTR 10	History of Theatre Arts
THTR 11	Principles of Acting 1

Humanities

CHIN 1	Beginning Chinese
CHIN 2	Elementary Chinese
CHIN 3	Intermediate Chinese
CHIN 4	Intermediate Chinese
ENGL 1B	English – Introduction to Literary Types
ENGL 1BH	English – Introduction to Literary Types – Honors
FRCH 1	Elementary French
FRCH 2	Elementary French
FRCH 3	Intermediate French
FRCH 4	Intermediate French
FRCH 60	French Culture Through Cinema
GERM 1	Elementary German
GERM 2	Elementary German
GERM 3	Intermediate German
GERM 4	Intermediate German
*HIST 1	History of the U.S.
*HIST 3	History of World Civilization
*HIST 3H	History of World Civilization – Honors
*HIST 4	History of World Civilization
*HIST 4H	History of World Civilization – Honors
*HIST 7	History of the U.S.
*HIST 7H	History of the U.S. – Honors
*HIST 8	History of the U.S.
*HIST 8H	History of the U.S. – Honors
*HIST 10	History of Asia
*HIST 11	History of Asia
*HIST 19	History of Mexico
*HIST 30	History of the African American
*HIST 31	History of the African American
*HIST 35	History of Africa
*HIST 36	Women in American History – Beyond the Stereotypes
*HIST 39	California History
*HIST 40	History of the Mexican American
HUMA 1	The Humanities
ITAL 1	Elementary Italian
ITAL 2	Elementary Italian
ITAL 3	Intermediate Italian
ITAL 4	Intermediate Italian
ITAL 60	Italian Culture Through Cinema
JAPN 1	Elementary Japanese
JAPN 2	Elementary Japanese
JAPN 3	Intermediate Japanese
JAPN 4	Intermediate Japanese
JAPN 5	Advanced Japanese
LIT 1	Early American Literature
LIT 2	Modern American Literature
LIT 6A	Survey of English Literature
LIT 6B	Survey of English Literature
LIT 11A	World Literature
LIT 11B	World Literature
LIT 14	Introduction to Modern Poetry
LIT 15	Introduction to Cinema
LIT 20	African American Literature
LIT 25	Contemporary Mexican American Literature
LIT 33	Images of Women in Literature
LIT 35	Science Fiction and Fantasy Survey
LIT 36	Introduction to Mythology
LIT 40	Children's Literature

Humanities (*continued*)

LIT 46	The Bible as Literature: Old Testament
LIT 47	The Bible as Literature: New Testament
PHIL 5	Introduction to Philosophy
PHIL 5H	Introduction to Philosophy – Honors
PHIL 12	Ethics
PHIL 12H	Ethics – Honors
PHIL 15	Major World Religions
PHIL 15H	Major World Religions – Honors
PHIL 20A	History of Western Philosophy
PHIL 20B	History of Western Philosophy
SIGN 80	American Sign Language I
SIGN 85	American Deaf Culture
SPAN 1	Elementary Spanish
SPAN 1H	Elementary Spanish – Honors
SPAN 2	Elementary Spanish
SPAN 2H	Elementary Spanish - Honors
SPAN 3	Intermediate Spanish
SPAN 3H	Intermediate Spanish – Honors
SPAN 4	Intermediate Spanish
SPAN 11	Spanish for the Spanish Speaking
SPAN 12	Spanish for the Spanish Speaking

* Courses may not be double counted to satisfy more than one area, even if a course is listed in more than one area.

AREA D:

Social, Political and Economic Institutions (6 units):

U.S. History and American Institutions

Select one (1) course from the following:

*HIST 1	History of the U.S.
*HIST 7	History of the U.S.
*HIST 7H	History of the U.S. – Honors
*HIST 8	History of the U.S.
*HIST 8H	History of the U.S. – Honors
*HIST 30	History of the African American
*HIST 31	History of the African American
*HIST 36	Women in American History – Beyond the Stereotypes
*HIST 40	History of the Mexican American
POLI 1	Political Science
POLI 1H	Political Science – Honors
POLI 25	Politics of the Mexican American
POLI 35	African American Politics

Elective Courses – *select at least one (1) course from the following list (3 units):*

AGAG 1	Food Production, Land Use and Politics – A Global Perspective
AGFR 20	Conservation of Natural Resources
ANTH 3	Archaeology
ANTH 5	Principles of Cultural Anthropology
ANTH 22	General Cultural Anthropology
ANTH 30	The Native American
BUSC 1A	Principles of Economics – Macroeconomics
BUSC 1AH	Principles of Economics – Macroeconomics – Honors
BUSC 1B	Principles of Economics – Microeconomics
BUSC 1BH	Principles of Economics – Microeconomics – Honors
CHLD 1	Child, Family, and Community
CHLD 10	Child Growth and Development

* Courses may not be double counted to satisfy more than one area, even if a course is listed in more than one area.

Elective Courses (*continued*)

CHLD 10H	Child Growth and Development – Honors
GEOG 2	Human Geography
GEOG 5	World Regional Geography
GEOG 30	Geography of California
*HIST 3	History of World Civilization
*HIST 3H	History of World Civilization – Honors
*HIST 4	History of World Civilization
*HIST 4H	History of World Civilization – Honors
*HIST 10	History of Asia
*HIST 11	History of Asia
*HIST 19	History of Mexico
*HIST 35	History of Africa
*HIST 39	California History
JOUR 2	Mass Media and Society
POLI 2	Political Science
POLI 5	Political Science Theory
POLI 9	Introduction to International Relations
PSYC 1A	Introduction to Psychology
PSYC 1AH	Introduction to Psychology – Honors
*PSYC 25	The Psychology of Women
SOC 1	Sociology
SOC 1H	Sociology – Honors
SOC 2	Sociology
SOC 2H	Sociology – Honors
SOC 4	Introduction to Gerontology
SOC 5	Introduction to Criminology
SOC 14	Marriage and the Family
SOC 15	Child Development
SOC 20	Sociology of Ethnic Relations
SOC 20H	Sociology of Ethnic Relations – Honors
SPCH 26	Interpersonal Communication
SPCH 26H	Interpersonal Communication – Honors

AREA E:

Lifelong Understanding and Self-Development (3 units):

Select one (1) course from the following:

AD 3	Chemical Dependency
BIOL 5	Contemporary Health Issues
BIOL 13	Human Reproduction, Development and Aging
BIOL 15	Human Sexuality
BIOL 15H	Human Sexuality – Honors
COUN 5	Career/Life Planning
FCS 41	Life Management
NF 10	Nutrition for Personal Health and Wellness
NF 25	Essentials of Nutrition
NF 25H	Essentials of Nutrition – Honors
NF 28	Cultural and Ethnic Foods
PE 34	Fitness for Living
PSYC 14	Developmental Psychology
* PSYC 25	The Psychology of Women
PSYC 26	Psychology of Sexuality
PSYC 33	Psychology for Effective Living

***Courses may not be double counted to satisfy more than one area, even if a course is listed in more than one area.**