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Faculty

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A.S. IN BIOLOGY

(Certificate of Achievement in Natural History also awarded. Skills Certificate available in Environmental Science.)

Students who complete the requirements listed below, plus additional general education and graduation requirements, will be awarded the associate degree. While students may take classes at both campuses, courses required for the major are offered at the Kentfield Campus.

All students should consult a counselor.

REQUIR	EMENTS		UNITS
BIOL	112A	Majors' Biology: Animals, Protozoa, Evolution and Classification	5
BIOL	1128	Majors' Biology: Plants, Algae, Fungi, and Ecology	5
BIOL	112C	Majors' Biology: Molecules, Cells, Prokaryotes and Genetics	5
And			
CHEM	115	Survey of Organic and Biochemistry	4
Or			
CHEM	131	General Chemistry I	5
And			
CHEM	132	General Chemistry II	5
MATH	104	Plane Trigonometry	3
PHYS	10BA	General Physics I	4
PHYS	1088	General Physics II	4
TOTAL M	TOTAL MAJOR UNITS		

Upon successful completion of this degree, students will be able to:

- Demonstrate basic understanding of the major areas of modern biology, at levels of organization ranging from molecules to the biosphere.
- Explain how important observations, hypotheses, experiments and revisions of theory have led to our modern understanding in these areas.
- Analyze critically current biological information in articles, news reports and other forms in the print and electronic media.
- Use procedures and equipment essential to modern biological research in the laboratory and the field.

Natural History Certificate of Achievement

The Natural History Certificate of Achievement is a field experience program based on scientific principles and concepts for students who want to develop a comprehensive understanding of the natural world. It is especially designed for elementary school teachers, natural history museum and environmental docents, and environmental educators. For students interested in receiving an Associate in Science degree in Biology, see requirements under that major.

REQUIREMENTS		i	UNITS	
BIOL	101	Field Biology	3	
BIOL	110	Introduction to Biology	3	
BIOL	161	Field Botany	3	
BIOL	162	General Ecology	3	
BIOL	235	General Marine Biology	4	
GEOG	112	Meteorology and Climatology	3	
GEOL	120	Physical Geology	3	
GEOL	120L	Physical Geology Laboratory	1	
BIOL	237	Marine Ecology Field Studies	2	
BIOL	244A	Alaska Field Studies	3	

BIOL	2448	Greater Yellowstone Ecosystem Field Studies	1.5
	Select	one field course from the following:	
GEOL	125	Field Geology I	2.5
GEOL	126	Field Geology II	2
GEOL	128	Geologic Studies of Point Reyes and the San Andreas	Fault 2
	In addi	ition, complete six units from the following courses:	
BIOL/ENVS 143 Stewardship of Marin Parks and Open Spaces		Stewardship of Marin Parks and Open Spaces	4
BIOL	164	Introduction to Mammalogy	3
BIOL	165	World of Insects	2
BIOL	165L	Introduction to Insect Biodiversity Laboratory	2
BIOL	167	Introduction to Herpetology	3
BIOL	169A	Introduction to Ornithology A	3
BIOL	1698	Introduction to Ornithology B	3
BIOL	171	Biology of Marine Mammals	3
TOTAL CERTIFICATE UNITS			MINIMUM OF 32.5

Upon successful completion of this certificate, students will be able

- Describe the major components of local ecosystems and explain their interrelationships.
- Use available resources and accepted procedures to identify species of living things, types of rocks and minerals and important meteorological phenomena, as well their origins and places in the local environment.
- Predict likely changes to local communities and ecosystems under different conditions.

Environmental Science Skills Certificate

Skills Certificates are an acknowledgement that the student has attained a specified set of competencies within a program. Skills Certificates may be part of a "ladder" of skills, beginning with job entry skills, or may constitute a skill set that enables a student to upgrade or advance in an existing career. Skills Certificates require less than 18 units and are shorter in duration than the Certificate of Achievement

This is the starting point for all those interested in environmental science. The program leading to this certificate introduces students to the major areas of environmental science, provides the basic background necessary for analysis and solution of environmental problems, gives an overview of some of the most important problems in Marin and provides direct contact with people solving them. It is designed to be completed in two years. It can be added to a College of Marin AA/AS degree to improve transferability to bachelor's programs in environmental science. It can also be earned apart from any degree to show mastery of the basics of the field of environmental science and to increase the diversity of job options in the field.

REQUIREMENTS			UNITS
BIOL/GEOL 13B		Introduction to Environmental Science	4
BIOL	110	Introduction to Biology	3
CHEM	105	Chemistry in the Human Environment	3
0r			
GEOL	120	Physical Geology	3
0r			
GEOG	101	Physical Environment	3
BIOL/GEOL 142		Environmental Policy and Decision-Making	3
0r			
BIOL/GEOL 145		Ethics in Science	3
0r			
GEOG	102	Human Environment	3
BIOL	143	Stewardship of Marin Parks and Open Spaces	4

SPCH

SPCH

SPCH

122

120

Public Speaking

Required Electives - select two courses (6 units):

Argumentation and Persuasion

is offered on the Indian Valley Campus two afternoons a week. The IVC classes mostly accommodate Court Reporting Students.

Please see the English (ENGL) category (courses numbered 062-097) for individual course listings.

COMMUNICATION

For additional Communication courses, please see Film and Video.

The curriculum is designed to provide theory and skills for those who are interested in mass media, television and films, whether students' goals be transfer, professional, or self-enrichment.

Career Options

Animator, Announcer, Broadcast Technician, Camera Operator, Community Affairs Director, Disc Jockey, Engineering Technician, Film Director, Film Editor, Freelance Film Maker, Light Technician, News Broadcaster, News Director, Producer, Production Engineer, Program Assistant, Promotion Sales Manager, Public Relations Representative, Reporter, Sales Account Executive, Screenwriter, Sound Editor, Sound Recorder, Sportscaster, Studio Technician, Teacher, Traffic Manager, Tutor, Videotape Photographer, Writer

Bonnie Borenstein, Patricia O'Keefe Department Phone: 415-485-9348

A.A.-T. IN COMMUNICATION STUDIES

Associate in Arts in Communication Studies for Transfer degree (AA-T)

This degree is intended for students who plan to transfer to the California State University (CSU) with a major in Communication Studies.

The Associate in Arts in Communication Studies for Transfer degree (AA-T) provides students with a breadth of courses that cover the many facets of communication, including public speaking, argumentation, mass media, and interpersonal and group communication. Students will develop their communication practices while studying theories and concepts that examine the role of communication in interpersonal relationships and society.

To complete the Associate in Arts Degree in Communication Studies for Transfer (AA-T), a student must:

- 1. Complete 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
 - The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
 - A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district. Up to 12 units may be double-counted.
- 2. Complete all courses in the major with a grade of "C" or better, or "P" if the course is taken as "pass/no pass."
- 3. Obtain a minimum grade point average of 2.0.

REQUIREMENTS		

UNITS

Interpersonal Communication **SPCH** 130 Small Group Communication 3 Required Electives - select two courses (6 units): **SPCH** 3 128 Intercultural Communication SPCH 140 Oral Interpretation of Literature I 3 3 COMM 110 Introduction toass Communication and Media Literacy Required Electives - select one course (3-4 units): JOUN 115 Reporting and Writing for Mainstream Media 3 **ENGL** 151 Reading and Composition 1B 4 Or **ENGL** 155 Critical Thinking and Composition 4 **ANTH** 102 Introduction to Cultural Anthropology 3 PSY 110 Introduction to Psychology 3 SOC 110 Introduction to Sociology *Or any 3-unit course, not listed above, that is CSU-transferable as communication studies.

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Upon successful completion of this degree, students will be able to demonstrate the following skills:

- Oral competency: Utilize different techniques to manage or minimize communication apprehension in a variety of contexts.
- Critical thinking: Understand that effective communicators adapt messages by evaluating language, culture, relationship, and
- Problem solving: Support claims with research from a variety of credible sources.

A.A. IN COMMUNICATION, MASS COMMUNICATIONS OPTION

Students who complete the requirements listed below, plus additional general education and graduation requirements, will be awarded the associate degree. All students should consult a counselor.

REQUIR	EMENTS		UNITS
СОММ	110	Introduction to Mass Communication and Media Literacy	3
FILM	150	Introduction to Film and Video Production	4
COMM	160	Images of Race, Gender, and Class in the Media	3
JOUN	115	Reporting and Writing for Mainstream Media	3
MMST	110	Introduction to Multimedia	3
	One co	urse from the following:	
FILM/HUM 109A		History of Film: Beginning to 1950	4
FILM/HUM 109B		Analysis and History of Contemporary Media	3
	And th	ree additional units from the following:	
JOUN	122	Newspaper and Media Production I	3
JOUN	123	Newspaper and Media Production II	3
SPCH	140	Oral Interpretation of Literature I	3
SPCH	155	On-Camera Performance/Reporting for Electronic Media	3
TOTAL M	TOTAL MAJOR UNITS		

Upon successful completion of this degree, students will be able to:

- Write a brief news story under deadline conditions for any textbased mass medium.
- Analyze the primary influences of dominant mass media on major cultural practices and social formations.
- Interpret media messages to create meanings based on personal experience.

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KIN 198: Off-Season Intercollegiate Track & Field

1.5-2 Units. 1 lecture and 1.5 lab hrs/wk for 1.5 units. Repeat: 3. No prerequisite.

An intensive course designed to help students unrstand and utilize the fundamentals and theory of training for and competing in the sport of track and field. Emphasizes the development of team and individual techniques and skills. (CSU) AA/AS Area H

KIN 215: Advanced First Aid/First Responder

3.0 Units. 2.5 lecture and 1.5 hrs/wk. No prerequisite. May also be taken as FIRE 215; credit awarded for only one course.

This introductory course is designed for lay persons interested in, or for professionals who require, First Responder training per State of California (Title 22) or U.S. DOT standards. The class teaches the basic pre-hospital care skills needed to render care at the scene of an emergency until more highly trained emergency medical response personnel arrive. Includes basic anatomy and body systems; lifting and moving patients; airway management; patient assessment; medical, behavioral, and trauma emergencies; terrorism awareness; and an overview of the Emergency Medical Services (EMS) system. This course is a prerequisite for the Emergency Medical Technician Program. (CSU/UC)

LIBRARY

Learning the techniques of library research will enable students to make use of this resource with confidence and efficiency. Library Skills courses enable students to manage information in an era of information explosion, whether their interests are academic, professional, or personal.

Faculty

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LIBRARY COURSE (LIBR)

LIBR 110: Introduction to Library Resources: A Self-Directed Approach

1.0 Unit. 1.125 TBA hrs/wk. No prerequisite. Self-paced. No regularly scheduled class meetings. Completion of the course represents approximately eighteen to thirty-six hours of academic work.

A self-paced course that facilitates the use of the library and teaches the basic skills needed for library research. The resources studied and the skills learned are applicable to any library - academic, public or special. Topics include the card catalog; important reference works such as encyclopedias, dictionaries, and almanacs; periodicals; periodical indexes; and book reviews. (CSU/UC)

MACHINE AND METALS TECHNOLOGY

Study in the field of machine and metals technology is designed as preparation for entrance into metalworking occupations. Graduates may enter the fields dealing with industrial production, prototype construction, special die work, or research and development. The courses in welding are designed to provide opportunity for the development.

opment of skills, knowledge, and experience for employment in the occupation and as auxiliary experience for persons in other majors.

Career Options

Certified Welder, Lathe Operator, Machinist, Machinist Apprentice, Mechanical Technician, Numerical Control Operator, Production Welder, Tool and Die Maker, Tool Company Representative, Welder Fabricator, Welding Technician

Faculty Arthur Lutz

Department Phone: 415-883-2211, Ext. 8108

A.S. IN MACHINE AND METALS TECHNOLOGY, OCCUPATIONAL

(Certificate of Achievement also awarded.)

An Associate of Science degree in Machine and Metals Technology, Occupational is awarded for satisfactory completion of the major requirements, as well as the general education requirements. A Certificate of Achievement is awarded for satisfactory completion of the major requirements as listed below. This program is offered at the Indian Valley Campus. All students should consult a counselor.

REQUIR	REMENTS	:	UNITS
	First Se	emester	
MACH	130	Welding I	2
MACH	140	Intermediate Machine Tool Processes	4
MACH	145	Computer Numerical Control Machining/Mill	3
MACH	165	Blueprint Reading for the Machine Trades	2
	Second	l Semester	
CIS	101	Introduction to Personal Computers and Operating Systems	1.5
ELEC	100	Fundamentals of Electronics	2
MACH	97	Machine Trades Math	2
MACH	155	Computer Numerical Control Machining/Lthe	3
MACH	240	Advanced Machine Tool Processes	4
	Third S	emester	
ENGG	256	Practical Materials Science	3
MACH	131	Welding II	2
MACH	250	Applications of Machine Tool Technology	2
WE	298B	Occupational Work Experience B	2
TOTAL N	AJOR U	NITS	32.5
T Imam		ful completion of this degree or cartificate study	

Upon successful completion of this degree or certificate, students will be able to:

- Demonstrate the technical knowledge and technical skills that will serve to prepare them for entry into careers of the manufacturing and related industries.
- (Determine the materials that are suitable for specific applications in the machine and metals technology fields and demonstrate (their applications.)

MACHINE AND METALS TECHNOLOGY COURSES (MACH)

MACH 106A: Metal Fabrication Fundamentals

2.0 Units. 1 lecture and 3 lab hrs/wk. No prerequisite.

This course introduces advanced metal fabrication techniques and their usefulness in other applications. The course includes basic metal straightening fundamentals, and introduces tools, techniques, and theory of metal fabrication. (CSU)