

Emphasis in Mathematics and Science

This emphasis focuses on training in the scientific method, the fundamental principles of natural science, and the principle laws and theories governing the physical and life sciences. It will also allow students to focus on the mathematical concepts, analytical thinking, and quantitative skills necessary for many other disciplines.

Students may use this emphasis to focus on transfer courses required for such baccalaureate majors as Applied Mathematics, Architecture, Astronomy, Aviation, Biochemistry, Biology, Biotechnology, Botany, Chemistry, Computer Science, Earth Science, Environmental Resource Management, Environmental Science, Geography, Geology, Geosciences, Marine Biology, Mathematics, Microbiology, Oceanography, Pre-Engineering, and Statistics.

Select 18 units minimum

Must complete at least one course in Mathematics and one in Science

Astronomy 100, 105L, 120
 Aviation Sciences 205
 Biology 100 or 101, 101L, 102, 105 or 106, 114, 114L, 118, 118L, 130, 131, 131L, 135, 185, 200, 201
 Botany 100 or 101, 101L
 Chemistry 110, 110L, 115, 115L, 205, 210, 220, 221
 CSIS-Computer Science 108, 110, 146, 210, 212, 220, 222
 CSIS-Web Technology 170
 Earth Sciences 100, 115
 Engineering 210, 210L, 231, 235, 236, 245
 Family and Consumer Sciences 185
 Geography 100, 100L, 103, 105, 110, 115, 120, 125
 Geology 100, 100L, 110, 120, 125, 150, 150L
 Mathematics 100, 110, 115, 120, 130, 135, 140, 141, 146, 200, 205, 206, 245
 Microbiology 200
 Oceanography 100, 100L or 101
 Physical Science 100, 100L, 101, 101L
 Physics 120, 121, 200, 201, 230, 231, 232
 Psychology 205, 205L, 210
 Sociology 205, 205L
 Zoology 100 or 101, 101L, 135, 145, 145L, 200, 203

Emphasis in Media and Communication

This emphasis focuses on various media and on how messages are produced, used, and interpreted. In addition, it will allow students to develop and apply skills in speaking, listening, and understanding verbal and non-verbal meanings.

Students may use this emphasis to focus on transfer courses required for such baccalaureate majors as Cinema, Communications, Journalism, Mass Media, Radio and Television, Speech, and Telecommunications and Film.

Select 18 units minimum

Must complete course work from at least two disciplines

Anthropology 107
 Cinema 100, 102, 103, 225
 Communications 100
 English 100, 150, 202, 203, 215
 Journalism 101, 105, 140
 Photography 100, 105, 140
 Radio and Television 100, 110, 220, 225
 Speech 100, 105, 115, 120, 125, 131
 Theatre Arts 100, 125

Emphasis in Social Sciences

This emphasis focuses on the nature of individual and collective human behavior. It will allow students to explore the political, economic, social, and psychological structures and institutions of human beings.

Students may use this emphasis to focus on transfer courses required for such baccalaureate majors as Administration of Justice, Anthropology, Child Development, Criminology, Gerontology, Government, History, Human Development, Political Science, Psychology, and Sociology.

Select 18 units minimum

Must complete course work from at least two disciplines

Administration of Justice 100, 102, 103, 104, 110
 Africana Studies 101, 102, 126

American Indian Studies 101, 102, 130, 140
 American Studies 200
 Anthropology 100, 100L or 101, 105, 107, 110, 115, 125, 126, 130, 137, 140, 225
 Biology 100 or 101, 101L, 105
 Chicano Studies 101, 102
 Child Development 100, 103, 104, 105, 115
 Chinese 130
 Communications 100, 105
 CSIS-Information Technology 105
 Economics 101, 102
 English 150
 Family and Consumer Sciences 105, 165
 Geography 103, 105
 Health 165
 History 101, 102, 105, 106, 107, 108, 121, 130, 140, 141, 150, 151, 152
 Judaic Studies 107
 Mathematics 120
 Multicultural Studies 200
 Political Science 100, 101, 102, 110
 Psychology 100, 105, 110, 115, 120, 125, 130, 145, 205, 205L, 210, 225, 230, 235
 Religious Studies 102, 107
 Sociology 100, 105, 110, 115, 120, 125, 130, 135, 145, 200, 205, 205L

Emphasis in World Languages

This emphasis focuses on exploring the connection of language to daily life and cultural context. It will provide a background in English language, as well as promote listening, writing, speaking, and reading comprehension skills in one or more foreign languages.

Students may use this emphasis to focus on transfer courses required for such baccalaureate majors as Linguistics, specific foreign language majors, and any other major requiring proficiency in one or more foreign languages.

Select 6 units minimum

English 100, 202, 203
 Philosophy 115
 Speech 100, 131

Select 12 units minimum

American Sign Language 100, 100L, 101, 101L, 110, 205, 205L, 206, 206L
 Anthropology 107
 Arabic 101A, 101B, 102A, 102B, 201A, 201B
 Chinese 101, 102, 130, 201
 English 150
 French 101, 102, 201, 202
 German 101, 102, 201, 202
 Italian 101, 102, 201
 Japanese 101, 102, 201, 202
 Spanish 101, 101A, 101B, 102, 102A, 102B, 201, 201A, 201B, 202

Upholstery (UP)

Contact the Design and Consumer Education Department for further information.
 (760) 744-1150, ext. 2349
 Office: P-8A

Certificates of Proficiency -

Certificate of Proficiency requirements are listed in Section 6 (green pages).
 • Upholstery

PROGRAM OF STUDY

Upholstery

Prepares students for variety of positions in upholstery and related industries. Students will master skills and techniques required for furniture upholstery and accessories, antique restoration, custom draperies and window treatments.

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
UP 85	Basic Upholstery	3
UP 86	Advanced Upholstery	3
UP 88	Antique Furniture Restoration	3
UP 90	Automotive Upholstery	3
UP 95 or	Window Treatments	
UP 96	Decorator Accessories	1.5
UP 97	Upholstery Topics	1
ID 135	Fabrics for Designers	3
TOTAL UNITS		17.5

COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

UP 85 Basic Upholstery (3)

1 hour lecture - 6 hours laboratory

Note: May be taken 4 times

Upholstering or replacing existing upholstery for various types of furniture. Commercial sewing machines, cushion stuffer, pneumatic tools, and hand tools will be used to complete individual projects.

UP 86 Advanced Upholstery (3)

1 hour lecture - 6 hours laboratory

Recommended preparation: UP 85

Note: May be taken 2 times

Advanced upholstery principles and techniques. Power sewing equipment, pneumatic tools, and specialized hand tools will be used to complete complex upholstery projects. Includes estimating, customer relations, tax laws, and other fundamentals of upholstery business operation.

UP 88 Antique Furniture Restoration (3)

1 1/2 hours lecture - 4 1/2 hours laboratory

Recommended Preparation: UP 85

Note: May be taken 2 times

Covers basic antique furniture restoration techniques, specialized tools, authentic materials, and standard terminology. Students will learn to identify style, approximate age, original fabrics, and types of exterior woods. Essential business concepts and practices will also be addressed.

UP 90 Automotive Upholstery (3)

1 hour lecture - 6 hours laboratory

Note: May be taken 2 times

Skills and techniques required to replace, repair or customize automotive and related upholstery. Fabrication of interiors and accessories for automobile interiors, watercraft and other recreational vehicles. Techniques and considerations related to auto alarm or sound system installation. Students will complete individual or group projects.

UP 95 Window Treatments (1.5)

1 hour lecture - 1 1/2 hours laboratory

Note: May be taken 2 times

Design and fabrication of various window treatments. Includes industry standards, design and fabric options, measuring and estimating, and related business concepts. Students will complete sample projects.

UP 96 Decorator Accessories (1.5)

1 hour lecture - 1 1/2 hours laboratory

Note: May be taken 2 times

Skills and techniques necessary for creation of a variety of decorator accessories: upholstered headboards; designer cushions; custom pillows; lampshades; duvet covers, bedspreads and dust ruffles; table runners and covers; and simple slip-covers. Includes design and fabric/materials selection, industry standards, cost estimating/pricing and other business considerations. Students will complete individual projects.

UP 97 Upholstery Topics (.5 - 4)

Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture or laboratory may be scheduled by the department. Refer to Class Schedule.

Note: May be taken 3 times

Topics in upholstery. See Class Schedule for specific topic offered. Course title will designate subject covered.

Wastewater Technology Education (WWT)

Contact Occupational & Noncredit Programs for further information. (760) 744-1150, ext. 2284
Office: AA-136

Associate in Arts Degrees -

AA Degree requirements are listed in Section 6 (green pages).

• Wastewater Technology Education

Certificates of Achievement -

Certificate of Achievement requirements are listed in Section 6 (green pages).

• Wastewater Technology Education

PROGRAM OF STUDY

Wastewater Technology Education

Specifically designed for individuals employed by or seeking employment in water districts in San Diego County.

A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements	Units
WWT 100 Treatment Plant Operations	3
WWT/WTE 110 Waterworks Mathematics	3
WWT/WTE 120 Instrumentation and Controls	3
WWT/WTE/ PWM 125 Supervision	3
WWT 150 Collection Systems Operator	3
WWT 155 Treatment Process Control	3
WWT/WTE 215 Motors/Pumps/Oper/Maintenance	3
Electives (Select 6 units)	
WWT/WTE 135 Backflow Prevention	3
WWT/WTE 138 Cross Connection Specialist	3
WWT 197 Wastewater Tech Education Topics	.5-4
WWT/WTE 225 San Diego Regional Internship	4-8
CE 100* Cooperative Education	3-4
TOTAL UNITS	27

*Cooperative Education must be related to this major.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

WWT 100 Treatment Plant Operations (3)

3 hours lecture

Note: May be taken 4 times

An introductory wastewater treatment plant operations course. Topics covered include: the various origins and characteristics of wastewater; an overview of wastewater collections systems; preliminary treatment; primary treatment; fixed film secondary biological treatment processes; treatment ponds and disinfection. Emphasis is given to the role of the operator and preparation for solving practical problems and problems typical of those found in Operator Certification examinations.