SOLANO

2020 Fall Catalog Addendum

This catalog addendum reflects updates and corrections to the 2020-2021 catalog.
New and modified programs and courses are effective Spring 2021.
The complete catalog covers Summer semester (June-August 2020);
Fall semester (August-December 2020); and Spring semester (January-May 2021).

Catalog Revised 11/2020

www.solano.edu

A public community college serving the Northern California communities of
Benicia, Dixon, Fairfield, Suisun, Travis Air Force Base,
Vacaville, Vallejo, and Winters

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Vacaville Center
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Travis Air Force Base Center
530 Hickam Ave., Bldg. 249, Travis Air Force Base, CA 94535
(707) 424-2431

ACCREDITATION AND APPROVALS

Solano Community College is accredited by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges, 10 Commercial Blvd., Suite 204, Novato, California 94949, (415) 506-0234, an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U.S. Department of Education. Additional information about accreditation, including the filing of complaints against member institutions, can be found at: *www.accjc.org*.

APPROVALS
Nursing - California State Board of Registered Nursing.
Certified Nursing Assistant - California Department of Public Health
Cosmetology - California State Board of Barbering and Cosmetology
Veterans Training - U.S. Department of Veterans Services
Active-Duty Training - Department of Defense
Foreign Student Education - U.S. Immigration Service (USCIS)

CERTIFICATION
Aeronautics Program - Federal Aviation Administration (FAA) in accordance with CFR14, FAR Part 147

Getting Started

DROPPING CLASSES

- Students are responsible for officially dropping courses online through MySolano before established deadlines.

- Students are responsible for paying all applicable fees each semester of attendance. Failure to pay fees may result in a hold on the student's account.

- Established deadlines are listed for each course on student's Schedule Bill.

- Students may be dropped from a class by the instructor for non-attendance.

- Students who do not officially drop courses may receive a grade of F.

Transfer

Credit-By-Examination

Credit-by-examination is available for some courses that are not remedial or normally taught at or below the secondary education level. Courses eligible for credit-by- examination have been identified by the appropriate academic school. The amount of credit granted may not exceed the amount listed for the specific course in the college catalog.

To be eligible, the student must
1. be enrolled currently at the College in at least one graded course other than those being taken for credit-by-examination
2. be in good standing (overall 2.0 GPA)
3. have successfully completed, with a minimum grade of C, a minimum of 12 units in residence or will have successfully completed, with a minimum grade of C, a minimum of 12 units by the end of the current semester, exclusive of units to be earned by the credit-by- examination.
4. have all prerequisites met or waived by the School Dean

No examination may be repeated. The maximum number of units that may be earned by credit-by-examination is 15. Students may obtain a copy of the policy and the creditby-examination petition form online or at an Admissions and Records service counter. The petition must be filed with the Admissions and Records office no later than the fourth week of the semester. If the petition is approved by the School Dean, the student returns the petition to the Admissions and Records office. Eligibility will be checked and payment of a fee for preparation and administration of the exam in the amount of $20/unit to a maximum of $120

Credit For Prior Learning

Credit for prior learning may be earned for eligible courses approved by the District for students who satisfactorily pass an authorized assessment. Authorized assessments may include the evaluation of approved external standardized examinations, Joint Services Transcripts, student-created portfolios, and credit by examination.

Transfer

CLEP (COLLEGE LEVEL ENTRANCE PROGRAM) EXAMINATION CREDIT

Solano Community College may award 3 units of college credit for CLEP examination scores of 50 (or otherwise noted) if the examination is compatible with the college's curriculum. Students who have received credit from a CLEP examination should not take the comparable college course as transfer credit will be only be awarded for one. CLEP scores may be used to meet Solano Community College General Education - Option A and California State University (CSU) General Education Breadth - Option C (CLEP cannot be applied to IGETC) . For more information contact the Admissions and Records office.

EXAMINATION (Score of 50 unless otherwise noted)	SCC GE AREA	CSU GE (3 semester units)
American Government	2B	D
American Literature	3	C2
Analyzing and Interpreting Literature	3	C2
Biology	1	B2
Calculus	4B	B4
Chemistry	1	B1
College Algebra	4B	B4
College Algebra - Trigonometry	4B	B4
English Literature (prior to F'11 only)	3	C2
French Level II (score – 59)	3	C2
History, United States I	2B	D and US-1
History, United States II	2B	D and US-1
Human Growth and Development	5	E
Humanities	3	C2
Introductory Psychology	2A	D
Introductory Sociology	2A	D
Natural Sciences	1	B1 or B2
Pre-Calculus	4B	B4
Principles of Macroeconomics	2A	D
Principles of Microeconomics	2A	D
Spanish Level II (score – 63)	3	C2 or D
Trigonometry	4B	B4
Western Civilization I	2A or 3	C2
Western Civilization II	2A	D

Transfer

AP (COLLEGE BOARD ADVANCED PLACEMENT) EXAMINATION CREDIT

AP EXAMINATION	Score	SCC Course Equivalent	SCC GE	CSU Units Granted	CSU GE	IGETC	UC Units Granted	Limitations of Credit
ART: Art History	3	ART 001	C	3	C1 or C2 (3 units)	3A or 3B (3 units)	5.3	**CSU GE:** Only 3 units total may be applied to CSU GE.
ART: Art History	4, 5	ART 001, 002	C	6			5.3	
ART, Studio: 2D	3,4,5	ART 006	C	3	N/A	N/A	5.3	**UC:** Maximum credit: 5.3 units for Studio Art, 2D, 3D & drawing exams
ART, Studio: 3D	3,4,5	ART 008	C	3	N/A	N/A	5.3	
ART, Studio: Drawing	3,4,5	ART 014	C	3	N/A	N/A	5.3	
◊ BIOLOGY	3,4,5	BIO 015	A	6	B2 & B3 (4 units)	5B & 5C (4 units)	5.3	
CALCULUS AB	3	N/A	D2	3	B4 (3 units)	2A (3 units)	2.6	
CALCULUS AB	4,5	MATH 020	D2	3	B4 (3 units)	2A (3 units)	2.6	**UC**: Maximum credit 5.3 units total for both AB & BC exams; 2.6 units for AB & AB subscore.
CALCULUS BC	3	N/A	D2	6	B4 (3 units)	2A (3 units)	5.3	
CALCULUS BC	4,5	MATH 020 & 021 or MATH 030	D2	6	B4 (3 units)	2A (3 units)	5.3	
± CALCULUS BC/AB Subscore	3,4,5	MATH 020 or MATH 030	D2	3	B4 (3 units)	2A (3 units)	2.6	
◊ CHEMISTRY	3	CHEM 010	A	6	B1 & B3 (4 units)	5A & 5C (4 units)	5.3	**Note:** Check with transfer schools for course equivalency in Chem. May not award credit for General Chem.
◊ CHEMISTRY	4,5	CHEM 001	A	6	B1 & B3 (4 units)	5A & 5C (4 units)	5.3	
COMPUTER SCIENCE A	3,4,5	N/A	D3	3	N/A	N/A	5.3	**UC:** CS A = 5.3 after F'18. UC Max credit 2.6 units for CS A & AB exams.
COMPUTER SCIENCE AB	3,4,5	N/A	D3	6	N/A	N/A	2.6	
COMPUTER SCIENCE Principles	3,4,5	N/A	D3	6	B4 (3 units)	N/A	5.3	
ECONOMICS: Macroeconomics	3,4,5	ECON 001	B2	3	D (3 units)	4 (3 units)	2. 6	
ECONOMICS: Microeconomics	3,4,5	ECON 002	B2	3	D (3 units)	4 (3 units)	2. 6	
ENGLISH: Language & Composition	3,4,5	ENGL 001	D1	6	A2 (3 units)	1A (3 units)	5.3	**UC:** Max credit 5.3 units for both Engl. Lang/Comp & Engl. Lit/Comp
ENGLISH: Literature & Composition	3,4,5	ENGL 001	D1 or C	6	A2 & C2 (6 units)	1A or 3B (3 units)	5.3	
◊ ENVIRONMENTAL SCIENCE	3,4,5	BIO 012*	A	4	B1 & B3 (4 units)	5A & 5C (3 units) ◊	2. 6	**IGETC**: Only 3 units apply; need 4 to meet 5A/5C req.
GOVERNMENT/POLITICS: Comparative	3,4,5	PLSC 002	B2	3	D (3 units)	4 (3 units)	2. 6	
GOVERNMENT/POLITICS: US	3,4,5	PLSC 001	B1	3	D & US-2 (3 units)	4 (3 units)	2. 6	
HISTORY: European	3,4,5	HIST 004 & 005	C	6	C2 or D (3 units)	3B or 4 (3 units)	5.3	**Note:** Only 3 units may be applied to CSU and IGETC GE for each exam. Check transfer schools - many will not award two courses for major/course equivalencies.
HISTORY: United States	3,4,5	HIST 017 & 018	B1	6	C2 or D & US-1 (3 units)	3B or 4 (3 units)	5.3	
HISTORY: Modern World	3,4,5	HIST 002 & 003	C	3	C2 or D (3 units)	3B or 4 (3 units)	5.3	
HUMAN GEOGRAPHY	3,4,5	GEOG 002	B2	3	D (3 units)	4 (3 units)	2.6	
LANGUAGE OTHER THAN ENGLISH:								
Chinese Language/Culture	3,4,5	N/A	C	6	C2 (3 units)	3B & 6A (3 units)	5.3	
French Language/Culture	3,4,5	FREN 003 or 011	C	6			5.3	
French Literature (Prior to F09)	3,4,5	FREN 004	C	6			5.3	
German Language/Culture	3,4,5	N/A	C	6			5.3	
Italian Language/Culture	3,4,5	N/A	C	6			5.3	
Japanese Language/Culture	3,4,5	N/A	C	6			5.3	
Latin	3,4,5	N/A	C	6			2.6	
Latin Literature (Pre 'F09)	3,4,5	N/A	C	6			2.6	
Latin: Vergil (Pre 'F12)	3,4,5	N/A	C	3			2.6	
Spanish Language/Culture	3,4,5	SPAN 002	C	6			5.3	
Spanish Literature/Culture	3	N/A	C	6			5.3	
Spanish Literature/Culture	4,5	SPAN 004	C	6			5.3	
MUSIC THEORY	3,4,5	MUSC 001	C	6	N/A (C1 Prior to F'09)	N/A	5.3	

If a specific AP exam is not listed, acceptance will default to the CSU standard. Consult with a counselor.

Transfer

AP (COLLEGE BOARD ADVANCED PLACEMENT) EXAMINATION CREDIT

AP EXAMINATION	Score	SCC Course Equivalent	SCC GE	CSU Units Granted	CSU GE	IGETC	UC Units Granted	Limitations of Credit
PHYSICS: B (pre F'13)	3,4,5	PHYS 002, 004	A	6	B1 & B3 (6 units)	5A & 5C (4 units)	5.3	**CSU GE:** 6 units max credit applied to baccalaureate, 4 units max to GE.
◊ PHYSICS: 1	3,4,5	PHYS 002	A	4		5A & 5C (4 units)	5.3	
◊ PHYSICS: 2	3	N/A	A	4		5A & 5C (4 units)	5.3	**IGETC:** Phys 1 & 2 may apply 4 sem. units to IGETC. Phys C: Elec/Mag and Mech. may only apply 3 units to IGETC – will need to complete at least 4 sem. units to satisfy Area 5A/5C.
◊ PHYSICS: 2	4,5	PHYS 004	A	4	B1 & B3 (4 units)	5A & 5C (4 units)	5.3	
◊ PHYSICS: C (Electricity/Magnetism)	3,4,5	PHYS 007	A	4		5A & 5C (3 units) ◊	2.6	
◊ PHYSICS: C (Mechanics)	3,4,5	PHYS 006	A	4		5A & 5C (3 units) ◊	2.6	**UC:** 5.3 units max combined for all PHYS exams.
PSYCHOLOGY	3,4,5	PSYC 001	B2	3	D (3 units)	4 (3 units)	2.6	
STATISTICS	3,4,5	MATH 011	D2	3	B4 (3 units)	2 (3 units)	2.6	

NOTES:

1. Students may earn associate degree and general education credit for Advanced Placement (AP) Examinations with scores of 3, 4, or 5. Advanced Placement Examinations are noted in the chart below with the specific course credit listed or with the notation of "N/A" where applicable. AP exams not included in the chart may have been exams offered in the past. Consult with a counselor to determine applicability.
2. Students must have the College Board send official AP exam results to the Solano Community College Admissions and Records office for use on the associate degree or general education pattern. Please note: Course credit and units granted by Solano Community College may differ from course credit and units granted by a transfer institution.
3. A student planning to transfer to a four-year college or university must consult with that transfer institution's catalog and admissions department regarding its awarding of Advanced Placement credit. Credit awarded at Solano Community College for the completion of a local AA/AS degree and general education, CSU general education, and/or IGETC (UC) is as noted above. This is not specific to individual colleges and universities. AP exams may not satisfy the requirements for specific majors at four-year colleges. Please consult with a counselor or a university representative on major specific courses and prerequisites.
4. Units awarded for Advanced Placement exams may not be used to meet the residency requirements for the associate degree.

◊ IMPORTANT NOTES ABOUT AP SCIENCES FROM IGETC STANDARDS: AP exams in Biology, Chemistry or Physics 1 and 2 (which replaced Physics B) allow CCC campuses to apply 4 semester or 5 quarter units to IGETC certification. For Environmental Science, Physics C: Mechanics and Physics C: Electricity/Magnetism, 3 semester or 4 quarter units are applied for IGETC certification; therefore, students who complete these exams will be required to complete at least 4 semester or 5 quarter units to satisfy the minimum required units for Area 5.

± Students who take the Calculus BC examination and earn a subscore of 3 or higher on the Calculus AB portion will receive credit for the Calculus AB examination, even if they do not receive a score of 3 or higher on the BC examination.

* Note that AP Environmental Science may count for BIO 012 for SCC purposes, but will not count for CSU GE Area B2 or IGETC GE Area 5B.

If a specific AP exam is not listed, acceptance will default to the CSU standard. Consult with a counselor.

Transfer

IB (INTERNATIONAL BACCALAUREATE) CREDITS

Solano Community College may award college credit for international baccalaureate (IB) course completion with scores of 5, 6, or 7 (unless otherwise noted), if the course work is compatible with the college's curriculum. No credit will be granted for lower level course work completed in the IB program. Students who have earned credit from an IB exam should not take a comparable college course because transfer credit will not be granted for both (meet with a counselor to verify).

International Baccalaureate (IB) Credit for Solano Community College General Education

REQUIRED EXAM SCORE *(HIGHER LEVEL EXAMS ONLY)* IB SCORE 5-7 unless otherwise noted	SCC GE (3 semester units)	CSU GE Breadth CERTIFICATION (3 semester units*)	IGETC CERTIFICATION (3 semester units*)
BIOLOGY	AREA A	AREA B2	AREA 5B - without lab
CHEMISTRY	AREA A	AREA B1	AREA 5A - without lab
ECONOMICS	AREA B2	AREA D	AREA 4
GEOGRAPHY	AREA B2	AREA D	AREA 4
HISTORY (any region)	AREA C	AREA C2 or D	AREA 3B OR 4
LANGUAGE A Literature CSU GE: SCORE 4; IGETC: Score 5-7	AREA C	AREA C2	AREA 3B and 6A
LANGUAGE A Language and Literature CSU GE: SCORE 4; IGETC: Score 5-7	AREA C	AREA C2	AREA 3B and 6A
LANGUAGE A1 (any language) CSU GE: SCORE 4; IGETC: Score 5-7	AREA C	AREA C2 Removed F'13	AREA 3B
LANGUAGE A2 (any language) CSU GE: SCORE 4; IGETC: Score 5-7	AREA C	AREA C2 Removed F'13	AREA 3B
LANGUAGE B (any language)	AREA C	N/A	AREA 6A
MATHEMATICS CSU GE: SCORE 4; IGETC: Score 5-7	AREA D	AREA B4	AREA 2A
PHYSICS	AREA A	AREA B1	AREA 5A – without lab
PSYCHOLOGY	AREA B2	AREA D	AREA 4
THEATRE	AREA C	AREA C1	AREA 3A

*GE units listed only; total transfer units may be up to 6 (GE units + elective, etc.). Check with transfer university.

1. Only higher level tests accepted for credit.
2. IB credit is not granted for English Composition (ENGL 001) or for the Art Exam.
3. If a student passes more than one test in the same language other than English (e.g., two exams in Spanish), only one exam may be applied.
4. Credit is granted only toward the specific area(s) listed in general education. The units may not apply toward certification of the corresponding GE-Breadth area.
5. Students seeking certification in Language A1 and/or A2 prior to transfer must have passed the test before Fall 2013.
6. The units earned from IB credit cannot be used to satisfy the 12-unit requirement or be applied toward financial aid.
7. Please confer with transfer university admissions representatives for application of units upon transfer.

C-ID (Course Identification Numbering System)

The Course Identification Numbering System (C-ID) is a statewide numbering system that is different from the course numbers assigned by individual California Community Colleges. A C-ID Designator next to a course means that the course is comparable in content and scope to a course offered by participating California colleges and universities. Thus, if the Solano Community College courses are listed below with a C-ID Designator, students can be assured that the courses will be accepted at a California college or university that offers the courses with the same C-ID Designator.

The C-ID Numbering System is particularly useful for students attending more than one California Community College since C-ID Designators are often applied to courses students need to prepare for transfer.

Solano Community College		C-ID Designator
ACCOUNTING		
ACCT 001	Financial Accounting	ACCT 110
ACCT 002	Managerial Accounting	ACCT 120
ANTHROPOLOGY		
ANTH 001	Introduction to Biological Anthropology	ANTH 110
ANTH 001L	Biological Anthropology Lab	ANTH 115L
ANTH 002	Introduction to Cultural Anthropology	ANTH 120
ANTH 007	Introduction to Archaeology	ANTH 150
ART		
ART 001	Art History	ARTH 110
ART 002	Art History	ARTH 120
ART 003A	Arts of Asia	ARTH 130
ART 003B	Arts of Africa, Oceania, and the Americas	ARTH 140
ART 004	Life Drawing	ARTS 200
ART 006	Design Principles in 2-Dimensions	ARTS 100
ART 007	Design-Color	ARTS 270
ART 008	Design Principles in 3-Dimensions	ARTS 101
ART 010	Art Appreciation	ARTH 100
ART 011	Survey of Modern Art	ARTH 150
ART 014	Introduction to Drawing	ARTS 110
ART 015	Intermediate Drawing	ARTS 205
ART 016	Beginning Painting	ARTS 210
ART - DIGITAL		
ARTD 044	Introduction to Digital Design	ARTS 250
BIOLOGY		
BIO 002	Cell and Molecular Biology	BIOL 190
BIO 003	Evolution, Ecology & Biodiversity	BIOL 140
BIO 004	Human Anatomy with Lab	BIOL 110B
BIO 005	Human Physiology with Lab	BIOL 120B
BIOTECHNOLOGY		
BIOT 001	Introductory Biology	BIOT 101X
BUSINESS		
BUS 005	Introduction to Business	BUS 110
BUS 018	Legal Environment of Business	BUS 120
CHILD DEVELOPMENT AND FAMILY STUDIES		
CDFS 038	Child Growth and Development	CDEV 100
CDFS 050	Child Family and Community	CDEV 110
CDFS 053	Teaching in a Diverse Society	ECE 230
CDFS 054	Child Health, Safety and Nutrition	ECE 220
CDFS 062	Principles & Practices of Teaching Young Children	ECE 120
CDFS 063	Introduction to Curriculum	ECE 130
CDFS 064	Observation and Assessment	ECE 200
CDFS 065	Practicum in Early Childhood Education	ECE 210

Solano Community College		C-ID Designator
CHEMISTRY		
CHEM 001	General Chemistry	CHEM 110
CHEM 001 +	General Chemistry I	
CHEM 002	General Chemistry II	CHEM 120S
CHEM 003	Organic Chemistry for Science Majors I, with Lab	CHEM 150
CHEM 003 +	Organic Chemistry I	
CHEM 004	Organic Chemistry II	CHEM 160S
CHEM 010	Intermediate Chemistry	CHEM 101
CHEM 011	Basic Organic Chemistry & BioChemistry	CHEM 102
COMPUTER INFORMATION SCIENCE		
CIS 020	Assembly Programming	COMP 142
CIS 021	Discrete Structures	COMP 152
CIS 022	Programming Concepts and Methodology I	COMP 122
CIS 023	Data Structures and Algorithms	COMP 132
CRIMINAL JUSTICE		
CJ 001	Introduction to Criminal Justice	AJ 110
CJ 002	Concepts of Criminal Law	AJ 120
CJ 011	Community and the Justice System	AJ 160
CJ 051	Criminal Investigation	AJ 140
CJ 053	Legal Aspects of Evidence	AJ 124
CJ 056	Juvenile Procedures	AJ 220
COMMUNICATION STUDIES		
COMM 001	Public Speaking	COMM 110
COMM 002	Introduction to Persuasion	COMM 190
COMM 006	Argumentation and Debate	COMM 120
COMM 008	Group Communication	COMM 140
COMM 012	Intercultural Communication	COMM 150
COMM 015	Oral Interpretation of Literature	COMM 170
COMM 050	Forensics (Speech & Debate)	COMM 160B
ECONOMICS		
ECON 001	Principles of Macroeconomics	ECON 202
ECON 002	Principles of Microeconomics	ECON 201
EDUCATION		
EDUC 001 +	Introduction to Elementary	
OCED 090	Classroom Teaching	EDUC 200
ENGINEERING		
ENGR 001	Introduction to Engineering	ENGR 110
ENGR 026	Mathematics and Engineering Problem Solving Using Matlab	ENGR 220
ENGR 030	Statics	ENGR 130
ENGR 045	Materials Science and Engineering	ENGR 140 B

C-ID (Course Identification Numbering System)

Solano Community College		C-ID Designator

ENGLISH

ENGL 001	College Composition	ENGL 100
ENGL 002	Argumentative Writing and Critical Thinking Through Literature	ENGL 110
ENGL 002	Introduction to Literature	ENGL 120
ENGL 004	Critical Thinking and Composition: Language in Context	ENGL 105
ENGL 006	Introduction to Creative Writing	ENGL 200
ENGL 030	Survey of American Literature 1	ENGL 130
ENGL 031	Survey of American Literature 2	ENGL 135
ENGL 040	Survey of British Literature 1	ENGL 160
ENGL 041	Survey of British Literature 2	ENGL 165

GEOGRAPHY

GEOG 001	Introduction to Physical Geography	GEOG 110
GEOG 001L	Physical Geography, Laboratory	GEOG 111
GEOG 002	Introduction to Human Geography	GEOG 120
GEOG 004	World Regional Geography	GEOG 125
GEOG 006	California Geography	GEOG 140
GEOG 010	Introduction to Geographic Information Systems and Techniques, with Lab	GEOG 155

GEOLOGY

GEOL 001	Physical Geology	GEOL 100
GEOL 002	Physical Geology Laboratory	GEOL 100L
GEOL 005	Geology of California	GEOL 200
GEOL 006	Earth Science	GEOL 120
GEOL 006 +	Earth Science	
GEOL 006L	Earth Science Laboratory	GEOL 120 L
GEOL 010	Introduction to Geographic Information Systems and Techniques, with Lab	GEOG 155

HISTORY

HIST 002	World History to 1500	HIST 150
HIST 003	World History since 1500	HIST 160
HIST 004	Western Civilization I	HIST 170
HIST 005	Western Civilization II	HIST 180
HIST 017	United States History to 1877	HIST 130
HIST 018	United States History from 1865	HIST 140

HUMAN SERVICES

HS 001	Introduction to Social Work and Human Services	SWHS 110

JOURNALISM

JOUR 001	Introduction to Reporting and Newswriting	JOUR 110
JOUR 011	Introduction to Mass Communications	JOUR 100
JOUR 060	Lower Division Student Media Practicum I	JOUR 130
JOUR 061	Lower Division Student Media Practicum II	JOUR 131

KINESIOLOGY

KINE 020A	Introduction to Kinesiology	KIN 100
KINE 020S	First Aid and CPR	KIN 101

Solano Community College		C-ID Designator

MATHEMATICS

MATH 002	College Algebra for STEM	MATH 151
MATH 011	Introduction to Statistics	MATH 110
MATH 020	Single Variable Calculus I Early Transcendentals	MATH 210
MATH 021	Single Variable Calculus II Early Transcendentals	MATH 220
MATH 022	Analytic Geometry and Calculus III	MATH 230
MATH 023	Ordinary Differential Equations	MATH 240
MATH 040	Introduction to Linear Algebra	MATH 250
MATH 055	Mathematical Concepts for Elementary School Teachers - Number Systems	MATH 120

MUSIC

MUSC 001	Music Theory I	MUS 120
MUSC 001	Musicianship I	MUS 125
MUSC 002	Music Theory II	MUS 130
MUSC 002	Musicianship II	MUS 135
MUSC 003	Music Theory III	MUS 140
MUSC 003	Musicianship III	MUS 145
MUSC 004	Music Theory IV	MUS 150
MUSC 004	Musicianship IV	MUS 155
MUSC 005	Music Fundamentals	MUS 110
MUSC 008	Music Appreciation	MUS 100
MUSC 009	Large Ensemble	MUS 180
MUSC 010	Large Ensemble	MUS 180
MUSC 011	Symphonic Band	MUS 180
MUSC 014	Large Ensemble	MUS 180
MUSC 015	Large Ensemble	MUS 180
MUSC 016	Large Ensemble	MUS 180
MUSC 017	Large Ensemble	MUS 180
MUSC 020	Large Ensemble	MUS 180
MUSC 021	Chorus	MUS 180
MUSC 024	Large Ensemble	MUS 180
MUSC 025	Large Ensemble	MUS 180
MUSC 026	Large Ensemble	MUS 180
MUSC 040A	Applied Music	MUS 160
MUSC 040B	Applied Music	MUS 160
MUSC 040C	Applied Music	MUS 160
MUSC 040D	Applied Music	MUS 160

NUTRITION

NUTR 010	Introduction to Nutrition Science	NUTR 110

PHILOSOPHY

PHIL 003	Introduction to Philosophy	PHIL 100

PHOTOGRAPHY

PHOT 056	Introduction to Photojournalism	JOUR 160

PHYSICAL SCIENCE

PHSC 013	Weather and Climate	GEOG 130
PHSC 013 +	Weather and Climate +	
PHSC 014	Atmospheric Science Laboratory	GEOG 130

Course Identification Numbering System (C-ID)

Solano Community College		C-ID Designator
PHYSICS		
PHYS 002	General Physics (Non-Calculus)	PHYS 105
PHYS 004	General Physics (Non-Calculus)	PHYS 110
PHYS 006	Physics for Science and Engineering: A	PHYS 205
PHYS 007	Physics for Science and Engineering: B	PHYS 210
PHYS 008	Physics for Science and Engineering: C	PHYS 215
POLITICAL SCIENCE		
PLSC 001	Introduction to American Government and Politics	POLS 110
PLSC 002	Introduction to Comparative Government and Politics	POLS 130
PLSC 003	Introduction to International Politics	POLS 140
PLSC 004	Introduction to Political Science	POLS 150
PLSC 006	Introduction to Political Theory	POLS 120
PLSC 007	Introduction to International Relations	POLS 140
PSYCHOLOGY		
PSYC 001	Introductory Psychology	PSY 110
PSYC 002	Biological Psychology	PSY 150
PSYC 004	Research Methods in Behavioral Science	PSY 200
PSYC 005	Abnormal Psychology	PSY 120
PSYC 006	Developmental Psychology	PSY 180
PSYC 012	Introduction to Gender	SJS 120
PSYC 012	Introduction to Gender	SOCI 140
PSYC 030	Introduction to Social Psychology	PSY 170
PSYC 040	Drugs, Health, and Society	PHS 103
SOCIAL JUSTICE STUDIES		
SJS 001	Introduction to Social Justice	SJS 110
SJS 002	Introduction to Race and Ethnicity	SOCI 150
SOCIOLOGY		
SOC 001	Introduction to Sociology	SOCI 110
SOC 002	Social Problems	SOCI 115
SOC 040	Introduction to Marriage and Family	SOCI 130

Solano Community College		C-ID Designator
SPANISH		
SPAN 001	First Semester Spanish	SPAN 100
SPAN 002	Second Semester Spanish	SPAN 110
SPAN 003	Third Semester Spanish	SPAN 200
SPAN 004	Fourth Semester Spanish	SPAN 210
THEATRE ARTS		
THEA 001	Acting I	THTR 151
THEA 002	Acting II	THTR 152
THEA 003	Stagecraft	THTR 171
THEA 006	Introduction to Theatre	THTR 111
THEA 008	Stage Makeup	THTR 175
THEA 009	Script Analysis	THTR 114
THEA 020	Introduction to Stage Lighting	THTR 173
THEA 021	Introduction to Theatre Design	THTR 172
THEA 024A	Rehearsal and Performance in Production	THTR 191
THEA 024B	Rehearsal and Performance in Production	THTR 191
THEA 024C	Rehearsal and Performance in Production	THTR 191
THEA 024D	Rehearsal and Performance in Production	THTR 191
THEA 027	Technical Theatre in Production	THTR 192
THEA 027A	Technical Theatre in Production	THTR 192
THEA 027B	Technical Theatre in Production	THTR 192
THEA 027C	Technical Theatre in Production	THTR 192
THEA 027D	Technical Theatre in Production	THTR 192
THEA 032A	Fundamentals of Costume Design	THTR 174
THEA 032C	Fundamentals of Costume Design	THTR 174
THEA 032D	Fundamentals of Costume Design	THTR 174
THEA 047A	Technical Theatre in Production	THTR 192
THEA 047B	Technical Theatre in Production	THTR 192
THEA 047C	Technical Theatre in Production	THTR 192
THEA 047D	Technical Theatre in Production	THTR 192

NOTE: This list will change periodically. Consult a counselor or visit http://www.c-id.net for the most current list of Solano Community College courses with C-ID agreement.

General Education

California State University General Education Breadth (CSU GE) Pattern - Option C

The CSU General Education Breadth (CSU GE-Breadth) is a series of courses that California community college (CCC) students may complete to satisfy the lower-division breadth/general education requirements before transferring to the California State University. The CSU GE-Breadth pattern is certified by the CCC and accepted by all CSU campuses. A Transfer Studies Certificate of Achievement may be achieved upon successful completion of the CSU Pattern. Please see a counselor for additional information and guidance.

_____GE Units + _____ Major Units + ____ Transferable Elective Unit(s) = ____ Units required (minimum of 60)

AREA A – English Language Communication and Critical Thinking			
Complete 1 course from each A1, A2, and A3. **must be completed with a minimum grade of C.**	**C**	**IP**	**P**
A1 — **Oral Communication: COMM** 001, 002, 006* Course from another college _____			
A2 — **Writing Communication: ENGL** 001 Course from another college _____ AP Exam _____			
A3 — **Critical Thinking: COMM** 002, 006* **PHIL** 001, 005 **ENGL** 002, 004 Course from another college_____			
AREA B – Scientific Inquiry and Quantitative Reasoning			
Complete 1 course from each B1, B2, and B4; one of which must include a lab. **B3 may be used to complete the lab requirement**	**C**	**IP**	**P**
B1 Physical Science — **ASTR** 010, 030, 040, 045 **GEOL** 001, 005, 006, 010 **CHEM** 001(L), 002(L), 003(L), 004(L), 010(L), 011(L), 012(L) **ENGR** 045(L) **PHSC** 012(L), 013, 015, 016 **GEOG** 001, 010 **PHYS** 002(L), 004(L), 006(L), 007(L), 008(L), 010 Course from another college_____ AP Exam _____ IB _____			
B2 Life Science — **ANTH** 001 **BIOT** 001 **BIO** 002(L), 003(L), 004(L), 005(L), 012, 014(L), 015(L), 016, 018*, 019(L), 020, 025 Course from another college_____ AP Exam _____ IB _____			
B3 Lab (if not met in B1 or B2) — **ANTH** 001L **BIO** 012L, 016L **GEOL** 002, 006L **ASTR** 020 **GEOG** 001L **PHSC** 014 Course from another college_____ AP Exam _____ IB _____			
B4 Mathematics — (must be completed with a minimum grade of C) **MATH** 002, 004, 011, 012, 020, 021, 022, 023, 030, 031, 040, 049, 051, 055 Course from another college_____ AP Exam _____ IB _____			
AREA C – Arts and Humanities			
Complete 3 courses. A minimum of 1 course from each C1 and C2	**C**	**IP**	**P**
C1 Arts — **ART** 001, 002, 003A, 003B, 010, 011, 012, 30B, 030C **CINA** 010, 011 **DANC** 004, 004N **MUSC** 005, 007, 008, 013 **PHOT** 031, 035 **THEA** 001, 002, 006, 009, 010, 011, 013 Course from another college_____ AP Exam _____ IB _____			
C2 Humanities — **ASL** 001, 005, 006 **ENGL** 006, 007, 018, 021, 023, 024, 030, 031, 036, 040, 041, 044, 058 **FREN** 001, 002, 003, 004, 011, 012, 031, 032 **HIST** 002+,003*, 004*, 005*, 010*, 017*#, 018*#, 028*#, 029*#, 031*, 037*# **HUMN** 001, 002, 003 **PHIL** 003, 004 **SPAN** 001, 002, 003, 004, 011, 031, 032, 033, 034 Course from another college_____ AP Exam _____ IB _____			

C = Completed IP = In Progress; P = Planned; (L) = Lab course;

* May be used in only one area; **#** Meets American Institution requirement

General Education

California State University General Education Breadth (CSU GE) Pattern - Option C

		C	IP	P
AREA D – Social Sciences				
Complete 3 courses from at least 2 different disciplines		C	IP	P
D	**ANTH** 002, 007 **JOUR** 011 **CDFS** 038, 040, 050, 053, 070 **PHIL** 006 **CJ** 001 **PLSC** 001, 002, 003, 004, 005, 006, 007, 016, 019 **COMM** 012 **PSYC** 001, 002, 004, 005, 006, 007, 012, 020, 030, 034 **COUN** 015, 023 **SJS** 001, 002, 030 **ECON** 001, 002 **SOC** 001, 002, 023, 040, 045, 075 **GEOG** 002, 004, 006 **TV** 050 **HIST** 002, 003, 004, 005, 010, 017, 018, 028, 029, 031, 037 **HS** 001 Course from another college_____ AP Exam _____ IB _____				
AREA E – Lifelong Learning and Self Development				
Complete 3 semester units with no more than 1 unit of physical activity		C	IP	P

E	**ATHL** 001 003 010 015 022
	       001A,B 003A,B 010A 015A,B 022A,B
	       002A-E 004A,B 016A,B 025
	BIO 018*
	CDFS 038*, 040, 050, 054, 070
	COUN 005, **058**, 098
	DANC 004A-D,F,H,J,K,M,N,P,S,T
	HED 002, 003
	KINE 002A,B,D 005C-E,J,K,M,N,Q**-S** 007D-G 009A-C,E-H,P 078
	       003A,D, E 006A,C,E,F 008A,B,D-F 020V, W
	NUTR 010, 054
	PSYC 006, 020, 034 **DD214** Military Experience
	
	Course from another college_____				

CSU Graduation Requirement in American Institutions				
(may be completed prior to transfer)				
Complete 1 course from each CSU 1 and CSU 2 **Courses may also be used in Area C2 and/or D**		C	IP	P
CSU 1	**PLSC** 001, 005			
CSU 2	**HIST** 017, 018, 028, 029, 037			
SCC Cross-Cultural Graduation Requirement				
(Exempt if earning an AA-T or AS-T)				
Complete 1 course which may be used in one other Area		C	IP	P
SCC	**ART** 012 **COUN** 015 **MUSC** 013 **THEA** 013 **CDFS** 053 **ENGL** 036 **PLSC** 005 **CINA** 011 **HIST** 037 **PSYC** 007 **COMM** 012 **HUMN** 003 **SJS** 002			

C = Completed IP = In Progress; P = Planned; (L) = Lab course;
* May be used in only one area; **#** Meets American Institution requirement

Graduation Requirements

DEGREES AND CERTIFICATES

Certificates of Achievement

A Certificate of Achievement recognizes a student's satisfactory completion of an organized program of study. A number of certificate programs are offered for students seeking specialized training in specific fields. Students are required to complete each course within the program with a minimum grade of C or a P if the course is taken on a Pass/No Pass basis) and to maintain a grade point average of 2.0 in program coursework. Certificate of Achievement programs differ from degree programs in that students are only required to complete the courses in the field of study; general education coursework is not required. All credits earned in a certificate program may be counted toward the A.A./A.S./AD-T Degree and, in some instances, credit for certificate courses may be transferred to four-year colleges.

To be eligible for a Certificate of Achievement, a minimum of 6 units in the field or a closely related subject must be successfully completed, with a minimum grade of C, at Solano Community College.

Students may be awarded a Certificate of Achievement based on the requirements in this Catalog, or the Catalog in effect at the time of first enrollment, or when the certificate was first offered.

Graduation Requirements

PROGRAM REQUIREMENTS

Total Units

A degree requires a minimum of 60 degree-applicable semester units. A minimum of 12 units must be successfully completed, with a minimum grade of C, at Solano Community College. The student must have a 2.0 overall grade point average at the time of graduation.

Biomanufacturing

BIOMANUFACTURING BACCALAUREATE DEGREE PROGRAM APPLICATION/ACCEPTANCE REQUIREMENTS

Currently the Biomanufacturing Bachelor of Science program admits students once per year in the fall. Applications are available online at *http://www.solano.edu/biomanufacturing*.

Prerequisite:
ALL of the following requirements must be met in order to APPLY to the Biomanufacturing Bachelor of Science degree program. If you are unsure about any of these items, please meet with an Academic Counselor. For counseling information, please visit http://www.solano.edu/counseling/.

1. Overall cumulative grade point average (GPA) of 2.5 for ALL college coursework.

2. Completion of, or current Spring semester enrollment in, the following prerequisites with a combined GPA of 2.5 and with no grade less than a C for each of the lower division courses: BIOT 001 (formerly BIOT 051), BIOT 052, BIOT 062, BIOT 063, CHEM 001, BIO 002 and MATH 011.

3. Completion of lower division general education CSU/IGETC Option B or Option C program prerequisites (see SCC college catalog).

4. Students who have attended college outside the United States must have transcripts evaluated by a National Association of Credential Evaluation Services (NACES) approved independent agency, demonstrating equivalency to the above requirements (1, 2, & 3).

5. One Statement of Interest, submitted with your application, explaining why you are interested in the program. Topic below:

Write a Statement of Interest that explains why you would like to complete the Bachelor of Science degree in Biomanufacturing. In this essay, state how your background in the prerequisite courses and/or any job experience has prepared you to succeed in this rigorous program. Emphasize your laboratory background. Include any life experience, special circumstances or barriers that you had to overcome while completing the prerequisite courses.

Transcripts:
During the application process, unofficial transcripts may be submitted with the application. Upon admission to the Biomanufacturing Bachelor of Science degree program, you are required to submit one original official transcript in a sealed envelope to the Admissions and Records office from each college and university attended, including Solano Community College, prior to being granted permission to enroll and register for classes in the program.

Please send transcripts to:

Solano Community College
Admissions and Records
Attn: Biomanufacturing Baccalaureate Admissions
4000 Suisun Valley Road
Fairfield, CA 94534-3197

Foreign Transcripts:
All foreign transcripts must be evaluated by a NACES agency for determining U.S. equivalency. ***IF foreign courses were completed or degree earned**, the evaluation must state its equivalency to the Prerequisite requirements (1, 2, & 3) listed above. A list of approved agencies can be found in the Admissions and Records Office.

CHEM 505   **0.0 Units**
Supplemental Instruction in Chemistry
Hours: 16-18 lab
An Open-Entry, open-exit course for students who seek academic support, through supplemental instruction, to fill in missing prerequisite knowledge and strengthen their problem solving skills in the following course/courses: CHEM 160, 010, 011, 012 , 001, 002, 003, 004 at Solano Community College.

Computer Information Science

Computer Programming

Program Description
This program is designed to prepare the student for employment as a computer programmer trainee.

Certificate of Achievement and Associate in Science Degree
A Certificate of Achievement can be obtained upon completion of the 33-unit major. The Associate in Science Degree may be obtained by completing the 33-unit major, SCC General Education - Option A, and electives. All courses in the major must be completed with a minimum grade of C or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete the Computer Programming Certificate of Achievement/Associate Degree will be able to:
1. Construct applications that use GUI (graphical user interface) components and access databases for data permanence.
2. Develop a programming solution to a data structure problem using object-oriented methodologies and appropriate data structures and algorithms.
3. Implement a well-designed, properly normalized relational database after analyzing user requirements and business rules.

REQUIRED COURSES.. **Units**
(listed in recommended sequence)
CIS 001 Introduction to Computer Science 3
BUS 092 Business Communication...................................... 3
CIS 022 Introduction to Programming............................. 3
CIS 055 MS Windows Operating Systems........................ 3
CIS 023 Data Structures and Algorithms........................... 3
CIS 015 Programming in Visual Basic.NET...................... 3
CIS 089 Essential Networking Technologies.................... 3
CIS 078 Access - Database Management System............. 3
CIS 052 UNIX Operating System 3
CIS 020 Assembly Programming 3
3 units from Recommended Electives............................... 3
    Required Major Total Units 33

Recommended Electives (select 3 units)................... **Units**
ACCT 001 Principles of Accounting - Financial 4
ACCT 002 Principles of Accounting – Managerial........... 4
BUS 005 Introduction to Business...................................... 3
CIS 035 Introduction to Java Programming 3
CIS 060 Introduction to the Internet................................ 1.5
CIS 061 Creating Web Pages... 3
CIS 066 Microsoft Word... 3
~~CIS 068 Object Oriented Game~~
  ~~Programming with Flash .... 3~~
CIS 073 Microsoft Excel.. 3
CIS 080 SQL Database Management Systems................... 3
OCED 090 Occupational Work Experience 1- 8
OCED 091 General Work Experience.............................. 1-6

Solano General Education.. **21**
Electives (as needed to reach 60 units)............................ 6
    Total Degree Units Solano GE.................................... 60

Note: Students planning to transfer to a four-year college and major in Management Information Systems/ Computer Science should see a counselor regarding Business Articulation Agreements for a particular university campus.

This is a Gainful Employment Program. For additional information, please visit *http://www.solano.edu/gainful_employment/* and select "Computer & Info Science: Computer Programming."

Computer Science

CS 104   Programming in Linux   0.5 Unit
Hours: 24-27 lab

An initial lab to prepare the student for the intense programming language classes using the Linux operating system. The student will learn how to navigate the Linux operating system as a programmer, install a development environment and utility programs, compile and execute programs, and submit completed assignments for grading.

CS 105   Programming in Windows   0.5 Unit
Hours: 24-27 lab

An initial lab to prepare the student for the intense programming language classes using the Windows operating system. The student will learn how to navigate Windows as a programmer, install a development environment and utility programs, compile and execute programs, and submit completed assignments for grading.

CS 110   C++ 1: Fundamentals   3.0 Units
Prerequisite: CS 104 or CS 105 with a minimum grade of C (may enroll concurrently)
Hours: 32-36 lecture, 48-54 lab

An introduction to programming using the C++ language using modern tools in a modern operating system. Course includes hands-on programming of structured algorithms, the study of C++ syntax, and an introduction to structured programming with data definitions and use.

CS 112   3.0 Units
C++ 2: Program Design and Data Structures
Prerequisite: CS 110 with a minimum grade of C
Hours: 32-36 lecture, 48-54 lab

A further study of the C++ programming language with design principles of object oriented programming and data structures used in process algorithms. Topics include class and pointer instantiation, virtual functions and templates, overloading, linked lists and vectors, stacks and queues, searching and sorting, binary trees, and quality assurance using exception handling.

CS 114   C++ 3: Project Management   3.0 Units
Prerequisite: CS 112 with a minimum grade of C
Hours: 32-36 lecture, 48-54 lab

The application of the C++ programming language in the business, scientific, and entertainment industries. Topics include problem analysis and project design, data and code security, group projects, and project completion and publication. Students will delve deeper into industry specific programming techniques that involve code logic, financial modelling, database interaction, encryption, graphs and trees, and interactive graphics.

CS 120   Python 1: Fundamentals   3.0 Units
Prerequisite: CS 104 or CS 105 with a minimum grade of C (may enroll concurrently)
Hours: 32-36 lecture, 48-54 lab

An introduction to Python programming using modern tools in a modern operating system. Course includes hands-on programming of structured algorithms, the study of Python++ syntax, and an introduction to object-oriented programming with class definitions and instantiation.

CS 122   3.0 Units
Python 2: Program Design and Data Structures
Prerequisite: CS 120 with a minimum grade of C
Hours: 32-36 lecture, 48-54 lab

A further study of the Python programming language with design principles of object oriented programming and data structures used in process algorithms. Topics include class and pointer instantiation, virtual functions and templates, overloading, linked lists and vectors, stacks and queues, searching and sorting, binary trees, and quality assurance using exception handling.

CS 124   Python 3: Project Management   3.0 Units
Prerequisite: CS 122 with a minimum grade of C
Hours: 32-36 lecture, 48-54 lab

The application of the Python programming language in the business, scientific, and entertainment industries. Topics include problem analysis and project design, data and code security, group projects, and project completion and publication. Students will delve deeper into industry specific programming techniques that involve code logic, financial modelling, database interaction, encryption, graphs and trees, and interactive graphics.

CS 130   Java 1: Fundamentals   3.0 Units
Prerequisite: CS 104 or CS 105 with a minimum grade of C (may enroll concurrently)
Hours: 32-36 lecture, 48-54 lab

An introduction to programming using the Java programming language using modern tools in a modern operating system. Course introduces the student to object oriented programming, Java language syntax, data definitions and use, language components and libraries, and interface and Graphical User Interface (GUI) components.

Computer Science

CS 132   **3.0 Units**
Java 2: Program Design and Data Structures
Prerequisite: CS 130 with a minimum grade of C
Hours: 32-36 lecture, 48-54 lab

A further study of the Java programming language with design principles of object oriented programming and data structures used in process algorithms. Topics include class and pointer instantiation, virtual functions and templates, overloading, linked lists and vectors, stacks and queues, searching and sorting, binary trees, and quality assurance using exception handling.

CS 134   **Java 3: Project Management**   **3.0 Units**
Prerequisite: CS 132 with a minimum grade of C
Hours: 32-36 lecture, 48-54 lab

The application of the Java programming language in the business, scientific, and entertainment industries. Topics include problem analysis and project design, data and code security, group projects, and project completion and publication. Students will delve deeper into industry specific programming techniques that involve code logic, financial modelling, database interaction, encryption, graphs and trees, and interactive graphics.

CJ 080   **3.0 Units**
The Criminal Justice System Viewed Through a Multi-Cultural Lens
Hours: 48-54 lab
Examines the interaction of law enforcement with various cultures in their respective communities with emphasis on intercultural communications and historical interactions with diverse cultures, races, ethnicities, genders and sexual orientations.

CJ 082   **3.0 Units**
Victimology: Victims and The Criminal Justice System
Hours: 48-54 lab
A study of crime victims and their interaction with various components of the criminal justice system focusing on the victim's experience within the system. Students will examine data research, various methodologies and victim precipitation theories. The tangible and intangible costs of victimization will also be examined as well as victim services and current trends in the field of victimology.

Education

Associate in Arts in Elementary Teacher Education for Transfer (ADT: A.A.-T)

Program Description
The Elementary Teacher Education degree provides a strong liberal studies foundation for students seeking to teach in an elementary school. The coursework is designed to meet the introductory content area subject matter requirements for teaching at the elementary school level.

Associate in Arts in Elementary Teacher Education for Transfer
The Associate in Arts in Elementary Teacher Education for Transfer (AA-T) degree is designed specifically for transfer, providing the breadth and depth of coursework necessary for students who seek to study liberal arts and education coursework at the CSU in preparation for a career in elementary school teaching. Students completing this degree (AA-T in Elementary Teacher Education) are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts the AA-T in Elementary Teacher Education will be required to complete no more than 60 units after transfer to earn a bachelor's degree. Students should consult with a counselor for more information on university admission and transfer requirements.

To earn the Associate in Arts in Elementary Teacher Education for Transfer Degree, students must:
1. Complete 60 semester units that are eligible for transfer to the California State University, including both of the following:
   a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements
   b. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
2. Obtain a minimum grade point average of 2.0.

Program Outcomes
Students who complete the Associate in Arts in Elementary Teacher Education for Transfer Degree will be able to:
1. Apply an understanding of child development theories and ethical standards to the development of a personal teaching philosophy.
2. Apply an understanding of how diverse cultural beliefs and social, political, and/or historical context impact form of human expression
3. Demonstrate quantitative reasoning skills and an understanding of the scientific method, consistent with elementary level standards.
4. Critically evaluate strategies and techniques for working with culturally, linguistically and ethnically diverse populations, including children with special education needs.

REQUIRED COURSES .... **Units**
CDFS 038 Child Growth and Development....................... 3
EDUC 001 Elementary Teacher Education 2
OCED 090 Occupational Work Experience 1
Liberal Arts and Social Science 27
Science and Math 15
List A 3
List B 6
    Total Units **57**

LIBERAL ARTS AND SOCIAL SCIENCE .... **Units**
COMM 001 Introduction to Public Speaking 3
ENGL 001 College Composition 4
ENGL 002 Critical Thinking and Writing About
    Literature 4
GEOG 004 World Geography 3
HIST 002 World History to 1500 3
HIST 017 History of the United States to 1877 3
PLSC 001 Introduction to American Government
    and Politics 3
ENGL 004 Critical Thinking and Composition:
    Language in Context 4

SCIENCE AND MATH .... **Units**
BIO 015 Introduction to Biology 4
GEOL 006 Earth Science 3
GEOL 006L Earth Science Laboratory 1
MATH 055 Mathematical Concepts for
    Elementary School Teachers – Number Systems 3
PHSC 012 Introduction to Principles of
    Physical Science 4

List A: (Select one course)... **Units**
ART 010 Art Appreciation 3
DANC 004 Dance Appreciation... 3
MUSC 008 Music Appreciation 3
THEA 006 Introduction to Theatre 3

List B: (Select two courses) .... **Units**
CDFS 062 Introduction to Early Childhood Education:
    Principles and Practices 3
CDFS 053 Teaching in a Diverse Society 3
CDFS 064 Observation and Assessment 3

Education

Required Major Total Units 57
CSU General Education or IGETC Pattern units 37-39
CSU Transferable Electives
    (as needed to reach 60 transferable units)* 1-3
      Total Degree Units 60

*37-39 units may be double counted toward both the major area of emphasis and CSU General Education or IGETC Pattern. Consult with a counselor for more information on completing this degree.

Engineering

**ENGR 014   Introduction to Statistical   4.0 Units
    Programming in R for Scientists and Engineers**
*Course Advisory: A minimum grade of C in MATH 011 (may enroll
    concurrently) and A minimum grade of C in CIS 001*
Hours: 48-54 lecture, 48-54 lab

Advances in computing power have enabled scientists to amass huge amounts of data on everything from genetics to climate science, but there is a need for someone to make sense of this data. In this class we will learn how to perform basic statistical analysis such as writing data frames, creating functions, using variables, statements, and loops and employing statistical concepts such as exploratory data analysis, probabilities, hypothesis tests, regression modeling and data visualization, using the statistical software R.

ENGR 045   Properties of Materials   4.0 Units
Prerequisite: A minimum grade of C in both PHYS 006 and CHEM 001.
General Education: Option B: Area 5A, 5C; Option C: Area B1, B3
Transferable to UC/CSU
Hours: 48-54 lecture, 48-54 lab

Covers the application of basic principles of physics and chemistry to the structure and properties of engineering materials. Special emphasis is devoted to the relationship between microstructure and the mechanical properties of metals, polymers and ceramics, and the electrical, magnetic, and optical properties of materials. Possible field trips. *(C-ID ENGR 140 B)*

C-ID Designation may change periodically; visit c-id.net/courses/search for current designation or consult with your counselor

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Fire Technology

Fire Technology

Program Description
This program was established under direction of Solano County fire protection agencies and offers both an intensive training course culminating in a Certificate of Achievement and a well-rounded educational program leading to the Associate in Science Degree. Instructors in this program are experienced members of the fire service field. In addition, a Fire Technology Academy for recently recruited fire service personnel and pre-service students is conducted periodically. The curriculum consists of courses selected from the regular fire technology course offerings.

Certificate of Achievement and Associate in Science Degree
A Certificate of Achievement can be obtained upon completion of the 30-45-unit major. The Associate in Science Degree can be obtained upon completion of the 30-42-unit major, SCC General Education - Option A, and electives. All courses in the major must be completed with a minimum grade of C or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete the Fire Technology Certificate of Achievement/Associate Degree will be able to:
1. Demonstrate the ability to analyze, appraise and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety.
2. Identify and comprehend laws, regulations, codes and standards that influence fire department operations, and identify regulatory and advisory organizations that create and mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.
3. Analyze the causes of fire; determine extinguishing agents and methods; differentiate the stages of the fire and fire development; and compare methods of heat transfer.
4. Identify and describe common types of building construction and conditions associated with structural collapse and fire fighter safety.

REQUIRED COURSES .... **Units**
FIRE 050 Principles of Emergency Services 3
FIRE 051 Fire Behavior & Combustion 3
FIRE 053 Fire Prevention Application............................... 3
FIRE 054 Fire Protection Systems 3
FIRE 056 Building Construction as it Relates to
    the Fire Service 3
FIRE 101 Principles of Fire and Emergency Services
    Safety and Survival.. 3
12-27 units from Recommended Electives 12
    Required Major Total Units 30-45

Recommended Electives: (select 12-27 units) .... **Units**
FIRE 140 Fire Technology Academy.................................. 24
EMT 112 Emergency Medical Technician (Basic) 7
EMT 128 Emergency Medical Responder........................... 3
OCED 090 Occupational Work Experience 1-8

Solano General Education.. 21
Electives (as needed to reach 60 units).........................0-9
    Total Degree Units Solano GE...............................60-63

This is a Gainful Employment Program. For additional information, please visit
http://www.solano.edu/gainful_employment/ and select "Fire Technology."

FIRE 050   Principles of Emergency Services   3.0 Units
Transferable to CSU
Hours: 48-54 lecture
An overview of fire protection; career opportunities in the fire service and related fields; history of fire service and fire protection; fire organization and management; function of public and private protection services; fire departments as part of local government; fire prevention and investigation; building construction; specific fire protection functions; fire and emergency service apparatus and facilities; and introduction to fire protection systems. This is a Fire Technology core course and must be completed with a minimum grade of C in order to receive an Associate Degree or Certificate of Achievement in Fire Technology.

FIRE 051   Fire Behavior & Combustion   3.0 Units
Transferable to CSU
Hours: 48-54 lecture
Provides the student with fundamental information and knowledge of the physical and chemical characteristics of matter, fire, hazardous materials, weapons of mass destruction identification and basic extinguishment theory. This is a Fire Technology core course and must be completed with a minimum grade of C in order to receive an Associate Degree or Certificate of Achievement in Fire Technology. Field Trip may be required.

Human Services

Human Services

Program Description
This program is designed to equip students with the basic knowledge and skills necessary for the variety of jobs in the field of Human Services and Social Work. These courses are intended to provide entry-level skills and training for students who are interested in employment in mental health, social welfare, developmental services, corrections, alcohol and drug treatment, or child/adolescent treatment services.

Certificate of Achievement and Associate of Arts Degree
A Certificate of Achievement can be obtained upon completion of the 23-unit major. The Associate of Arts Degree can be obtained upon completion of the 23-unit major, SCC General Education -Option A, and electives. All courses in the major must be completed with a minimum grade of C or a P if the course is taken on a Pass/No Pass basis.

Program Outcomes
Students who complete the Human Services Certificate of Achievement/Associate Degree will be able to:
1. Develop basic knowledge within the field of Human Services.
2. Develop cultural competence.
3. Develop group facilitation skills.
4. Develop case management skills.
5. Apply basic Human Services knowledge and skills in community settings.

REQUIRED COURSES .... **Units**
(listed in recommended sequence)
HS 001 Introduction to Human Services 3
COUN 062 Helping Skills:
   Creating Alliances & Facilitating Change** 3
HS 053 Serving Special Populations 3
HS 055 Introduction to Case Management........................ 3
COUN 064A Practicum I**.. 4
HS 054 Introduction to Group Processes 3
COUN 064B Practicum II**.. 4
   Required Major Total Units 23

**See Counseling section for COUN course descriptions

CSU General Education or IGETC Pattern units....37-39
Transferable Electives (as needed to reach 60 units)..0-1
   Total Degree Units CSU GE or IGETC 60

Solano General Education.. 21
Electives (as needed to reach 60 units).......................... 16
   Total Degree Units Solano GE.................................... 60

* 0-3 units may be double counted toward both the major area of emphasis and CSU General Education or IGETC Pattern. Consult with a counselor for more information on completing this degree.

This is a Gainful Employment Program. For additional information, please visit
http://www.solano.edu/gainful_employment/ and select "Human Services."

HS 054   Introduction to Group Processes   3.0 Units
Prerequisite: HS 001 with a minimum grade of C
Course Advisory: COUN 062 with a minimum grde of C
Transferable to CSU
Hours: 48-54 lecture
An introduction to the theory and dynamics of group interaction including psychoeducational, support and therapeutic context. The various stages and processes of group development are studied using both a conceptual and experiential approach. This course is intended to assist persons who will function as leaders in a variety of small group situations.

C-ID Designation may change periodically; visit c-id.net/courses/search for current designation or consult with your counselor

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Interdisciplinary Studies

Wellness and Self Development

Program Description
This major is designed to equip students with the informative tools to support education in lifelong wellness and self-development. Students will be well acquainted with the vast landscape of wellness, self development, while considering the psychological, biological, developmental, and physical factors involved. They will be able to make more effective decisions about optimizing their own wellness, lifestyle and performance.

Associate in Arts Degree
The Associate in Arts Degree can be obtained by completing the 18-unit major, SCC General Education - Option A, and electives. All courses for this major must be completed with a minimum grade of C or a P if the course is taken on a Pass/No Pass basis. Courses selected cannot be used to fulfill general education.

Program Outcomes
Students who complete an Associate Degree will be able to:
1. Apply the theories of Wellness and Self Development with attention to personal, professional growth and vocational/life purpose.
2. Apply understanding of personal self and others to gain insight in both a psychological and biological perspective, thereby, enhancing personal wellness and community relationships.
3. Acquire a knowledge base that encourages lifelong learning for students to effectively adapt to a complex and changing society.

REQUIRED COURSES.. **Units**
3 units from Wellness Required 3
3 units from Self Development Required 3
3 units of any Wellness course(s)....................................... 3
3 units of any Self Development course(s)........................ 3
6 units of any Wellness and/or
   Self Development course(s)... 6
***courses may only be used one time within the major*
   Required Major Total Units 18

Wellness

Required (select a minimum of one course)
HED 002 Health Education.. 3
HED 003 Women's Health Issues....................................... 3
KINE 057 Introduction to Sports Psychology 3
NUTR 010 Nutrition 3

Electives
ATHL* 001, 002A, 002B, 003, 004, 010, 015, 016A, 016B, 022
BIO 004, 005, 016, 018, 020
CDFS 054
DANC 004, 004A, 004B, 004C, 004D, 004E, 004F, 004G,
004H, 004J, 004K, 004M, 004N, 004P, 004S, 004T
KINE 020A, 020S, 020V, 020W
KINE Activity*: 002A, 002B, 002D, 003A, 003D, 003E, 005C,
005J, 005K, 005M, 005N, 005P, 006A, 006C, 006D, 006E, 006F,
007F, 008A, 008B, 009B, 009H, 009P, 078
NUTR 054

Maximum 3 units of DANC, KINE, or ATHL activity courses

Self Development

Required (select a minimum of one course)
COUN 005 Career-Life Planning 3
COUN 007 College Study Techniques 3
COUN 015 Valuing Diversity... 3
COUN 023 Psychology for Modern Life............................ 3
PSYC 020 Personal and Social Behavior 3

Electives
CDFS 038, 040, 050, 070
COMM 001, 008, 010
COUN 058, 062
HS 001, 053, 054
OCED 070, 071
PSYC 001, 005, 006, 012, 034, 040
SJS 002, 030

Solano General Education... **21**
Electives (as needed to reach 60 units)........................... **21**
   Total Degree Units Solano GE.................................... 60

Kinesiology

Associate in Arts in Kinesiology for Transfer (ADT: A.A.-T)

Program Description
The Associate in Arts in Kinesiology for Transfer degree is designed to provide a seamless transfer pathway for students interested in pursuing at least one Kinesiology degree option in the CSU system.

Associate in Arts in Kinesiology for Transfer
Successful completion of the Associate in Arts in Kinesiology for Transfer degree prepares students to transfer into the CSU system and work in the sub-fields of Kinesiology. Students will learn about human functioning during sport and exercise, how exercise science and biomechanics is integrated into exercise program development, and observation and assessment of human performance. The Associate in Arts in Kinesiology for Transfer degree can provide students with the foundational knowledge necessary for transfer to a 4-year Bachelor of Science (BS) or Bachelor of Arts (BA) degree program. Students are encouraged to meet with a counselor to develop their educational plans as degree options and general education requirements vary for each university.

To earn the Associate in Arts in Kinesiology for Transfer degree, students must:
1. Complete 60 semester units that are eligible for transfer to the California State University, including both of the following:
   a. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements
   b. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
2. Obtain a minimum grade point average of 2.0.

Program Outcomes
Students who complete the Associate in Arts in Kinesiology for Transfer degree will be able to:

1. Identify major microscopic and gross structures of the major systems of the human body.

2. Describe normal physiological processes.

3. Describe the different sub disciplines of Kinesiology.

4. Describe the role of physical activity in daily life.

5. Explain the career options available to students graduating from departments of Kinesiology

REQUIRED COURSES .... **Units**
BIO 004 Human Anatomy 5
BIO 005 Introductory Physiology 5
KINE 020A Introduction to Kinesiology 3
Two courses from List A 6-10
3 units from Movement-based courses
(maximum of one course from any group) 3
   Required Major Total Units **22-26**

List A (select two courses, only one from same
   subject such as CHEM or PHYS) .... **Units**
BIO 016 Introduction to Human Biology 3
CHEM 001 General Chemistry 5
CHEM 012 Chemistry for Health Services 5
KINE 020S Advanced First Aid and Emergency Care 3
MATH 011 Elementary Statistics 4
PHYS 002 General Physics (Non-calculus) 5
PHYS 006 Physics for Science and Engineering 5

CSU General Education or IGETC Pattern Units ... 37-39
**CSU Transferable Electives (as needed to reach
60 transferable units)*** **1-12**
   Total Degree Units **60**

 *6-12 units may be double counted toward both the major area of emphasis and CSU General Education or IGETC Pattern. Consult with a counselor for more information on completing this degree

Mathematics

MATH 002   **4.0 Units**

Algebra for Calculus (College Algebra)

Prerequisite: MATH 104 with a minimum grade of C or a Multiple Measures Evaluation. MATH 104 with a minimum grade of C is highly recommended for students who have not completed Algebra 2 or Integrated Math III in high school with a minimum grade of C.

General Education: Option A: Area D2; Option B: Area 2; Option C Area B4

Transferable to UC/CSU

Hours: 64-72 lecture

Develops the skills and introduces the concepts necessary for further study in mathematics, and facilitate the application of those skills and concepts to other fields. Included is a review of elementary set algebra; the algebra of functions; the real and complex numbers as a field; algebraic, exponential, and logarithmic functions; equations and inequalities of these functions; solution of linear systems, matrix algebra, and introduction to sequences and series. *(C-ID MATH 151)*

MATH 055   **3.0 Units**

Mathematical Concepts for Elementary School Teachers

Prerequisite: MATH 104 or MATH 112 with a minimum grade of C or Successful completion of two years of high school algebra or recommendation of a counselor or math instructor based on a Multiple Measures Evaluation.

General Education: Option C: Area B4

Transferable to UC/CSU

Hours: 48-54 lecture.

Focuses on the development of quantitative reasoning skills through in-depth, integrated explorations of topics in mathematics, including real number systems and subsystems. Emphasis is on comprehension and analysis of mathematical concepts and applications of logical reasoning. *(C-ID MATH 120)*

C-ID Designation may change periodically; visit c-id.net/courses/search for current designation or consult with your counselor

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MUSC 001   Beginning Theory I   **4.0 Units**
Prerequisite: MUSC 005 with a minimum grade of C
Course Advisory: MUSC 028
Transferable to UC/CSU
Hours: 64-72 lecture
A study of diatonic scales and triads, intervals, diatonic chords, basic harmonic progressions and cadences, part writing, rhythm and meter, sight singing, ear training, dictation, history and performance. Short creative assignments are included to provide experience in the application of materials learned in class. It includes analysis and composition and is required for music majors. (C-ID MUS 120; MUS 125)

C-ID Designation may change periodically; visit c-id.net/courses/search for current designation or consult with your counselor

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Political Science

PLSC 007   International Relations   3.0 Units
Course Advisory: PLSC 001 with a minimum grade of C
General Education: Opt. A: Area B1; Opt. B: Area 4; Opt C: Area D
Transferable to UC/CSU
Hours: 48-54 lecture

An introduction to international relations theory with an examination of national, international, transnational, and sub-national actors and their institutions, interactions and processes as they relate to global issues. Designed to give students a foundation for the study of international relations, it provides a backdrop to understanding global interdependence, its causes and consequences. Included are political, economic, historical, philosophical, cultural, geographical, and environmental dimensions of interdependence. (Formerly IR 001) *(C-ID POLS 140)*

C-ID Designation may change periodically; visit c-id.net/courses/search for current designation or consult with your counselor

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THEA 027B   **3.0 Units**
Technical Theatre in Production Show Run Crew - Drama
Transferable to UC/CSU
Hours: 144-162 lab

A practicum course oriented for the student to work with the unique technical requirements as used in a dramatic production such as, realistic and period scenic design elements: architecture as well as natural settings. Students will gain practical experience in the application of production responsibilities in any of the following for live show running crews: Properties, Costume, Lighting, Sound, Stage Management and house management. Students are given an increasing level of responsibility in accordance with their individual abilities. *(C-ID THTR 192)*

C-ID Designation may change periodically; visit c-id.net/courses/search for current designation or consult with your counselor

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Page # Catalog	Page # Addendum	Course/Program/Heading	In Printed 2018-2019 Catalog	Spring 2019 Addendum
26	3	Getting Started – Dropping Classes	Non-attendance or non-payment of fees does not guarantee removal of students from a course nor alleviate student's responsibility to pay fees.	Students are responsible for paying all applicable fees each semester of attendance. Failure to pay fees may result in a hold on the student's account.
58	4	Transfer – Credit-By-Examination	have completed a minimum of 12.0 units in residence or will have completed a minimum of 12 semester units by the end of the current semester, exclusive of units to be earned by the credit-by- examination	have successfully completed, with a minimum grade of C, a minimum of 12 units in residence or will have successfully completed, with a minimum grade of C, a minimum of 12 units by the end of the current semester, exclusive of units to be earned by the credit-by-examination.
--	4	Credit for Prior Learning	--	Credit for prior learning may be earned for eligible courses approved by the District for students who satisfactorily pass an authorized assessment. Authorized assessments may include the evaluation of approved external standardized examinations, Joint Services Transcripts, student-created portfolios, and credit by examination.
59	5	Transfer – CLEP	--	See page 5
60	6-7	Transfer – AP	--	See pages 6-7
61	8	Transfer – IB	--	See page 8
64-66	9-11	C-ID	--	Add: ARD 044 = C-ID ARTS 250 CDFS 054 = C-ID ECE 220 CIS 020 = C-ID COMP 142 CIS 023 = C-ID COMP 132 ENGR 045 = C-ID ENGR 140 B GEOL 006 = C-ID GEOL 120 GEOL 006 + GEOL 006L = C-ID GEOL 120 L PHSC 013 = C-ID GEOG 130 PHSC 014 + PHSC 014 = GEOG 130
74-75	12-13	General Education CSU GE Breadth – Option C	--	Add: PHYS 002(L) to Area B1 COUN 058 to Area E KINE 005S to Area E
77	14	Graduation Requirements – Certificates of Achievement	To be eligible for a Certificate of Achievement, at least 6 semester units in the field or a closely related subject must be completed at Solano Community College.	To be eligible for a Certificate of Achievement, a minimum of 6 units in the field or a closely related subject must be successfully completed, with a minimum grade of C, at Solano Community College.
78	15	Graduation Requirements – Total Units	A degree requires a minimum of 60 degree-applicable semester units. At least 12 semester units must be completed at Solano Community College. The student must have a 2.0 overall grade point average at the time of graduation.	A degree requires a minimum of 60 degree-applicable semester units. A minimum of 12 units must be successfully completed, with a minimum grade of C, at Solano Community College. The student must have a 2.0 overall grade point average at the time of graduation.
165	16	Biomanufacturing	--	Prerequisite: Add MATH 011
--	17	Chemistry	--	New Course: CHEM 505 Supplemental Instruction in Chemistry
--	18	Computer Information Science – Computer Programming Certificate/Associate in Science	--	Remove CIS 068, Object Oriented Game Programming with Flash, from the programs
	19-20	Computer Science	--	New Courses: CS 104 Programming in Linux CS 105 Programming in Windows CS 110 C++ 1: Fundamentals CS 112 C++ 2: Program Design and Data Structures CS 114 C++ 3: Project Management CS 120 Python 1: Fundamentals CS 122 Python2: Program Design and Data Structures CS 124 Python 3: Project Management CS 130 Java 1: Fundamentals CS 132 Java 2: Program Design and Data Structures CS 134 Java3: Project Management

Page # Catalog	Page # Addendum	Course/Program/Heading	In Printed 2018-2019 Catalog	Spring 2019 Addendum
	21	Criminal Justice	--	New Courses: CJ 080 The Criminal Justice System Viewed Through a Multi-Cultural Lens CJ 082 Victimology: Victims and The Criminal Justice System
214	22-23	Education – Associate in Arts in Elementary Teacher Education for Transfer (ADT: A.A.-T)	--	Add DANC 004, Dance Appreciation, to List A
	24	Engineering	--	New Course: ENGR 014 Introduction to Statistical Programming in R for Scientists and Engineers
218	24	Engineering	--	ENGR 045 = C-ID ENGR 140 B
--	25	Fire Technology	--	Fix accidental omission: Fire Technology Certificate of Achievement and Associate in Science
253	26	Human Services	--	Remove CSU GE/IGETC pattern options from local degree
254	27	Human Services	HS 054: Prerequisite: HS 051 with a minimum grade of C	HS 054: Prerequisite: HS 001 with a minimum grade of C
255	28	Interdisciplinary Studies: Wellness and Self Development	--	Update courses – See page 27
263	29	Associate in Arts in Kinesiology for Transfer (ADT: A.A.-T)	*6-15 units may be double counted toward both the major area of emphasis and CSU General Education or IGETC Pattern. Consult with a counselor for more information on completing this degree	*6-12 units may be double counted toward both the major area of emphasis and CSU General Education or IGETC Pattern. Consult with a counselor for more information on completing this degree
280	39	Mathematics	MATH 002 = C-ID MATH 955	MATH 002 = C-ID MATH 151
282	30	Mathematics	MATH 055 – Transferrable to CSU	MATH 055 – Transferrable to UC/CSU
289	31	Music	MUSC 001 Beginning Theory I 4.0 Units Course Advisory: MUSC 027 or knowledge of musical notation Transferable to UC/CSU Hours: 64-72 lecture Study of diatonic scales and triads, intervals, diatonic chords, basic harmonic progressions and cadences, part writing, rhythm and meter, sight singing, ear training, dictation, history and performance. Short creative assignments are included to provide experience in the application of materials learned in class. It includes analysis and composition and is required for music majors. (C-ID MUS 120; MUS 125)	MUSC 001 Beginning Theory I 4.0 Units Prerequisite: A minimum grade of C in MUSC 005 and MUSC 028 Transferable to UC/CSU Hours: 64-72 lecture A study of diatonic scales and triads, intervals, diatonic chords, basic harmonic progressions and cadences, part writing, rhythm and meter, sight singing, ear training, dictation, history and performance. Short creative assignments are included to provide experience in the application of materials learned in class. It includes analysis and composition and is required for music majors. (C-ID MUS 120; MUS 125)
326	32	Political Science	--	PLSC 007 = C-ID POLS 140
350	33	Theatre Arts	--	THEA 027B = C-ID THTR 192