

**Proposed ASSIST Displays of CAN Information
Display Specifications
August 13, 2003**

Overview

This document proposes how California Articulation Number (CAN) information can be displayed in appropriate articulation reports generated by ASSIST. This information is being provided to the ASSIST Board of Directors and the CAN Board of Directors for review, comment, and approval. It was developed jointly by the ASSIST Coordination Site (ACS) and CAN System Office (CANSO) and shared with college and university articulation staff for comment. If adopted by both Boards, the ASSIST Coordination Site will modify the ASSIST software to display CAN information in the approved manner.

Background

The ASSIST and CAN projects both began operating as intersegmentally funded activities in 1985. ASSIST is aimed at collecting, storing, and communicating articulation information for students, faculty, and staff to use in advising and evaluating students who transfer among California Community Colleges, California State University, and University of California campuses. ASSIST now operates as California's official online source for course articulation information. The central operations of ASSIST are managed by the ASSIST Coordination Site located in Irvine and the intersegmental project is guided by the ASSIST Board of Directors.

CAN provides additional articulation content that can be communicated when students, faculty, and staff are examining traditional articulation information. CAN provides a supplemental common course number for commonly articulated lower-division, major preparation courses at colleges and universities. These supplemental course numbers (CAN Identifiers) provide a common name and number for qualified courses that can be used in addition to the local course names and numbers used at colleges and universities. Each CAN Identifier has a corresponding CAN course description that is created and updated by a CAN Faculty Discipline Review Committee whose membership includes faculty from colleges and universities who participate in CAN. Individual college and university courses are then qualified to receive a supplemental CAN Identifier through a process coordinated by the CAN System Office located in Sacramento. Once a university has qualified a local course for a CAN Identifier, they commit to accepting (and applying to lower-division major requirements) any other college or university courses qualified with the same CAN Identifier. The CAN project is guided by the CAN Board of Directors.

In the late 1980s and early 1990s the CANSO provided regularly updated data to the ACS on all college and university courses qualified for CAN. University staff entering and updating articulation in ASSIST had the choice to include the display of CAN Identifiers for qualified courses in each individual instance of articulation when appropriate.

In the mid 1990s the CANSO ceased providing updated data to the ACS and in the late 1990s ASSIST discontinued the display of CAN information. However, the ASSIST and CAN Boards remained interested in resuming the display of CAN information in ASSIST once the operations of the CAN project became more stable.

As identified in the current and previous ASSIST Strategic Plan, the ASSIST Board has approved the activity of modifying ASSIST to display CAN information. This activity involves receiving regularly updated CAN data from the CANSO and modification of the ASSIST software to display CAN Identifiers in corresponding articulation reports.

In 2002 the CAN Board of Directors approved a contract between the CANSO and the ACS to accomplish these activities. The first phases of this work involved establishing data specifications for the CANSO to use in sending data on CAN qualified courses to ASSIST and cleaning up the data in the CAN database so that curriculum data matched with the curriculum data in ASSIST. This work has now been completed and the CANSO and ACS are working on establishing an ongoing process and schedule for transmitting CAN data to ASSIST.

The next phase of this work is for the ASSIST and CAN Boards to discuss this proposal and agree on specifications for where and when CAN Identifiers should be displayed in existing ASSIST articulation reports. This document proposes the initial specifications to aid further discussion and has already been shared with college and university articulation for their comments.

If the ASSIST and CAN Boards finalize and approve the display specifications, the ACS will modify the ASSIST software to display CAN Identifiers accordingly and this project will be completed. The ACS and CANSO will then continue to work in a collaborative manner to maintain this functionality as a standard feature of ASSIST.

In the future it may be desirable for the ASSIST and CAN Boards to consider further modifications to ASSIST utilizing the CAN data. For example, it may be possible for ASSIST to display additional instances of articulation that have not been entered directly into the ASSIST database by universities but does exist due to mutual qualification of college and university courses for the same CAN Identifier. Most of the college and university articulation staff who responded during the review period expressed their desire to have ASSIST display “implied” instances along with the traditional articulation displayed in ASSIST. Such modifications would require considerable discussion, review, and planning, and ASSIST would require additional financial support to develop and implement them.

Proposed Display Specifications

The following specifications are proposed for displaying CAN Identifiers in ASSIST.

CSU Baccalaureate Course Lists

The CSU Baccalaureate Course Lists in ASSIST are lists of California Community College courses that the college faculty have determined to be CSU Baccalaureate level (per CSU Executive Order 167) and therefore transferable for general credit to any CSU campus. These data in ASSIST are historical and ASSIST users can request to display this information for a specific academic year.

It is proposed that the appropriate CAN Identifiers be displayed for all community college courses that are CAN qualified in the corresponding academic year. CAN Identifiers will always be displayed with the “CAN” prefix, such as “CAN MATH 18”.

When a CSU baccalaureate level college course is qualified for one or more CAN Identifiers in the given year, the CAN Identifier(s) will be displayed directly underneath the local course information (before the next local course is listed), on a separate line(s), indented, and surrounded by parentheses (as shown in Appendix A).

There are times when the CAN qualification of an individual local course involves other local courses. This is always the case with CAN Sequences and some other special conditions usually involving local course sequences. In these cases a special footnote symbol (§) will be displayed immediately after the corresponding CAN Identifier. At the bottom of the page a special section will also be displayed with more textual descriptions of ALL sequences and special conditions referenced on the page (as shown at the bottom of Appendix A).

Major Preparation, Departmental, and GE/Breadth Articulation Agreements

The major preparation, departmental, and GE/Breadth articulation agreements in ASSIST are campus-to-campus agreements that communicate specifically how courses taken at one institution (generally a community college) will be used to meet university lower-division major/GE requirements or are comparable to specific university courses or sequences. The receiving institution (the university to which the student is transferring) is responsible for creating, maintaining, and communicating this articulation since it will eventually be the institution that grants credit toward a baccalaureate degree.

While the specific presentation of individual articulation agreements varies from university to university, there is a general presentation format used in the ASSIST software that controls the specific placement of information on the page. This general presentation format is applied when universities reference specific courses

in agreements. Agreements may also include textual information to describe requirements or course articulation. When courses are explicitly referenced in agreements and the ASSIST software controls the placement of course information on the page, CAN Identifiers can be automatically displayed without intervention from the university staff who maintain the agreements.

It is proposed that individual university articulation officers have the authority to specify which agreements for their university are to include the display of CAN Identifiers. This would allow university articulation officers to display CAN Identifiers in agreements with community colleges and other university campuses who are full CAN participants. They would also be able to suppress the display of CAN Identifiers in agreements with institutions who are not full CAN participants. This proposal provides the most control to ensure that CAN Identifiers are only displayed for campuses that will honor CAN and where the university believes that display of CAN information is beneficial to their prospective students. This proposal is also in keeping with ASSIST's philosophy that universities retain as much control as possible over how their articulation is presented.

When CAN Identifiers are to be displayed for an agreement, all college and university courses referenced in the articulation agreement that are qualified for CAN in the year of the agreement will display any corresponding CAN Identifiers. The display of CAN Identifiers will be controlled by the ASSIST software (based on data from the CANSO).

CAN Identifiers will be displayed on the next line immediately following the qualified local course (from the sending or receiving institution). CAN Identifiers will be indented and displayed immediately under the course title, in parentheses (as shown in Appendix B). If the CAN qualification involves other local courses, the special footnote symbol (§) will be displayed immediately after the corresponding CAN Identifier; at the bottom of the page a special section will be displayed with more textual descriptions of ALL sequences and special conditions referenced on the page (as shown at the bottom of both pages in Appendix B).

IGETC and CSU GE-Breadth Course Lists

IGETC and CSU GE-Breadth course lists in ASSIST are lists of California Community College courses that have been qualified for either of these special general education certification programs. Since the focus for CAN is on lower-division major preparation courses, and not general education, CAN Identifiers will not be displayed in these reports. Mutual qualification of college courses in CAN does not permit one college to certify IGETC or CSU GE-Breadth using CAN qualified course from another college unless those courses have been directly qualified for IGETC or CSU GE-Breadth.

UC Transferable Course Lists

UC Transferable course lists in ASSIST are lists of California Community College courses that are transferable for general credit to any UC campus. Since no UC campuses are currently qualifying local courses for CAN, CAN Identifiers will not be displayed in these reports.

NOTE: Web ASSIST does not have any reports that provide a simple list of university courses (similar to the CSU Bacc Course Lists or UC Transfer Course Lists for community college courses). Therefore there would be no way within ASSIST for students to see a complete list of university courses with indications of which are qualified for CAN.

APPENDIX A

Sample CSU Baccalaureate List Showing CAN Identifiers

Course	Title	Semester Units

==== Physics ====		
PHYS 100	Concepts in Physics	3
PHYS 110	Introductory Physics	3
IGETC: 5A CSU GE: B1		
PHYS 141	General Physics 1	4
IGETC: 5A CSU GE: B1, B3		
(CAN PHYS 2)		
(CAN PHYS SEQ A§)		
PHYS 142	General Physics 2	4
IGETC: 5A CSU GE: B1, B3		
(CAN PHYS 4)		
(CAN PHYS SEQ A§)		
PHYS 161	Engineering Physics 1	5
IGETC: 5A CSU GE: B1, B3		
(CAN PHYS 8)		
(CAN PHYS SEQ B§)		
PHYS 162	Engineering Physics 2	5
IGETC: 5A CSU GE: B1, B3		
(CAN PHYS 14)		
(CAN PHYS SEQ B§)		
PHYS 163	Engineering Physics 3	5
IGETC: 5A CSU GE: B1, B3		
(CAN PHYS 12)		
(CAN PHYS SEQ B§)		
PHYS 179	Workshops in Physics	.5-10
PHYS 190	Mechanical Universe	3
PHYS 191	Beyond Mechanical Universe	3

§ Allan Hancock College PHYS 141 + PHYS 142 qualified as CAN PHYS SEQ A

Allan Hancock College PHYS 161 + PHYS 162 + PHYS 163 qualified as
CAN PHYS SEQ B

APPENDIX B

Sample Articulation Agreement Showing CAN Identifiers

To: **CSU Fresno** | From: **Allan Hancock College**
02-03 General Catalog Semester | 02-03 General Catalog Semester

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====PHYSICS (B.S.)====

A. LOWER DIVISION MAJOR REQUIREMENTS

PHYS 4A	&	Mechanics and Wave Motion	(3)	PHYS 161	Engineering Physics 1	(5)
PHYS 4AL		Laboratory in Mechanics	(1)		(CAN PHYS 8)	
		and Wave Motion			(CAN PHYS SEQ B§)	09/04/01

PHYS 4B	&	Electricity, Magnetism,	(3)	PHYS 162	&	Engineering Physics 2	(5)
		and Heat				(CAN PHYS 14)	
PHYS 4BL	&	Laboratory in	(1)			(CAN PHYS SEQ B§)	
		Electricity, Magnetism,		PHYS 163		Engineering Physics 3	(5)
		and Heat				(CAN PHYS 12)	
PHYS 4C		Light and Modern Physics	(3)			(CAN PHYS SEQ B§)	09/04/01

B. ADDITIONAL MAJOR REQUIREMENTS

ONE COURSE FROM THE FOLLOWING:

CSCI 15		C and C++ Programming	(2)	NO COMPARABLE COURSE		01/12/00	
CSCI 40		Introduction to	(4)	NO COMPARABLE COURSE			
		Programming and Problem				12/28/00	
		Solving					
ECE 70		Engineering Computations	(3)	COM SC 171	&	FORTTRAN	(3)
		Using C and FORTRAN				(CAN CSCI 4)	
				COM SC 175		Object Oriented	(3)
						Programming	
						(CAN CSCI 22§)	02/20/97

CHEM 1A		General Chemistry	(5)	CHEM 150	General Chemistry 1	(5)
		(CAN CHEM 2)			(CAN CHEM 2)	
		(CAN CHEM SEQ A§)			(CAN CHEM SEQ A§)	12/20/00

CHEM 1B		General Chemistry and	(5)	CHEM 151	General Chemistry 2	(5)
		Qualitative Analysis			(CAN CHEM 4)	
		(CAN CHEM 4)			(CAN CHEM SEQ A§)	12/20/00
		(CAN CHEM SEQ A§)				

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THE ABOVE ARTICULATION AGREEMENT IS SUBJECT TO PERIODIC REVISION. PLEASE CONSULT A COUNSELOR TO OBTAIN CURRENT INFORMATION ABOUT POSSIBLE CHANGES IN THE AGREEMENT. ALL COURSES MUST BE BACCALAUREATE LEVEL. THE FRESNO STATE UNIVERSITY CATALOG IS LOCATED ON THE WEB AT www-catalog.admin.csufresno.edu.

§ Allan Hancock College PHYS 161 + PHYS 162 + PHYS 163 qualified as
CAN PHYS SEQ B

Allan Hancock College COM SC 173 or COM SC 175 qualified as CAN CSCI 22

CSU Fresno CHEM 1A + CHEM 1B qualified as CAN CHEM SEQ A

Allan Hancock College CHEM 150 + CHEM 151 qualified as CAN CHEM SEQ A

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PHYSICS (B.S.) (continued)

IT 52	Electricity and Electronics	(3)	EL 118 &	Fundamentals of Circuit Analysis	(3)
<u>OR</u>			EL 119 &	Fundamentals of Circuit Analysis Lab	(2)
MEAG 53	Electricity and Electronics	(3)	EL 122 &	Electronic Devices and Circuits	(3)
			EL 123	Electronic Devices and Circuits Lab	(2) 12/12/01

MATH 75	Mathematical Analysis I (CAN MATH 18) (CAN MATH SEQ B§) (CAN MATH SEQ C§)	(4)	MATH 181	Calculus 1 (CAN MATH 18) (CAN MATH SEQ B§) (CAN MATH SEQ C§)	(5) 11/11/96
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MATH 76	Mathematical Analysis II (CAN MATH 20) (CAN MATH SEQ B§) (CAN MATH SEQ C§)	(4)	MATH 182	Calculus 2 (CAN MATH 20) (CAN MATH SEQ B§) (CAN MATH SEQ C§)	(5) 11/11/96
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MATH 77	Mathematical Analysis III (CAN MATH 22) (CAN MATH SEQ C§)	(4)	MATH 183	Linear Algebra and Multivariable Calculus (CAN MATH 22) (CAN MATH 26§) (CAN MATH SEQ C§)	(5) 04/17/95
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MATH 81	Applied Analysis	(4)	MATH 184	Differential Equations with Linear Algebra (CAN MATH 24) (CAN MATH 26§)	(5) 02/28/01
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§ CSU Fresno MATH 75 + MATH 76 qualified as CAN MATH SEQ B

CSU Fresno MATH 75 + MATH 76 + MATH 77 qualified as CAN MATH SEQ C

Allan Hancock College MATH 181 + MATH 182 qualified as CAN MATH SEQ B

Allan Hancock College MATH 181 + MATH 182 + MATH 183 qualified as CAN MATH SEQ C

Allan Hancock College MATH 183 + MATH 184 qualified as CAN MATH 26