REPORT ON ARTICULATION, TRANSFER And SHARED COURSE NUMBERING

FOR ARIZONA PUBLIC POSTSECONDARY EDUCATION

Submitted to the Joint Legislative Budget Committee
By
The Arizona Board of Regents and the Arizona Community Colleges
December 15, 2010

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PART I

2009-2010 Progress Report

ARTICULATION AND TRANSFER FOR

ARIZONA PUBLIC POSTSECONDARY EDUCATION

2009-2010

Highlights

The 2009π2010 academic year offered several

Improved AZTransfer.com

AZTransfer.com, Arizona's website for transfer students, staff and the public, has been redesigned with changes implemented over the past two years. The 'hits' to the system rose from 11.9 million in 2007π08 to **26.1 million hits in 2009-10.** A portal for high schools students was added this past summer.

ABOR Policy for Transfer Student Admissions Strengthened

The Arizona Board of Regents revised its admission policy for transfer students based on data provided by the Arizona State System for Information on Student Transfer (ASSIST) regarding transfer student success (i.e., students who complete baccalaureate degrees) as a function revised ÆÐtransfer

2009-2010 Progress Report
ARTICULATION AND TRANSFER FOR
ARIZONA PUBLIC POSTSECONDARY EDUCATION

BACKGROUND

In 1996, the Arizona

AZtransfer.com

- An Exam Equivalency Guide, in beta version, has been launched which shows the credits earned with specific scores on standardized tests. Advanced Placement (AP), International Baccalaureate (IB), College Level Examination Program (CLEP) and the Dantes Subject Standardized Tests (DSST) are included in the Guide.
- A new online tool "Get Started!" has been added to help users navigate options in higher education. By answering just a few questions, student will be directed to appropriate resources for making future postsecondary plans.
- The AZtransfer staff and ADE have taken initial steps to determine how Education and Career Action Plans (ECAPs) might be linked to AZtransfer.com to assist with college planning in high school.
- Students may now upload completed courses into academic program planning guides rather than entering them manually.
- Community college Chief Information Officers (CIOs) began discussions about the option of sending electronic transcripts statewide.

ATFs Address Test Alignment

Faculty ATFs have, over the last several years, been reviewing institutional equivalencies for Advanced Placement (AP) exams and College Level Examination Program (CLEP) exams in an effort toward establishing common equivalencies statewide. In the fall of 2009, with more high schools offering the International Baccalaureate Programme (IB), several ATFs added IB tests to their consideration. The status of their work is available to students in the new Exam Equivalency Guide (EEG), mentioned above, which gives them quick and easily accessible information on required exam scores for credit on all of the standardized exams.

This project continues and will be expanded for the fall 2010 ATF meetings, to meet the requirements HB2725.

Arizona General Education Curriculum (AGEC) Numbers Rise

Community College students who complete an AGEC satisfy all lower division general education requirements at the three universities. An AGEC constitutes over half (35–38) of the curricular unit requirements for transfer associates degrees. Since there is strong evidence that completion of the AGEC has a positive correlation with academic success for transfer students at the universities (Hezel Associates evaluation of ATASS in 2007; subsequent data generated by ASSIST), the numbers of students who complete an AGEC, transfer and graduate from the universities are measures of student success.

- Since 2002, the numbers of students who have completed the AGEC has tripled (see chart in Appendix 2).
- The number of students transferring with a transfer associate degrees (includes embedded AGEC and common major courses) has more than doubled since 2004 and represents an increasing percentage of new transfer students each year.

- However, the rate of students transferring from the community colleges has remained relatively flat in recent years, one of the issues APASC intends to address with its new structure. And it is estimated than less than half of the students who complete an AGEC transfer to a university. These students have the background to succeed at the university level, but cannot be individually identified to recruit them back to school. A statewide longitudinal student data system could address this critical issue.

ABOR Admissions Policy Changes Tied to Transfer Student Success

A recent analysis of student success

TRANSFER SYSTEM SUPPORTS

Management

Consistent with the 1996 Transfer Articulation Task Force (TATF) recommendations,

- ASSIST data are used by community colleges in part to:
  - Track persistence, time to degree, GPAs and majors of their students at other Arizona public institutions;
  - Comply with federal reporting requirements for Carl Perkins IV funding and Student Right to Know information; and
  - Comply with state dual enrollment course reports and grant reports for federal and non profit agencies.

- ASSIST data are used by the universities in part to:
  - Generate university system wide reports to APASC and ABOR on topics such as persistence rates, graduation rates and average university GPA of transfer students broken down by transfer hours and transfer degrees; and
  - Conduct special studies focusing on the transfer student profile, transfer rates and enrollment patterns of their key feeder institutions.

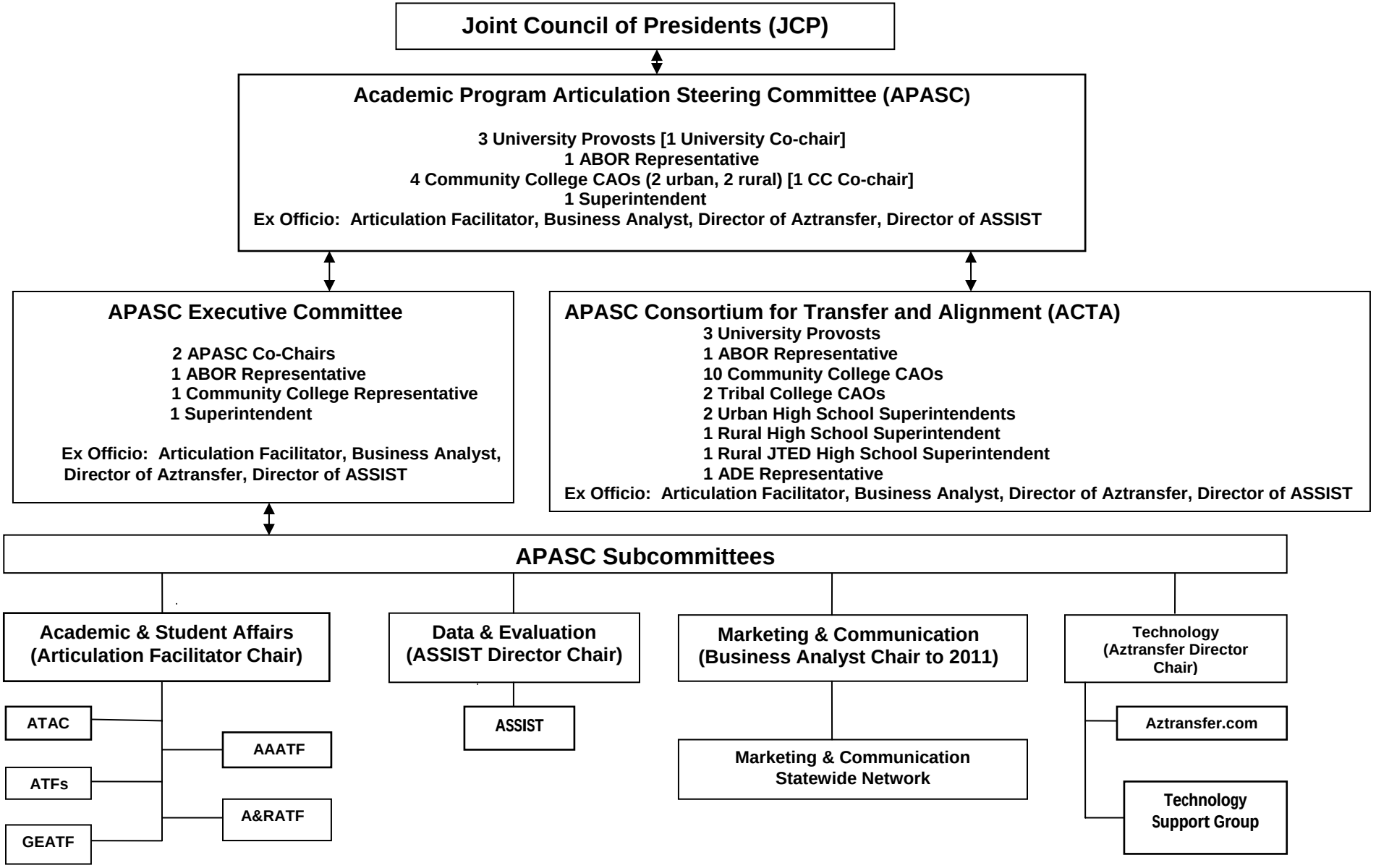
IDENTIFYING AND MEETING THE STATE'S POSTSECONDARY NEEDS

The Arizona public community colleges and universities continue to act jointly to meet the postsecondary needs of Arizona citizens. Examples of initiatives include:

- ASU developed the Maricopa to ASU Pathways Project MAPPS) and similar TAGS with nonπMaricopa colleges all of which provide academic road maps for community college

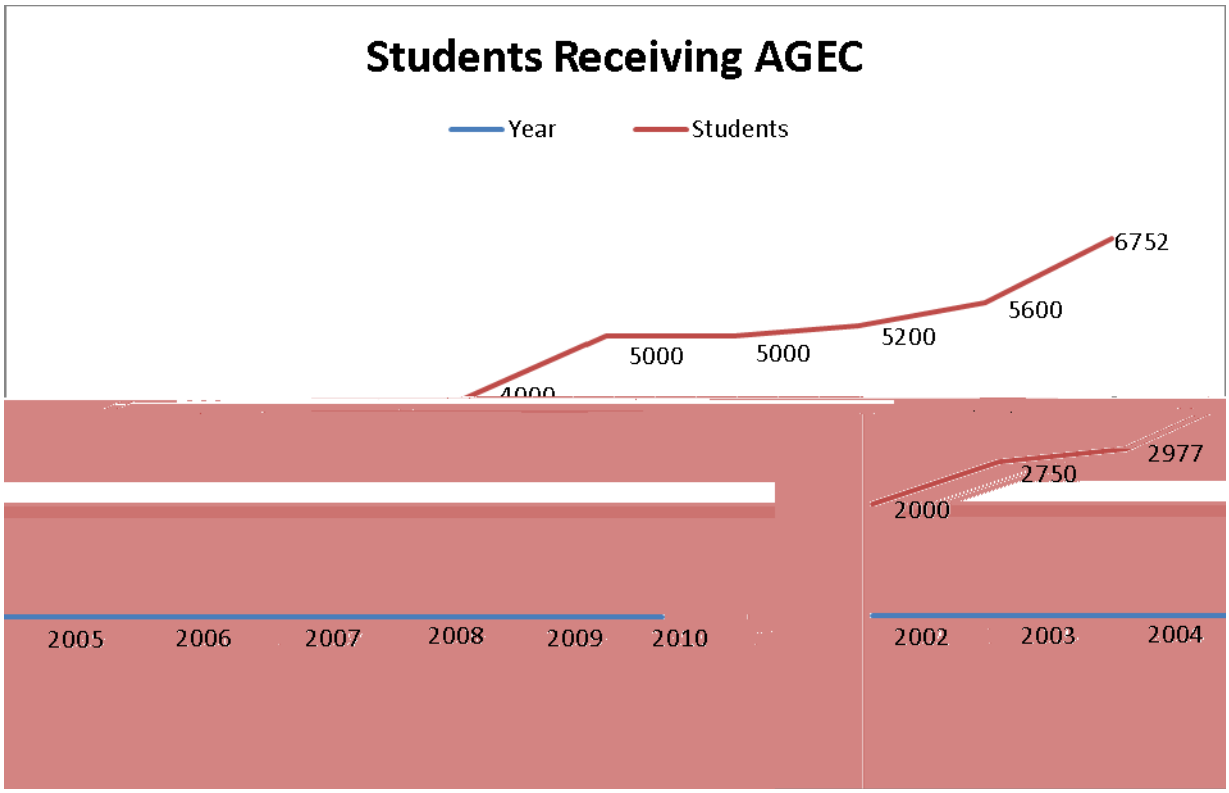
APPENDIX 1

Academic Program Articulation Steering Committee (APASC)



Final: 8-24-10 (presented to JCP); rev: 10-25-10

APPENDIX 2


Students Receiving AGEC
Year
Students
6752
5600
5200
5000
5000
4000
2977
2750
2000
2005
2006
2007
2008
2009
2010
2002
2003
2004

PART II

Course Numbering System for

Arizona's Universities and Community Colleges

Executive Summary

SB 1186: Postsecondary Institutions; Course Numbering requires public universities and community colleges to develop and implement a shared numbering system that identifies courses that transfer from community colleges to the universities toward a baccalaureate degree.

In August, the Joint Council of Presidents of the community colleges and universities approved an action plan for developing a course numbering model. Under the leadership of a steering committee, the plan called for a statewide committee with members appointed by the presidents/chancellors of the 13 public community colleges and universities to:

- Review and select course numbering models for further study and cost analysis.
- Establish protocols for and conduct costs analyses.
- Provide options and costs to Joint Council of Presidents
- Pending approval of Joint Council of Presidents, develop final report for submission to state legislature.

During the ensuing weeks, the steering committee and the full committee met several times to carry out the plan. After reviewing several models from other states and considering options for Arizona, the committee selected two models of shared numbering systems for further review and cost analysis. These two options were presented to the Joint Council of Presidents on November 12 and they unanimously selected the *Shared Unique Number (SUN*

A Course Numbering System for Arizona's Public Universities and Community Colleges

COMMON COURSE NUMBERING MODELS

There is no single definition of shared or common course numbering. The SC, based upon a review of systems in place in 22 states (see Appendix 2), identified four primary "common course" numbering models, which form a continuum of complexity and conformity required by the institutions. The four models are:

1.

The SC identified 204 courses that would be included in the analysis because they meet the criteria of (1) satisfying the requirements of the Arizona General Education Curriculum (AGEC) and/or (2) are common major courses as defined in the 1996 Transfer Articulation Task Force (TATF) report (accepted by Joint Legislative Budget Committee, 4 December 1996). Of these 204 courses, 90 already have direct equivalencies between the community colleges and the universities, and 114 do not (see Appendix 3).

The review process revealed a number of issues on the transfer of courses that could not be resolved simply by a common course numbering system but should be addressed by APASC:

- Some courses transfer to two of the universities, but not the third. Transfer of courses that meet AGEC and common course requirement should be fairly standard among the universities.
- The existing transfer system, which is built on community college to university transfer, needs to address multiπdirection transfer of courses, because many students attend multiple institutions in the state.
- Some of the courses among the 204 identified in this process were only common among 3 institutions. It is anticipated that institutions will begin to develop more courses for the common bank, another benefit for students.

TWO OPTIONS FOR ARIZONA

After considerable discussion the SNSC recommended that two of the models be selected for further analysis: and . Subsequently, each of the 13 institutions developed cost estimates for implementing and maintaining each of the two models.

A. Same Prefix, Number, Title

In this model, courses are assigned the same prefix, number, and title, and are regarded as equivalent in all aspects (e.g., preπrequisites, credit hours, course level, course descriptions, course content, course outcomes, etc.).

This model would be most transparent for identifying equivalent courses statewide and would be the simplest for students to understand. A student would know that a course at one institution would be the same course at the transfer institution, whether transferring to a community college or university. However, course content and learning outcomes need to be significantly common in this model; for example, several states use a 75π80% rule for common course content in order to assign a common course number. While the Arizona universities accept many community college courses as “equivalent” to their courses, these courses are considered acceptable substitutes but they have not 0.0.Tc0.2250Td[250Td(nu2.9Td(the)Tj)Tj/C

13 institutions would need to agree upon all of the components of any course that would be given the same prefix, number, and title, since these courses would become interchangeable among institutions.

Issues/Challenges: Several issues were raised by the SNSC in considering this option.

- *Cost.* The most significant barrier to this model is the estimated cost, which is detailed later in the report, although it is difficult to anticipate all of the costs at this time due to the complexities associated with it. For example, course prefix□number information is used for multiple purposes at the department, college and institutional level for data and management decisions. A statewide common course prefix and number will have a ripple effect on other areas of the institution which cannot be determined at this time.

- *Cost/Benefit*. The SNSC expressed concern about the overall benefit of this model for the cost. A numbering system provides information on course to course transfer, but it does not tell students courses apply to degree programs, typically the more critical information for accurate academic planning. No numbering system can address that issue.

- *Reduction in curricular flexibility and innovation*. This system could significantly limit the ability of institutions to address changes within their curricula, modify both courses and programs, and be responsive to changes. Any changes would need to be agreed to by all institutions that offer the course, a very time consuming and significant barrier to curricular change.

- *Limited course bank*. Because of the level of commonality required for this model to be successful, the bank of courses will be fewer than in other models. For example, a similar course offered by several community colleges may apply to the Arizona General Education Curriculum and

- *Statewide Management System*. A statewide entity would need to be established to manage the course numbering system to do some of the following: coordinate among the

Table 3. Estimated Faculty Replacement Costs For Implementing Imp300016003345(0)7(00)NuTcTDbTcTf1Tc84003.0610Td6003

Course Type	Number of Courses	University Adjunct Rate per 3-Credit Course	Urban CC Adjunct Rate per 3-Credit Course	Rural CC Adjunct Rate per 3-Credit Course	Total University Cost per Course Type	Total Urban CC Cost per Course Type	Total Rural CC Cost per Course Type	Total Faculty Cost per Course Type
STEM	24	$ 8,000	$ 2,130	$ 1,650	$ 576,000	$ 102,240	$ 316,800	$ 995,040
Social/Behavioral	30	$ 5,000	$ 2,130	$ 1,650	$ 450,000	$ 127,800	$ 396,000	$ 973,800
Humanities	30	$ 4,000	$ 2,130	$ 1,650	$ 360,000	$ 127,800	$ 396,000	$ 883,800
Fine Arts	6	$ 4,000	$ 2,130	$ 1,650	$ 72,000	$ 25,560	$ 79,200	$ 176,760
Total:	90				$ 1,458,000	$ 383,400	$ 1,188,000	**$ 3,029,400**

Course Type	Number of Disciplines	Number of Course Replacements	University Adjunct Rate per 3-Credit Course	Urban CC Adjunct Rate per 3-Credit Course	Rural CC Adjunct Rate per 3-Credit Course	Total University Cost per Course Type	Total Urban Urban	3	2	R Ļ	Ö

Table 11. Total Estimated Costs Over Three Years to Implement the "Same Number, Prefix, Title" Numbering System Among Arizona Universities and Community Colleges (Annual maintenance costs would begin at the end of the third year).

Item	In-Kind Contributions	Additional Funding
University Faculty	$ 12,521,250	$ 4,956,000
	$ 607,500	$ 1,093,500
	$ 1,620,000	$ 2,187,000

Table 12. Estimated Average In-Kind Faculty Salary Contributions For Implementing "Shared Unique Number" Numbering

Course Type	Number of Courses	University Rate per 3-Credit Course	Urban CC Rate per 3-Credit Course	Rural CC Rate per 3-Credit Course	Total University Cost per Course Type	Total Urban CC Cost per Course Type	Total Rural CC Cost per Course Type	Total Faculty Cost per Course Type
STEM	20	$ 13,125	$ 11,500	$ 10,685	$ 196,875	$ 115,000	$ 106,850	$ 418,725
Social/Behavioral	47	$ 13,125	$ 11,500	$ 10,865	$ 462,656	$ 270,250	$ 255,328	$ 988,234
Humanities	35	$ 13,125	$ 11,500	$ 10,865	$ 344,531	$ 201,250	$ 190,138	$ 735,919
Fine Arts	12	$ 13,125	$ 11,500	$ 10,865	$ 118,125	$ 69,000	$ 65,190	$ 252,315
Total:	114				$ 1,122,188	$ 655,500	$ 617,505	**$ 2,395,193**

Table 14. Estimated Average Staff In-Kind Contributions For Implementing "Shared Unique Number" Numbering System Among Arizona Universities and Community Colleges.

	FTE			Annual		
Staff	**University**	**CC's**	**APASC**	**Salary**	**ERE**	**Total**
Administrative	1.13	1.63	0.00	$ 60,000	$ -	**$ 165,000**
Technical	0.75	1.63	0.00	$ 75,000	$ -	**$ 178,125**
Total	**1.88**	**3.25**	**0.00**	**$ 135,000**	**$ -**	**$ 343,125**

Appendix 1

SHARED COURSE NUMBERING COMMITTEE
of the Arizona Community Colleges and Universities

Steering Committee		
Institution	**Name**	**Title**
Arizona Board of Regents	Stephanie Jacobson, Co-Chair	Associate Vice President, Academic and Student Affairs
Maricopa Community Colleges	Maria Harper-Marinick, Co-Chair	Provost and Executive Vice Chancellor
ATASS	Michael Hensley	ATASS Business Analyst
Pima Community College	Suzanne Miles	Provost and Executive Vice Chancellor
Northland Pioneer College	Jeanne Swarthout	President
Arizona State University	David Young	Senior Vice President for Academic Affairs
Shared Numbering System Committee		
Arizona State University	Arthur Blakemore	Vice Provost
Arizona Western College	Joann Linville	Vice President for Learning Services
Central Arizona College	James Moore	Dean of Records and Admissions
Central Arizona College	[illegible]	[illegible]

Appendix 2: 22 States and Common Course Numbering System (CCNS) Models

An initial step in considering a common course numbering system (CCNS) for Arizona is to examine what other states have developed. Information on each state is provided first, then they are grouped according to type of model.

State	Legislation	Year	Institutions Included	Courses Involved in CCNS	Websites
CA	SB 1415	2004	CCC system with involvement of CSUs, UCs, and private institutions	20 highest demand majors	http://www.asccc.org/C-id/index.html http://www.assist.org/web-assist/welcome.html
CO	HB 1237	1986	CO CC system (13 schools) later, 4 area voc ed schools	general education, CTE; lastly, remainder (more than 12,000 courses)	http://www.cccs.edu/cccns/ccnsindex.html
CT	CC Board	2000	CT CC system (12 schools)	all	http://www.commnet.edu/academics/ccn/
FL		1971	all public cc's and u's	all	http://scns.fldoe.org/scns/public/pb_index.jsp http://www.registrar.ufl.edu/catalog/programs/courses/scns.html
ID		1996	all public cc's and u's	90-100 general education courses	http://www.boardofed.idaho.gov/public_col_univ/credit_transfer.asp
IL	IAI		IL Eastern CC system (partial state)	GE crosswalk	http://www.itransfer.org/container.aspx?file=iai http://www.iecc.edu/catalog/PDF/14_General_Program_Information_pp46-52_032210.pdf
IN	HB1001	2005	Indiana University and Purdue University systems	"equivalent courses, including courses with the same course number and title, must count in the same way at all campuses within the system where the course is offered." This is an "equivalent applicability" system at the university level only.	

State	Legislation	Year	Institutions Included	Courses Involved in CCNS Websites
MT		2007	MT university system	all undergraduate courses http://www.mus.edu/transfer/TI_Operational_Guidelines_081203.pdf crosswalk example (accounting) : http://mus.edu/transfer/CCN/quicksrch.asp?subj1=ACTG
NV	NBOR	1999	NSHE community colleges and universities	all baccalaureate degree courses http://system.nevada.edu/Chancellor/Academic-A1/CCN/history.htm_cvt.htm http://system.nevada.edu/Chancellor/Academic-A1/CCN/CCN-Guidelines.htm_cvt.htm
NM	SB161	2005	NMHE cc's and uni's	general education courses; NM's CCNS: http://hed.state.nm.us/cms/kunde/rts/hedstatenmus/docs/345396584-07-09-2008-14-55-24.pdf
NC	UNC & NCCCS boards	1996	58 community colleges	all; phase in process: 1 general education, 2 major courses, 3 remainder established a Combined Course Library (CCL) of 3,800 courses; NC uses a 75% common course description model; 25% (the last sentence) is institutionally unique.
ND			NDUS, tribal colleges, and private colleges	500 courses; crosswalk shows common courses then the credits of each course at 13 institutions http://www.ndus.nodak.edu/students/ccn/matrix/default.asp
OR	HB2913	1987	colleges and universities	all http://www.ous.edu/state_board/jbac/
SD	SDBOR	2005	six universities: GE	uses SCED (School Codes for the Exchange of Data); SD Department of Ed also developing CCNS: http://doe.sd.gov/educationonline/2010/May/art_1.asp
TN	Complete College TN Act	2010	community colleges	http://www.csus.edu/ihelp/PDFs/Complete%20College%20Tennessee%20Act.pdf
TX		1973	community colleges	community colleges utilize the Texas Common Course Numbering System (TCCNS): lower

State	Legislation	Year	Institutions Included	Courses Involved in CCNS	Websites
WV	HB 2489	1993	universities, state colleges, community colleges	a “CEG approach” for matching courses WV University Transfer Course Equivalency Guide:	

Appendix 3

Arizona Courses for Consideration in Numbering System

SB 1186 has defined the courses to be included in the shared numbering system as those which satisfy the requirements for the Arizona General Education Curriculum (AGEC) and common major requirements for equivalent majors. Over 200 courses were identified for analysis and to estimate costs as described below.

AGEC Courses

The AGEC is comprised of 35 credits with courses from the following disciplines:

- FRESHMAN COMPOSITION: a one-year lower division English Composition sequence.
-

List of 114 Courses

College Mathematics
Pre-Calculus
Finite Mathematics
Brief Calculus
Math for Elementary Education Majors

Human Sexuality
Introduction to Human Geography
World/Regional Geography
Introduction to Language/Linguistics

Introduction to Production
Begin Am Sign Language I
Begin Am Sign Language II
Inter Am Sign Language I