

Bay Region Guide to High School to Community College Course-to-Course Articulation: Framework for Effective Practice



Developed by the North/East and South/West Bay Region's Career Pathways Consortia Systems Alignment Working Groups. Funded by SB1070. 2016, Version 3.6



The North/East Bay College and Career Pathways Consortium (NEBPC) is a collaborative of 13 community colleges and 18 K-12 school districts in Alameda, Contra Costa, Napa, Solano and Sonoma Counties. The Southwest Bay Area Career Pathways Consortium (SWBACPC) is a collaborative of 14 community colleges and 18 K-12 school districts in the Monterey, San Mateo, Santa Clara, and Santa Cruz Counties. The Consortia are working to build a regional community of practice that increases successful transition of high school students into post-secondary certificate and degree programs aligned to their career interests as well as to high wage/high growth career pathways in the greater Bay Region.

The Consortia also supports development of regional alignment among the California Career Pathway Trust Consortia, throughout the Bay Region.

Contra Costa Community College District is the lead agency for SB 1070 Career Technical Education (CTE) Pathways Program Grant that funds the North/East Bay College and Career Consortium.

- **Foothill College** serves as fiscal agent to the SB 1070 grant for the Southwest Bay Area Career Pathway Consortium (SWBACPC).

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OVERVIEW & PURPOSE

Over the past two decades, hardworking career technical education (CTE) practitioners have spent countless hours attempting to support collaboration between secondary and postsecondary (community college) faculty to develop seamless transitions in CTE programs within a pathway, program of study and/or sequence of courses through non-duplicative sequences of learning supported by articulation agreements. While significant progress has been made in local programs, to date the work has not resulted in a clear, transparent, useful system that assists students, parents and educators to maximize the opportunities offered by CTE programs.

With the emphasis on developing, maintaining, and enhancing effective Career Pathways through SB 1070 and California Career Pathways Trust (CCPT), it is incumbent on the secondary and postsecondary systems to agree on common, efficient practice for CTE course-to-course articulation that supports students in their pathways, programs of study, and transitions to higher education.

The process of developing articulation agreements is based on collaborative efforts between the college faculty and secondary instructors. While the primary benefit is to students, this collaborative process has a secondary benefit of enhancing communication between secondary and post-secondary faculty with programs and between sites and must be supported by resources identified by each college and district partner. The process identified in this document relates to Career Technical Education (CTE) articulation.

Since course-to-course articulation requires considerable effort on the part of each system to establish and maintain agreements as well as develop and maintain procedures to ensure the transcription of college credit, **colleges and districts are urged to consider dual or concurrent enrollment options as viable alternatives.**

THE PURPOSE OF THIS HANDBOOK IS TO:

1. Promote common course-to-course articulation practice across the service areas of the NEBPC and SWBACPC.
2. Provide a convenient and centralized place to find general information, uniform procedures and best practices about high school to college articulation.
3. Recommend guiding principles to promote local, regional and preferably statewide course-to-course CTE articulation practices.
4. Clarify federal and state regulatory requirements vs. local practice.
5. Provide system approach recommendations for effective and student centered practices guiding CTE secondary to postsecondary articulation procedures.
6. Recommend common definitions for use statewide.
7. Provide information on articulation practices, procedures, and policies that are:
 - Student centered
 - Accessible on college and high school websites which are easy to navigate
 - Transparent
 - Easily understood.

DEFINITIONS

ARTICULATION - A planned process that links two or more educational institutions together to facilitate a smooth transition for students to move from one course, program, or educational level to the next. Its purpose is to coordinate policies and practices among sectors of the education system, minimizing or eliminating course repetition. Successful completion of an articulated course assures faculty that the student has taken the appropriate course, received the necessary instruction and preparation, and that similar outcomes can be assured, enabling progression to the next level of instruction. <http://ciac.csusb.edu>

ARTICULATION AGREEMENT - A written commitment that is agreed upon at the State level or approved annually by the lead administrators of a secondary institution and a postsecondary educational institution; or a sub baccalaureate degree granting postsecondary educational institution and a baccalaureate degree granting postsecondary educational institution; and to a program that is designed to provide students with a non-duplicative sequence of progressive achievement leading to technical skill proficiency, a credential, a certificate, or a degree; and linked through credit transfer agreements between the 2 institutions. (Perkins IV Act).

CREDIT BY EXAMINATION - Students receive college credit for articulated coursework based upon a written examination, or other demonstration of course mastery. The content/format of this demonstration is the purview of the college faculty. The exam may be the final exam in the course at the secondary site or an additional exam taken at the college. In addition, a minimum grade in the secondary course may be required, as defined by the articulation agreement for the course.

CATEMA - Career and Technical Education Management Application. This is an online software utilized to award student credit through articulation.

CONCURRENT ENROLLMENT - An arrangement that allows high school students to enroll in postsecondary courses, for postsecondary credit, but usually not for high school credit. Generally students are taught by college faculty, either at the college or high school, or through distance education. (www.ecs.org/clearinghouse/28/11/2811.pdf)

COR—Course Outline of Record or Course Outline. This is the “official” district-level course outline for the class that is articulated. A teacher’s syllabus is not the course outline of record. The format for course outlines vary by district, but at a minimum, the COR should include:

Course Title. Course Summary. Length of the course in hours. Number of credits or units awarded. Prerequisites (if any). Student Learning Outcomes or Course Objectives (skills and competencies). Measurement methods. Required equipment. Required/recommended textbooks.

DUAL ENROLLMENT - Programs that allow high school students to enroll in college courses and earn college and high school credits simultaneously, thereby exposing them to the academic and social demands of postsecondary education. (Karp, Bailey, Hughes, and Fermin, 2004, p. 1).

POST-SECONDARY—For the purpose of this document, the term post-secondary means community colleges or community college districts.

ROP—Regional Occupational Program/Center

SECONDARY—For the purpose of articulation, the term secondary normally means high school or regional occupational program (ROP), however, it sometimes includes adult schools and other secondary sites.

TRANSCRIPTED CREDIT—Refers to process of posting articulated courses to student’s college transcript.

UNITS/CREDITS— A numerical value associated with a course. A typical secondary course is between 5 and 10 credits and a typical community college course is around 3 units.

BENEFITS OF ARTICULATION

For High School Students and Parents

- Minimizes course duplication, and reduces costs for students
- Allows students to receive both high school and college credit and/or advanced placement in college programs
- Provides incentive for students to continue their education
- Facilitates student transition from high school to college
- Prepares students for higher education
- Gives students a more positive attitude about school and increased self-confidence as evidenced by similar acceleration to post-secondary models
- Results in college transcript after completing the articulated high school course *needs a caveat*
- Encourages student enrollment at community college
- Qualifies students to be placed in the next course in the sequence
- Eliminates student fees for most high school students. Some student populations such as AB 540 or Adult School may not be eligible

For High School Teachers and College Faculty

- High school instructors gain first-hand knowledge of the articulated college programs
- College staff gain first-hand knowledge of the articulated high school, ROPC, and adult programs
- Establishes an integrated program to encourage continuing education
- Provides increased cooperation, understanding, knowledge of the articulated college programs
- Provides increased cooperation, understanding, and increased respect and collegiality among articulated instructors of the secondary and post-secondary institutions
- Demonstrates to instructors that how/what they are teaching is connected with all levels of education
- Keeps instructors abreast on “state-of-the art” technology through concentration of shared training, equipment, staff, and facilities
- High school instructor does not have to meet CCCC minimum qualifications
- Provides ADA to high school while college earns successful course completions

For Administrators and Board Members

- Increases enrollment in and promotes more enthusiasm and interest in the articulated course
- Increases student success
- Increases cooperation between high schools and colleges
- High school instructors gain first-hand knowledge of the articulated college programs
- College staff gain first-hand knowledge of the articulated high school, ROPC, and adult programs
- Gives students a more positive attitude about school and increased self-confidence as evidenced by similar acceleration to post-secondary models
- High school instructor does not have to meet CCCC minimum qualifications
- Provides ADA to high school while college earns successful course completions
- Increases enrollment in and promotes more enthusiasm and interest in the articulated course

GUIDING PRINCIPLES

1. Colleges and districts will eliminate restrictions on, or requirements of, secondary students who earn credit for a college-level course completed in high school, linked to a community college course via an articulation agreement, beyond those minimum conditions imposed by Education Code and Title 5. Secondary students will not be required to complete coursework at a college in order to be awarded credit for a college-level course completed in high school that is linked to a community college course via an articulated agreement. Many California community colleges have delayed granting credit for articulated CTE courses that students have taken while in high school until they have completed some minimum number of units at the community college, a practice sometimes referred to as “credit in escrow”. **This credit in escrow process is no longer an acceptable practice.**
2. Secondary students who have completed college-level coursework while in high school, in a course linked to a community college course via an articulation agreement, will be awarded college credit on a college transcript **no later than June 30th of each year- following the term of completion.** Transcribed credit will be notated on the student’s college transcript as Credit by Exam (CBE/CE or other code).
3. Grades awarded for courses linked to a community college course via an articulation agreement will be according to the official course outline of record. Colleges may require specific grades to earn articulated credit. Grades of A or B have been determined as the Best Practice range for grades.
4. Secondary students will not be required to complete comprehensive matriculation processes at a college in order to be awarded credit for a college-level course completed in high school that is linked to a community college course via an articulation agreement. For such students, college enrollment to secure a unique identifier and ensure accuracy of the student record is the sole requirement.
5. Secondary students who have completed college-level coursework while in high school, in a course linked to a community college course via an articulation agreement, may opt not to post articulated credit to a college transcript; however, once credit is transcribed, it will not be removed.
6. Secondary students who have completed college-level coursework while in high school, in a course linked to a community college course via an articulation agreement, shall not be subject to fees for the posting of college credit or other activities related to the articulated coursework.
7. Articulated coursework and units earned will be applied to college course and program requisites and requirements in the same manner as the college course, however, the units are not eligible for application to the required 12 units in residence required for the award of the associate degree.
8. Secondary districts and colleges/districts will not develop articulation agreements that result in the waiving of a certificate or degree requirement without the transcription of a course and grade. This option, permitted by title 5 Section 55051, does not allow for portability of credit or application to the requirements for the associate degree and must be avoided.
9. Successful course-to-course articulation for CTE requires considerable investment of resources by both secondary and postsecondary partners. Dual and concurrent enrollment options may provide a more efficient transition for high school students. **Course-to-course articulation should be reserved for pathways that cannot be served by dual or concurrent enrollment options.**
10. Statewide, secondary students will experience common procedures for secondary-to-postsecondary career technical education (CTE) course articulation in order to ensure equity in access to the benefits of completing college-level coursework while in high school.

RECOMMENDATIONS FOR AN EFFECTIVE PROCESS

CCC Academic Senate Best Practices

In an effort to inform secondary to postsecondary activities occurring on community college campuses statewide, the Academic Senate for California Community Colleges has developed the following summary of effective practices. This summary provides a step-by-step guide to developing effective credit by examination protocols for awarding college credit based on articulated high school courses.

1. Colleges adopt articulation policies that allow for courses taught at high schools and ROCs to be articulated for both the waiver of college course requirements and for college credit to be earned by exam.
2. Colleges adopt policies regarding credit by examination for articulated high school courses that permit the awarding of credit without a residency requirement. The credit earned must be noted on the transcript as being earned “by examination.” Local discussions should establish what limits, if any, to place on the units a student may be awarded for credit by exam for both articulated high school courses and in general.
3. Once appropriate policies have been adopted, procedures and practices may be put into effect. These practices should be published in a medium that allows all involved educators to have clarity. Colleges should develop print media that explain the practices, in detail. Flowcharts and handbooks are effective documents to serve this purpose.
4. Articulation agreements created following the approved practices and policies of the college should include details of the course content as well as the expectation for the credit by examination assessment, as determined by the college faculty. If a minimum grade in the articulated course is required to be eligible for the awarding of credit, this requirement should be indicated.
5. Students enrolled in articulated courses must be informed of the opportunity for college credit and provided an opportunity to “opt-in” for credit. Effective practices may include a visit to classrooms by a college representative and student completion of a credit by examination enrollment form.
6. Students who have opted-in for college credit must apply to the college in order to be admitted and obtain a college identification number. At this point, students are considered registered with the college and can begin their academic record. Absent the completion of an application the secondary student does not formally exist in the college’s database and cannot be awarded credit.
7. Students are then entered into a data repository at the college to store their information until the credit can be awarded. The creation of a database of students who potentially will earn credit by exam for articulated high school courses provides a means of tracking such students and enables the college to proactively assist them if resources are available to do so.
8. The high school/ROCP teacher, college faculty, or test proctor provides agreed-upon testing and/ or assessments and completes certification for those students who meet all conditions of the articulation agreement. The certification may include completion of a form for submission to Admissions and Records or entering the assessment grade into the online student data repository.
9. Designated college staff facilitates the end of course assessment process (i.e., the credit by exam mechanism) in collaboration with secondary teachers and college faculty and ensures that grades are entered and recorded properly at the college.
10. Designated college staff provides the information to the Admissions and Records office for inclusion on the students’ college transcripts. Credit is noted on the transcript as being earned “by examination”.

CCC Academic Senate Recommendations

In an effort to support secondary to postsecondary transition activities occurring on community college campuses statewide, the Academic Senate for California Community Colleges has developed the following recommendations:

1. Local senates should develop a high school articulation and credit by exam policy that is consistent with current language in Title 5; further, that policy should facilitate the awarding of credit and not impose unnecessary barriers.
2. Community college personnel who are assigned to facilitate articulation relationships should work with their high school counterparts to communicate the details of the process by which credit by exam is awarded and provide them an opportunity to opt-in or out.
3. Community college articulation policies and practices should not require residency prior to awarding of credit for articulated high school work.
4. Because articulation and credit by exam processes are complex and ever-evolving and college personnel are constantly turning over, ongoing professional development of college and high school personnel is necessary to ensure the success of these efforts. Colleges should support local and regional activities that both inform participants and provide opportunities for them to build these pathways.
5. In order to ensure that credit is awarded for articulated high school work when warranted, every college and secondary district should have a designated individual or individuals who facilitate both the establishment

Bay Area General Guideline Best Practices

1. College discipline faculty determines whether there is sufficient correspondence between the college and high school course to consider development of an articulation agreement.
2. Intersegmental curriculum development and correspondence collaboration is strongly recommended.
3. The standards and requirements for articulated courses are at the collegiate level and the recommendation whether or not to articulate a particular course is determined by the colleges' academic disciplines.
4. The college curriculum committee must approve the course as eligible for credit-by-exam and this information must be published in the catalog course description prior to establishing an articulation agreement.
 - a. Use of the Statewide Career Pathways (SCP) templates to develop articulation agreements is a preferred Best Practice. <http://statewidepathways.org/index.html>
 - b. Terms and conditions of individual course articulations are specified in the articulation agreement.
5. Articulation agreements must be regularly reviewed, at a minimum every two years. Concurrent activities designed to strengthen intersegmental collegiality during the review process is encouraged.
6. Colleges reserve the right to cancel articulation agreements at any time, effective the following academic year.
7. The use of web-enabled processes to facilitate the development of articulation agreements is recommended.
8. The application of developmentally appropriate resources to support student success utilizing articulation and the credit by exam process is strongly encouraged and considered a Best Practice.
9. The training of high school guidance counselors regarding all aspects of articulation, how it works, and the benefits of acceleration to post-secondary strategies would be highly beneficial to all stakeholders.

Recommended Must Haves- For Program Effectiveness

1. High school students must apply for admission to the college to obtain a college ID number that permits grade reporting and tracking.
2. High school teachers are trained on and facilitate input of student data and course grades into CATEMA®.
3. Parent signatures for enrollment approval occur as part of the high school course enrollment requirements.
4. Credit by Examination (CBE) verification forms are not required. CATEMA facilitates verification
5. The use of CATEMA® and CATEMA® rosters are used as the audit record for college credit.
6. At a minimum, meetings between HS and CCC Faculty and Deans occur every two years, with an annual meeting targeted as optimal.

Developing Articulation Agreements

Best Practice: Las Positas College

Use a web-based system and on-going convening of secondary and postsecondary partners to develop and maintain agreements.

Best Practice:

- Agreement development, maintenance, and renewal processes are supported by staff at both the college and high school districts. Defined resources are committed.
- Articulation agreements are college-to-school district and/or ROPC, not college-to-high school.
- Agreements are branded with SCP logo, college logo and high school district or ROPC logo.
- All agreements are uploaded to the SCP database.
- Web-enabled processes are used to facilitate the development of articulation agreements.

Best Practice: Las Positas, Ohlone and Riverside Community College District

- Keep the number of signatures required to a minimum. 5-6 maximum suggested.
- High school teacher/district administrator. College department chair/faculty, college dean/VP.
- Utilizes college or high school district offices as the repository for all signed articulation agreements.

Awarding College Credit

Students intending to earn college credit, in a college-level course offered in high school, linked to a college course **via an articulation agreement** must enroll in the college during their high school course and obtain a college ID number.

Colleges and secondary partners are strongly encouraged to use the CATEMA® system, or a similarly efficient local system, to ensure the proper and efficient assignment of grades for students who successfully complete a college-level course in high school that is linked to a community college course via an articulation agreement.

Best Practice: Diablo Valley College and Riverside Community College District

Effective use of CATEMA®

- Grades posted to college transcript
- Acknowledgement letters to high school students with transcript instructions.
- All secondary teachers are trained on CATEMA®.
- Record student's grades on their CATEMA® rosters.

Best Practice:

Admissions and Records

- Hire someone at the college to ensure that A&R transcripts the credit by June 30th.
- High school teacher sends data and CATEMA® roster to high school A&R.

- UC/CSU deadline for transcripts: July 1st

Determining Which College In A District Will Be Indicated On Transcript

Best Practice: Riverside Community College District

Student will select the college they want articulated credit from. Absent a selection the following process is utilized:

- First, if the secondary course is articulated with only one of the college district colleges, that college will appear on the student's transcript.
- If more than one college in the district has an Articulation Agreement in place for the same secondary course, the student's secondary feeder district will determine which college will award the credit.
- Finally, if the student's secondary school district is not in the service area to one of the college district colleges, the CTE Office, or campus equivalent, will make the final determination.

Time Requirement For Awarding Credit/ Transcript Notation

Best Practice:

- Credit must be applied for and transcribed no later than June 30th following the term of completion (fall or spring), within the current academic year.
- Course must be articulated prior to fall registration (by March annually) so as to avoid any holds on course registration based on prerequisites.

Requirements For Receiving Credit - Course Transcription

Best Practice:

Minimum grade for credit:

- A grade of A will be automatically transcribed.
- Grades of B or C will be transcribed by student request.
- Pass/No Pass is available to students only if such options are on the course outline of record and if students have requested the option in accordance with college guidelines.

Fees Associated With Posting Credit

Best Practice:

- No fees required for the posting of credit for K-12 students.
- Adult School and undocumented/AB540 students are required to pay college course fees.
- The Board of Governors (BOG) fee waivers do not cover CBE fees.

ARTICULATION IN PRACTICE

See Appendix B for Process Examples from Select Colleges Statewide

Instructions: High School Student

1. **Meet Academic Requirements**
2. **Submit the College application - apply for Admissions**
 - a. All high school students are required to apply for admissions, at the beginning of each term they are enrolled in a class they will receive college credit for.
 - i. Per Title 5 of the California Education Code, sections 48800, 48800.5, 76001, and 76002
3. **Complete an articulation contract for credit/articulation approval form**
4. **Contact your high school counselor/career college specialist to forward forms to college**

Instructions: High School Faculty

1. **Identify where course-to-course alignment might exist**
 - a. Through consultation with HS faculty in the specific subject/CTE area and/or with district personnel so as to avoid any duplication.
2. **Complete an Articulation Proposal- Request to Articulate from the CA Statewide Career Pathways.**
<http://www.statewidepathways.org/>
3. **Set up articulated courses in CATEMA® each semester to assist students in applying for articulated credit**
4. **Make sure everyone knows your course is articulated**
 - a. Check your school catalog/guide with the course listing and make sure your class is noted on the listing as being articulated and showcases the SCP and CCC logos.
 - b. Ensure parents consent to enrollment and transcription of credit.
 - c. Students can choose Pass/No Pass - in some circumstances.
5. **Advertise**
 - a. Post a notice stating that your class is a college level course articulated with a local high school (formerly 2+2) and that students can earn college credit while still in high school.
 - b. Include in the HS catalog of courses and **add the College logo**. Utilize website, posters, etc.
 - c. Distribute the CTE course announcements at the beginning of each year.
 - d. Ensure that materials are accurate and up to date.
6. **Prepare your students for the challenge of an articulated course**
 - a. Ensure you have the correct level and range of resources to support your students and that they are clear regarding the requirements for success.
 - a. Regular, ongoing advisement
 - b. Tutoring and support services
 - c. Assessment for correct placement
7. **Near the end of your course**
 - a. Check to ensure that you have a supply of blank Articulation Credit forms. Not necessary if your school is using are inputting student information into CATEMA®.
8. **Make a roster of students who will receive the college credit (Not necessary with CATEMA®)**
 - a. Ensure students complete the credit request form.
 - b. Ensure clarity and accuracy of all information submitted.
 - c. Collect credit forms and hold them until the end of the course when grading and Credit by Exam components are complete.
 - d. Submit a copy of your roster to the Admissions Office to complete the student's application or, submit official end of semester course grades in CATEMA®

9. Explain to students the process for requesting college credit

- a. Inform college counselors about articulated course(s) when they are enrolling at the college.
- b. Successful completion of the articulated course should allow the student to enroll in the subsequent level course.

10. Awarding College Credit

- a. Students intending to earn college credit in a college-level course offered in high school linked to a college course via an articulation agreement must enroll in the college during their high school course and obtain a college ID number.

11. Schedule regular contacts with your counterpart at the college level

- a. Invite them to visit your classroom or visit theirs.
- b. Invite them join your advisory committee if one exists.
- c. Arrange a tour to the community college and meet with the faculty, see facilities.
- d. Have community college faculty guest lecture in your class.

12. Update all articulation agreements

- a. Every two years convene the high school/ROPC discipline faculty and the partnering college.
- b. Align with program review requirements.
- c. Establish annual meet and greet for continuing and new faculty, with year two consisting of a full review process.
- d. Calendar during Winter Break as a half-day event and coordinate with an all Principals meeting if possible.

Instructions: College Faculty

1. Request Course for Articulation

- a. Meet with high school or ROPC faculty to review current college catalog or schedule of classes for comparable course(s).
- b. Request from high school faculty:
 - Articulation form, or Statewide Pathways Articulation Student Contract for Credit forms
 - Call the CTE office to have a Request for Articulation form mailed
- c. Ensure that high school faculty sends Request for Articulation form to the CTE Office along with appropriate high school course outlines, competency lists, names of textbooks and equipment used.
- d. Ensure that CTE office sends completed Request for Statewide Career Pathway templates and supporting materials to the Department Chair and discipline specific faculty who determine whether there is a potential for articulation.

2. Initial Evaluation of Course Equivalency

- a. CTE office sends the appropriate college course outline(s) to the requesting High School/ROPC faculty.
- b. Requesting faculty prepares CTE Course Outline or calls CTE office and then emails the outline to the CTE office.
- c. The Department Chair and discipline specific faculty review the CTE Course Outline to determine whether to convene the Articulation Committee.
- d. CTE office notifies the requesting faculty whether the articulation request will go to committee.

3. Convene Articulation Committee

- a. CTE office forms an Articulation Committee, consisting of CTE staff, College Division Dean and discipline specific faculty members for the high school and college.
- b. CTE office convenes a meeting between the Articulation Committee members.

4. Review Curriculum for Equivalency

- a. Articulation Committee reviews the CTE Course Outline and either approves it or makes recommendations.
 - Curriculum review includes an in-depth review of course objectives, competencies, exams/evaluations, textbooks, grading standards, critical thinking skills, written assignments, outside assignments, equipment, and facilities to determine if the high school/ROPC course(s) meet collegiate standards of quality and rigor
- b. Curriculum modifications may be suggested and implemented. If all members agree, the high school/ROPC faculty member incorporates changes into CTE Course Outline.
- c. If necessary, a second meeting is scheduled for further discussion.

5. Finalize Articulation Agreement

- a. If all members of the Articulation Committee approve the CTE Course Outline, the CTE office prepares a CTE Articulation Agreement.
- b. The CTE office circulates the CTE Articulation Agreement to obtain necessary signatures. Such as:
 - College Vice President of Instruction
 - College Dean
 - College discipline specific faculty member
 - High School discipline specific faculty member
 - School Director or ROPC Administrator
 - District CTE/ROPC Administrator or Associate Superintendent
- c. Signature pages should be retained at the HS/CCC district offices.

6. Record Articulation Agreement

- a. CTE office revises Articulation Master list to include new agreement.
- b. CTE office files the agreement with original signatures in the CTE office.
- c. Update college website and course catalog.
- d. Update high school course catalog.
- e. Upload into the statewide website.

7. Notify Appropriate Campus Personnel

- a. At the end of the spring semester, CTE office sends a copy of the Articulation Master List to the appropriate college and high school personnel.
- b. Copies of the signed Articulation Agreement will be sent to:
 - ROPC main office or appropriate high school district office
 - College Division Dean
 - Faculty who signed the agreement

APPLYING FOR ARTICULATED CREDIT

CATEMA® – Career and Technical Education Management Application

CATEMA® is an online software utilized to award student credit through articulation.

<https://www.catema.com>

Career And Technology Education Management Application (CATEMA®) for managing articulation credit information relating to courses, classes, school districts, high schools, teachers, counselors, college registrars, college advisors, and students.

The web application is designed to provide a simple method to enter, update, display and report course articulation outcomes and Career and Technology Education related information. The web-based interface allows students, teachers, counselors, and school administrators establish and maintain their own user accounts. Teacher recommendations for credit are available to college counselors and registrars.

The System Manager and staff can manage the web site and database through the web interface. Data access, entry and update can be performed from any web-enabled computer, from any location where the Internet is available such as the school classroom, high school computer lab, local library computer, public Internet kiosk, or from the individual user's home. The staff has, read and write access to all areas of the system. System Manager and staff users have immediate access to detailed, as well as summary information for the current school year and all previous years.

PRINCIPLES IMPLEMENTED IN THE SYSTEM

- Make the system easily accessible to everyone in education
- Validate all data at the point of entry to reduce entry errors
- Minimize the tasks necessary for the students, teachers, and system staff
- Provide easily accessible and printable data in detail & summary reports
- Assure data is accurate and secure, with separation of student, teacher, and school information

SECURITY

The application implements the Secure Socket Layer "SSL" security technology with 256 bit encryption to protect information entered and extracted. This technology is currently the preferred method of protection for most web-based transactions. The CATEMA® System adheres to all regulations and guidelines relating to information privacy. Each user has specific access limitations based on user type, school/district affiliation, and user status.

THE SYSTEM MANAGER'S PRIMARY TASKS

- Approve new teachers "accounts"
- Approve the new "classes" for the current school year
- Review and close classes from the previous school year
- Update "Courses Available", "Participating Districts/Schools" lists
- Run routine summary and detail reports
- Occasionally assist with forgotten user names and pass phrases

COLLEGE STAFF ACCOUNTS

College counselors, coordinators, advisors and registrars may look up students by social security number, community college ID# and/or by student name. Their user account allows them to check for/verify a student's recommendation for college credit. They can view a student's complete system course history, and the registrar can record whether the student was awarded credit by the college.

Mt San Jacinto College Process

How Can High School Students Receive College Credit?

High School/ROP Articulation – Credit by Exam:

- Mt. San Jacinto College awards college credit to high school students who earn an “A” or “B” in career-related “articulated” high school courses.
- An articulated course is one in which the high school teacher and the MSJC faculty have “formally agreed” that the high school course outline, syllabus, textbook, midterm and/or final exam are comparable to those in a course of the same major at Mt. San Jacinto College. (California Education Code section 55753.5)
- MSJC faculty will determine the content and method of the “credit- exam”.
- MSJC will not award grade points to these courses; and the units cannot exceed nine (9) as applicable to a specific Certificate or Associate Degree at graduation or counted in determining the twelve (12) units required for the residency at MSJC.
- Units will be awarded to the high school student’s MSJC transcript within one semester after the student has successfully completed the course.
- Students will be eligible to take the “credit-exam” if they have an “A” or “B” in the course at the time the exam is offered. If they score a 70% or higher on the “credit-exam”, students will earn credit (CR) at Mt. San Jacinto College for completing the course.
- Credit will be posted as a CR on their MSJC transcript, not a letter grade. We are working to revise the policy so students will receive a letter grade.
- MSJC will not require approved high school articulation students to meet the 12-unit residency requirement prior to posting these units.
- Articulation high school students will need to complete the online MSJC application in order to obtain an MSJC student identification number.
- Articulation students are not required to go through MSJC assessment, orientation or matriculation.

Articulation Agreements:

- The process for establishing an articulation agreement for a high school or ROP course can be initiated by either the community college faculty in the appropriate discipline, or the staff of the high school or ROP course.
- However, the most productive method is for all parties to collaborate on the requests. The Career Education Special Programs office facilitates group meetings (Articulation and Training Days and mini-articulation workshops) regularly to bring high school/ROP and college faculty together for the review of curriculum and development of articulation agreements.
- Upon completion of the appropriate forms the Career Education Special Programs office will coordinate the review and approval of the agreements. The Career Education Special Programs office will maintain all articulation agreements and distribute copies as needed.

Santa Rosa Junior College Credit by Exam (CBE) process

NON- CATEMA®

SRJC only records grades of “B” or better, unless the student indicates that they want to accept a “C” grade.

Process for CTE Credit by Exam conducted at high schools for articulated courses:

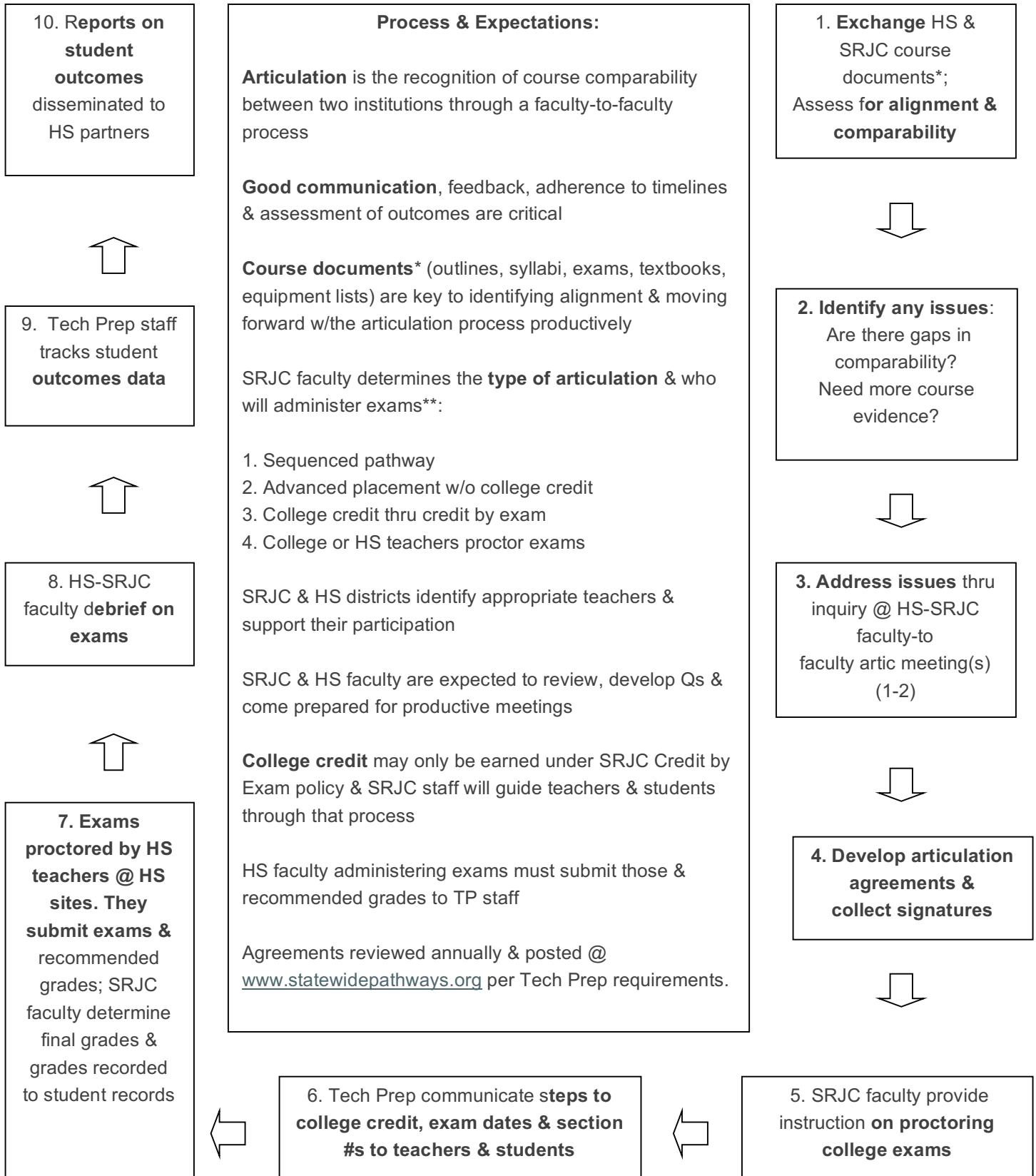
- Students apply to CC via cccapply
- Students submit a concurrent enrollment form (tailored to Credit by Exam) so parents understand that they will be completing an SRJC exam at the HS site for the opportunity to earn college credit for their HS course and not attending a class at the college:
 - http://cte.santarosa.edu/sites/cte.santarosa.edu/files/styles/AHS_CBE_AUTO%2080_%20DET%20179-181_Spring%202016.pdf
- Special sections of “Credit by Exam” are set up on the schedule of classes, by HS location and are RESTRICTED so that no one can enroll in them.
- CTE staff develops rosters in Excel and sends those rosters to the HS teacher charged with proctoring the college exam; teacher is directed NOT to proctor exam to any student not on these rosters (because those on the roster have been cleared to take the exam—they’ve submitted their concurrent enrollment form for CBE and they have an application to college on file)
- HS teacher proctors exam and sends recommended grades to CC instructor
- CC instructor reviews student work + recommended grades, then returns the Excel roster with assigned grades to CTE staff
- CTE staff emails the list of students who have passed the exam to Admissions staff
- Admissions staff then enrolls each passing student into a CBE section that has been established for each high school
- CTE staff monitors this enrollment via our student information system (SIS)
- Once all students are enrolled, CTE staff emails the CC instructor: “All students enrolled, please assign grades.”
- CC instructor confirms with CTE staff when all grades are recorded in SIS
- Only grades of “B” or better are recorded, unless the student indicates he/she wants the “C” grade
- No risk of a poor grade being recorded on their CC transcripts
- HS students receive their college grades in the same semester that they have completed CBE

Note: this is a backwards process, so the timeline is important. Students need to **complete CBE by the first week of May** in order to allow enough time for this process of manually being enrolled by Admissions staff AFTER the students have successfully passed the CBE.

This is a lot of work that takes place behind the scenes in order to support the hundreds of students completing CC CBE each spring.

This process is in collaboration with Admissions staff to prevent students from starting their college record with a failing grade. The SJRC process is a home-grown student information system.

SANTA ROSA JUNIOR COLLEGE PROCESS FLOW CHART



APPENDIX

INFORMATION FOR STUDENTS & PARENTS

An essential part of the articulation of high school/ROP courses is the necessary advisement of students. Students need to know all of the following:

- Colleges award college credit to high school students who successfully complete a career- related “articulated” high school course.
- High School articulation units will be awarded to the high school student’s respective college transcript no later than June 30th once the high school student completes the course and credit- exam as long as the student meets the grade requirements and the necessary forms are completed and submitted to the specified college office by the high school or ROP teacher.
- Some high schools may require the high school student to have an “A” or “B” in the articulated course at the time the credit-exam is offered, to be eligible to take the exam.
- If they score a 70% (C) or higher on the exam, they will receive credit for the course.
- Colleges should not require articulation approved students to meet any-unit residency requirement prior to posting these units.
- Units may also transfer to a four year college/university
- Only currently approved courses can be articulated for credit.
- Some schools may require Approved high school/ROP coursework must be completed with a “B” grade or better.
- Students are not required to complete assessment or new student orientation for articulation purposes.
- Articulated course credit must be requested by the high school/ROP teacher or counselor using the appropriate forms or through establishing a CATEMA student profile as part of a CATEMA roster.
- Requests for Articulation will not be approved if the credit exam grade is less than 70%.
- Course grade will not be automatically articulated. Parent/guardians must sign consent and recognition of the grade and financial aid implications of earning college credit.

Process for Current High School/ROP Students

- The student signs up for the approved articulated course at their high school
- The student must enroll at the college utilizing an application or through the CATEMA system
- The student maintains an appropriate grade in the course and takes the credit exam when offered
- The High School Instructor completes the Grade Verification Form or verifies the grade earned in CATEMA for students who meet the credit exam grade requirement
- The teacher will indicate with an original signature or CATEMA submission to the college, which students successfully completed the approved and agreed upon “credit-exam” with a C (70) or better
- If necessary, the college faculty person will also sign the grade verification form to confirm that the student is eligible for credit

PROCESS EXAMPLES - SELECT COLLEGES STATEWIDE

Diablo Valley College

What Is High School Articulation?

- Articulation allows students to receive a college grade and units on a college transcript for their high school course. The credit appears on a student's college transcript as "Credit by Exam Articulation" and the exam grade is the transcript college grade. Active articulation agreements must be in place between the student's high school district and DVC at the time the student was enrolled in the high school class.

What Is The Student's Role In High School Articulation?

- Obtain a college student ID number and apply to become a DVC student (steps 1 and 2 below)
- Set up a student account in [CATEMA](#) for the high school course (teacher will assist with this process)
- Complete the course with a grade of "B" or better on the "Credit by Exam" evaluation. The grade from the "Credit by Exam" is your college transcript grade.

How do I as a student obtain a College Identification Number and apply to DVC?

Steps to obtain your DVC student ID number and complete your application:

- Complete the online [OpenCCC](#) to create an account. There is no cost for this. [Create an Account Video](#)
- Complete your online college application. This can be done after creating your OpenCCC account or at a later time. There is NO COST to apply to DVC — it is a free application. [Complete Application Video](#)

How do I as a student obtain my college transcript?

- Login to the Insite/Web Advisor [Official Transcripts](#) and submit a [transcript request form](#) to the Admissions and Records Office.
- Take your Official DVC Transcript to your high school registrar to have this course reflected on your high school transcript.

What is the role of high school teachers in high school articulation?

- Ensure that the curriculum standards of the post-secondary articulated course are maintained.
- Promote articulation opportunities to students and parents and facilitate student receipt of credit.
- Add the [DVC logo](#) to your school course catalog next to your course with the following notation.
**This course is articulated with Diablo Valley College which means that you can earn college credit.*
- Add all articulated class sections into CATEMA at the beginning of each semester/year.
- Assign a grade into CATEMA at the end of the semester/year for students who successfully complete the course and credit by exam.
- [Renew the course articulation agreement](#) following the 3-year renewal cycle ensuring currency of articulation.

What are the articulation steps for high school teachers?

1. Request course for articulation

- High school or ROP faculty reviews current Diablo Valley College [course outline](#) for comparable courses(s)
- Requesting High School faculty submits to the DVC Instruction Office Coordinator the completed [Articulation Request form](#) with the appropriate high school/ROP course outline(s), competency list, names of textbooks used and equipment used (if applicable). Supplementary information can be sent to DVCHSArticulation@DVC.edu.
- The DVC Instruction Office reviews for completeness and alignment and, if there is sufficient equivalency, will send the completed Request for Articulation form and additional information to the Department Chair/discipline specific faculty, who determine whether there is a potential for articulation.

2. Evaluation of course equivalency

- The DVC Department Chair/discipline specific faculty review the high school application and course materials to determine whether to convene a meeting to discuss the course-to-course articulation. If a meeting is held, and a decision to articulate is made, the articulation agreement is developed by the DVC Instruction Office/Career Pathways Manager. The DVC course must be approved for Credit by Exam by the DVC Curriculum Committee. Once these two processes are complete, the course becomes eligible to offer as articulated in the following academic year.

My high school or ROP course is articulated, now what?

- First, make sure everyone knows! Check your school catalog/guide with the course listing and make sure your class is noted as being articulated. [DVC Logo](#) for your course catalog
- Put up a notice in your classroom that states students can earn college credit while in high school.
- Prepare your students for the challenge of an articulated college course. Your course is the same course that is being taught at the college and **the grade results in a permanent college record**. To receive Diablo Valley College credit, students must earn a grade of "B" or higher on the "Credit by Examination". **The exam grade is the grade that will appear on the college transcript.**

What is CATEMA®, its role and teacher responsibilities?

- **Career And Technology Education Management Application** is a web-based software utilized to award student credit through articulation. Once a class is articulated, the DVC Instruction Office provides training in the use of CATEMA. This system ensures that student records and information is accurate.

Are you a new teacher? [Create a CATEMA Account](#)

Guide your students in creating their DVC account, enrolling as a college student and then creating a CATEMA account using the following instructional videos and access links:

- [Students Create OpenCCC Account - Video](#) [Students Create their OpenCCC Account HERE](#)
- [Students Complete a DVC Application - Video](#)
- [Students Create a CATEMA Account - Video](#) [Students Create their CATEMA Account HERE](#)
 - [PowerPoint for Student CATEMA Account Setup](#)

Mt. San Jacinto College

COLLEGE AND HIGH SCHOOL/ROP COURSE ARTICULATION PROCESS

1. Course content is reviewed; the Articulation Crosswalk (Attachment B) assists in comparing competency and skill requirement. This form will help you answer the question – At the end of the course, students should be able to? The form is not mandatory but very useful to determine if high school/ROP and college courses are well aligned.
2. MSJC faculty and high school/ROP instructors meet to review and compare course outlines and competencies for both courses suggested for articulation. The Articulation Crosswalk will assist in developing the appropriate “credit-exam” approach for the course, a key to determining if both courses equally measure mastery of content. The goal is to determine if completion of the high school/ROP course with a grade of “B” or better adequately measures mastery of course content. What competency methods will show student competency?
3. The Course Articulation Agreement form (Attachment C) and Course Articulation “Credit By Exam Criteria” (Attachment D) must be completed; both are mandatory. Attachment C will be completed by the MSJC Faculty. Completion of these forms will initiate the articulation process. Completed forms are submitted to the MSJC Career Education, Special Programs Office who will prepare drafts and distribute copies to MSJCCD Department Chair(s) and subject-area faculty for review.
4. Department Chairs and faculty will have 30 days to review the documents. After making any necessary revisions, final draft forms will be submitted by the Career Education, Special Programs Office to the appropriate Dean of Instruction for approval.
5. Proposals are brought to the Career Education Advisory Committee as information items.
6. Proposals are brought to the MSJCCD Curriculum Committee as information items.
7. Final forms, approved and signed by the Dean of Instruction, are submitted to the Vice President of Instruction, along with a prepared Course Articulation Agreement cover sheet (Attachment A) for review, approval and recommendation to the Office of the MSJCCD President for final signature.
8. Final executed copies go to the MSJCCD Office of Instruction (maintained in the Career Education Special Programs Office) and the MSJCCD Articulation Officer for maintenance in course files as well as distribution to department chairpersons and faculty.
9. In addition, copies will be forwarded to the originating school district or the Regional Occupational Program office, as applicable. 10. Requests for information or copies of existing articulation agreements should be directed to the special program office.

Attachments may be found on the MISC Articulation website:

[http://www.msjc.edu/CTETransitions/Documents/MSJC Articulation Handbook Fall 2013.pdf](http://www.msjc.edu/CTETransitions/Documents/MSJC%20Articulation%20Handbook%20Fall%202013.pdf)

Moorpark College
HIGH SCHOOL CREDIT ARTICULATION PROCESS

Step 1 – Create the class in CATEMA®

<https://www.catema.com/vcccd/>

Step 2 – Students apply to Moorpark College.

http://www.moorparkcollege.edu/apply_and_enroll/apply_for_admission/index.shtml

Step 3 - Students create their myvcccd account and receive their student ID number.

Students receive an email from the college within 72 hours. The email they receive tells them to create a myvcccd account on the college website's portal within 10 days. When they log in to their myvcccd account, it gives them their student ID number.

Step 4 - Students register in CATEMA® (using their student ID number) and link to their class.

Step 5 - Students complete the Petition for Credit form. Student returns the form to the instructor, and the form is forward to the Registrar.

Step 6 – Petition for credit for students.

When final grades for your students are established, enter them into CATEMA® and request credit in CATEMA®.

Step 7 – Send an email to request credit.

Step 8 – Review students' work.

Submit an example of "A", "B" and "C" grade work to the college professor to ensure consistency of grading.

Step 9 – The professor reviews sample student work and a decision is made to award credit or not.

Step 10 – Registrar appends letter grade credit to transcript.

REGULATORY GUIDANCE

- Title 5 regulations permit high school students to earn college credit that is notated on a college transcript credit through credit by exam mechanisms, with no residency requirement.
- Local policies can enable students to earn college credit for their high school work at no cost or minimal cost to the student in a way that neither compromises the integrity of the college course nor disrupts the smooth transition of a student from high school to college.
- Such practices are effective in providing high school students college level coursework in a high school setting and provide faculty across segments an opportunity to collaborate to benefit students.

<http://www.asccc.org/sites/default/files/AlternativeMethodsForAwardingOfCollegeCredit.pdf>

California Education Code

<http://www.leginfo.ca.gov/cgi-bin/calawquery?codesection=edc>

Federal Perkins IV Education Code Section 88532

<http://www.leginfo.ca.gov/cgi-bin/displaycode?section=edc&group=88001-89000&file=88530-88540>

Colleges and districts will not impose additional restrictions on secondary students who are awarded credit for a college-level course completed in high school, linked to a community college course via an articulation agreement, beyond those minimum conditions imposed by Education Code and Title 5.

Secondary districts and colleges/districts will not develop articulation agreements that result in “advanced placement”. This option, permitted by title 5 Section 55051, does not allow for portability of credit or application to the requirements for the associate degree and must be avoided.

Regulatory Requirements: What Is and What Is Not (CCC Academic Senate Paper)

In California, in order for a student to earn transcribed community college credit for work completed at a secondary school, Title 5 regulations require that the student complete a credit by exam process that confirms that he or she has achieved the objectives of the comparable college course as defined by the community college faculty. A review of the regulations is necessary to understand the origins of current practices that interfere with the awarding of earned credit.

The regulatory language that defines high school articulation and credit by examination can be found in Title 5, Division 6, Chapter 6, Subchapter 1,

Article 5. Alternative Methods for Awarding Credit, §55050 – 55051

§ 55050. Credit by Examination

(a) The governing board of each community college district shall adopt and publish policies and procedures pertaining to credit by examination in accordance with the provisions of this section.

(b) The governing board may grant credit to any student who satisfactorily passes an examination approved or conducted by proper authorities of the college. Such credit may be granted only to a student who is registered at the college and in good standing and only for a course listed in the catalog of the community college.

(c) The nature and content of the examination shall be determined solely by faculty in the discipline who normally teach the course for which credit is to be granted in accordance with policies and procedures approved by the curriculum committee established pursuant to section 55002. The faculty shall determine that the examination adequately measures mastery of the course content as set forth in the outline of record. The faculty may accept an examination conducted at a location other than the community college for this purpose.

(d) A separate examination shall be conducted for each course for which credit is to be granted. Credit may be awarded for prior experience or prior learning only in terms of individually identified courses for which examinations are conducted pursuant to this section.

(e) The student's academic record shall be clearly annotated to reflect that credit was earned by examination.

(f) Grading shall be according to the regular grading system approved by the governing board pursuant to section 55023, except that students shall be offered a "pass-no pass" option if that option is ordinarily available for the course.

(g) Units for which credit is given pursuant to the provisions of this section shall not be counted in determining the 12 semester hours of credit in residence required for an associate degree.

(h) A district may charge a student a fee for administering an examination pursuant to this section, provided the fee does not exceed the enrollment fee, which would be associated with enrollment in the course for which the student seeks credit by examination.

§ 55051. Articulation of High School Courses

(a) For purposes of this section, the term "articulated high school course" means a high school course or courses that the faculty in the appropriate discipline, using policies and procedures approved by the curriculum committee established pursuant to section 55002, have determined to be comparable to a specific community college course.

(b) The governing board of a community college district may adopt policies to permit articulated high school courses to be applied to community college requirements in accordance with this section. Articulated high school courses may be accepted in lieu of comparable community college courses to partially satisfy: (1) Requirements for a certificate program, including the total number of units required for the certificate; or, (2) The major or area of emphasis requirements in a degree program.

(c) Articulated high school courses used to partially satisfy certificate or major/area of emphasis requirements shall be clearly noted as such on the student's academic record. Notations of community college course credit shall be made only if community college courses are successfully completed or if credit is earned via credit by examination.

(d) Except through credit by examination, as defined in section 55753, high school courses may not be used to satisfy: (1) The requirement of section 55063 that students complete at least 60 semester or 90 quarter units in order to receive an associate degree; or, (2) Any general education requirement for the associate degree established by the district.

Residency Requirement

Some colleges impose a "residency" requirement on incoming students. Students are thus required to complete as many as 15 units at the college "in residence" before the earned credit can be notated on the transcript. **The California Community Colleges Chancellor's Office has stated that while a college may choose to implement such a "residency" requirement, nothing in Title 5 regulations requires it.**

Requiring residency for acquisition of articulated credit may stem from a debatable interpretation of Title 5 §55050b, which states, "The governing board may grant credit to any student who satisfactorily passes an examination approved or conducted by proper authorities of the college.

Such credit may be granted only to a student who is registered at the college and in good standing...." Some colleges use this statement to justify the use of college course completion as a condition to be met prior to the transcription of credit and delay the awarding and subsequent transcription of credit until the student has completed some minimum number of units or specified courses at the college, impacting the portability of articulated high school work.

In order to receive credit via credit by exam for articulated high school work, the student must be **“registered”** and **“in good standing”** at the college (Title 5 §55050). The terms “registered” and “in good standing” are ambiguous: “registered” could mean either that the student has completed an application for admission or that he or she is enrolled in courses, while the only definitions in regulation for “in good standing” relate to the criteria for regaining good standing and do not indicate clearly that a student is in good standing until that standing is lost. **Local district policy should explicitly define these terms in order to facilitate the awarding of credit earned for work completed at a secondary school.**

Title 5 §55051 creates two possible objectives for high school to college articulation.

While the emphasis of this paper is on the awarding of credit for high school or ROCP work using credit by examination, Title 5 also allows colleges to waive local degree or certificate requirements based upon course work completed at a high school. This practice may be used to fulfill a prerequisite or to allow a student to waive a requirement involving an introductory or other major or area of emphasis course. It does not allow the waiving of required units (i.e., the 60 semester units needed to earn a degree) or general education requirements.

When credit by examination is employed to award credit for articulated secondary course work, the units earned can be applied towards the units needed to earn a certificate or degree and, if the course for which credit had been awarded is a transferable course, the course credit would transfer as the college course for which credit was awarded. While a college may use high school work to waive a college course requirement, §55050 prohibits the granting of college credit unless the student takes a college course, or is assessed through examination and found competent as defined in that course’s course outline of record.

Everyone involved in the secondary course articulation process must be clear about these end-goal distinctions; while the actual process for establishing and implementing articulation may be the same, the outcome for students is significantly different. Such clarity is particularly important when one is informing students regarding the process, as misunderstandings could potentially impede their progress.

For example, if an articulation agreement waives the college’s local requirement for beginning Excel based on an Excel course taught at the high school, then the student is deemed to have met the prerequisite for intermediate Excel as well as having waived the beginning Excel as a course needed for their certificate or degree, but he or she does not have college credit for such a course. If the student then transfers to a university and college credit for the beginning Excel is required, they will be lacking this coursework unless they earned college credit via the credit by exam process.

Although credit by examination does take place outside of the high school to college context, such an application of the concept is beyond the scope of this paper. Local processes for implementing credit by examination protocols, be they for articulated courses or otherwise, may greatly overlap. To prevent confusion, colleges should consider implementing local policies that discuss each type of credit by examination as a singular process.

SAMPLE POLICY DOCUMENTS/BOARD POLICY

RIVERSIDE COMMUNITY COLLEGE

BP 4050 ARTICULATION

References:

Title 5 Section 51022(b);

Education Code Sections 66720-66744;

ACCJC Accreditation Standard II.A.10

Recognizing the importance of supporting the articulation of courses between the Riverside Community College District (RCCD) and secondary education institutions, the Board of Trustees endorses and supports a process through which high school students are provided the opportunity to earn college credit for articulated courses thereby permitting a smooth transition from secondary to post secondary education. The Chancellor shall establish procedures that assure appropriate articulation of the District's educational programs with proximate secondary education institutions and baccalaureate institutions. The procedures also may support articulation with institutions, including, but not limited to, community colleges and secondary education not geographically proximate, resulting in appropriate and advantageous partnerships with RCCD. Revised: November 25, 2014

AP 4050 SECONDARY ARTICULATION

References: Title 5 Section 55051

ACCJC Accreditation Standard II.A.10 (formerly II.A.6.a)

Education Code Sections 66700, 70901, 70902

Purpose

Secondary to post-secondary articulation provides a method by which college credit can be awarded to students for coursework completed at the secondary level. Articulation ensures that students are not unnecessarily required to duplicate coursework in college, reduces the demand on impacted courses, and creates a smooth transition from secondary to post-secondary education. A smooth transition can be defined as a student's ability to: 1. Obtain credit for pre-requisite coursework prior to enrolling in college. 2. Enroll in higher level course work immediately and reduce the demand for impacted courses. 3. Identify educational and career pathways prior to enrolling in college. The program will enhance cooperation and communication between local Secondary Education Institutions (SEI) and Riverside Community College District (RCCD) colleges.

Process

The District's Secondary to Post-Secondary Articulation Handbook contains guidelines for administering the program, instructions for faculty developing articulation agreements, and instructions for students on how to apply for and receive articulated credit. The Handbook can be viewed on the District's Academic Programs website, under "Resources":

<http://rccd.edu/academicprograms/Pages/index.aspx> or,

<http://rccd.edu/academicprograms/Documents/Articulation%20Handbook-June%202014.pdf>

Office of Primary Responsibility: Career and Technical Education Projects Office. Revised: December 2, 2014

SECONDARY BOARD POLICY

CSBA Sample Administrative Regulation Alternative Credits Toward Graduation

AR 6146.11 Instruction

Definitions:

Semester

A semester period is one period of 40 to 60 minutes of instructional time per week throughout one semester of at least 17 weeks, or a minimum of 12 clock hours of instructional time provided during the academic year or in summer school. While the content to be covered is planned within these time frames, a student may be granted one semester period of credit even though the student spends less than the aforementioned amount of time in completing the necessary work. (5 CCR 1600)

Private Instruction

The following section is for use by districts that grant credit toward graduation for private instruction as authorized by 5 CCR 1631; see item #8 in the accompanying Board policy.

A student who is regularly enrolled and in attendance at a high school shall receive credit toward high school graduation for private instruction under the following conditions: (5 CCR 1631) The instruction entails fields and subjects included in the high school's courses of study and curricula. The student demonstrates his/her capabilities at the beginning and at the end of the period of private instruction by examination(s) given under the school's supervision, thereby showing that he/she has made progress in learning satisfactory to the school.

ARTICULATED COURSE AND THE UC/CSU HONORS GPA BUMP

After a series of discussions with the SB 1070 Systems Alignment Working Groups in the North East and Southwest Bay Areas and a November, 2015 meeting with the UC Office of the President Articulation Unit it was determined that courses articulated, between the secondary district/school and a community college, are eligible to be considered for the extra weight assigned to UC honors courses. Articulated courses submitted for consideration must meet all the course criteria and guidelines for defined by UC (see honors courses section below for greater detail).

Subsequent discussions led to a decision that the greater bay area SB 1070 consortia should, with guidance and direction from CCCCO, develop the process and guidelines for submission of a UC Program Status application (see criteria below) for the purpose of facilitating regional articulation agreements in those areas where such alignment is possible.

This regional approach would facilitate increased articulation agreement development and cooperation between colleges and reduce the course submission workload for high schools. While the details are yet to be developed at this time, should the application be approved, regional CC Districts would be responsible for the development, monitoring, and evaluation of the agreements. High Schools within the region would be able to save significant time and effort through the elimination of the need to submit the course information individually. (Once the course is approved for the region, high schools need merely add them to their a-g course lists).

Below you will find detailed information regarding the process and requirements for obtaining program status as well as the criteria for determining eligibility for honors designation. It should be noted, that since articulated courses are college level course work they would be eligible for the extra gpa weight (assuming the subject criteria are meet).

Honors

To encourage students to undertake more challenging studies in high school, the University of California assigns extra weight to grades received in honors-level courses. UC maintains an honors "a-g" course policy that defines the types of honors courses eligible for the UC honors designation.

When calculating a student's UC GPA to determine if the student meets or exceeds the minimum GPA by residency status, the number of UC-designated honors courses receiving the additional grade points is limited to eight semesters or four years. Students may complete more than eight semesters of honors coursework, but a maximum of eight extra points will be factored into the UC GPA.

Most students complete UC-designated honors courses in grades 11 and 12, although some may complete these courses as early as grade 10. The University limits the amount of extra points added to the UC GPA for UC-designated honors courses completed in grade 10 to no more than four semesters or two years. This limitation also only affects the GPA calculation that determines if an applicant meets or exceeds the minimum GPA UC requires based on residency status.

Course Criteria & Guidelines

Courses that meet the criteria outlined below may be granted UC honors designation and qualify students to earn extra points in their UC GPA computation. The University strongly encourages honors-level courses be made available to all segments of the school population.

School-Created Honors Courses

Honors courses designed by an institution to demonstrate distinctive features that set it apart from regular high school courses in the same "a-g" subject area are eligible for the UC honors designation. These courses should be comparable in terms of workload and rigor to Advanced Placement (AP), International Baccalaureate (IB) or introductory college-level courses in the subject. There is no limit to the number of UC-designated honors-level high school courses that may be approved for an institution's "a-g" course list.

General Requirements

School-created honors courses must satisfy the following general requirements:

- Honors-level courses are specialized, advanced courses designed for 10th-, 11th- or 12th-graders who have already completed foundation work in the subject area.
- High school courses offered at the grade 9 level that schools might locally designate as “honors” are not eligible for the UC honors designation.
- Courses must have established prerequisites, as appropriate to the discipline.
- Honors-level courses must have a comprehensive final examination or a substantive, culminating project. The purpose of the final exam/project is for students to exhibit depth of knowledge and sustained mastery of subject material.
- In general, it is highly recommended high school courses being considered for the UC honors designation will have a non-honors equivalent course offered at the same frequency (e.g., annually, every other year, etc.), in the same subject area, and at the same grade level. Exceptions to this criterion may be allowed under certain subject-specific circumstances.

Subject-Specific Requirements

- In addition to meeting the general UC honors course criteria, courses must meet subject-specific requirements.
<http://www.ucop.edu/agguide/a-g-requirements/>

Advanced Placement (AP) Courses

- All “a-g” approved AP courses receive the UC honors designation. For a list of approved AP courses, please refer to the College Board Advanced Placement program’s “a-g” course list.
- Institutions may only add AP courses to their “a-g” course list that have passed the College Board’s AP Course Audit. Institutions should submit AP Course Audit materials to the College Board in a timely manner to ensure their new AP courses are authorized and then submitted to UC for “a-g” review prior to the close of UC’s annual “a-g” course submission period on September 15.
- All AP courses on an “a-g” course list must be authorized by the College Board’s AP Course Audit for each year the course is offered. It is also highly recommended that schools offer a non-honors equivalent course at the same frequency (e.g., annually, every other year, etc.), in the same subject area, and at the same grade level to their AP course.

International Baccalaureate (IB) Courses

- Designated “a-g” approved IB courses receive the UC honors designation. For a list of IB courses that carry the UC honors designation, please refer to the International Baccalaureate program’s “a-g” course list.

It is also highly recommended that schools offer a non-honors equivalent course at the same frequency (e.g., annually, every other year, etc.), in the same subject area, and at the same grade level to their IB course.

College Courses

- UC-transferable college courses with 3 (or more) semester units or 4 (or more) quarter units in any “a-g” subject area will receive UC honors status. Designated non-transferable college courses in English and mathematics may fulfill the “a-g” subject requirements, but will not carry the extra honors weight when calculating the UC GPA.
- To determine whether a California community college course will satisfy the “a-g” subject requirements, search for the college’s “a-g” course list. <https://hs-articulation.ucop.edu/agcourselist#/list/search/all>

POLICY, PRACTICE AND RESEARCH RESOURCES

ACADEMIC SENATE PAPER

Alternative Methods for the Awarding of College Credit: Credit by Examination for Articulated High School Courses
<http://www.asccc.org/sites/default/files/AlternativeMethodsForAwardingOfCollegeCredit.pdf>

REFERENCES

Anderson, G. M., Sun, J. C., & Alfonso, M. (2006). Effectiveness of statewide articulation agreements on the probability of transfer: A preliminary policy analysis. *Review of Higher Education*, 29(3), 261-291.

California Department of Education. Instructions and guidelines for the development of the 2008-2012 Career Technical Education (CTE) Local Plan. <http://www.cde.ca.gov/ci/ct/pk/>

California State University. (2008). Executive Order 1036. Retrieved July 10, 2013, from <http://www.calstate.edu/eo/EO-1036.html>

US Department of Education. Office of Career Technical Education, Perkins Act Education. <http://www2.ed.gov/offices/OVAE/CTE/perkins.html>

WEB RESOURCE LINKS

Sample Documents for Articulation Summary:

These documents demonstrate the varying policies, practices and protocols that districts use to institute articulation locally.
Link: statewidepathways.org/resources.html

Diablo valley College Articulation process video: How to navigate ASSIST.org website

<http://www.dvc.edu/enrollment/counseling/videolibrary.html>

<https://www.youtube.com/watch?v=4jNyilCsNBc>

Statewide Career pathways – Articulation templates

These articulation templates represent CTE (career technical education) courses typically offered at high schools/ROCPs and community colleges. Written by Discipline Work Groups comprised of faculty from high schools, ROCPs, and community colleges, with input from the broader discipline field, the templates provide a general overview of the content and structure of such classes offered throughout the state.

<http://statewidepathways.org/showtemplates.php>

Useful Articulation Publications

These documents have been created and posted in an effort to support the activities of local articulation and CTE transitions staff statewide and can be used as a resource for CTE transitions staff.

http://statewidepathways.org/effective_practices.html

Community College Research Center (CCRC)

The CCRC is the leading independent authority on the nation's nearly 1,200 two-year colleges. Since its inception, CCRC's consortium of researchers has strategically assessed the problems and performances of community colleges. Link: ccrc.tc.columbia.edu

Perkins

The Carl Perkins Federal act was established to improve career-technical education programs, integrate academic and career-technical instruction, serve special populations, and meet gender equity needs and is the regulatory language for CTE programs. Link: <http://www.cde.ca.gov/ci/ct/pk/>

The CATEMA® System

This web application is designed to provide a simple method to enter, update, display and report course articulation outcomes and career and technology education related information.

Link: <https://www.catema.com>

Chaffey College Tech Prep

The Chaffey College Tech Prep program is designed to help create pathways that lead to an associate or baccalaureate degree or a post-secondary certificate in a specific career field. Students combine high school and ROP CTE classes, real-world experience, and/or college classes, to form a balanced and practical educational experience. Link:

www.chaffey.edu/tech_prep

Title 5 Web Search

This link is provided as an efficient way to search for Title 5 regulatory language, via a search for specific regulatory section.

[https://govt.westlaw.com/calregs/index?_lrguid=i6566e0e80ead49b2b8a790b2c2255fc0&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/index?_lrguid=i6566e0e80ead49b2b8a790b2c2255fc0&transitionType=Default&contextData=(sc.Default))

Professional Development & Cross Regional Community of Practice

Tri-valley Educational Collaborative- CTE teachers get subs to allow them to attend these meetings.

<http://www.laspositascollege.edu/tec/>

Annual or bi annual meeting for articulation agreement review. Need agenda models.

Statewide Career Pathways

<http://www.statewidepathways.org/>

Sample Documents

<http://statewidepathways.org/files/ctecpwposter.pdf>

http://statewidepathways.org/effective_practices.html

Request for Articulation Form: <http://www2.ohlone.edu/org/cte/docs/requestforarticulation.pdf>

Articulation Template: <http://www2.ohlone.edu/org/cte/docs/articulationtemplate.pdf>

Articulation Review Renewal form: <http://www2.ohlone.edu/org/cte/docs/articulationreviewrenewalform.pdf>

Contract for Credit: <http://www2.ohlone.edu/org/cte/docs/ohloncollege2+2studentcontractforcredit.pdf>

Calendar Deadlines: <http://www2.ohlone.edu/org/cte/docs/ctedeadlines2015.pdf>

Articulation Research References

- Anderson, G. M., Sun, J. C., & Alfonso, M. (2006). Effectiveness of statewide articulation agreements on the probability of transfer: A preliminary policy analysis. *Review of Higher Education, 29*(3), 261-05.
- Cain, H. J. (2013). *Tech prep articulation from Alabama's public schools to Alabama's two-year colleges: Perceptions of administrators, counselors, and technical teachers* (Doctoral dissertation).
- Cantor, J.A. (1999). Tech prep as a catalyst for community college instructional program development. *Community College Journal of Research and Practice, 23*(4), 357-369.
- Cardona, S. L. (2012). *Interinstitutional collaboration practices between Virginia community colleges and high schools involved in dual enrollment articulation agreements* (Doctoral dissertation).
- Crockett-Bell, S. (2007). *The dual credit program: Measuring the effectiveness on students' transition from high school to college* (Doctoral dissertation).
- Fincher, M., Sharp L., Burks J., Lyon K., Parker, M., Ward, J., Hall, A., Wilson V., & Brittany Washington (2014). Articulation visibility at two-year colleges. *Community College Journal of Research and Practice, 38*(7), 684-692.
- Gall, M. D.; Gall, Joyce P.; Borg, Walter R. (2014). *Applying Educational Research: How to Read, Do, and Use Research to Solve Problems of Practice* (7th Edition) Pearson.
- Ignash, J. M., & Townsend, B. K. (2000). Evaluating state-level articulation agreements according to good practice. *Community College Review, 28*(3), 1-21.
- Karandjeff, Kelley & Eva Schiorring (2011). Career and technical education (CTE) transfer research project: Improving transfer pathways for California Community college students in CTE programs. *Journal of Research in the Community College, 18*(20), 42-51.
- Kim, J., & Bragg, D. D. (2008). The impact of dual and articulated credit on college readiness and retention in four community colleges. *Career & Technical Education Research, 33*(2), 133-158.
- Kim, J. (2014). Relationship of tech prep and dual credit to college readiness and retention. *College Student Journal, 48*(3), 337-346.
- King, S. B., & West, D. (2009). Statewide articulation agreements between high school and community college career and technical programs. *Community College Journal of Research and Practice. 33*(6), 527-532.

- Morgan, C., McDavid, J. A., & Beedle, J. (2008). Mississippi's articulation process: A work in progress. *Community College Journal of Research and Practice*, 32(2), 135-143.
- Oremus, V. C. (1973). *Articulation between high schools and industrial occupational programs in the public community colleges in Colorado* (Doctoral dissertation).
- Poole, S. C. (2011). *Analysis of the North Carolina high school to community college articulation agreement's impact on student motivation in a North Carolina high school* (Doctoral dissertation).
- Roksa, J., & Keith, B. (2008). Credits, time, and attainment: Articulation policies and success after transfer. *Educational Evaluation and Policy Analysis*, 30(3), 236-254.
- Ruhlan, S., Jurgens, C., Ballard, D. (2003). Tech prep's role in education reform: perceptions from state tech prep directors. *Journal of Career and Technical Education*, 20 (1).
- Senie, Kathryn C. (2016) Implementing transfer and articulation: A case study of community colleges and state universities. *Community College Journal of Research and Practice*, 40(4), 269-284.
- Tenbergen, K. (2010). How course articulation agreements facilitate the transfer and completion of a bachelor's degree: A comparison of native and transfer students (Doctoral dissertation).