



Reference: *Title 5 Sections 55000 et seq.*

Purpose

These procedures provide for the establishing, reviewing, and challenging of prerequisites, co-requisites, and advisories on recommended preparation, by faculty, in a manner consistent with Board Policy 4260, law and good practice. Therefore, this procedure calls for caution and careful scrutiny by the college curriculum committees in establishing them. Nonetheless, it is as important to have prerequisites in place where they are a vital factor in maintaining academic standards as it is to avoid establishing prerequisites where they are not needed.

The District Educational Coordinating Council (DECC) will facilitate dialogue regarding issues involving curriculum, educational planning and coordination and ensure adherence to prerequisite criteria according to district policy and Title 5. In instances where consensus is not reached, the Chancellor shall make the final determination to approve or deny a proposed co-requisite or prerequisite. The timeline for this process is detailed in this administrative procedure.

Definitions (CCR Section 55000; 55502)

Content review with statistical validation shall be the primary means to substantiate the appropriateness and need for course prerequisites, except in the stated exceptions defined later in this procedure. The district shall adopt the following definitions and explanations:

- A. Advisories – a condition of enrollment that a student is advised, but not required, to meet before or concurrent with enrollment in a course or educational program.
- B. Prerequisites – a condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program.
- C. Corequisites – a condition of enrollment consisting of a course or courses that a student is required to simultaneously take with another course or courses.
- D. Content Review – a rigorous systematic process conducted by faculty to identify the necessary and appropriate body of knowledge or skills students need to possess prior to enrolling in a course, or which students need to acquire through simultaneous enrollment in a corequisite course. Content Review, at the minimum, has the following elements:
 - 1. Careful review of the course outline of record to identify the skills and knowledge necessary for student success.

2. Determination of how the preparation can be obtained in order to advise or require students to acquire the necessary preparation prior to enrolling in a prerequisite or corequisite.
 3. Review of all faculty syllabi for the target course, sample exams, assignments, instructional materials, grading criteria for the target course, SLOs, course objectives, required and recommended reading and essay requirements to determine a sufficient correlation/association of required skills/knowledge students must have prior to enrolling in the target course and matching those skills/knowledge to the proposed prerequisite or corequisite course(s).
 4. Direct involvement of the learning area faculty to collaborate on identifying course content, skills and requirements and determine how the course outline is being implemented by the learning area.
 5. Specification of the body of knowledge and/or skills which are deemed necessary at entry and/or concurrent with enrollment.
 6. Identification and review of the prerequisite or corequisite which develops the body of knowledge and/or measures skills necessary for enrollment in the target course.
 7. Documentation of the review undertaken.
 8. The prerequisite or corequisite meets the appropriate level of scrutiny specified in section 4260(3) of this procedure.
- E. “Necessary and Appropriate” (as it relates to Content Review) - a strong rational basis exists for concluding that a prerequisite or corequisite is reasonably needed to achieve the purpose that it purports to serve. This standard does not require absolute necessity.
- F. Content Review with Statistical Validation - is defined as conducting a content review (as defined in CCR, Title 5, sec. 55000(c)) and the compilation and analysis of data according to sound research practices which shows that a student is highly unlikely to succeed in the course unless the student has met the proposed prerequisite or co-requisite. The local process for statistical validation is described below in section 4260(4) of this procedure.
- G. Health and Safety Prerequisites – is a prerequisite or corequisite necessary to protect the health or safety of a student or the health or safety of others.
- H. Educational Program - an organized sequence of courses leading to a defined objective, a degree, a certificate, a diploma, a license, or transfer to another institution of higher education.
- I. Sequence of Courses – content and thematically related courses in a discipline showing a progression of complexity.
- J. Disproportionate Impact – Disproportionate impact occurs when the percentage of persons from a particular racial, ethnic, gender, age or disability group who are directed to a particular service or placement based on an assessment instrument, method, or procedure is significantly different from the representation of that group in the population of persons being assessed, and that discrepancy is not justified by empirical evidence demonstrating that the assessment

instrument, method or procedure is a valid and reliable predictor of performance in the relevant educational setting. (CCR, Title 5, sec. 55502(d)).

- K. Target Course – the course that a proposed prerequisite, corequisite or advisory shall be applied to.

Permitted Prerequisites and Corequisites

- A. No prerequisite or corequisite may be established or renewed unless it is determined to be necessary and appropriate to achieve the purpose for which it has been established and supported by substantiated evidence.
- B. Prerequisites or corequisites may be established only for any of the following purposes:
1. The prerequisite or corequisite is expressly required or expressly authorized by statute or regulation; or
 2. The prerequisite will ensure that a student has the skills, concepts, and/or information that is presupposed in terms of the course or program for which it is being established, such that a student who has not met the prerequisite is highly unlikely to receive a satisfactory grade in the course (or at least one course within the program) for which the prerequisite is being established (CCR, Title 5, sec. 55003(d)(2)); or
 3. The corequisite course will ensure that a student acquires the necessary skills, concepts, and/or information, such that a student who has not enrolled in the corequisite is highly unlikely to receive a satisfactory grade in the course or program for which the corequisite is being established; or
 4. The prerequisite or corequisite is necessary to protect the health or safety of a student or the health or safety of others.
- C. Levels of Required Scrutiny - All adopted prerequisites, corequisites or advisories must meet the appropriate level of scrutiny required per CCR, Title 5, sec. 55003:
1. Advisories – content review required. For advisories only, the minimum standard of content review will require only of a comparison of the course level Student Learning Outcomes and/or course objectives for both the target course and the intended advisory course. All other content review must follow the standard set forth in Section B “Definitions” of this administrative procedure.
 - a. Prerequisites/Corequisites Requiring Content Review Alone:
 1. Course in a sequence in a discipline – content review required
 2. Course for a sequence in Career Technical Education disciplines – content review required
 - b. Prerequisites/Corequisites requiring content review with statistical validation (as described below in section 4260(4))
 1. Course out of discipline but not an English or Math

- course
 - 2. Course or eligibility for a course out of discipline in English or Math
- c. Health and Safety Requirement - Content review may be used to establish a health and safety prerequisite based on either of the following:
 - 1. Mandated by Statute or Outside Agency Regulation – no content review required, but documentation is required, to include legal or regulatory citation, or
 - 2. Mandated by the Outside Agency- if a prerequisite or corequisite is mandated by industry or outside agency, a minimal content review shall be required to align the required skill set determined necessary. Documentation is required to cite the source of mandate.
- d. Limitations on Enrollment - Requiring Criteria Other than Content Review
 - 1. Auditions for performance courses– documentation of the audition process plus disproportionate impact study at least every six years related to the audition. Additionally, other courses must be available to meet degree/certificate requirements.
 - 2. Honors courses restricted to an honors cohort– other sections/courses must be available to meet degree/certificate requirements
 - 3. Blocks of courses or sections (cohorts) – other sections/courses are available to meet degree/certificate requirements.
- e. Assessment Test Prerequisites
 - 1. Cut score for use within the same discipline sequence – content review, plus a test approved by the Chancellor's Office in accordance with established standards, plus validated cut-off scores, plus multiple measures, plus disproportionate impact study
 - 2. Cut score for use outside assessment area – same as above plus data collection and analysis.
- 2. In cases where content review alone is sufficient, proposing faculty may elect to include statistical validation with their content review.

Exemptions

In all cases described below, substantiating documentation of the legal statute, baccalaureate institution requirement, etc. must be provided at the time of submission to the curriculum committee. Similarly, a requisite's exempt status will be subject to verification by the curriculum committee and by college and district administration.

- A. A prerequisite or corequisite need not be scrutinized using content review or content review with statistical validation if:
 - a. It is required by statute or regulation; or

- b. It is part of a closely-related lecture-laboratory course pairing within a discipline; or
- c. It is required by four-year institutions; or
- d. Baccalaureate institutions will not grant credit for a course unless it has the particular communication or computation skill prerequisite.

Exempt Programs

- A. The requirements of section 4260(4) of this policy related to collection of data shall not apply when the prerequisite or corequisite is required for enrollment in a program, that program is subject to approval by a state agency other than the Chancellor's Office and both of the following conditions are satisfied:
 - a. Colleges in at least six different districts have previously satisfied the data collection requirements of this subdivision with respect to the same prerequisite or corequisite for the same program; and
 - b. The district establishing the prerequisite or corequisite conducts an evaluation to determine whether the prerequisite or corequisite has a disproportionate impact on particular groups of students described in terms of race, ethnicity, gender, age or disability, as defined by the Chancellor. When there is a disproportionate impact on any such group of students, the district shall, in consultation with the Chancellor, develop and implement a plan setting forth the steps the district will take to correct the disproportionate impact. (CCR, Title 5, sec. 55003(g))

Prerequisites Requiring Pre-Collegiate Skills (Title 5, sec. 55002(l))

If a prerequisite requires pre-collegiate skills in reading, written expression, or mathematics, the District shall:

- A. Ensure that courses designed to teach the required skills are offered with reasonable frequency and that the number of sections available is reasonable given the number of students who are required to meet the associated skills prerequisites and who diligently seek enrollment in the prerequisite course.
 - a. Monitor progress on student equity in accordance with CCR, Title 5 sec. 54220. Monitoring shall include:
 - b. Conducting an evaluation to determine the impact on student success including whether the prerequisite or corequisite has a disproportionate impact on particular groups of students described in terms of race, ethnicity, gender, age or disability, as defined by the State Chancellor
 - c. Where there is a disproportionate impact on any such group of students, the district shall, in consultation within the State Chancellor, develop and implement a plan setting forth the steps the district will take to correct the disproportionate impact. Implementation shall take effect no later than two years from the end of the semester in which disproportionate impact was identified. Upon subsequent review, if the disproportionate impact continues

to exist, the prerequisite or corequisite will be suspended until a revised implementation plan is established and in force.

- d. Review of disproportionate impact shall be a required component of the required review of course co-requisites and prerequisites as defined in section 4260(5) of this procedure.

Process for Establishing a Communication, Computation or Interdisciplinary Prerequisite or Corequisite

In accordance with the requirement for content review with statistical validation, approval and implementation of a communication skills, computational skills, or interdisciplinary prerequisite shall require all of the following:

- A. Completion of rigorous and documented content review indicating that the skills acquired in the proposed prerequisite or corequisite are necessary for success in the target course as described in section 4260(1).
- B. Sufficient statistical evidence (statistical validation) that the proposed prerequisite or corequisite will improve student success in the target course. In gathering this evidence, at a minimum, the District's Office of Institutional Research will:
 - a. Using a t-test of independent groups, compare the performance outcomes (grade points) in the target course of students who did and did not complete the proposed prerequisite course prior to enrolling in the target course. For the purposes of local validation, a result with $p \leq 0.05$ with a standardized mean difference (Cohen's d) of 0.20 or greater will be considered sufficient evidence of a positive correlation between prerequisite completion and subsequent course success.
 - b. Calculate incremental gain in success. This is the difference between the success rate of students meeting the potential prerequisite and the overall success rate for the target course. A 10% or higher incremental gain in success for students completing the prerequisite is typically considered a positive justification for the prerequisite (Academic Senate for California Community Colleges, 1997, p. 8).
 - c. Calculate the right/wrong ratio of the target course based on past completers. A right outcome would be success with the prerequisite satisfied or non-success without the prerequisite being satisfied. A wrong outcome would be non-success in the target course with the prerequisite satisfied or success without the prerequisite having been satisfied. A right/wrong ratio of 2:1 or higher is typically considered a result in favor of the prerequisite (Academic Senate for California Community Colleges, 1997, p. 8).
 - d. Determine whether enforcement of the proposed prerequisite course has a disproportionate impact on a particular subgroup of students by race/ethnicity, gender, age, disability status, or economically disadvantaged status. A prerequisite shall not be implemented if it would disproportionately exclude a particular subgroup of students by race/ethnicity, gender, age, disability status, or economically disadvantaged status without at the same time increasing the course

success rate for that subpopulation to a degree deemed reasonable by the curriculum committee(s).

- e. Sufficient evidence to enforce the prerequisite will be considered to exist if at least two of the three criteria identified in section 4260(4)(B)(a-c) have been met. In instances where one of the three criteria is met, additional conversation will occur and the determination will be made by the curriculum committee. If none of the criteria are met, insufficient evidence will be considered to exist to enforce the proposed prerequisite.
- C. The statistical criteria listed in section 4260(4)(B)(a-c) of this procedure may be modified or revised by mutual consent of the District's Office of Institutional Research and all college curriculum committees.
 - D. Approval of the course by the college curriculum committee; and
 - E. As a separate action, approval of the prerequisite by the college curriculum committee.

Content Review with Statistical Validation for New Courses

- A. If the Curriculum Committee, using content review with statistical validation, initially determines that a new course needs to have a communication or computation skill prerequisite or corequisite, then the prerequisite or corequisite may be established for a single period of not more than two years while the research is being conducted and the final determination is being made, provided that all other requirements for establishing the prerequisite or corequisite have been met. (CCR, Title 5, sec. 55003(g)) This review shall be consistent with the mandated review process described section 4260(5) of this procedure.
- B. The proposed corequisite or prerequisite may be established as an advisory allowing time for sufficient data to be gathered on student success and disproportionate impact, with full statistical validation to follow in order to determine if a prerequisite or corequisite is necessary and appropriate.

Additional Requirements

- Mandated Review Process
 - A. All prerequisites, corequisites and advisories must be reviewed to assure they remain necessary and appropriate and to ensure that no disproportionate impact is found to exist. This review shall occur as part of the periodic curriculum review process set by the district and curriculum committees. At a minimum, this process to review prerequisites and corequisites shall occur at least once each six years, except that prerequisites and corequisites for Career and Technical Education (CTE) courses or programs shall be reviewed every two years. Every attempt shall be made to make certain that changes in prerequisites or corequisites do not adversely affect currently enrolled students. (CCR, Title 5, sec. 55003(b)(4))

- B. The review process shall include an examination of pre- and post- requisite course success as well as analysis of disproportionate impact section 4260(4)(A)(d). Additional analysis, such surveys of faculty and students' perceptions of course readiness, may be required at the mutual consent of the curriculum committees and the District's Office of Institutional Research. This does not preclude faculty from initiating their own surveys or data gathering for consideration in this review process.
- C. Upon review, if a disproportionate impact is found to exist, the prerequisite or corequisite will be suspended until an implementation plan is established and in force.
- Prohibition from Establishing Blanket Prerequisites
 - A. Prerequisites establishing communication or computational skill requirements may not be established across the entire curriculum unless established on a course-by-course basis. (CCR, Title 5, sec. 55003(j))
- Ensuring Access
 - A. Whenever a corequisite course is established, sufficient sections shall be offered to reasonably accommodate all students who are required to take the corequisite. A corequisite shall be waived as to any student for whom space in the corequisite course is not available. (CCR, Title 5, sec. 55003(m))
 - B. Other Degree Applicable Courses – the College shall ensure other degree applicable courses are available to students impacted by implementation of prerequisites or corequisites.
- Satisfaction of Prerequisite
 - A. The determination of whether a student meets a prerequisite shall be based on successful completion of an appropriate course or on an assessment using multiple measures, as required by section CCR, sec. 555521(a)(3). No exit test may be required to satisfy a prerequisite or corequisite unless it is incorporated into the grading for the prerequisite or corequisite course.
- Publication
 - A. Prerequisites, corequisites, and advisories on recommended preparation must be identified in college publications available to students, to include the College Catalogue and Schedule of Classes, as well as the course outline of any course for which they are established.
- Periodic Training
 - A. The Curriculum Committee may conduct periodic training to assist in ensuring the appropriate criteria, scrutiny, and documentation required to establish

advisories, prerequisites, and corequisites based on CCR, Title 5, sec. 55003 *et seq.* and District procedures.

- Ensuring Districtwide Uniformity in Prerequisites
 - A. WHCCD Administrative Procedure 4020 establishes the Rule of Seven, requiring that, among other things, prerequisites shall be uniform throughout the district. To ensure this uniformity, the following process shall be adhered to with regard to the establishment of corequisites and prerequisites districtwide:
 - a. When a new or revised corequisite or prerequisite is approved by one college, this same requisite must be brought for a vote at all other college curriculum committees in the district within 30 days.
 - b. If a corequisite or prerequisite is proposed and approved by one college for a course that is not cataloged at the second college, the second college may opt to create or activate the proposed course and will have 60 days to bring the course and its proposed requisite to a vote of the second college's curriculum committee. Alternately, the second college may elect not to create or reactivate the course, in which case the approved corequisite or prerequisite will be advanced for Board approval.
 - c. If the colleges' decisions on the proposed requisite are not in agreement, or if the requisite is not brought up for a vote at the second college within the timelines prescribed above, the item will be placed on the agenda for the next meeting of the District Educational Coordinating Council for discussion and mediation. The college curriculum committees will then have a further 30 days to mutually approve or deny the proposed prerequisite or corequisite.
 - d. If the college curriculum committees have not mutually approved or denied the proposed prerequisite by the end of this period, the Chancellor shall make the final determination on the proposed prerequisite, taking into consideration the data gathered from both content review and statistical validation as well as any written opinions provided by the college curriculum committees, Academic Senates, and college and district administrative units. (BP 4260)
 - e. This process shall also apply to proposals to eliminate a corequisite or prerequisite.
- Student Challenge Process
 - A. Any student who does not meet a prerequisite or co-requisite or who is not permitted to enroll due to a limitation on enrollment but who provides satisfactory evidence as determined by the discipline faculty may seek entry into the course as follows:
 - a. If space is available in a course when a student files a challenge to the prerequisite or co-requisite, the district shall reserve a seat for the student and resolve the challenge within five (5) working days. If the challenge is upheld or the District fails to resolve the challenge within the five (5) working-day period, the student shall be allowed to enroll in the course.
 - b. If no space is available in the course when a challenge is filed, the challenge shall be resolved prior to the beginning of registration for the

next term and, if the challenge is upheld, the student shall be permitted to enroll if space is available when the students registers for that subsequent term.

- B. Grounds for challenge shall include the following:
- a. Those grounds for challenge specified in CCR, Title 5, sec. 55201(f).
 - b. The student seeks to enroll and has not been allowed to enroll due to a limitation on enrollment established for a course that involves intercollegiate competition or public performance, or one or more of the courses for which enrollment has been limited to a cohort of students. The student shall be allowed to enroll in such a course if otherwise he or she would be delayed by a semester or more in attaining the degree or certificate specified in his or her educational plan.
 - c. The student seeks to enroll in a course that has a prerequisite established to protect health and safety, and the student demonstrates that he or she does not pose a threat to himself or herself or others.
 - d. The student has the obligation to provide satisfactory evidence that the challenge should be upheld. However, where facts essential to a determination of whether the student's challenge should be upheld are or ought to be in the college's own records, then the college has the obligation to produce that information.

Board approval date: 5/18/10
Reviewed/Revised: 11/28/17

Appendix A – Flowchart Ensuring Districtwide Uniformity in Course Prerequisites

