

September 2009

Revisions to Minimum College Admission Standards - College Academic Distribution Requirements (CADR)

Background

The Higher Education Coordinating Board (HECB) is required by state law¹ to establish minimum college admission standards for use by all of Washington's public baccalaureate institutions. Each school retains the authority to accept or reject individual applicants based on the prospective students' applications for admission.

The HECB adopted the current minimum standards for freshman admission in May 2007. The standards, including revised College Academic Distribution Requirements (CADR), are scheduled to be fully implemented by baccalaureate institutions beginning with the 2012 summer academic term. In revising the standards, the Board sought to ensure that students admitted to Washington's baccalaureate institutions would be academically prepared to enter college and earn their degrees. The revised minimum college admission standards are intended to encourage students to enroll in challenging coursework throughout their high school careers, a goal that was reaffirmed in the *2008 Strategic Master Plan for Higher Education*.

The minimum standards signal to students, parents, and K-12 educators the minimum level of academic preparation students need to succeed in college. They also inform high schools of the content and quality of courses they must offer to ensure their students have the opportunity to gain admission, enroll in institutions of higher education, and earn bachelor's degrees. The large majority of incoming students are required to meet the state minimum requirements, but significant flexibility is provided to the four-year institutions. Up to 15 percent of freshmen may be admitted at each institution's discretion, even if the students do not meet the state minimums, in recognition that many prospective students demonstrate their preparedness for college in unique ways that are not reflected in the statewide minimum standards.

High school graduation requirements are also changing in response to some of the same concerns behind the changes to the freshmen admission standards adopted by the Board in 2007. The Washington State Board of Education has created a proposed credit framework called CORE 24², which represents the essential high school graduation requirements all students should have to prepare for life after high school. Core 24 would require high school students to earn 24 credits for their diploma, an increase of five credits over the current requirement of 19.

¹ RCW 28B.76.290 (2)

² Link to SBE website and Core 24 <http://www.sbe.wa.gov/mhds.htm>

The new requirements would bring high school graduation requirements into closer (but not exact) alignment with HECB’s recently revised minimum college admission standards.

For example, the HECB’s freshmen admission standards and Core 24 each would require three credits of mathematics through Algebra II, including math-based quantitative coursework in the senior year. The change in the math requirement is already being phased in and will be in effect for the graduating class of 2013.³ In science, the Core 24 requirement is more rigorous than the HECB’s freshmen admission standard. Three credits would be required for high school graduation, compared with two required by the HECB. Both sets of requirements call for two years of laboratory science and one algebra-based science course. The Core 24 requirements also align with HECB admission standards for social science, world language, and English.

Standards Adopted in May 2007

Following are the standards established in 2007 that will be fully implemented beginning 2012 (Science CADR are effective 2010).

College Academic Distribution Requirements (CADR)

English	4 credits (must include 3 credits of college preparatory composition or literature.
Math	3 credits
Senior year math-based quantitative course	1 credit *
Science	2 credits **
Social Science	3 credits
Foreign Language	2 credits
Arts	1 credit
Total Credits	<hr/> 15-16

*Quantitative math-based course required in senior year; does not require higher-level math than current admissions policy.

**Both laboratory sciences, with one credit algebra-based science course for college admission in 2010-11

³In 2007, the Legislature directed the State Board of Education to increase the high school math graduation requirements from two to three credits. The graduating class of 2013 is now required to earn three credits of math or math equivalent coursework through Algebra II or an equivalent http://www.sbe.wa.gov/documents/ThirdMathCredit_002.pdf

The new standards included several policy changes for baccalaureate institutions:

- Students are required to complete at least three credits of CADR coursework in each year of high school
- “Credit” replaces a “year of coursework” to recognize block scheduling or alternative course delivery models
- Use of the Admissions Index as admissions criteria was eliminated. SAT/ACT standardized tests are still required, as is a minimum 2.0 GPA
- Comprehensive review of admission applications is encouraged but not required.

Proposed Modifications

As directed by the Board, staffs have continued to work with high schools and institutions during implementation to ensure there were no unintended consequences from these changes. Over the past two years, we received a great deal of feedback. Two particular areas have been identified that require HECB attention to make sure the intent of changes are upheld without limiting options for students or creating undue burden on institutions.

1. The College Academic Distribution Requirements (CADRs) were intended to ensure students remained challenged through a rigorous curriculum all four years of high school. However, at the high school freshmen level, many students are still taking courses such as pre-algebra or non lab-based science courses that prepare them for CADRs but may not be in specific courses that meet CADR requirements.
2. Within the science requirement, algebra and specific subject areas are coupled. As we implement this requirement, it has become clear that tying the algebra-based science requirement to the requirement for a specific course in biology, chemistry, or physics is problematic. The effect of this requirement, as written, is to limit students to taking either chemistry or physics to meet the requirement because high schools are telling us that biology is not an “algebra-based” course. In addition, the requirement excludes other subject areas that might be algebra-based, including courses in astronomy, geological science, genetics, or marine science.

Recommendations

Appendix A outlines proposed modifications to the current requirements that would:

1. Modify the CADR requirements to *encourage* students to take three CADR courses in the freshmen year but *require* three CADR courses each year in grades 10-12 as long as the students complete all other state and institutional admission requirements.
2. Modify the algebra-based science requirement to decouple the algebra requirement from specific subject requirements so that any laboratory science can meet the requirement for an algebra-based science. Students would still need one laboratory course in biology, chemistry, or physics but that course would not necessarily need to be algebra-based.

Subject Area:	Minimum College Academic Distribution Requirements (CADR)	Proposed New Language	Old language (approved 2007)
College Academic Distribution Requirements to be implemented 2012.	College Academic Distribution Requirements (CADR) coursework equals 15 total credits	Students are encouraged to take a minimum of three credits of CADR courses each year of high school, including senior year. Students who are unable to complete three CADRs as high school freshmen (grade 9) will be considered for admission provided they meet all other state and institutional admission requirements. Students must take a minimum of three credits of CADR courses in grades 10-12.	15 total credits of CADR coursework. Students must take a minimum of 3 credits ⁴ of CADR courses each year of high school, including the senior year.
Science Implementation: Summer 2010	<p>Science – 2 credits</p> <p>Two credits of lab science are required.</p> <p>One of these credits must be in an algebra-based science.</p> <p>One of these credits must be in biology, chemistry, or physics</p> <p><i>Note: The above requirement for two credits of lab science takes effect in 2010.</i></p>	<p>Science – 2 credits</p> <p>Two credits of lab science are required for college admission in the 2010-11 academic year.</p> <p>One credit must be in an algebra-based science course. Students completing this requirement typically take this course in two successive high school semesters.</p> <p>One Credit must be in biology, chemistry, or physics (this course may also meet the “algebra-based” requirement).</p> <p>The principles of technology courses taught in Washington State high schools may also satisfy the laboratory science requirement.</p> <p>To complete the second credit, students may take courses identified by the school district as laboratory science courses, e.g., astronomy, environmental science, geological science, genetics, marine science.</p> <p>An algebra-based science course with laboratory taken in the senior year may satisfy both the science requirement and the senior-year math-based credit requirement (see math above).</p> <p><i>Note: Course work completed prior to ninth grade does not apply toward this college admission requirement.</i></p>	<p>Science</p> <p>Two credits of lab science, including 1 credit of algebra-based biology, chemistry, or physics</p> <p><i>Note: the requirement for 2 years of lab science, including 1 year of algebra-based biology, chemistry, or physics would take effect in 2010.</i></p>

Please see the following page for further clarification on the science requirement.

⁴Previous to the 2007 revisions, the standards referred to year-long courses. In the current standards, the wording was revised to “credits” in recognition of schools that schedule an equivalent course in a shorter time period (block scheduling by many high schools results in year-long courses being offered in one term, or half-year).

Two credits of laboratory science are required for college admission.

A minimum of one credit must be an algebra-based laboratory science course. A minimum of one credit must be a biology, chemistry, or physics course comparable to two semesters in one subject area. These two requirements may be satisfied by a single course if it fulfills all of the above criteria, e.g. one credit in an algebra-based chemistry course with a laboratory component qualifies as 1) an algebra-based laboratory science, and 2) a “biology, chemistry, or physics” course.

The second credit of laboratory science can be a biology, chemistry, or physics course, but it can also be satisfied by a course in another science subject (e.g., astronomy, environmental science, geological science, genetics, marine science), provided it has been identified as a laboratory science course by the school district.

The principles of technology courses taught in Washington State high schools may also satisfy one credit of the laboratory science requirement.

An algebra-based laboratory science course taken in the senior year may satisfy both the senior-year math-based quantitative credit requirement (see senior-year quantitative section below) and one credit of the laboratory science requirement.

Course work completed prior to ninth grade does not apply toward this college admission requirement.

CORE 24 Policy Framework and CADR

	Current High School Graduation Requirements	Core 24 Graduation Requirements	College Academic Distribution Requirements (effective 2012-13*)
CADR - College Academic Distribution Requirements			3 CADR credits required each year of high school
Subject Areas	Credits	Credits	Credits
English	3	4	4
Mathematics	2 (The graduating class of 2013 will need to complete 3 credits including Alg. 2, incl. 1 math in senior year)	3 (Algebra 2, including 1 math in sr. year)	3 (Algebra 2, including 1 math in sr. year)
Science	2 (includes 1 lab science)	3 (2 lab science 1 algebra-based)	2 (both lab science--1 algebra-based) *effective 2010
World Languages		0-2	2
Arts	1	2	1
Social Sciences	2.5	3	3
Health & Fitness	2	2	
CTE	1	3	
Electives	5.5	2-4 depending on pathway	
TOTAL CREDITS	19	24	15-16 (depending on how math and science requirements are met)

