CTE Course Equivalency
Update on Implementation of ESSB 6552

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JANUARY 23, 2017
SENATE EARLY LEARNING & K12 EDUCATION COMMITTEE
Today’s Overview:

- Historical Perspective
- State Board of Education Support
- ESSB 6552
- Progress on Implementation
- Statewide Frameworks
- Data
- Future Focus
- Questions
Historical Context on Math/Science 
Statewide CTE Equivalency Frameworks

2014 SESSION: 
SBE Legislative Priorities

Ample Provision 
Make ample provision for K-12 education programs

Legislative Action: Identify a reliable and dependable revenue funding source for K-12 education to support a robust response to the McCleary Court Order, and to fully implement the provisions of ESHB 2261 and SHB 2776.

Career & College Ready
Authorization of a 24-credit career and college-ready graduation requirement framework

Math & Science Equivalencies
Expansion of math and science course equivalencies for vocational programs.

Legislative Action: The Board urges the Legislature to direct the development of statewide model course modules and frameworks that allow students to fulfill math and science credit requirements at skill centers and other high school programs across the state. The Board has an interest in ensuring that these credit equivalency opportunities are offered in an equitable manner across the state.

SBE Legislative Priority for 2014 session.
• How we increase flexible pathways to 24 credit diploma?
• How can increasing math & science credit requirements not impede CTE pathways?
Math/Science Statewide CTE Equivalency
Frameworks: Why the Need?

- Math & Science Equivalencies have existed for a long time. The statewide framework aspect was the key:

  1. Standardization of credit across regions for a particular course.

  2. Create confidence around coverage of math and science content relative to Washington State Learning Standards.
Purpose/Background of ESSB 6552

Summary of Engrossed Second Substitute Bill:

The Legislature intends to address flexibility for increasing instructional hours and implementing 24 credits for high school graduation. The intent includes the educational policy reason for shifting the focus and intent of the funding provided for the 2014-15 school year, from compliance with the minimum instructional hours offering to assisting school districts to provide an opportunity for students to earn 24 credits for high school graduation and obtain a meaningful diploma.
ESSB 6552 (2014)
Amended RCW 28A.700.070, RCW 28A.230.097

- OSPI would develop CTE curriculum frameworks that must align with WA State Learning Standards and industry standards.

- Beginning no later than the 2015-16 school year, a LEA must grant academic course equivalency in mathematics or science.

- High school students must have opportunity to access at least one CTE course that is considered equivalent to math or science as determined by the office of the superintendent of public instruction and the state board of education in RCW 28A.700.070.
March 2014
ESSB 6225 Passed

Summer 2014
OSPI staff identifies potential courses

Fall-Winter 2014
Draft Frameworks are Compiled

Summer 2015
Initial Professional Development Begins

May 2015
SBE approves 21 CTE Course Equivalencies

February 2015
CTE and Science/Math Instructors and OSPI finalize frameworks

April 2016
Second Round of CTE Course Equivalencies Adopted

June 2016
State Superintendent approves CTE English Equivalencies

June 2016
A total of 36 State Frameworks Available

April 2017
Deadline for additional equivalencies to SBE

ONGOING:
Evolving professional development around equivalencies

Implementation Timeline
Selection of Courses

- OSPI Program Supervisor nomination
- Strength of academic alignment
- Review of courses offered statewide
- Emphasis on
  - Comprehensive High School and Skills Centers options
  - Mathematics and Science credits
  - Variety of program areas and pathways to meet diverse program offerings across state
Every Career and Technical Education class falls into one of 16 national career clusters

- Agriculture, Food and Natural Resources
- Architecture & Construction
- Arts, A/V Technology & Communications
- Business Management & Administration
- Education & Training
- Finance
- Government & Public Administration
- Health Sciences
- Hospitality & Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections & Security
- Manufacturing
- Marketing
- Science, Technology, Engineering & Mathematics
- Transportation, Distribution & Logistics
Statewide CTE Framework

- Industry Standards and Competencies
- Aligned Washington State Learning Standards
- 21st Century Leadership Standards
- Performance Assessments – summative and formative
- Leadership Alignment by unit

Standards may be added to the document prior to submission, but may not be removed from the framework to meet state credit equivalency requirements. Performance assessments may be developed at the local level. In order to earn state approval, performance assessments must be submitted within the framework. Courses are eligible for specified credit.
Statewide Framework Document for: 030104- AP ENVIRONMENTAL SCIENCE

Standards may be added to this document prior to submission, but may not be removed from the framework to meet state credit equivalency requirements. Performance assessments may be developed at the local level. In order to earn state approval, performance assessments must be submitted within this framework. This course is eligible for 1 credit of laboratory science. The Washington State Science Standards performance expectations for high school blend core ideas (Disciplinary Core Ideas, or DCIs) with scientific and engineering practices (SEPs) and crosscutting concepts (CCCs) to support students in developing usable knowledge that can be applied across the science disciplines. These courses are to be taught in a three-dimensional manner. The details about each performance expectation can be found at Next Generation Science Standards, and the supporting evidence statements can be found under Resources.

### AP Environmental Science

<table>
<thead>
<tr>
<th>Course Title: AP Environmental Science</th>
<th>Total Framework Hours: 180</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIP Code: 030104</td>
<td>Exploratory  Preparatory</td>
</tr>
<tr>
<td>Career Cluster: Agriculture, Food, and Natural Resources</td>
<td>Cluster Pathway: Environmental Service System</td>
</tr>
<tr>
<td>Eligible for Equivalent Credit in: Math  Science</td>
<td>Total Number of Units: 8</td>
</tr>
</tbody>
</table>

#### Course Overview

**Summary:**
A course that focuses on the application of biological, chemical, and physical principles to the study of the physical environment and the solution of environmental problems, including subjects such as abating or controlling environmental pollution and degradation; the interaction between human society and the natural environment; alternative energy, and natural resources management. Includes instruction in biology, chemistry, physics, geosciences, climatology, statistics, and mathematical modeling.

As with all agriculture courses, instruction and assessment in the Supervised Agriculture Experience (SAE) is a requirement. The Supervised Agriculture Experience includes placing a student in a position where he or she will learn the practices of entrepreneurship and the fundamentals of research and experimentation in the agricultural field. Participants in the SAE will conduct exploratory projects with the purpose of learning about and improving practices in their surroundings.

SAE.01. This course will include instruction in and Student involvement in Supervised Agriculture Experience Projects (SAE).
# Mathematics Equivalency

<table>
<thead>
<tr>
<th>CIP Code</th>
<th>Course</th>
<th>Equivalency</th>
</tr>
</thead>
<tbody>
<tr>
<td>149991</td>
<td>Engineering Design 1</td>
<td>Algebra 1</td>
</tr>
<tr>
<td>190401</td>
<td>Consumer and Family Resources</td>
<td>Algebra 1</td>
</tr>
<tr>
<td>270301</td>
<td>Applied Algebra 1</td>
<td>Algebra 1</td>
</tr>
<tr>
<td>270305</td>
<td>Financial Math</td>
<td>Algebra 1</td>
</tr>
<tr>
<td>100304</td>
<td>Animation Tech. Video Graphics</td>
<td>Geometry</td>
</tr>
<tr>
<td>110803</td>
<td>Video Game Design/Digital Computer Animation</td>
<td>Geometry</td>
</tr>
<tr>
<td>460201</td>
<td>Residential Carpentry</td>
<td>Geometry</td>
</tr>
<tr>
<td>270301</td>
<td>Applied Algebra 2</td>
<td>Algebra 2</td>
</tr>
<tr>
<td>110201</td>
<td>Computer Programming</td>
<td>1 credit beyond Geo.</td>
</tr>
<tr>
<td>150613</td>
<td>CORE Plus</td>
<td>3rd Year Math</td>
</tr>
<tr>
<td>279998</td>
<td>Business Statistics</td>
<td>Statistics</td>
</tr>
</tbody>
</table>
# Science Equivalency

<table>
<thead>
<tr>
<th>CIP Code</th>
<th>Course</th>
<th>Equivalency</th>
</tr>
</thead>
<tbody>
<tr>
<td>010901</td>
<td>Animal Science</td>
<td>Biology or Lab Science</td>
</tr>
<tr>
<td>011101</td>
<td>Plant Science</td>
<td>Biology or Lab Science</td>
</tr>
<tr>
<td>030101</td>
<td>Natural Resources</td>
<td>Biology or Lab Science</td>
</tr>
<tr>
<td>030201</td>
<td>Natural Resources Management and Policy</td>
<td>Biology or Lab Science</td>
</tr>
<tr>
<td>010000</td>
<td>Intro to AFNR</td>
<td>Lab Science</td>
</tr>
<tr>
<td>011001</td>
<td>Food Science and Safety</td>
<td>Lab Science</td>
</tr>
<tr>
<td>030104</td>
<td>AP Environmental Science*</td>
<td>Lab Science</td>
</tr>
<tr>
<td>120503</td>
<td>Culinary Arts and Food Science</td>
<td>Lab Science</td>
</tr>
<tr>
<td>120505</td>
<td>Food Production and Services</td>
<td>Lab Science</td>
</tr>
<tr>
<td>190504</td>
<td>Food Science, Dietetics, and Nutrition</td>
<td>Lab Science</td>
</tr>
<tr>
<td>260102</td>
<td>Biomedical Sciences</td>
<td>Lab Science</td>
</tr>
<tr>
<td>CIP</td>
<td>Course</td>
<td>Equivalency</td>
</tr>
<tr>
<td>--------</td>
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</tr>
<tr>
<td>260103</td>
<td>Biomedical-Body Systems</td>
<td>Lab Science</td>
</tr>
<tr>
<td>510808</td>
<td>Veterinarian Assistant</td>
<td>Lab Science</td>
</tr>
<tr>
<td>511614</td>
<td>Nursing Assistant</td>
<td>Lab Science</td>
</tr>
<tr>
<td>400891</td>
<td>Principals of Technology Applied</td>
<td>Physics or Lab Science</td>
</tr>
<tr>
<td>110201</td>
<td>Computer Programming</td>
<td>Science</td>
</tr>
<tr>
<td>150613</td>
<td>CORE Plus</td>
<td>Science</td>
</tr>
<tr>
<td>010308</td>
<td>Agroecology and Sustainability</td>
<td>Life Science or Lab Science</td>
</tr>
<tr>
<td>030104</td>
<td>Environmental Science</td>
<td>Life Science of Lab Science</td>
</tr>
<tr>
<td>261201</td>
<td>Agricultural Biotechnology</td>
<td>Life Science or Lab Science</td>
</tr>
</tbody>
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# Multiple/English Equivalency

<table>
<thead>
<tr>
<th>CIP</th>
<th>Course</th>
<th>Equivalency</th>
</tr>
</thead>
<tbody>
<tr>
<td>150613</td>
<td>CORE Plus</td>
<td>$3^{rd}$ Year Math and Science</td>
</tr>
<tr>
<td>150613</td>
<td>CORE Plus</td>
<td>English</td>
</tr>
<tr>
<td>150613</td>
<td>CORE Plus</td>
<td>English, $3^{rd}$ Year Math, Science</td>
</tr>
<tr>
<td>150613</td>
<td>CORE Plus</td>
<td>English and Science</td>
</tr>
<tr>
<td>150613</td>
<td>CORE Plus</td>
<td>English and $3^{rd}$ Year Math</td>
</tr>
</tbody>
</table>
Data

- Data collection for statewide equivalency has been added to the Comprehensive Education Data and Research System (CEDARS) for school year 2016-2017.
- Districts will report the use of state equivalency in the grade history file, which is collected at the end of the term.
- For school year 2017-2018 schools districts will report courses offered as local and statewide equivalencies, and the basic education credit the course is equivalent to.
Future Opportunities?
Explore the concept of a Civics/CTE Equivalency Class

Civics/CTE Equivalency Idea

Satisfy three graduation requirements:
- Social Studies: 3 credits (.5 must be civics)
- CTE/Occupational Ed: 1 credit
- High School & Beyond Plan: Non-credit requirement

Civics as part of career readiness
- The purpose of a high school diploma is to declare that a student is ready for success in postsecondary education, gainful employment, and citizenship (RCW 28A.230.090)

Embed the concept of high school and beyond plan in a credit-earning course.
Provides more flexibility on course-taking options (satisfy two requirements with one class).
Questions?

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