**LOCAL EDUCATION AGENCY TECHNICAL GUIDANCE –**

**CAREER AND TECHNICAL EDUCATION COURSE EQUIVALENCY
TO MEET DISTRICT OF COLUMBIA GRADUATION REQUIREMENTS**

Last Updated: August 24, 2023

**Overview and Purpose**

The Office of the State Superintendent of Education (OSSE), Office of Career and Technical Education (CTE), is issuing the following technical guidance for local education agencies (LEAs) interested in allowing Perkins-funded CTE courses to meet high school graduation requirements and corresponding Carnegie Units.

OSSE is committed to supporting DC students to become meaningful members of our community who are prepared for college and careers. In recent years, OSSE has partnered with industry leaders and LEAs to develop and expand robust CTE pathways to support DC students. Together with LEAs, OSSE hopes to continue to grow opportunities for students to participate in meaningful pathways to graduation.

Through this guidance:

- OSSE outlines an initial set of CTE courses that meet state-level standards for non-elective courses that are required for graduation and are therefore deemed eligible for possible Carnegie Units toward graduation.
- OSSE intends to supplement innovation underway within LEAs to support high school redesign and reduce inefficiency in credit accumulation that data shows holds some students back from full participation in CTE course pathways, work-based learning (WBL) opportunities and/or dual enrollment courses.

LEAs have the authority to determine what courses meet the District of Columbia's graduation requirements. Therefore, while this guidance supports the course equivalency approach, it is not mandatory, nor is it an exhaustive list of potential equivalent courses. Since both the CTE course standards and the standards associated with non-CTE courses required for graduation establish the minimum content that must be included in these courses, LEAs are encouraged to conduct their own analysis using their specific course standards and curriculum to determine whether additional course equivalencies exist.

**Tracking Course Equivalency Impact**

OSSE encourages LEAs to consider how it will document and track the impact and outcomes of course equivalency at the student and LEA levels.

*Student-level analysis:* LEAs should consider how students who enroll and complete CTE courses with non-elective Carnegie Unit equivalency will have such courses documented on their transcripts. When developing transcript procedures, LEAs will want to consider college admission requirements and how to effectively convey that students have met the relevant course requirements via course equivalency. OSSE has observed states/districts with course equivalency programs develop transcript documentation to indicate: (1) the nature of the course (e.g., CTE Art-Equivalent) and (2) graduation requirement(s) satisfied (e.g., 1.0 Carnegie Unit).

*LEA-level analysis:* LEAs should consider how it will track and aggregate participation within and across courses and WBL opportunities. Additionally, LEAs may want to consider what will constitute success (e.g., target for student WBL completion) and impact (e.g., how course equivalency has allowed students to complete CTE pathways, dual enrollment courses and/or WBL opportunities) and how it will review data over time.

**Methodology**

To determine whether a CTE course may be deemed equivalent, OSSE reviewed standards for each applicable CTE course and compared them against DC's state-defined standards for associated graduation requirements (see table below). OSSE also reviewed other state practices in allowing CTE course equivalency. Based on this review, OSSE determined that at least 14 states allow for and support this approach to course equivalency between CTE and non-CTE courses to meet graduation requirements.

| CTE Course | State-Level Standards |
|---|---|
| Arts, Audio/Visual Technology, and Communications: Audio/Video Production I | National Art Standards - Media Arts |
| Arts, Audio/Visual Technology, and Communications: Audio/Video Production II | National Art Standards - Media Arts |
| Biomedical Sciences: Human Body Systems | Next Generation Science Standards |
| Biomedical Sciences: Medical Interventions | Next Generation Science Standards |
| Biomedical Sciences: Biomedical Innovation | Next Generation Science Standards |

| | |
|---|---|
| Biotechnology: Biotechnology I | [Next Generation Science Standards](#) |
| Biotechnology: Biotechnology II | [Next Generation Science Standards](#) |
| Practicum in Health Science: Biotechnology | [Next Generation Science Standards](#) |
| Computer Science: Computer Science A | [OSSE Common Core Math Standards](#) |
| Engineering: Digital Electronics | [Next Generation Science Standards](#)<br>[OSSE Common Core Math Standards](#) |
| Engineering: Principles of Engineering | [Next Generation Science Standards](#)<br>[OSSE Common Core Math Standards](#) |
| Government and Public Administration: Foreign Service and Diplomacy | [Social Studies Standards](#) |
| Government and Public Administration: National Security | [Social Studies Standards](#) |
| Graphic Design and Illustration: Graphic Design and Illustration I | National Art Standards - [Media Arts](#) |
| Graphic Design and Illustration: Graphic Design and Illustration II | National Art Standards - [Media Arts](#) |
| JROTC: JROTC LET 2 | [Social Studies Standards](#)<br>[PE Standards](#) |

| JROTC: JROTC LET 3 | Social Studies Standards<br>PE Standards |
|---|---|
| JROTC: JROTC LET 4 | Social Studies Standards<br>PE Standards |

Note: The above-noted course equivalents were compared under the 2006 Social Studies standards since the new standards were not yet adopted at the time of the review and will not be implemented until the 2024-25 school year.

If a CTE course includes coverage of 80 percent or more of the content standards of a course required for graduation, it may earn equivalent credit. "Coverage" of a standard is based on both (1) the current course and (2) any prerequisites in the course pathway. LEAs ultimately are responsible for course implementation, including fidelity of implementation of standards as part of course instruction.

The following eight CTE courses have been deemed eligible for equivalent credit.

| Program of Study | Course Name | Level and Prerequisite(s) | Graduation Requirement Satisfied |
|---|---|---|---|
| Arts, Audio/Visual Technology, and Communications | A/V Production I | Level 2 (Prerequisite: Principles of A/V, Technology, and Communication) | Art |
| Arts, Audio/Visual Technology, and Communications | A/V Production II | Level 3 (Prerequisites: Principles of A/V, Technology, and Communication and A/V Production I) | Art[1] |
| Biomedical Sciences | Medical Interventions | Level 3 (Prerequisites: Principles of Biomedical Sciences and Human Body Systems) | Science[1] |
| Biomedical Sciences | Biomedical Intervention | Level 4 (Prerequisites: Principles of Biomedical Sciences; Human Body Systems; and Medical Interventions) | Science[1] |
| Graphic Design and Illustration | Graphic Design and Illustration I | Level 2 (Prerequisite: Principles of A/V, Technology, and Communication) | Art |
| Graphic Design and Illustration | Graphic Design and Illustration II | Level 3 (Prerequisites: Principles of A/V, Technology, and Communication and | Art[1] |

| | | Graphic Design & Illustration I) | |
|---|---|---|---|
| Junior Reserve Army Training Corps (JROTC) | JROTC Leadership Education and Training (LET) 3 | Level 3 (Prerequisites: LET 1 and LET 2) | Physical Education (PE) |
| JROTC | JROTC LET 4 | Level 4 (Prerequisites: LET 1, LET 2, and LET 3) | PE

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[1]Meets the graduation requirement as part of a sequence of courses. Students must take the indicated prerequisite(s) to satisfy the equivalent graduation requirement.


**CTE Course Sequencing**

CTE Programs of Study (POS) are a sequential set of courses that a student takes, in order, with concepts and curricula that increase in complexity and rigor with each course. Generally, a student must begin with Level 1, progress to Level 2, and thereafter, to subsequent levels, as applicable. A student may enroll in some CTE courses concurrently (e.g., Level 1 taken at the same time as Level 2) based on LEA -level guidance. As noted in the course-specific guidance below, LEAs must schedule students in courses according to the relevant course prerequisites and sequencing. Students who are not part of the CTE POS shall not be scheduled in a CTE Level 2, 3, or 4 course. This is particularly important because in some instances, students may only receive course equivalency if they have completed multiple levels in the pathway. To this end, OSSE advises the following:

Audio/Visual Production:
● Students must complete Level 1 (Principles of A/V, Technology, and Communications) and Level 2 (A/V Production I) to meet the Art graduation requirement.
● Note that Level 3 (A/V Production II) also satisfies the Art requirement, if taken in conjunction with Level 2.

Biomedical Sciences:
● Students must complete Level 1 (Principles of Biomedical Science), Level 2 (Human Body Systems), and Level 3 (Medical Interventions), to satisfy the Level 4 Science graduation requirement.
● Note that Level 4 (Biomedical Innovation) also meets a Level 4 Science graduation requirement, if taken in conjunction with Level 1, 2, and 3.

Engineering/Environmental Sustainability:
● Students must complete Level 1 (Introduction to Engineering Design), Level 2 (Principles of Engineering), and Level 3 (Environmental Sustainability) to satisfy the Level 4 Science graduation requirement.

Graphic Design and Illustration:

- Students must complete Level 1 (Principles of A/V, Technology, and Communications) and Level 2 (Graphic Design I) to satisfy the Art graduation requirement.
- Note that Level 3 (Graphic Design II) also meets the Art requirement, if taken in conjunction with Levels 1 and 2.

This is not meant to be an exhaustive list of courses and additional courses may be added to over time. LEAs are encouraged to communicate with OSSE about additional CTE courses to be considered for credit equivalency. OSSE will provide the process for course selection upon LEA request.