

Integrated Coursework and Awarding Simultaneous Credit Guidance for Schools

INTRODUCTION

[State law](#) allows districts, schools, [community schools](#) and chartered nonpublic schools to integrate content standards from multiple subject areas into a single course for which students can earn simultaneous credit. This document outlines processes and considerations to support schools in developing integrated courses. It also provides guidance for awarding appropriate credit for high school students to satisfy Ohio’s graduation requirements.

Integrated coursework benefits students by creating authentic learning experiences, deepening student understanding of content and potentially creating space in students’ schedules for additional learning experiences. The blending of knowledge across subject areas mimics real-world situations and makes learning more authentic. Students are engaged in learning because the design of integrated curriculum creates challenging, meaningful tasks that help students connect information.

In addition to creating a dynamic and engaging learning environment and better student engagement, integrated coursework can make space in students’ schedules for opportunities such as elective courses, College Credit Plus courses, work-based learning and other innovative educational experiences. Studies also consistently find that courses that integrate career-technical content result in higher student test scores, compared to the test scores of students who received instruction that did not integrate courses. Students may meet course requirements through in-school and out-of-school experiences such as credit flexibility.

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INTEGRATED COURSEWORK AND SIMULTANEOUS CREDIT

Integrated coursework aligns different areas of study by making connections across multiple disciplines. Curriculum for integrated courses addresses standards across subject matter lines and emphasizes interdisciplinary connections from technical and academic areas. Integrated courses include standards from different disciplines organized around a common theme. They connect learning standards to authentic, real-world applications. Integration engages students in relevant, meaningful activities they can understand and link to real-life experiences.

Integrated courses may allow students to meet learning expectations for multiple academic and technical courses through a single course experience. In this case, students may simultaneously receive credit for all courses for which they have met the district and state requirements.

Simultaneous credit refers to full or partial credit students earn in more than one content area while they are enrolled in a single course. Districts decide which courses yield simultaneous credit and the amount of credit students will earn. Districts should develop local policies that govern the awarding of credit.

Having students take courses through an integrated model does not excuse districts from the requirement to administer the required [Ohio State Tests](#) and [WebXams](#). Schools may administer any state end-of-course tests associated with the integrated courses, either at the end of the course or when students meet learning expectations.

INTEGRATED COURSEWORK AND GRADUATION REQUIREMENTS

State law (ORC 3313.603 and 3313.614) outlines [course and assessment requirements](#) all students must meet to earn a diploma. Students must earn a minimum of 20 credits, complete the requirements of at least one [graduation pathway](#) and satisfy any additional local requirements.

A student may satisfy course requirements through a variety of instructional methods, including, but not limited to, integrated, applied, career-technical and traditional coursework. [Ohio law](#) provides that units students earn in English language arts, mathematics, science and social studies delivered through integrated academic and career-technical instruction are eligible to meet students' graduation requirements. To earn full or partial credit that satisfies multiple graduation requirements, an integrated course must both teach and assess the standards from each course for which students earn credit.

[State law](#) prohibits schools from requiring students to remain enrolled for any specific number of terms if they satisfy graduation requirements early and can graduate. A local school district's board of education is responsible for determining how students earn credit and how much credit they earn. The local board may adopt a policy for awarding credit for integrated courses, including how that credit appears on transcripts.

While state law does not mandate how courses are reflected on transcripts, it is important to remember that schools use student transcripts in a variety of ways. For example, college admissions, technical skill verification and transcript reviews by the [NCAA](#). Transcripts should specify the courses for which a student is receiving credit to properly show the coursework that student completed.

The Department highly recommends that districts identify separately on a student's transcript all credits awarded for integrated coursework to show clearly the integrated courses for which the student has earned credit.

PROCESSES FOR DEVELOPING INTEGRATED COURSES

Planning and implementing integrated coursework typically requires cooperation between teachers and administrators. School leaders should consider carefully the school's capacity to offer more integrated course options for students.

The process described below outlines steps districts can take to develop integrated courses. It is an example only. Schools can develop integrated courses and award simultaneous credit in many different ways.

Identify a Planning Team

The integrated coursework planning team may include the following individuals or groups:

- Academic and technical teachers;
- School special education, gifted, English learner representatives;
- School counselors;
- School administrators;
- Curriculum coordinators from the district, school or educational service center;
- EMIS coordinator;
- Career-Technical Planning District representatives;
- Board of education members;
- Business Advisory Council members or other industry representatives;
- Other local school advisory groups, such as groups for school building management and career-technical education pathways;
- Postsecondary faculty; and
- Other individuals or groups the district considers appropriate.

Identify Areas for Integration

Your planning team members should work together to identify courses that align logically. There is no need to force alignment of content; as your planning team works, areas of alignment will emerge.

When identifying areas for integration, schools might consider:

- What courses naturally align with one another? What current instructional practices is the school implementing that cut across academic or technical disciplines?
 - Do you have courses in your district that you recommend students take either simultaneously or in a sequence? Do you have project-based learning opportunities already happening in your school or district that cut across disciplines? These questions provide a starting place to identify areas of alignment within available courses.
- Are there opportunities to integrate courses that help prepare students for their post-high school pathways?
 - Would integrating content allow your students to experience classes that better prepare them for life after high school?
- How do the standards for the courses connect?
 - Standards alignments can be developed locally. Some questions to consider when determining alignment could be:
 - Do the standards for each course support or reinforce each other?
 - Do the standards from one course apply to standards from another course?

- Does this alignment enhance or improve the content addressed in the standards?
- To support integrated coursework and simultaneous credit, the Ohio Department of Education partnered with educators across the state to identify areas of alignment in [Ohio's Learning Standards](#) and [Ohio's Career-Technical Career Field Content Standards](#). By July 1, 2018, the Department expects to post on its website alignments between [Ohio's Career-Technical Career Field Content Standards](#) and Ohio's Learning Standards for math and English language arts. The Department expects to post alignments between Ohio's Career-Technical Career Field Content Standards and Ohio's Learning Standards for science and social studies by March 2019.
 - Alignments are rated as enhancement, application or reinforcement to better clarify how schools can use the standards as they plan to integrate standards in coursework.
 - Enhancement – Enhancement occurs when a standard or competency enriches the standard or competency from the other content area by increasing skills or supplementing content knowledge.
 - Reinforcement – Reinforcement occurs when a standard skill in two subjects exactly corresponds or a standard skill in one content area supports a standard skill from another.
 - Application – Application occurs when the course employs a standard or competency in relevant situations provided by the other content area standard or competency, allowing skills and concepts to be used in real-world contexts.
- What is the current instructional capacity within the school? What are the license areas of your instructional staff? Do you currently have cross-curricular teacher-based teams?
 - If you have teachers who are licensed to teach multiple subject areas, their cross-curricular knowledge can make them a natural fit for teaching or advising on content delivery for integrated courses.
 - Existing teacher-based teams in your school already may be doing cross-curricular planning and projects. Members of these teams are well-suited to take the next step in planning a fully integrated course.

Design and Implement the Integrated Course Experience

Planning teams should meet regularly to design, implement and evaluate integrated coursework experiences. After they have identified courses for integration, reviewed the standards for areas of alignment and selected instructors, they should consider the additional factors outlined below.

When designing the integrated course experience, consider:

- The time needed for instructors to guide student learning of all standards in the integrated course. Schools may need to adjust the master schedule, for example, using block scheduling, modified block or additional open schedule options.
 - Does integrated course delivery require adjustments to the master schedule?
 - Should the school adjust student schedules to accommodate the integrated course?
 - What adjustments need to be made to the master schedule for cross-curricular planning time for instructors?
- Throughout the design and implementation of the integrated course experience, school leaders will need to provide opportunities for key staff to sharpen skills in content areas and approaches to integrated instruction.

- How will school leaders identify the professional development needs of the planning team and instructional staff?
- What resources will the school use to support professional development?
- How will the school monitor professional development to ensure faithful implementation?

When identifying the specific courses to integrate, you might choose to do the following:

- Blend two courses into a single course experience.
- Identify content in existing courses that can be, or already is, embedded in other courses.
- Use credit flexibility policies to design unique learning experiences for students.

1. Blending Courses

Blending two courses into a single course through the alignment of learning expectations can result in two courses becoming one new course. In this model, standards from each course are considered carefully and addressed in the curriculum for the new course. For example, physics content could be blended with astronomy content to create a new course that could be called astrophysics. Physics content could be blended with anatomy and physiology content to create a new biomechanics course.

2. Identification of Embedded Content

Schools can award simultaneous credit by identifying the embedded content in a course.

- A humanities course could result in simultaneous credit, since English language arts and social studies learning expectations may be embedded in the course.
- Career-technical education's Human Anatomy and Physiology course in the Allied Health pathway could garner simultaneous credit, since anatomy and physiology content is embedded in the course.
- There is embedded biology content in the Animal and Plant Science course that is part of Agribusiness and Production Systems pathway.
- Students can meet the financial literacy requirement through several courses in the Business and Administrative Services pathway, Personal Financial Management in the Family Consumer Sciences courses, and the Business Management for Agricultural and Environmental System course in the Agricultural and Environmental System career field.

3. Using Credit Flexibility Policies to Design Unique Learning Experiences and Issue Simultaneous Credit

[Ohio law](#) requires each district to have board of education policy allowing it to award credit based on a student's demonstration of subject area competency. This is known as credit flexibility. The state plan requires that districts provide students the opportunity to earn both partial and simultaneous credit. Each district's credit flexibility plan establishes a process and procedures for using credit flexibility to earn credit. Individual courses of study should provide the guidance for writing credit flexibility plans for those courses.

Districts may develop credit flexibility plan templates based on a specific course of study. Students who want to receive credit for the course by fulfilling the stated requirements submit these plans. Students may use this process in an integrated course experience to earn the simultaneous credit. Districts also may update their credit flexibility plans and policies to include provisions on whole-class or multiple student credit flexibility plans.

This allows students to earn credit, including simultaneous credit. Credit flexibility focuses on student demonstration of learning, not delivery of the course or the method of instruction.

Assessing Student Learning in Integrated Coursework

Participation in integrated courses does not excuse districts from the requirement to administer Ohio's State Tests, including appropriate WebXams, in tested subjects. Schools may choose to administer any state end-of-course tests associated with the integrated courses either at the end of the course or when students complete learning expectations (or earn full credit for the tested course). This may include Ohio's State Tests or WebXams. The state standards these tests assess should inform course design and instructional strategies. When integrated courses result in students taking a state assessment that generates teacher-level Value-Added data, teachers must link to those students accordingly through roster verification.

Additionally, districts and schools may develop student assessments and student surveys locally and use them to evaluate and improve integrated courses. Student performance data from formative and summative assessments, projects, performance-based assessments (including career-technical student organization competitions, if appropriate), state end-of-course tests, work-based learning rubrics and industry-recognized credentialing tests may all be part of your strategy to evaluate student learning, which is an indicator of the course's success.

CAREER-TECHNICAL EDUCATION ARTICULATED CREDIT GUIDELINES

For career-technical education courses aligned to statewide opportunities for articulated credit through the Ohio Department of Higher Education's transfer and articulation guidelines, high schools must continue to follow the program approval and credit awarding process set forth by the Department of Higher Education's articulation and transfer policy. These include:

- Following the guidance documents (Career-Technical Assurance Guide (CTAG) and alignment documents) provided by the Department of Higher Education for each career-technical education course;
- Seeking appropriate approval from the Department of Higher Education through affirmation or review of the secondary course;
- Where it is required for student credit award opportunities, utilize the WebXam or (in a limited number of cases) the appropriate industry standard credentials;
- Clearly displaying a name similar to the career-technical education EMIS subject-coded course on the transcript and post a letter grade for university and college registrar verification purposes.

Note: For statewide articulated credit, a grade of "C" or better is required for awarding articulated college credit. Naming the course on the transcript consistent with the CTAG is preferred for college and university registrar verification.

EDUCATOR LICENSURE FOR INTEGRATED COURSES

Local districts have several options for identifying qualified educators for integrated courses. If courses are integrated across licensure areas, districts may use educators who:

- Hold a valid teaching license, such as a resident educator, alternative resident educator or professional license in the appropriate grade band and each of the areas taught; or
- Hold a standard teaching license with one or more supplemental licenses in the appropriate

- grade band and each of the areas taught; or
- In a co-teaching approach, educators should be licensed appropriately in the respective areas of content. See the Reporting section (page 8) for more information.

Teacher Licensure and Teacher of Record

In most situations, a single instructor will not hold all the licenses needed to deliver the integrated course. Teacher of record and teachers delivering the instruction should be faculty members who have the content expertise to help develop the course, content delivery plan and assessment of student learning. For core academic courses, [state law](#) requires teachers to be Highly Qualified Teachers (HQT); ESSA requires teachers to be properly licensed. You may report more than one teacher of record for integrated courses, and the licenses of both teachers will be evaluated for certification. If one of the teachers of record is properly certified for the subject code reported, no error would be generated for certification. This is especially important for integrated courses that include a career-technical education component because career-technical education teachers must be properly certified to receive career-technical education-weighted funding.

Delivery Models

Scenario 1: An integrated course consisting of a career-technical education course and an academic course with teacher of record being the career-technical education teacher.

Offering academic credit for career-technical education courses often leads to the question whether the teacher is highly qualified. There are three parts to meeting the High Qualified Teacher requirement:

1. A teacher must have at least a bachelor's degree;
2. A teacher must have a certificate or license that is appropriate to his or her teaching assignment;
3. A teacher must be able to demonstrate subject area expertise through a content test, having an academic major, having a master's degree in the subject area or through another approved means.

Consequently, a career-technical education teacher will need to hold a bachelor's degree and a license in the appropriate career-technical education program area. Typically, a career-technical education teacher fulfills the third requirement through the academic major option. This requires a teacher to demonstrate that he or she has earned 30 semester hours or 45 quarter hours of science-based coursework related to the license held, for example, biology, organic chemistry, anatomy and physiology, human genetics, pathology, and human growth and development. If the teacher cannot demonstrate that he or she completed the required hours of science-based classes, the teacher must provide evidence of subject area expertise through one of the other methods. See the other options and methods for meeting subject area expertise in Forms A-E in the [HQT Toolkit](#).

In this scenario, it is important to remember that the earned academic credit is not for a specific academic course or subject code. The assigned credit and associated graduation requirement is the career-technical education course or subject code. In most cases, the career-technical education instructor is licensed only to teach courses within his or her career-technical education program. Therefore, the school or district would specify the type of academic credit and type of graduation requirement that is satisfied by enrollment in a given career-technical education subject code.

Scenario 2: An integrated course consisting of two academic courses in different subject areas.

To meet proper certification requirements, the teacher must be licensed in the multiple subject areas or the school may use a co-teaching approach.

Scenario 3: An integrated course consisting of a career-technical education course and an academic course with teacher of record being the academic teacher.

In this case, career-technical education-weighted funding would not be generated because the teacher of record does not hold the appropriate career-technical education licensure. Adding a co-teacher and reporting him or her as a second teacher of record in EMIS would alleviate this issue and allow career-technical education-weighted funding to be awarded, assuming all other data for the course is reported correctly.

REPORTING OF INTEGRATED COURSES IN EMIS

Course reporting in EMIS

EMIS requires that each course listed in the system be reported with a [single subject code](#). When reporting a district course that integrates content normally reported under two or more EMIS subject codes, districts have several reporting options.

Report a single course in EMIS

All students are enrolled in the same course section in EMIS. Districts can report a single lead teacher or multiple co-teachers for the course. With this reporting approach, districts pick the EMIS subject code using these criteria:

- If the district is delivering an integrated course that includes an approved career-technical education course, the career-technical education subject code associated with the course must be reported, along with the other EMIS course data required for the career-technical education program matrix.
- If the course has a single lead teacher, report the EMIS subject code that corresponds to the content being delivered by this teacher. The EMIS subject code is used to evaluate the licensure of a teacher reported for the course in EMIS.
- If the course has an end-of-course assessment requirement, use a subject code associated with that requirement. This will place the students in the course on the EMIS missing list for the end-of-course assessment if an assessment is not reported.

It is possible that a single integrated course will meet more than one of the criteria listed above. In this case, the district must choose the most important criteria (typically this will be the career-technical education subject code, if one of the courses is career-technical education related) or report multiple courses in EMIS. Regardless of how you report courses in EMIS, each course should be reflected individually on student transcripts.

Report a course in EMIS for each relevant subject code

All students in the course are enrolled in more than one course in EMIS. A course, with the appropriate subject area, teachers and other EMIS information, is reported for each type of content and credit included in the integrated course. Report each course with its share of the total time of instruction and possible graduation credit.

Note that this approach may present challenges based on the way your district's student information system handles course scheduling. Some systems may not allow students to be in more than one course (needed for EMIS) within the same period of the day (may be used in local student information system but not reported to EMIS). In addition, for those taking period attendance, it is important to make sure absences from the integrated course are not double counted in the student information system.

Credit Reporting in EMIS

Regardless of how integrated courses are delivered, report the actual credit awarded to students in the [graduation summary record](#). The areas in which students earned credit will be reported in the Core Area Code (GC060) field. The amount of credit students earn for each subject area is reported in the Core Area Count (GC070) field.

Teacher Certification and EMIS Reporting

All teachers reported for a course are evaluated for proper licensure during EMIS processing. If a district reports more than one lead teacher or co-teachers, accountability calculations will be based on the teacher who teaches the greatest proportion of the course based on the course dates. If co-teachers are responsible for a reported course for the same period of time, if either teacher meets the licensure requirement for the course, it will appear in EMIS as being taught by a properly licensed teacher.

Reporting of Assessments from Integrated Courses

For accountability purposes, test records, not course records, determine which students are included in test-based accountability measures. When students take an end-of-course test as part of an integrated course, the test result should be reported in the [student assessment record](#). Course reporting will not affect how students are counted on graded measures on Ohio School Report Cards. Teachers who instruct integrated courses would participate in roster verification to verify:

1. The grades, classes and subjects they taught;
2. The students who received instruction from them;
3. The months during which students received instruction from them; and
4. The percentage of instructional responsibility they had for each student during the months selected. Data from roster verification is used to develop EVAAS Value-Added composites.

Note: How schools report courses may impact how students appear on EMIS reports. This may include the Assessment Missing Report. If you are integrating a course that normally would have a state end-of-course assessment but are using the subject code for the non-end-of-course aspects of the course (such as with a career-technical education course), the Department will not know to include the student on the Assessment Missing Report based on that course enrollment. In this case, reporting the appropriate end-of-course assessment in EMIS will still include the student in the appropriate accountability measures, but the Department will not be able to remind you to report that record.

SCHOOL FUNDING CONSIDERATIONS

School Districts

For funding purposes, participation in integrated coursework does not exempt a school from complying with the minimum number of hours of instruction each school year. In order to receive the full-time equivalency funding for a student, a student must be expected to be in attendance for the full school day or enrolled in at least 5 units of instruction.

Community Schools

Similar to traditional school districts, participation in integrated coursework does not exempt a community school from complying with the minimum number of hours of instruction each school year (920). However, the 5-credit hour rule does not apply to community schools. If a student attending a community school is not expected to be at the brick and mortar facility for the full school day, the community school may only receive a portion of the full-time equivalency funding for that student.

Career-Technical Education

Career-technical education teachers must be properly certified for courses to receive career-technical education-weighted funding. All additional Career-technical funding requirements still apply.

eSchools

For students participating in online community schools, funding is still based on participation in classroom and non-classroom based learning opportunities.

PROFESSIONAL DEVELOPMENT PLAN

The Ohio Department of Education is working with the Ohio ESC Association to deliver professional development on simultaneous credit throughout the 2018-2019 school year. These dates will be posted on the Ohio Department of Education's website and announced through the Department's e-newsletter, EdConnection.

GLOSSARY

Academic Content Area: A domain of knowledge and skill in an academic discipline including, English language arts, mathematics, science, social studies, fine arts and physical education.

Career-Technical Education: Programs or pathways and courses associated with the 16 Career-Technical Education Career Fields, such as Agriculture and Environmental Systems, Business and Administrative Services, Construction Technologies and Manufacturing Technologies.

Discipline: A field of study.

Integrated Coursework: Courses where aligned content from multiple subject areas form a single course.

Simultaneous Credit: Credit awarded for multiple subject areas through an integrated coursework experience.

Career Field: A group of occupations and industries related by skills or products. Within each career field, there are pathways that correspond to a collection of courses and training opportunities to prepare students for a given career.

Career Pathway: A sequence of integrated courses and experiences that develop a student's academic, technical and professional skills aligned to his or her area of career interest. Career pathways connect students to one or more credentials, further education or training and prepare students for high-opportunity careers.

Graduation Pathway: [Ohio law](#) created [several pathways for students to qualify for a high school diploma](#) for the classes of 2019 and beyond.