

Course Sequences

Evidence should be considered that illustrates the secondary-postsecondary sequence of courses that reflect the aligned POS. **Documentation should show there is a planned sequence that does not result in any duplication of coursework for a student participating in a POS.** The academic content should show the program of study will enable a secondary student to meet the state’s diploma requirements through the program of study as well as the desired academic content to support the program of study technical content.

At the postsecondary level, the program of study should show the coursework a student will pursue to satisfy the academic general education requirements for a POS-related credential, credential, or degree. An example of a coordinated, non-duplicative progress of courses may be the Career Cluster Plans of Study template. A single Career Cluster Plan of Study template could satisfy documentation for both the alignment of the secondary and postsecondary sectors and illustrate the coordinated, non-duplicated progression of courses. Examples of the Career Cluster Plans of Study can be viewed at www.careerclusters.org.

Non-duplicative sequences of secondary and postsecondary courses within a POS ensure that students transition to postsecondary education without duplicating classes or requiring remedial coursework.

Well-developed course sequences should:

- Map out the recommended academic and career and technical courses in each POS.
- Begin with introductory courses at the secondary level that teach broad foundational knowledge and skills that are common across all POS.
- Progress to more occupationally-specific courses at the postsecondary level that provide knowledge and skills required for entry into and advancement in a chosen POS.
- Offer opportunities for students to earn postsecondary credit for coursework taken during high school.

Course Sequences

Self-Assessment Ranking of Current Implementation Status and Importance to Your Implementation

Rank your development and implementation progress for Course Sequences according to the measurement criteria listed. Determine the level that most closely aligns with the progress made toward Course Sequences implementation. The self-assessment is intended to be an authentic gauge of actual implementation. Results from the self-assessment can be used to target areas for technical assistance and professional development. An analysis of the level of importance can assist in establishing the priority and possible timeline for implementing technical assistance and scheduling professional development.

| Implementation Characteristics | Current Status | Importance |
|--|--|--|
| The program of study is fully aligned with state academic standards for reading, mathematics, and science. | <input type="checkbox"/> None <input type="checkbox"/> In Progress <input checked="" type="checkbox"/> Operational | <input type="checkbox"/> Low <input type="checkbox"/> Important <input checked="" type="checkbox"/> Critical |
| Courses are articulated to build depth of knowledge and skills without duplication and fully integrate opportunities for students to earn college credit. | <input type="checkbox"/> None <input type="checkbox"/> In Progress <input checked="" type="checkbox"/> Operational | <input type="checkbox"/> Low <input type="checkbox"/> Important <input checked="" type="checkbox"/> Critical |
| The program of study creates a career pathway to prepare students for the transition to postsecondary education. The program of study must include a formal credentialing program, a two-year degree program, or a four-year degree program and is consistent with the student's career goals. | <input type="checkbox"/> None <input type="checkbox"/> In Progress <input checked="" type="checkbox"/> Operational | <input type="checkbox"/> Low <input type="checkbox"/> Important <input checked="" type="checkbox"/> Critical |
| CTE courses in the program of study start broad in secondary and lead to specialization through the educational process. | <input type="checkbox"/> None <input type="checkbox"/> In Progress <input checked="" type="checkbox"/> Operational | <input type="checkbox"/> Low <input type="checkbox"/> Important <input checked="" type="checkbox"/> Critical |
| Overall Status Summary | Current Status | Importance |
| After considering each of the implementation characteristics, please rank: 1) your current status of POS Course Sequences implementation; and 2) the level of importance this element has to your POS implementation. Transfer these rankings to the Self-Assessment Summary to compare the status and importance of this element to the other POS framework elements. | 1 None 2 In Progress <input checked="" type="checkbox"/> Operational | 1 Low 2 Important <input checked="" type="checkbox"/> Critical |

Course Sequences—Implementation Capacity Analysis

Self-Assessment Reflection and Action Planning

In the section below, identify your current capacity assets in the area of **Course Sequences** by responding to the question prompts. Give equal analysis to local capacity barriers, items of critical importance, and steps needed to remedy these capacity concerns.

| State or Local Self-Assessment | Items of Critical Importance/Action Steps |
|---|---|
| <ul style="list-style-type: none"> • What’s working well that is worth keeping? <ul style="list-style-type: none"> • Alignment of LEA CTE curriculum to careerclusters.org industry based knowledge and skills statements. • Creation of construction pathway templates that illustrate the “broad to narrow” RPOS framework including course descriptions based on knowledge and skills, not typical “marketing” terminology. • Moving the student planning process into the middle school arena so students enter high school having identified a cluster of interest and a “first-cut” high school to college plan. • Use of the Montana Career Information System (MCIS) as the tool that students can use for interest surveys, career planning, and creating a six year pathway, known as their Montana Achievement Plan (MAP). The MAP is available to students to work with throughout their high school career, college, and on into the workforce. • Integration of math into the construction pathway. Math becomes part of the construction pathway in three ways: <ul style="list-style-type: none"> • NRCCTE Math-In-CTE, identification and teaching of embedded math principles in all courses • Applied math illustrated by the Geometry in Con- | <ul style="list-style-type: none"> • What will be new or needs to be revised? <ul style="list-style-type: none"> • Full implementation of Math-in-CTE throughout the construction curriculum at all schools. • Using MCIS for middle school interest surveys and high school planning for all LEA schools. • Greater use of MCIS and interest assessments with freshmen will help with enrollment in construction pathway courses • Revising the assessments for the state-wide articulation (START) courses CSTN 100 and CSTN 120 to reflect assessing at multiple points in the curriculum. • Bringing in a greater number of instructors at both the secondary and postsecondary level to understand the importance of alignment and postsecondary credit opportunities for high school construction students. • Adding the NRCCTE Literacy-in –CTE to the same classes that use the math-in-CTE process. • What strategies will you use to address items identified as being of critical importance? <ul style="list-style-type: none"> • Working close with the MCIS state administrators to identify how to push MCIS forward and a true, first class web based career planning tool. • Improve the professional development opportunities for more teachers. |

struction/Technical Geometry Class

- Adding a technical math class, taught as a dual-credit class, M111 Technical Math
- What goals do you have to sustain and enhance the level of collaboration among the partners?
 - Further development of the MCIS system for ease of use by students, their parents, teachers and counselors.
 - Adding an on-line, just-in-time oriented pre M111 Technical Math so that students, who, via math skills assessments indicate need for improvement, can learn the skills they need to succeed in the construction pathway without being inundated with concepts they are not interested in.
- What strategies will you use to sustain the engagement of partnership members?
 - Collaborative opportunities for postsecondary to work closer with secondary teachers and administrators in assuring a smooth pathway from secondary into postsecondary that results in lowering the remediation rate and subsequently students who are college ready.
- How will you know if your partnership is being successful?
 - RPOS serves as the model to bring RPOS to the entire state. When both secondary and postsecondary schools look to the RPOS program as the guide and model to pattern RPOS implementation, it will be determined successful.
 - The alignment process will be seen as successful as students enter college prepared for their CTE curriculum without having to waste time on developmental courses.
- Bring more administrators into the process in terms of Principals, Superintendents, Deans, and Presidents.
- What are the indicators you will use to measure your improvement?
 - Enrollment in construction CTE courses
 - Math score improvement
 - Technical Skills attainment improves
 - More students graduating from high school and entering college in the construction field without needing remedial courses.
- How will you know if you are successful? And when?
 - Feedback from employers and advisory boards notes improvement in students.
 - Students graduating from two-year construction programs able to get jobs in the construction industry.\
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