



Credit Options: Applied Academics/ Academic Credit through CTE Courses

What is Applied Academic Credit?

Applied Academic Credit is academic credit that is awarded through a career technical education course. Applied academics can occur in a variety of contexts that incorporate standards from one or more academic disciplines and are presented as alternatives to the traditional academic coursework in math, science, and language arts. Career and technical education (CTE), integrated academic courses, project based learning, and other examples of applied academics are alternative delivery models for academic content. Applied academic credit can be set up as an entire course, a project, integrated instruction, or some combination of these. No matter the form applied academics assumes, there is some level of collaboration, curriculum planning, and assessment that should take place in order to assure that academic content is both relevant and aligned to standards.

Applied academic credits enhance the relevance of education for students and give students the opportunity to use academic content and demonstrate academic proficiency in real-world, career based situations. Applied academic credits also allow smaller districts to offer a variety of meaningful learning opportunities efficiently by combining standards from multiple courses. Applied learning also allows schools of any size to create opportunities for students to acquire knowledge and skills in contexts that immerse the students in real-world contexts.

Interdisciplinary Learning Experiences

Through Applied Academic Credit, educators can provide interdisciplinary learning experiences for students to apply their knowledge and skills for the purpose of measuring a student's level of proficiency. For example, as a part of a Career and Technical Education course in Automotive Technology students could earn Science credit. Other examples of Applied Academic Credit could include the following:

Examples of Applied Credit include:

- Agriculture includes significant biology content including instruction in plant and animal sciences with applications of genetics, cell structure, and plant physiology. Topics are often learned through designing experiments.
- A course from a Culinary Arts program may award credit in Health, when students study biological contamination, and methods of preserving foods and other health related topics, chemical relationships involved.
- Accounting courses that have projects that enlist all aspects of business math is often used to award math credit.
- Geometry credit can be awarded for an appropriate number of terms of drafting.

Requirements for Implementation

1. Crosswalk standards taught in the academic course and the career technical education course. Teachers from both the academic area and the CTE area need to be involved¹.
2. Using appropriate Oregon Content Standards, Oregon Skill Sets, or other state- or nationally-recognized standards, review the applied academic course, instructional materials, and assessment strategies to ensure they include substantial academic content.
3. Determine the amount of academic credit that should be offered based on the academic standards explicitly addressed in the course and if any additional instruction is necessary.
4. Plan ways for students to meet all content expectations using supplemental materials if necessary. Additional methods could include but are not limited to online courses, tutorials, or projects.
5. Select appropriate collections of evidence to indicate that learning has happened. The options for collections of evidence allow for deeper, authentic learning while taking into account the learner's skills and interests, thereby fostering a sense of ownership over their learning experience. These can include the following:
 - Collections of Evidence (portfolios)

¹ Teachers of both CTE and other content are involved in awarding credit which may require credit to be awarded by someone other than the CTE teacher. Consult TSPC, collective bargaining agreements, and district policy for clarity.

- Reports, journals, and/or reflections
- Summary and documentation of a project related to school, a student organization, or a workplace activity, evaluation, and documentation of a workplace activity
- Summary and documentation of a community-based project related to a community problem or need
- Work Sample or other evidence from a performance assessment (e.g., validated Technical Skills Assessment, industry assessment such as would be provided by Adobe, Microsoft, American Welding Society (AWS), or the National Institute for Metalworking Skills (NIMS))
- Technical or research report with documentation of work and reflection
- Reflection piece or personal statement accompanied by a sample of work
- Storyboard, artwork, photo collections, or a PowerPoint presentation accompanied by a description of the work
- Video or audio presentation

6. Evaluate the learning process using a robust process such as an ODE- or district-approved scoring rubric.

These approaches give students the opportunity to use academic content in real-world situations and demonstrate academic proficiency. Students who receive credit through integrated and applied courses still complete all of the high school credit requirements at the same level of performance as students following more traditional approaches.

Transcribing Credits

Credits earned by way of Applied Academics are versatile. They can be transcribed as Career and Technical Education credit such as Technical Math or Applied Science. They also can be transcribed as core academic credit such as Geometry or Biology. The decision should be made locally and in cooperation with the student so that the result addresses both completion requirements and the student's longer-term career and college goals.

Resources

Case studies of schools offering applied academic credit: <https://www.oregon.gov/ode/learning-options/CTE/resources/Documents/appliedacademiccasestudybrief.pdf>

Lane ESD Credit Equivalency Pilot Project: Summary Report

<https://www.inflexion.org/lane-esd-credit-equivalency-pilot-project-summary-report/>