



## Secondary CTE Biotechnology

Applicant

Legal name:

Date:

Requirements

**Applicants must meet both content knowledge and occupational experience requirements.**

### Content Knowledge (Applicants must have A or B):

- A. 24 semester hours of related postsecondary coursework verified on an official transcript to include a minimum of three (3) semester hours of content coursework in the area listed as **REQUIRED** below, and 21 semester hours of content related coursework from the areas listed as **RELATED** in the table below. **OR**
- B. Applicants who provide a valid and current state or national industry license or certification in the appropriate occupational area (e.g., histotechnician/technologist, medical technologist, medical lab technician, biomedical clinical technician, quality assurance technician, quality control technician) may have the content coursework waived by the Colorado Department of Education.

### Occupational Experience (Applicants must have 1, 2 or 3):

*Credit for student teaching (up to 800 hours) in the content area may be applied to either occupational or teaching experience*

1. If you hold a bachelor's or higher degree: 2,000 hours of verified occupational (non-teaching) experience in the content area **OR**
2. If you hold less than a bachelor's degree: 4,000 hours of verified occupational (non-teaching) experience in the content area **OR**
3. Three (3) years' verified teaching experience in the content area (full-time is defined as 51% or more of a teaching schedule dedicated to teaching in the content area).

Content coursework	Coursework	Semester Hours
<b>REQUIRED (3 semester hours required)</b>		
Introduction to biotechnology		
<b>RELATED (21 semester hours required)</b>		
Laboratory safety/management		
Molecular biology <i>with lab</i>		
Biochemistry		
Genetics		
Chromatography		
Organic chemistry <i>with Lab</i>		
DNA techniques		

**Total semester hours (24 semester hours required):**

Up to a maximum of six (6) semester hours of professional development may serve in lieu of coursework in the "related content coursework" section above and must be documented within the application. (15 contact hours = 1 semester hour)

**Note: Initial (three-year) CTE authorizations cannot be renewed and always include mandatory CTE coursework assigned at the time of issuance. You will be notified by CDE via email of all required coursework that is needed to advance to a professional (five-year) CTE authorization. Please do not enroll in coursework until you receive the notification from CDE.**