

BIOSCIENCE 41.0100.00

Program Description, Industry Credentials, Coherent Sequence, and Teacher Certification Requirements

PROGRAM DESCRIPTION

The **Bioscience** program prepares individuals to apply scientific principles and technical skills in support of biologists and biotechnologists in research, industrial and government settings. The **Bioscience** program includes instruction in fermentation technology, cell culturing, protein purification, biologic synthesis, assaying and testing, quality control, industrial microbiology, bioprocessing, chromatography and bio separation, genetic technology, laboratory and hazardous materials safety, computer applications, and test equipment operation and maintenance.

The **Bioscience** program is designed and delivered as a coherent sequence of school-based and work-based supervised learning. The Professional Skills developed by business and industry leaders across Arizona are integrated throughout the program. The **Bioscience** students develop leadership, social, civic, and career skills through participation in the Career and Technical Student Organization HOSA (Future Health Professionals).

The **Bioscience** instructional program prepares students for entry-level employment, further training, and/or post-secondary education for these and other occupations: Laboratory Technician, Research Technician, Biological Science Technician, and Research/Lab Aide

INDUSTRY CREDENTIALS

Review the [Current CTE Credential List](#) for approved A-F CCR and are CTED eligible for the **Bioscience** instructional program.

COHERENT SEQUENCE

41.0100.10 - Bioscience I, **and**

41.0100.20 - Bioscience II, **and program may elect to add:**

41.0100.30 - Bioscience III, **or**

41.0100.40 - Bioscience IV, **or**

41.0100.75 - Bioscience - Internship **or**

41.0100.80 - Bioscience – Cooperative Education

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TEACHER CERTIFICATION REQUIREMENTS

The instructor must be ADE/CTE certified in one of the following Certificates:

SCTHC	Standard Career and Technical Education Health Careers
SSCTEHC	Standard Specialized Career and Technical Education Health Careers
SSCTEHC	Standard Specialized Career and Technical Education Health Careers
SCTA	Standard Career and Technical Education Agriculture
SSCTEA	Standard Specialized Career and Technical Education Agriculture
SCTIET	Standard Career and Technical Education Industrial and Emerging Technologies
SSCTEJET	Standard Specialized Career and Technical Education Industrial and Emerging Technologies

- Note:
- Bioscience 41.0100.75 (Internship) does not require a CTE Teacher to have a Cooperative Education Endorsement (CEN).
 - Bioscience 41.0100.80 (Cooperative Ed.) requires CTE Teacher to be appropriately certified for the program and to have a Cooperative Education Endorsement (CEN).