

TOPIC: RECOMMEND APPROVAL OF BACHELOR OF SCIENCE IN BIOCHEMISTRY AT METROPOLITAN STATE UNIVERSITY OF DENVER

PREPARED BY: IAN MACGILLIVRAY, ASSOCIATE DEPUTY DIRECTOR OF ACADEMIC AFFAIRS

I. SUMMARY

This item recommends approval for Metropolitan State University of Denver (MSU Denver) to offer a Bachelor of Science in Biochemistry degree.

II. BACKGROUND

The Colorado Commission on Higher Education's role and responsibility in the review of new academic programs at institutions operating under a performance contract is limited to review for fit with statutory role and mission, per §23-5-129(6)(b), C.R.S.

OVERVIEW OF PROPOSED PROGRAM

The following is summarized from the institution's proposal:

The Bachelor of Science in Biochemistry provides the practical knowledge and skills for advanced study and careers in biochemistry, chemistry, molecular biology, genetics, pharmaceuticals, and biotechnology. Biochemistry is by its nature an interdisciplinary area of study. The required coursework reflects that reality, offering a complete education in the biochemical, biomedical, and technical fields including courses in organic chemistry, physical chemistry, analytical chemistry, biochemistry, biology, cell and molecular biology, genetics, and physics.

Additional information on this proposed degree, unrelated to fit with statutory role and mission, is attached (Appendix A).

ROLE AND MISSION SUPPORT

This degree supports MSU Denver's statutory role and mission, which states:

There is hereby established a university at Denver, to be known as Metropolitan state university of Denver, which shall be a comprehensive institution with modified open admission standards at the baccalaureate level; except that nontraditional students at the baccalaureate level who are at least twenty years of age shall only have as an admission requirement a high school diploma, a GED high school equivalency certificate, or the equivalent thereof. Metropolitan state university of Denver shall

offer a variety of liberal arts and science, technical, and educational programs. The university may offer a limited number of professional programs. In furtherance of its role and mission, Metropolitan state university of Denver may offer master's degree programs that address the needs of its urban service area. C.R.S. §23-54-101

III. STAFF ANALYSIS

Pursuant to Colorado Revised Statutes 23-5-129(6)(b), department staff finds that the institution's proposed degree is consistent with the institution's statutory role and mission. The program was approved by MSU Denver's governing board at its April 4, 2014 meeting. MSU Denver confirms the degree meets gtPathways requirements.

IV. STAFF RECOMMENDATION

Staff recommends that the Commission approve Metropolitan State University of Denver's proposal to offer a Bachelor of Science in Biochemistry degree.

STATUTORY AUTHORITY

C.R.S. §23-5-129 Governing boards - performance contract - authorization – operations

(6) While operating pursuant to a performance contract negotiated pursuant to this section, the governing board of a state institution of higher education:
(b) Need not consult with nor obtain approval from the Colorado commission on higher education to create, modify, or eliminate academic and vocational programs offered by the institution, so long as such creations, modifications, and eliminations are consistent with the institution's statutory role and mission. Institutions shall submit information to the department demonstrating that the creation or modification of an academic or career and technical education program is consistent with the institution's statutory role and mission. The Colorado commission on higher education shall have the authority to override the creation or modification of an academic or vocational program if the change made by the governing board is inconsistent with the institution's statutory role and mission.

APPENDIX:

Appendix A: Additional Information

APPENDIX A: ADDITIONAL INFORMATION

This additional information is unrelated to the proposed degree's fit with the institution's statutory role and mission. The following is summarized from the institution's proposal:

EVIDENCE OF NEED

Colorado's bioscience industry creates 100,000 direct and indirect jobs with anticipated growth of 66.7% for biomedical engineers and 35.8% for biochemists. Colorado ranks 12th nationally in the emerging life science cluster; approx. 375 biochemistry patents were awarded in Colorado from 2004-2009. As of fall 2012, thirty MSU Denver students were dual majors in Biology & Chemistry and 308 had major-minor combinations; of 173 Biology/Chemistry majors surveyed, 80% had taken or planned to take biochemistry courses and 30% expressed strong interest in pursuing Biochemistry degrees. The department of Chemistry is American Chemical Society accredited and designed the Biochemistry major to align with American Society for Biochemistry and Molecular Biology curriculum recommendations.

DUPLICATION

Department staff confirms that a search of the SURDS database revealed baccalaureate degrees in biochemistry at Colorado State University, University of Colorado Boulder, and University of Colorado Colorado Springs.