

TOPIC: RECOMMEND APPROVAL OF BACHELOR OF APPLIED SCIENCE AT COLORADO MOUNTAIN COLLEGE

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I. SUMMARY

This item recommends approval for Colorado Mountain College (CMC) to offer a Bachelor of Applied Science (BAS) degree. Senate Bill 10-101 amended §23-71-102(1), C.R.S. to read, "...Colorado mountain college, in addition to its mission as a junior college, may also offer no more than five baccalaureate degree programs as its board of trustees determines appropriate to address the needs of the communities within its service area..."

II. BACKGROUND

COMMISSION AUTHORITY

The Commission's role and responsibility in the review of new baccalaureate programs at Colorado Mountain College is defined in §23-71-133(1), which states that the Commission shall make its determination based on the following criteria:

- (a) Whether Colorado Mountain College can demonstrate workforce and student demand for the baccalaureate degree program by providing data;
- (b) Whether Colorado Mountain College can demonstrate regional and professional accreditation requirements, when applicable, and compliance with those requirements as deemed appropriate at both the institutional and program levels;
- (c) Whether Colorado Mountain College can demonstrate that its provision of the baccalaureate degree program is the most cost-effective method of providing the baccalaureate degree program in its service area; and
- (d) Whether Colorado Mountain College can provide a cost-benefit analysis showing that the additional baccalaureate degree program will not create a negative impact for the college or require additional state-appropriated moneys to operate.

III. DEMONSTRATION OF COMPLIANCE WITH 23-71-133(1), C.R.S.

The following is summarized from CMC's proposal:

OVERVIEW OF PROPOSED PROGRAM

The Bachelors of Applied Science (BAS) is designed to prepare individuals as managerial and supervisory personnel in a variety of professions. The program provides a career and educational pathway for students who have earned an Associate of Applied Science (AAS) degree in a career or technical education (CTE) field from an accredited institution of higher education. By building on technical specialties and general education courses and combining them with upper division coursework, students will acquire management, supervision and leadership skills. The goal of the BAS team was to use as many courses as possible in the existing Bachelor of Science in Business Administration (BSBA) and Bachelor of Arts in Sustainability Studies (BASS) degrees. This will strengthen enrollments in the existing degrees and provide options for students.

DEMONSTRATION OF WORKFORCE AND STUDENT DEMAND

A survey conducted in 2013 by an independent firm, Interact Communications, revealed that of 64 business and industry respondents, most were strongly in favor of having a more highly-educated pool of potential employees to hire from and are more likely to hire those with a bachelor's degree than those with an associate's degree or other job training. The Bachelor of Applied Science (BAS) will contribute to the economic development within the local economy, improve the lives of individuals and strengthen the cultural and social capital of the communities through the following goals:

1. Increase opportunities for current students and graduates of AAS degrees in the CMC district and across the state to attain management-level responsibilities and earn higher lifelong wages through baccalaureate-level training and education;
2. Produce individuals with bachelor's level supervisory and managerial skills to enhance the occupational/technical preparation provided by their associate degree programs, which will prepare students for supervisory and management opportunities within their technical field;
3. Provide a rigorous, innovative curriculum that encompasses upper division professional coursework and general education courses to fine-tune important skills, including public speaking, communication, critical thinking, conflict resolution, financial accounting, project management, collaboration, workplace diversity, business management, public administration and organizational problem-solving;
4. Provide opportunities for students holding an Associate of Applied Science degree to complete a bachelor's degree in a reasonable amount of time;
5. Gain practical experience that combines the AAS degree's technical skills with upper division coursework through a Capstone project;

The college's service area currently lacks a physical institution that offers a BAS degree for area residents who have completed an Associate of Applied Science (AAS) degree, are looking for job advancement that a bachelor's degree can provide and want to attend college locally. In the same survey referenced above, current students (the primary audience for this

proposed degree) indicated they were not willing to transfer to other colleges to obtain a BAS, but that they would be more interested if CMC offered it locally. At present, over 40% of the students at CMC are enrolled in an Associate of Applied Science degree program. CMC AAS graduate respondents were mostly concerned with the additional time that they would have to invest into acquiring a BAS and the career advancement possibilities, though most are convinced that the additional time and cost of acquiring a BAS would be helpful in improving their employability and chances for career advancement.

There are potentially two secondary audiences: One audience will be students who have graduated with applied science degrees from other community colleges in Colorado, and the second audience will be our district community members working in various business and industry environments, such as hospitality and resorts, hospitals and public service industries (e.g., fire districts, police departments, National Forest Service, emergency medical services, etc.). Many of these employees need a bachelor's degree to be eligible for promotions and advancement. The BAS degree is a perfect fit. Additionally, secondary students can use existing pathways from high school to AAS degrees and into the BAS. Plans of study can be developed to provide students a road map from Secondary CTE programs to the AAS and into the BAS. The total number of completed Current Student Surveys was 694. The total number of AAS Degree Alumni Surveys was 31.

DEMONSTRATION OF COMPLIANCE WITH REGIONAL AND PROFESSIONAL ACCREDITATION REQUIREMENTS

Accreditation at CMC is on-going to meet its mission and help students succeed. Colorado Mountain College is accredited by the Higher Learning Commission (HLC). The BAS has been submitted to the HLC for approval. CMC has existing faculty who are academically qualified to teach upper division courses in this degree program. All faculty members are appropriately credentialed, and these credentials are housed at the college's Central Services.

DEMONSTRATION THAT THIS PROVISION OF THE PROGRAM IS THE MOST COST-EFFECTIVE METHOD OF PROVIDING THE PROGRAM IN CMC'S SERVICE AREA

Information from the work of the strategic planning consultants hired by the Board of Trustees in spring 2013 and the Strategic Planning Steering Committee will be used to create the new 2014-17 strategic plan for the college by December 2013. It is expected that this plan will achieve alignment with our AQIP (Academic Quality Improvement Program) Projects, one of which is an Action Project on "Improving the Bachelor's Degree Implementation", the college's budget alignment, existing facilities and college-wide Information Technology plans. The further development and implementation of the BAS will be incorporated within this planning process. The current strategic plan and its accompanying college-wide balanced score card has been helping the college measure its progress on key performance indicators related to student learning, employees, partnerships, enrollment, programs and college finances. Strategic planning has fully supported all current programs at the College and is

expected to create and foster support for the proposed BAS degree. It is the beginning process by which any new program or policy is implemented and is a way to break down and look at the big picture and plan for the future, in a calculated, systematic way. By monitoring very closely not only key performance indicators (KPIs) of success and signature learning outcomes (SLOs), but also the financial piece, the College's use of the balanced score card will ensure the sustainability of the BAS program. With year-to-year analyses (making trending available), CMC will be able to determine, each fiscal year, whether or not any changes need to be made to program implementation, the budget, etc., and if so, specifically what those changes are. In a cyclical manner, strategic planning is then used to determine the importance of the changes, how to make those changes, etc. We believe that the new planning process and monitoring with a balanced score card will assure that the college is fiscally responsible in sustaining the BAS program.

COST-BENEFIT ANALYSIS SHOWING THE PROGRAM WILL NOT CREATE A NEGATIVE IMPACT FOR CMC OR REQUIRE ADDITIONAL STATE-APPROPRIATED MONEYS

The Business Office developed a model to reflect the impact of key variables (e.g., FTE, tuition rate, ratio of full-time and part-time faculty and staff) on the projected net income attributed to the program. The Financial analysis assumes that after the first year when it is anticipated to ramp up, there will be a steady 3% growth in FTE annually. Tuition revenue is expected to increase 9% in 2014 and 7% every other year thereafter in the upper division courses. A lower cost program such as the BAS helps to subsidize higher cost programs and increase enrollment in courses common to the BSBA and BASS degrees.

The college maintains healthy reserve funds (approximately 25% of its budget), but the extremely low cost of implementing the proposed program should not tax the resources of the institution. The Fiscal Impact Team has laid out the revenue/expense, staffing and enrollment projections for the first five years of operation, anticipating 3% growth in FTE annually. The college has set funding aside to specifically meet the needs of the bachelor's degrees. The Business Office will provide additional budget information upon request. The college has existing faculty in place who will teach in the BAS. Additionally, the college has added support positions for the bachelor's degrees in student and academic affairs (e.g., financial aid, reference librarian, and customer support/help desk and career services).

Additionally, in order to be approved by the Higher Learning Commission (HLC) to offer bachelor's degrees, CMC created a sustainable financial model. This model was provided to HLC reviewers in April 2011. The bachelor's finance team continues to provide regular updates to the college's Board of Trustees. The comprehensive model includes all costs, FT faculty, adjunct faculty, materials, supplies, equipment and professional development. On the revenue side, the college conservatively looked at the anticipated enrollments. To closely track the impact of bachelor's degrees at CMC, the college set up a \$5 million Revolving Fund from which bachelor's degrees could be shown to break even. At the current rate of

enrollment growth, the college's two existing degrees, Business and Sustainability, break even in the 7th year with \$3.1 million left in Revolving Fund.

Senate Bill 10-101 granted CMC the authority to offer up to five bachelor's degrees. CMC has been approved by the State of Colorado's Department of Higher Education to offer up to five bachelor's degrees. CMC selected the five degrees to best meet the needs of students in a financially responsible way. As in most college's financial models, the lower cost programs such as a BAS will help pay for the higher cost program.

In the financial analysis presented to the CMC Board of Trustees in June 2013, Table 1 below shows the financial model assumptions that were presented for In-District (ID) enrollments, In-State (IS) enrollments, and Out-of-State (OS) enrollments. With these assumptions, the financial model shows that with the addition of three new programs, it is anticipated that breakeven will occur in year 10. At that point in time, the bachelor reserve balance in the Revolving Fund is projected to be \$2,193,593.

Table 1: Financial Model

	BSBA	BASS	BSN	TE	BAS
Residency Mix	ID 81% IS 8% OS 11%	ID 81% IS 8% OS 11%	ID 90% IS 9% OS 1%	ID 85% IS 10% OS 5%	ID 81% IS 8% OS 11%
Tuition Growth Rate	100/200 Level: 7% every other year starting in 14/15 300/400 Level: 9% in 14/15 and 7% every other year thereafter				
Differential Tuition	None	None	\$40 per credit	\$25 per credit	None
FTE Growth Rate	2% annually through 15/16 3% annually thereafter		Program Projected FTE reduced by 25%, 3% growth annually	Program Projected FTE reduced by 25%, Ramp up growth over six years	Ramp up growth over first three years, then 3% annually thereafter
Full-Time Faculty	2	2	2	2	None
Program Specific Staff	None	None	Admin Assistant (FT)	Program Director (FT) & Admin Assistant (PT)	None
Foundation Contribution	None	None	\$559,276 grant over 2 years	\$500,000 spread over 5 years	None
Staff Positions	1 Fin Aid Specialist, 1 Academic Credentials Evaluator, 1 Admissions Rep, 1 Instructional/Reference Librarian, 1 Career Services Director, and 1 Customer Support Specialist				

*In the top row, BSBA = B.S. Business Administration (approved in March 2011), BASS = B.A. Sustainability Studies (approved in March 2011), BSN = B.S. Nursing (this proposal), TE = Bachelor of Interdisciplinary Studies with Teacher Education (proposed), and BAS = Bachelor of Applied Science (proposed).

Table 2 below shows FTE projections for CMC's five bachelor degree programs. Year 1 is 2011-12. The FTE for Years 1, 2 and 3 are actual numbers.

Table 2: FTE Projections for CMC’s Five Bachelor Degrees

	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr10
B.S. Business Admin	36	111	110	112	114	117	121	125	128	132
B.A. Sustainability Studies	66	171	168	171	175	180	185	191	197	203
B.A. Interdisc. Studies w/TE					18	41	48	57	68	72
Bach. Applied Science					30	63	66	70	72	74
B.S. Nursing				20	47	48	49	51	52	54

Faculty: At this time, no additional full-time faculty members will be required for the program. Qualified existing full-time and adjunct faculty in the AAS, BSBA, and BASS degrees will teach many of the courses. Due to the rich pool of adjuncts available for the college to draw upon from our communities, we will be able to support the program. Existing faculty workloads will be impacted by increased class sizes. There will be a commensurate increase in faculty advising workload for existing AAS full-time faculty. This initiative will impact qualified existing faculty who choose to add upper division courses to their workload. The college will backfill, as needed, any existing faculty workload.

Table 3 below shows net revenue data for all five bachelor degrees. CMC has actual data for years 1, 2 and 3. Subsequent years are based on very granular cost and revenue analysis. All values are in thousands. Year 1 is 2011-12 school year. The BAS is shown to start in Year 5, the 2015-16 academic year. The values can jump substantially due to the application of foundation gifts to various programs. The break-even net revenue value funds is in Year 10, the 2020-21 school years. At first glance, it appears the break-even is in Year 8, but the proposed Bachelor of Interdisciplinary Studies with Teacher Education incurs some costs in Year 9.

Table 3: Net Revenue in Thousands for all 5 Bachelors

	Yr1	Yr2	Yr 3	Yr 4	Yr 5	Yr6	Yr7	Yr8	Yr9	Yr 10
B.S. Business Admin (approved)	-197	-184	-248	-142	-114	-51	-46	-6	-2	41
B.A. Sustainability Studies (approved)	-220	-132	-175	21	69	173	167	219	230	302
B.A. Interdisc. Studies w/TE (proposed)	-16	-38	-92	-25	-122	-236	-193	-180	-261	(242)
Bach. Applied Science (proposed)	0	-30	0	-5	48	130	133	166	194	204
B.S. Nursing (proposed)	0	0	0	29	-256	-190	-196	-192	-200	(195)
Total	(236)	(200)	(267)	20	(261)	(123)	(89)	13	(37)	69

<i>Foundation Gifts</i>	0	0	258	400	100	100	100			
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*Yr 1 = 2011-12; Yr10 = 2020-21

Library: Library Collections reviewed the BAS proposal and indicated that the program will be served by the libraries’ online and print collection that is already in place to support BSBA, SUS, and two-year business programs. Additional funding will be allocated to build up the libraries’ collection to support the management and organizational development courses. Allocated funding will consist of \$15,000 seed money and a yearly budget increase of \$2,000 for online database and periodical subscriptions.

Facilities: Long-range planning is accomplished via the Facilities Planning Process. CMC is presently revising the Facilities Planning Process, which will include more focus on “Existing Facility Utilization and Efficiency.” This may result in major building remodels or new buildings, due to obsolescence driving replacement, particularly in the heating, air conditioning, and lighting of our structures. Considerations of new program needs or business needs requiring dedicated or specialized space (e.g., Compressed Natural Gas [CNG] facilities) will be included in the revised Facilities Planning Process. Short-term planning is done in several ways, including the Minor Maintenance Annual Process and class scheduling process, which is provided to the Facilities Department each semester to determine current and future facility needs.

CMC has the basic infrastructure in place to offer the BAS and anticipates little impact on facilities at our current utilization rate, which is less than 70%. These new, modern, fully-equipped, intimately-sized campus locations have SmartBoards in 80% or more of their classrooms (depending on the location) and require faculty to train to use them as part of our faculty orientation process. Campuses also have computer labs, mobile computer labs to be moved into classrooms of choice, IVS-equipped classrooms, and a resource bank that includes electronic tablets, pens, etc. With the availability of expanded hours and days, no campus location would be over utilized for classroom space. However, there are factors that need to be considered, such as the faculty demands: If the faculty is adjunct, the impact would be absorbed within the campus current adjunct office space.

This recommendation is based on a comprehensive review of course offerings at campuses, the feasibility study and research completed by the BAS team (consisting of faculty and staff), as well as conversations and feedback with other faculty, the College Leadership Team (CLT), the CMC Quality Team (QT) and the Academic Program & Resource Committee (APRC). The strength in this degree is that the college has existing faculty in place to begin our efforts. It is expected that enrollments will expand with these delivery options. The Canvas learning management system generates a course shell for each section of each course to assure online course support for students and faculty. A flexible hybrid model also allows for consolidation if enrollment should ever falter.

IV. STAFF ANALYSIS

On June 17, 2013, the CMC Board of Trustees approved the Bachelor of Applied Science (BAS) to be one of the five baccalaureate degrees the college offers. The proposed BAS degree meets the 120 credit hour cap. The only other public institution to offer a BAS degree is Colorado Mesa University. This degree would provide more transfer opportunities for students currently enrolled in or who have completed Associate of Applied Science degrees.

GT PATHWAYS WAIVER

CMC is also requesting a waiver from having to include the thirty-one credits of gtPathways curriculum as the general education core. The AAS degrees on which the BAS is built are not traditional Liberal Arts & Sciences degrees and, as such, are not required to contain the gtPathways curriculum. CMC faculty has created general education cores for each AAS degree that do not “map” well with the structure of the gtPathways curriculum. The general education core for the BAS is in line with the gtPathways competency requirement that ensures “that students demonstrate competency in reading, critical thinking, written communications, mathematics, and technology” [23-1-125(3), C.R.S.]. This degree, as designed, meets state requirements, even though it does not require the entire gtPathways curriculum.

V. STAFF RECOMMENDATION

Staff recommends that the Commission approves the Bachelor of Applied Science (BAS) degree at Colorado Mountain College with a waiver not to have to include the gtPathways curriculum in the degree.

VI. SUPPLEMENTAL INFORMATION

Copies of all relevant materials are on file in the Academic Affairs Division and are available upon request.

STATUTORY AUTHORITY

C.R.S. §23-71-133 Junior colleges - Approval of baccalaureate degrees