

# MontanaTech

## Year Three Self-Evaluation Report



# Northwest Commission on Colleges and Universities

## Year Three Self-Evaluation Report



**Montana**Tech

Submitted by  
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Chancellor

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## **INSTITUTIONAL OVERVIEW**

Montana Tech of The University of Montana (Montana Tech) traces its roots to the enabling act that granted statehood to the people of Montana. In that act, the United States Congress set aside 100,000 acres to establish and maintain a school of mines. In 1900, the Montana State School of Mines opened its doors. In 1965, the school underwent a name change to the Montana College of Mineral Science and Technology. On January 21, 1994, the Board of Regents adopted a plan to restructure the entire Montana University System followed by adoption of a resolution on July 6, 1995 initiating a second phase. This restructuring created the Montana University System and gave the college its new name, Montana Tech of The University of Montana. It also assigned to Montana Tech what had been the Butte Vocational-Technical Center and what is now known as Highlands College.

Montana Tech has evolved into a dynamic institution composed of four schools and colleges: School of Mines and Engineering; College of Letters, Sciences, and Professional Studies; Highlands College; and the Graduate School. Prior to 1951, the college offered Bachelor of Science degrees in only five areas. Today, the institution offers degree programs at the doctorate, masters, bachelor, associate, and certificate levels. The student body presents a national and global snapshot with 41 states and 20 foreign countries represented. The Institution, which now has an approximate enrollment of 2900 students, provides these graduates with the knowledge and skills necessary for successful lives and careers, conducts basic and applied research, and provides related services to the citizens of Montana and beyond.

Montana Tech is a leader in Science, Technology, Engineering, and Mathematics (STEM) education. Montana Tech is one of the few institutions in the United States that maintains a broad spectrum of minerals and energy engineering degree programs that are accredited by the Accreditation Board for Engineering and Technology (ABET). All of Montana Tech's engineering programs are ABET accredited. Moreover, many of Tech's engineering programs are not only unique to the region but may also be one of only a few in the country. For example, Montana Tech is one of only two U.S. schools that offer a B.S. degree in geophysical engineering, one of ten that offer a B.S. degree in metallurgical engineering, one of nineteen that offer a B.S. degree in mining engineering, and one of only twenty that offer a B.S. in petroleum engineering. In addition, Montana Tech also offers non-engineering degree and certificate programs that are not offered by other units of the Montana University System (MUS). These include, but are not limited to, Healthcare Informatics, Professional and Technical Communications, B.S. degrees in both Liberal Studies and Statistics, and the Pre-Apprentice Lineman certificate program. A number of Montana Tech's non-engineering programs have specialized accreditation/certification from entities such as the American Chemical Society (ACS) and The Commission on Collegiate Nursing Education (CCNE), among others.

The campus plays an integral role in education, research, and economic development within the state and region. Tech is strategically positioned within the Montana University System to assist the Montana Board of Regents in addressing their three strategic goals: 1. Access & Affordability: Increase the overall educational attainment for Montana residents; 2. Workforce & Economic

Development: Assist in the expansion and improvement of the economy; and 3. Efficiency & Effectiveness: Improve institutional efficiency and effectiveness. The campus is also home to the Montana Bureau of Mines and Geology (MBMG) whose governmental mandate is to collect and publish information on Montana's geology in order to promote orderly and responsible development of Montana's energy, ground-water, and mineral resources. The MBMG provides these services to the public and a variety of constituents within the private sector, as well as federal, state, and local governments.

Montana Tech has an outstanding faculty. We have full-time core faculty for every degree program. The environment at Montana Tech is one that encourages faculty-student interaction. Undergraduate and graduate students are frequently involved with faculty and staff in research programs. Montana Tech's commitment to research has resulted in significant growth in its funded research over the last several years. The institution's funding base has diversified to include local, state, and national support from the private sector and government.

Montana Tech's world-renowned reputation is based on the successes of over 100 years of graduates in the university's heritage programs in both the extractive engineering fields and in the associated science fields. While the campus continues to receive recognition for its heritage programs, the growth of programs in areas such as Safety/Industrial Hygiene, Business, Energy, and Healthcare characterizes Montana Tech as a truly diversified campus.



## Northwest Commission On Colleges and Universities

### BASIC INSTITUTIONAL DATA FORM

Information and data provided in the institutional self-evaluation are usually for the academic and fiscal year preceding the year of the evaluation committee visit. The purpose of this form is to provide Commissioners and evaluators with current data for the year of the visit. After the self-evaluation report has been finalized, complete this form to ensure the information is current for the time of the evaluation committee visit. Please provide a completed copy of this form with each copy of the self-evaluation report sent to the Commission office and to each evaluator.

To enable consistency of reporting, please refer to the glossary in the 2003

Accreditation Handbook for definitions of terms.

Institution: Montana Tech of The University of Montana

Address: 1300 West Park Street

City, State, ZIP: Butte, Montana, 59701

Degree Levels Offered: ☒ Doctorate ☒ Masters ☒ Baccalaureate ☒ Associate ☒

Other Certificate

If part of a multi-institution system, name of system: Montana University System

Type of Institution: ☒ Comprehensive ☐ Specialized ☐ Health-centered ☐

Religious-based

☐ Native/Tribal ☐ Other (specify) \_\_\_\_\_

Institutional control: ☒ Public ☐ City ☐ County ☐ State ☐ Federal ☐ Tribal

☐ Private/Independent (☐ Non-profit ☐ For Profit)

Institutional calendar: ☐ Quarter ☒ Semester ☐ Trimester ☐ 4-1-4 ☐

Continuous Term

☐ Other (specify) \_\_\_\_\_



**Specialized/Programmatic accreditation:** List program or school, degree level(s) and date of last accreditation by an agency recognized by the United States Department of Education. (Add additional pages if necessary.)

| <b>Program or School</b>                | <b>Degree Level(s)</b> | <b>Recognized Agency</b>                                                                                | <b>Date</b> |
|-----------------------------------------|------------------------|---------------------------------------------------------------------------------------------------------|-------------|
| General Engineering                     | BS                     | Engineering Accreditation Commission of the Accreditation Board for Engineering & Technology (ABET/EAC) | 2010        |
| Geological Engineering                  | BS                     | ABET/EAC                                                                                                | 2010        |
| Geophysical Engineering                 | BS                     | ABET/EAC                                                                                                | 2010        |
| Metallurgical and Materials Engineering | BS                     | ABET/EAC                                                                                                | 2010        |
| Mining Engineering                      | BS                     | ABET/EAC                                                                                                | 2010        |
| Petroleum Engineering                   | BS                     | ABET/EAC                                                                                                | 2010        |
| Industrial Hygiene – On Campus Program  | MS                     | Applied Science Accreditation Commission (ABET/ASAC)                                                    | 2010        |
| Industrial Hygiene – On Line Program    | MS                     | ABET/ASAC                                                                                               | 2010        |
| Software Engineering                    | BS                     | ABET/EAC                                                                                                | 2010        |
| Computer Science                        | BS                     | Computer Science Accreditation Board of Engineering & Technology (CSAC/CSAB)                            | 2010        |
| Nursing                                 | ASRN                   | Accreditation Commission for Education in Nursing, Inc. (ACEN)                                          | 2010        |
| Nursing                                 | BSN-Completion         | Commission on Collegiate Nursing Education (CCNE)                                                       | 2013        |

*Revised February 2011*

**Full-Time Equivalent (FTE) Enrollment** (Formula used to compute FTE: Semester: Undergraduate SCH/12 +Graduate SCH/15)

**Official Fall FTE Student Enrollments**

| <b>Classification</b>   | <b>Current Year Dates: Fall 2013</b> | <b>One Year Prior Dates: Fall 2012</b> | <b>Two Years Prior Dates: Fall 2011</b> |
|-------------------------|--------------------------------------|----------------------------------------|-----------------------------------------|
| Undergraduate           | 2,435                                | 2,369                                  | 2,397                                   |
| Graduate                | 103                                  | 116                                    | 99                                      |
| Professional            |                                      |                                        |                                         |
| Unclassified            |                                      |                                        |                                         |
| <b>Total all levels</b> | <b>2,538</b>                         | <b>2,484</b>                           | <b>2,495</b>                            |

**Full-Time Unduplicated Headcount Enrollment.** (Count students enrolled in credit courses only.)

**Official Fall Student Headcount Enrollments**

| <b>Classification</b>   | <b>Current Year<br/>Dates: Fall 2013</b> | <b>One Year Prior<br/>Dates: Fall 2012</b> | <b>Two Years Prior<br/>Dates: Fall 2011</b> |
|-------------------------|------------------------------------------|--------------------------------------------|---------------------------------------------|
| Undergraduate           | 2757                                     | 2646                                       | 2651                                        |
| Graduate                | 166                                      | 170                                        | 152                                         |
| Professional            |                                          |                                            |                                             |
| Unclassified            |                                          |                                            |                                             |
| <b>Total all levels</b> | <b>2923</b>                              | <b>2816</b>                                | <b>2803</b>                                 |

**Numbers of Full-Time and Part-Time Instructional and Research Faculty & Staff and Numbers of Full-Time (only) Instructional and Research Faculty & Staff by Highest Degree Earned.** Include only professional personnel who are primarily assigned to instruction or research.

Total Number **Fall 2013**

| <b>Rank</b>                           | <b>Full Time</b> | <b>Part Time</b> | <b>Number of <u>Full Time (only)</u> Faculty and Staff by Highest Degree Earned</b> |                 |               |                   |                  |
|---------------------------------------|------------------|------------------|-------------------------------------------------------------------------------------|-----------------|---------------|-------------------|------------------|
|                                       |                  |                  | <b>Other</b>                                                                        | <b>Bachelor</b> | <b>Master</b> | <b>Specialist</b> | <b>Doctorate</b> |
| Professor                             | 33               | 4                |                                                                                     |                 |               |                   | 33               |
| Associate Professor                   | 30               | 2                |                                                                                     |                 | 5             |                   | 25               |
| Assistant Professor                   | 44               | 5                |                                                                                     |                 | 22            |                   | 22               |
| Instructor                            | 29               | 9                | 5                                                                                   | 12              | 10            |                   | 2                |
| Lecturer and Teaching Assistant       |                  |                  |                                                                                     |                 |               |                   |                  |
| Research Staff and Research Assistant | 46               |                  | 1                                                                                   | 10              | 29            |                   | 6                |
| Undesignated Rank                     | 0                | 61               |                                                                                     |                 |               |                   |                  |

**Mean Salaries and Mean Years of Service of Full-Time Instructional and Research Faculty and Staff.** Include only full-time personnel with professional status who are primarily assigned to instruction or research.

| Rank                                | Mean Salary | Mean Years of Service |
|-------------------------------------|-------------|-----------------------|
| Professor                           | \$77,693    | 24.7                  |
| Associate Professor                 | \$65,700    | 10.7                  |
| Assistant Professor                 | \$61,165    | 6.2                   |
| Instructor                          | \$50,435    | 10.1                  |
| Lecturer and Teaching Assistant     |             |                       |
| Research Staff & Research Assistant | \$57,558    | 11.2                  |
| Undesignated Rank                   |             |                       |

**Financial Information.** Complete each item in the report using zero where there is nothing to report. Enter figures to the nearest dollar. Auxiliary and service enterprises of the institution (housing, food service, book stores, athletics, etc.) should be included. The institution's audit materials should be an excellent reference for completing the report.

|                                 |                                        |                   |               |          |
|---------------------------------|----------------------------------------|-------------------|---------------|----------|
| Fiscal year of the institution: | July 1 <sup>st</sup> through June 30th |                   |               |          |
| Reporting of income:            | Accrual Basis                          | <u>Cash Basis</u> | Accrual Basis | <u>X</u> |
| Reporting of expenses:          | Accrual Basis                          | <u>Cash Basis</u> | Accrual Basis | <u>X</u> |

### BALANCE SHEET DATA

| <b>ASSETS</b>                                                                       | <b>Last Completed<br/>FY<br/>Dates: FY 13</b> | <b>One Year Prior<br/>to Last<br/>Completed FY<br/>Dates: FY 12</b> | <b>Two Years Prior<br/>to Last<br/>Completed FY<br/>Dates: FY 11</b> |
|-------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------|
| <b>CURRENT FUNDS</b>                                                                |                                               |                                                                     |                                                                      |
| Unrestricted                                                                        |                                               |                                                                     |                                                                      |
| Cash                                                                                | 9,992,365                                     | 9,621,214                                                           | 8,521,002                                                            |
| Investments                                                                         |                                               |                                                                     |                                                                      |
| Accounts receivable gross                                                           | 860,243                                       | 773,308                                                             | 991,164                                                              |
| Less allowance for bad debts                                                        |                                               |                                                                     |                                                                      |
| Inventories                                                                         | 515,432                                       | 392,680                                                             | 394,046                                                              |
| Prepaid expenses and deferred charges                                               | 205,443                                       | 233,255                                                             | 209,245                                                              |
| Other (Securities lending collateral, Interest receivable, Inter-entity receivable) | 772,748                                       | 1,518,884                                                           | 1,600,006                                                            |
| Due from                                                                            | 19,819                                        | 25,804                                                              | 29,744                                                               |
| <b>Total Unrestricted</b>                                                           | <b>\$12,366,050</b>                           | <b>\$12,565,145</b>                                                 | <b>\$ 11,745,207</b>                                                 |
| Restricted                                                                          |                                               |                                                                     |                                                                      |
| Cash                                                                                | 1,110,754                                     | 1,889,244                                                           | \$ 1,731,301                                                         |
| Investments                                                                         |                                               |                                                                     |                                                                      |
| Other (Account and Grant receivable & Investment receivable)                        | 423,330                                       | 610,059                                                             | 505,143                                                              |
| Due from                                                                            | 869,939                                       | 483,965                                                             | 979,082                                                              |
| <b>Total Restricted</b>                                                             | <b>\$2,404,023</b>                            | <b>\$2,983,268</b>                                                  | <b>\$3,215,526</b>                                                   |
| <b>TOTAL CURRENT FUNDS</b>                                                          | <b>\$14,770,073</b>                           | <b>\$15,548,413</b>                                                 | <b>\$14,960,733</b>                                                  |
| <b>ENDOWMENT AND SIMILAR FUNDS</b>                                                  |                                               |                                                                     |                                                                      |
| Cash                                                                                | 1,174                                         | 1,049                                                               | 1,024                                                                |
| Investments                                                                         | 398,383                                       | 409,444                                                             | 387,543                                                              |
| Other (identify)                                                                    |                                               |                                                                     |                                                                      |
| Due from                                                                            |                                               |                                                                     |                                                                      |
| <b>TOTAL ENDOWMENT AND SIMILAR FUNDS</b>                                            | <b>\$399,557</b>                              | <b>\$410,493</b>                                                    | <b>\$388,567</b>                                                     |
| <b>PLANT FUND</b>                                                                   |                                               |                                                                     |                                                                      |
| Unexpended                                                                          |                                               |                                                                     |                                                                      |
| Cash                                                                                | 3,111,046                                     | 3,046,318                                                           | 2,305,854                                                            |
| Investments                                                                         |                                               | -                                                                   |                                                                      |
| Other (identify)                                                                    | 1,275                                         | 21,105                                                              | 21,556                                                               |
| <b>Total unexpended</b>                                                             | <b>3,112,321</b>                              | <b>3,067,423</b>                                                    | <b>2,327,410</b>                                                     |
| Investment in Plant                                                                 |                                               |                                                                     |                                                                      |
| Land                                                                                | 1,681,255                                     | 1,681,255                                                           | 1,519,005                                                            |
| Land improvements                                                                   | 392,817                                       | 426,241                                                             | 482,583                                                              |
| Buildings                                                                           | 41,199,113                                    | 44,168,105                                                          | 39,981,822                                                           |
| Equipment                                                                           | 5,670,973                                     | 5,799,600                                                           | 5,697,691                                                            |
| Library resources                                                                   | 36,260                                        | 54,270                                                              | 66,097                                                               |
| Other (identify)                                                                    | 1,443,485                                     | 662,292                                                             | 3,795,844                                                            |
| <b>Total investments in plant</b>                                                   | <b>\$50,423,903</b>                           | <b>\$52,791,763</b>                                                 | <b>\$51,543,042</b>                                                  |
| Due from                                                                            | 0                                             | 0                                                                   | 0                                                                    |

|                                                                                                                     |                     |                     |                     |
|---------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|
| Other plant funds (identify)                                                                                        | 0                   | 0                   | -                   |
| <b>TOTAL PLANT FUNDS</b>                                                                                            | <b>\$53,536,224</b> | <b>\$55,859,186</b> | <b>\$53,870,452</b> |
| OTHER ASSETS (BUREAU, STUDENT<br>LOAN FUNDS, RENEWAL AND<br>REPLACEMENT, RETIREMENT OF<br>INDEBTNESS, AGENCY FUNDS) | 9,695,232           | 9,322,722           | 7,986,817           |
| <b>TOTAL OTHER ASSETS</b>                                                                                           | <b>\$9,695,232</b>  | <b>\$9,322,722</b>  | <b>\$7,986,817</b>  |
| <b>TOTAL ASSETS</b>                                                                                                 | <b>\$78,401,086</b> | <b>\$81,140,814</b> | <b>\$77,206,569</b> |

**BALANCE SHEET DATA (continued)**

| <b>LIABILITIES</b>                                                                                                     | <b>Last<br/>Completed<br/>FY<br/>Dates: FY 13</b> | <b>One Year Prior<br/>to Last<br/>Completed FY<br/>Dates: FY 12</b> | <b>Two Years Prior<br/>to Last<br/>Completed FY<br/>Dates: FY 11</b> |
|------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------|
| <b>CURRENT FUNDS</b>                                                                                                   |                                                   |                                                                     |                                                                      |
| Unrestricted                                                                                                           |                                                   |                                                                     |                                                                      |
| Accounts payable                                                                                                       | 966,976                                           | 1,403,572                                                           | 1,085,731                                                            |
| Accrued liabilities                                                                                                    | -                                                 | -                                                                   | -                                                                    |
| Students' deposits                                                                                                     | 61,100                                            | 57,350                                                              | 51,533                                                               |
| Deferred credits                                                                                                       | 1,110,030                                         | 1,123,357                                                           | 1,194,156                                                            |
| Other liabilities (Securities<br>lending liability,<br>Accrued compensated<br>absences, OPEB<br>Implicit Rate Subsidy) | 8,571,880                                         | 7,574,692                                                           | 6,800,450                                                            |
| Due to                                                                                                                 | -                                                 | -                                                                   | -                                                                    |
| Fund balance                                                                                                           | 1,656,064                                         | 2,406,174                                                           | 2,613,337                                                            |
| <b>Total Unrestricted</b>                                                                                              | <b>\$12,366,050</b>                               | <b>\$12,565,145</b>                                                 | <b>\$11,745,207</b>                                                  |
| Restricted                                                                                                             |                                                   |                                                                     |                                                                      |
| Accounts payable                                                                                                       | 119,015                                           | 66,389                                                              | 55,471                                                               |
| Other (Deferred revenue,<br>Inter-entity<br>payables, OPEB Implicit Rate<br>Subsidy)                                   | 1,595,249                                         | 2,142,019                                                           | 2,237,712                                                            |
| Due to                                                                                                                 | 28,564                                            | -                                                                   | 73,727                                                               |
| Fund balance                                                                                                           | 661,195                                           | 774,860                                                             | 848,616                                                              |
| <b>Total Restricted</b>                                                                                                | <b>\$2,404,023</b>                                | <b>\$2,983,268</b>                                                  | <b>\$3,215,526</b>                                                   |
| <b>TOTAL CURRENT FUNDS</b>                                                                                             | <b>\$14,770,073</b>                               | <b>\$15,548,413</b>                                                 | <b>\$14,960,733</b>                                                  |
| <b>ENDOWMENT AND SIMILAR FUNDS</b>                                                                                     |                                                   |                                                                     |                                                                      |
| Restricted                                                                                                             | -                                                 | -                                                                   | 0                                                                    |
| Quasi-endowed                                                                                                          | -                                                 | -                                                                   | 0                                                                    |
| Due to                                                                                                                 | -                                                 | -                                                                   | 0                                                                    |
| Fund balance                                                                                                           | 399,557                                           | 410,493                                                             | 388,567                                                              |
| <b>TOTAL ENDOWMENT AND SIMILAR<br/>FUNDS</b>                                                                           | <b>\$399,557</b>                                  | <b>\$410,493</b>                                                    | <b>\$388,567</b>                                                     |
| <b>PLANT FUND</b>                                                                                                      |                                                   |                                                                     |                                                                      |
| Unexpended                                                                                                             |                                                   |                                                                     |                                                                      |
| Accounts payable                                                                                                       | 32,553                                            | 57,981                                                              | 74,856                                                               |
| Notes payable                                                                                                          | -                                                 | 0                                                                   | -                                                                    |
| Bonds payable                                                                                                          | -                                                 | 0                                                                   | -                                                                    |
| Other liabilities (Accrued<br>interest payable)                                                                        | 75,594                                            | 78,593                                                              | 83,223                                                               |
| Due to                                                                                                                 | -                                                 | -                                                                   | -                                                                    |
| Fund balance                                                                                                           | \$3,004,174                                       | 2,930,849                                                           | 2,169,331                                                            |
| <b>Total unexpended</b>                                                                                                | <b>\$3,112,321</b>                                | <b>\$3,067,423</b>                                                  | <b>\$2,327,410</b>                                                   |
| Investment in Plant                                                                                                    |                                                   |                                                                     |                                                                      |
| Notes payable                                                                                                          | -                                                 | -                                                                   | -                                                                    |
| Bonds payable                                                                                                          | 7,436,022                                         | \$7,615,671                                                         | 7,845,610                                                            |
| Mortgage payable                                                                                                       | -                                                 | 0                                                                   | -                                                                    |
| Other liabilities (Accrued<br>interest payable)                                                                        | 36,222                                            | 43,157                                                              | 44,090                                                               |

|                                                                                                                                                    |                     |                     |                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|
| Due to                                                                                                                                             | 2,620,300           | 2,771,000           | 428,670             |
| Fund balance                                                                                                                                       | 40,331,359          | 42,361,935          | 43,224,672          |
| <b>TOTAL INVESTMENTS IN PLANT FUND</b>                                                                                                             | <b>\$50,423,903</b> | <b>\$52,791,763</b> | <b>\$51,543,042</b> |
| <b>FUND BALANCE (BUREAU OF MINES, STUDENT LOAN FUNDS, RETIREMENT OF INDEBTEDNESS FUNDS, RENEWAL AND REPLACEMENT FUNDS, AGENCY FUNDS)</b>           | <b>\$7,175,016</b>  | <b>\$6,557,430</b>  | <b>\$5,215,601</b>  |
| <b>TOTAL OTHER LIABILITIES(BUREAU OF MINES, STUDENT LOAN FUNDS, RETIREMENT OF INDEBTEDNESS FUNDS, RENEWAL AND REPLACEMENT FUNDS, AGENCY FUNDS)</b> | <b>\$2,520,216</b>  | <b>\$2,765,292</b>  | <b>\$2,771,216</b>  |
| <b>TOTAL LIABILITIES</b>                                                                                                                           | <b>\$25,173,721</b> | <b>\$25,699,073</b> | <b>\$22,746,445</b> |
| <b>FUND BALANCES</b>                                                                                                                               | <b>\$53,227,365</b> | <b>\$55,441,741</b> | <b>\$54,460,124</b> |
| <b>TOTAL LIABILITIES AND FUND BALANCES</b>                                                                                                         | <b>\$78,401,086</b> | <b>\$81,140,814</b> | <b>\$77,206,569</b> |

**CURRENT FUNDS, REVENUES, EXPENDITURES, AND OTHER CHANGES**

|                                                                                                                      | <b>Last<br/>Completed<br/>FY<br/>Dates: FY 13</b> | <b>One Year<br/>Prior to Last<br/>Completed FY<br/>Dates: FY 12</b> | <b>Two Years<br/>Prior to Last<br/>Completed FY<br/>Dates: FY 11</b> |
|----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|---------------------------------------------------------------------|----------------------------------------------------------------------|
| <b>REVENUES</b>                                                                                                      |                                                   |                                                                     |                                                                      |
| Tuition and fees                                                                                                     | 17,967,434                                        | 17,671,482                                                          | 18,302,694                                                           |
| Federal appropriations                                                                                               |                                                   |                                                                     |                                                                      |
| State appropriations                                                                                                 | 18,255,903                                        | 18,422,091                                                          | 17,229,119                                                           |
| Local appropriations                                                                                                 |                                                   |                                                                     |                                                                      |
| Grants and contracts                                                                                                 | 11,609,916                                        | 11,731,912                                                          | 14,018,465                                                           |
| Endowment income                                                                                                     |                                                   |                                                                     |                                                                      |
| Auxiliary enterprises                                                                                                | 4,334,712                                         | 4,024,731                                                           | 4,033,804                                                            |
| Other (Sales and service, Other<br>operating revenue, Private gifts,<br>and Investment Income)                       | 5,670,493                                         | 6,470,328                                                           | 5,050,572                                                            |
| <b>Total Revenues</b>                                                                                                | <b>\$57,838,458</b>                               | <b>\$58,320,544</b>                                                 | <b>\$58,634,654</b>                                                  |
|                                                                                                                      |                                                   |                                                                     |                                                                      |
| <b>EXPENDITURE &amp; MANDATORY<br/>TRANSFERS</b>                                                                     |                                                   |                                                                     |                                                                      |
| Educational and General                                                                                              |                                                   |                                                                     |                                                                      |
| Instruction                                                                                                          | 16,638,736                                        | 16,238,017                                                          | 15,529,333                                                           |
| Research                                                                                                             | 11,002,389                                        | 10,497,883                                                          | 11,871,446                                                           |
| Public services                                                                                                      | -                                                 | -                                                                   | 4,152                                                                |
| Academic support                                                                                                     | 3,699,393                                         | 4,274,700                                                           | 3,777,329                                                            |
| Student services                                                                                                     | 3,105,503                                         | 3,685,101                                                           | 3,458,876                                                            |
| Institutional support                                                                                                | 3,744,436                                         | 3,505,014                                                           | 3,582,108                                                            |
| Operation and maintenance of<br>plant                                                                                | 4,121,592                                         | 3,922,157                                                           | 4,638,366                                                            |
| Scholarships and fellowships                                                                                         | 9,402,215                                         | 9,009,335                                                           | 9,214,184                                                            |
| Other (identify)                                                                                                     | 1,354,653                                         | 1,057,132                                                           | 785,723                                                              |
| Mandatory transfers for:                                                                                             | 0                                                 | 0                                                                   | 0                                                                    |
| Principal and interest                                                                                               | 187,536                                           | 21,219                                                              | 26,539                                                               |
| Renewal and replacements                                                                                             | 1,039,221                                         | 1,850,617                                                           | 1,590,066                                                            |
| Loan fund matching grants                                                                                            | -                                                 | -                                                                   | -                                                                    |
| Other (identify)                                                                                                     | 456,439                                           | 597,353                                                             | 411,520                                                              |
| <b>Total Educational and General</b>                                                                                 | <b>\$54,752,113</b>                               | <b>\$54,658,528</b>                                                 | <b>\$54,889,642</b>                                                  |
|                                                                                                                      |                                                   |                                                                     |                                                                      |
| Auxiliary Enterprises                                                                                                |                                                   |                                                                     |                                                                      |
| Expenditures                                                                                                         | 4,056,446                                         | 4,020,257                                                           | 4,076,783                                                            |
| Mandatory transfers for:                                                                                             |                                                   |                                                                     |                                                                      |
| Principal and interest                                                                                               |                                                   |                                                                     |                                                                      |
| Renewals and replacements                                                                                            |                                                   |                                                                     |                                                                      |
| <b>Total Auxiliary Enterprises</b>                                                                                   | <b>\$4,056,446</b>                                | <b>\$4,020,257</b>                                                  | <b>\$4,076,783</b>                                                   |
| <b>TOTAL EXPENDITURE &amp; MANDATORY<br/>TRANSFERS</b>                                                               | <b>\$58,808,559</b>                               | <b>\$58,678,785</b>                                                 | <b>\$58,966,425</b>                                                  |
| <b>OTHER TRANSFERS AND<br/>ADDITIONS/DELETIONS (identify)</b>                                                        |                                                   |                                                                     |                                                                      |
| <b>EXCESS</b> [deficiency of revenues over<br>expenditures and mandatory transfers<br>(net change in fund balances)] | <b>\$(970,101)</b>                                | <b>\$(358,241)</b>                                                  | <b>\$(331,771)</b>                                                   |



### INSTITUTIONAL INDEBTEDNESS

| <b>TOTAL DEBT TO OUTSIDE PARTIES</b> | <b>Last Completed FY<br/>Dates: FY 13</b> | <b>One Year Prior to Last Completed FY<br/>Dates: FY 12</b> | <b>Two Years Prior to Last Completed FY<br/>Dates: FY 11</b> |
|--------------------------------------|-------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------|
| For Capital Outlay                   | \$10,064,534                              | \$10,374,721                                                | \$8,274,280                                                  |
| For Operations                       | \$0                                       | \$0                                                         | \$0                                                          |

**Domestic Off-Campus Degree Programs and Academic Credit Sites:** Report information for off-campus sites within the United States where degree programs and academic coursework is offered. (Add additional pages if necessary.)

**Degree Programs** – list the names of degree programs that can be completed at the site.  
**Academic Credit Courses** – report the total number of academic credit courses offered at the site.

**Student Headcount** – report the total number (unduplicated headcount) of students currently enrolled in programs at the site.

**Faculty Headcount** – report the total number (unduplicated headcount) of faculty (full-time and part-time) teaching at the site.

**PROGRAMS AND ACADEMIC CREDIT OFFERED AT OFF-CAMPUS SITES WITHIN THE UNITED STATES**

| Location of Site<br>Name<br>City, State, ZIP            | Degree<br>Programs                              | Academic Year<br>Credit Courses                    | Fall 2013<br>Student<br>Headcount | Faculty<br>Headcount |
|---------------------------------------------------------|-------------------------------------------------|----------------------------------------------------|-----------------------------------|----------------------|
| Helena College<br>Helena, MT 59601                      | BAS – Business<br>and Information<br>Technology | 18 onsite credits<br>30 recorded/online<br>credits | 29                                | 6                    |
| Miles City Community<br>College<br>Miles City, MT 59301 | AAS – Radiologic<br>Technology                  | 30 online/blended<br>credits                       | 3                                 | 2                    |

**Programs and Academic Courses Offered at Sites Outside the United States.** Report information for sites outside the United States where degree programs and academic credit courses are offered, including study abroad programs and educational operations on military bases. (Add additional pages if necessary.)

**Degree Programs** – list the names of degree programs that can be completed at the site.  
**Academic Credit Courses** – report the total number of academic credit courses offered at the site.

**Student Headcount** – report the total number (unduplicated headcount) of students currently enrolled in programs at the site.

**Faculty Headcount** – report the total number (unduplicated headcount) of faculty (full-time and part-time) teaching at the site.

**PROGRAMS AND ACADEMIC CREDIT COURSES OFFERED AT SITES OUTSIDE THE UNITED STATES**

| Location of Site<br>Name<br>City, State, ZIP | Degree<br>Programs | Academic<br>Credit<br>Courses | Student<br>Headcount | Faculty<br>Headcount |
|----------------------------------------------|--------------------|-------------------------------|----------------------|----------------------|
| N/A                                          |                    |                               |                      |                      |

## **PREFACE**

### **Update on Institutional Changes Since Last Report**

In May, 2011, the Board of Regents authorized the appointment of Dr. Donald Blackketter as Chancellor of Montana Tech of The University of Montana. Dr. Blackketter replaces Dr. W. Franklin Gilmore, who retired as Chancellor following the Spring 2011 semester.

In May, 2013, the Montana Board of Regents of Higher Education approved the collaborative Ph.D. in Materials Science between The University of Montana, Montana Tech, and Montana State University. Limited authority was granted to Montana Tech to award a Ph.D. in Materials Science as a participant in the collaborative Materials Science Ph.D. program. In September 2013 a substantive change document was filed with NWCCU and Montana Tech has been granted candidacy status at the doctoral level. The commission will take action on the candidacy status of Montana Tech at its June 2017 meeting following the review and evaluation of the Year Seven Report.

In October, 2012, Montana Tech dedicated the new Frank and Ann Gilmore University Relations Center (URC). The URC is the first 100% privately funded building on the Tech campus.

### **Response to Topics Requested by the Commission**

In the Spring 2011 report from the Commission evaluators, Montana Tech received the following concern and recommendation resulting from the Year One Self-Evaluation Report:

**Concern:** Montana Tech may have too many indicators of achievement.

**Response:** The Assessment Committee at Montana Tech thought this concern was well founded. As a result of this concern, the assessment committee did a thorough review of its indicators of achievement and found many to be either redundant or not very meaningful as an indicator of the corresponding objective. Montana Tech has addressed this concern by reducing the number of indicators of achievement from 37 to 28.

**Recommendation:** Montana Tech should develop the benchmarks necessary to establish meaningful, assessable and verifiable indicators of achievement for its focused objectives. St 1 B1 & 2.

**Response:** Montana Tech appreciates the usefulness embedded within this recommendation. Appropriate benchmarks are a significant part of a meaningful assessment of mission fulfillment. As demonstrated in the following updated chapter one, Montana Tech has made significant progress in this regard by requiring benchmarks within department specific program reviews. In general, program review benchmarks are determined based on program specific strengths and weaknesses, and examples are provided in chapter one. In addition, Tech has

developed well defined benchmarks for General Education, the Foundation of Engineering and Science Program, and the College Success course (see chapter one for examples). However, particularly for the indicators of achievement found under core theme *The Montana Tech Community*, Tech still has more work to accomplish in developing appropriate benchmarks. This is an area the assessment committee will continue to develop.

In April, 2010, a NWCCU Evaluation Committee visited the Montana Tech campus for a comprehensive evaluation. The committee provided the campus with four commendations and three recommendations. The committee recommendations, and what the campus is doing to address the recommendations, are as follows:

**Recommendation #1:** In light of the institution's acknowledgment of the shortage of on-campus housing for first-time freshmen, and given the freshman live-on policy, the committee recommends that the institution address the deficiency of on-campus housing available for first-time freshmen. (Standard 3.D.13).

**Response:** Montana Tech has addressed this recommendation by prioritizing our campus housing units for freshmen and moving our upper classmen to an apartment housing unit located near the campus. The beds available in the existing on-campus dormitories are sufficient to satisfy the current number of freshmen required to live on campus by our policies. In addition, the campus administration is evaluating the construction of a new, on-campus dormitory, which will be made available to upper classmen and transfer students as well as any freshmen needing housing. A construction decision on this new dormitory will be based on future need.

**Recommendation #2:** The committee recommends that Montana Tech continue in its assessment progress by establishing and following an integrated, institution-wide assessment plan that includes documentation of activities, and establishes consistency in its presentation of learning outcomes to its constituency. (Policy 2.2).

**Response:** Shortly after the evaluation team left the Montana Tech campus, our NWCCU Steering Committee began its work on the year one report which addresses the revised accreditation standards. The Steering Committee has developed an Assessment Committee, comprised of faculty, staff, and administrators, that is charged with reviewing the campus's current assessment plan and incorporating any needed revisions. The revisions will assist the various campus entities in their assessment activities and will enable the campus to follow an integrated, institution-wide assessment plan. In addition, the campus has allocated funds to hire an Assessment Director in the School of Mines and Engineering as well as in the College of Letters, Sciences, and Professional Studies. Two faculty members have agreed to serve as Assessment Directors in their respective school/college and will be integral members of the Assessment Committee.

**Recommendation #3:** The committee recommends that the institution review its practices for the evaluation of part-time faculty relative to the policy and procedures outlined in the Faculty Staff Handbook Section 206.4 to ensure consistent implementation across the institution (STD 4.A.5 and 4.A10, Policy 4.1).

**Response:** The language in Section 206.4 of the Faculty Staff Handbook is also present in the Collective Bargaining Agreement (CBA) between the Montana Tech Faculty Association (MTFA) and the Montana Board of Regents of Higher Education. In summary, it is now clearly stated that it is the duty of the Department Head to evaluate part-time faculty. To help ensure consistent implementation, many departments are addressing this issue as they develop department standards for tenure and promotion.

# **Updated Chapter One: Mission, Core Themes, and Expectations**

## **Executive Summary of Eligibility Requirements 2 and 3**

### **Authority**

Montana Tech of the University of Montana is part of the Montana University System which is governed by the Montana Board of Regents of Higher Education that has constitutional authority to operate public higher education in Montana. Montana Tech has a Chancellor that serves as the full-time executive officer. The Chancellor reports to the President of The University of Montana and through the President to the Commissioner of Higher Education and the Board of Regents. Montana Tech is fully authorized to award certificates of applied science, associate degrees, bachelor's degrees, master's degrees, and doctoral degrees.

### **Mission and Core Themes**

The mission and core themes of Montana Tech are clearly defined, published in the catalog, and have been reviewed and approved by the Montana Board of Regents on September 22, 2010. The educational interests and well-being of our students are the primary purposes of the institution. Substantially all of our financial resources are dedicated to these purposes.

## Standard 1A: Mission

### Montana Tech's Mission

To meet the changing needs of society by supplying knowledge and education through a strong undergraduate curriculum augmented by research, graduate education and service.

Montana Tech's strategic goals, as given in the most recent [strategic plan](#) completed Spring of 2014, are the following:

1. Be a National Leader in Educating Undergraduate and Graduate Students
2. Support and Grow Research, Scholarship, and Technology Transfer
3. Respond to Industry, Community and State Needs
4. Improve our Recognition and Reputation in the State, Nation, and World
5. Secure Resources that Support Excellence
6. Create a Culture and Workplace Environment that Fosters Engaged Citizenship Across Local, National and Global Communities

In 2004-2005, Montana Tech's mission was rewritten. The rewritten mission statements were developed in a collaborative process that involved administrators, faculty, and staff and were approved by the Board of Regents on September 22, 2005. As part of the Montana University System, Montana Tech's mission is heavily influenced by the [mission](#) articulated by the Board of Regents for the Montana University System. On October 19, 2001, the Board of Regents adopted the following mission statement:

*The mission of the Montana University System is to serve students through the delivery of high quality, accessible postsecondary educational opportunities, while actively participating in the preservation and advancement of Montana's economy and society.*

Montana Tech is currently in the process of revising its mission statement. This process is similar to what was done in 2004-2005. That is, it is a collaborative effort that involves administrators, both the faculty and staff senates, and the general Montana Tech community.

Through a shared process involving input from Tech's NWCCU steering committee, faculty, and staff, Montana Tech has identified the following four core themes and the various internal objectives as fundamental aspects of the mission:

- 1. Education & Knowledge:** The following five objectives have been identified within this core theme:
  - a. Create and sustain strong graduate, baccalaureate, associate, and certificate programs.

- b. Facilitate student learning through diverse delivery and educational experiences.
  - c. Prepare students for successful careers.
  - d. Provide students a gateway for transfer education.
  - e. Provide students with a general education.
- 2. Student Achievement:** The following 3 objectives have been identified within this core theme:
- a. Students make acceptable progress towards their Montana Tech degree.
  - b. Students are prepared for employment, graduate school, or for professional school after graduating from Montana Tech.
  - c. Students have the opportunity to obtain academic distinction while attending Montana Tech.
- 3. Engaged Faculty:** The following three objectives have been identified within this core theme:
- a. Faculty engage in the pursuit of successful teaching.
  - b. Faculty engage in research, scholarly activity, and/or professional development.
  - c. Faculty engage in service to their profession, the campus, and/or community.
- 4. The Montana Tech Community:** The following four objectives have been identified within this core theme:
- a. Promote a diverse and inclusive environment.
  - b. Provide instructional, research, and living environments that enhance the educational experience.
  - c. Provide events and programs that serve the Montana Tech community.
  - d. Engage Montana Tech alumni and friends.

## **Mission Fulfillment**

All objectives will be rated by an objective rating group (ORG) consisting of members from the NWCCU Steering committee, Tech's assessment committee, and other campus representatives who have relevant knowledge of the objective. This rating process will involve the ORG determining, based on the respective indicators of achievement, the scale score of the statement: "The objective has been achieved," where possible scores are given by:

- 1) disagree,
- 2) agree,
- 3) strongly agree.

Any objective scoring a (1) will be addressed through an action plan which is to be developed by the objective rating group. Montana Tech defines mission fulfillment at an acceptable threshold when all objectives are rated as either (2) or as (3).



## **Standard 1B: Core Themes**

### **Core Themes**

The four core themes identified by Montana Tech, along with the objectives that are embedded within them, collectively define and encompass the mission of Montana Tech. All the core themes must necessarily be met in order for Tech to successfully realize its mission. That is, in order for Montana Tech to meet the changing needs of society by supplying knowledge and education through a strong undergraduate curriculum which is augmented by research, graduate education, and service, the following core themes must be manifested:

1. Education & Knowledge
2. Student Achievement
3. Engaged Faculty
4. The Montana Tech Community

The remainder of this section analyzes each specific core theme by identifying respective objectives and indicators of achievement. The indicators of achievement will be used to evaluate whether the objective has been realized and will ultimately indicate whether the core themes and mission are being fulfilled.

## **Core Theme 1: Education & Knowledge**

A student at Montana Tech engages in more than just the study of a discipline. At Tech, education grows into knowledge through the exploration of science, technology, and values that inform our lives and communities. Montana Tech provides students with opportunities to engage in both research and technology development, thereby enhancing the basic conditions required for knowledge to be integrated later into meaningful applications.

### **Objective 1: Create and sustain strong graduate, baccalaureate, associate, and certificate programs.**

- Indicators of Achievement
  - (a) Within annual program assessment reports, identification of both program strengths and weaknesses. These strengths and weaknesses should be identified on the basis of evidence supplied by (where appropriate): curriculum reviews, an assessment of faculty strengths and weaknesses, an assessment of student learning, and the number of graduates.  
Benchmark: yes or no per program assessment report.
  - (b) Number of graduate, baccalaureate, associate, and certificate programs including enrollment and number of graduates per program per year.  
Benchmark: yes or no per assessment report.
  - (c) Within each program assessment report, a summary of the results of program-specific measures of student learning.  
Benchmark: yes or no per assessment report.
  - (d) Within each assessment report, programs will identify ways to maintain current strengths and to address weaknesses.  
Benchmark: yes or no per assessment report.

### **Rationale**

All four indicators provide evidence of Montana Tech's effectiveness in sustaining successful programs. Indicator (a) requires programs to identify strengths and weaknesses, while indicator (d) requires programs to identify strategies to maintain current strengths and make improvements within weak areas. Indicators (b) and (c) ask for specific information on number of graduates and learning within each program.

The assessment reports have been developed, in conjunction with departments, by Montana Tech's assessment committee. See examples [CLSPS](#), [SME](#), and [Highlands](#).

### **Objective 2: Facilitate student learning through diverse delivery and educational experiences**

- Indicators of Achievement
  - (a) For each annual program assessment report, a summary of the educational opportunities (and participation rate) available to students in the program. Examples: Number of Undergraduate Research Program (URP) participants, capstone course description and

enrollment, seminar activities, conference attendance, guest lecture opportunities, and field trips.

Benchmark: yes or no per assessment report.

- (b) For each annual program assessment report, the distance education assessment will include (when appropriate):

- i. Number of degrees offered through distance education
- ii. Number of courses offered through distance education, per year and per type (e.g., synchronous asynchronous, or blended)
- iii. Enrollment in distance education courses, per year and per type

Benchmark: yes or no per assessment report.

- (c) Assessment of programs designed to help students be successful in college, where the assessment report is developed by the assessment committee and includes appropriate responses to improve the program.

- i. Programs:

1. An annual assessment of the College Success course (see example at [FESP](#))
2. An annual assessment of the Foundations of Engineering and Science Program (see example at [FESP](#)).

Benchmark: yes or no per assessment report.

### **Rationale**

Indicator (a) determines how each department optimizes educational experiences within its program. Indicator (b) provides evidence of diverse delivery through the assessment of program-specific distance education. Indicator (c) assesses programs designed specifically to facilitate student learning.

### **Objective 3: Prepare students for successful careers.**

- Indicators of Achievement

- (a) For each annual program assessment report, a summary of the ways in which the program prepare graduates for a successful career.

Examples: Internships, professional exam preparation, specialized training or software (e.g., learning the statistical package SAS), IAB feedback.

Benchmark: yes or no per assessment report.

### **Rationale**

Indicator (a) provides details on how student education is preparing students for a career.

### **Objective 4: Provide students a gateway for Transfer Education.**

- Indicators of Achievement

- (a) For each annual program assessment report, the number of students per year, per major, who transfer to another institution the following year, for each receiving institution.

Benchmark: yes or no per assessment report.

- (b) For each annual program assessment report, the average number of Tech credits per student, per major, obtained prior to transfer, for

each receiving institution.  
Benchmark: yes or no per assessment report.

### **Rationale**

Indicators (a) and (b) provide specific, quantitative claim that Tech courses are often used for transfer education. Note that it is the responsibility of each program to determine if the measurements represent a strength or weakness.

### **Objective 5: Provide students with a General Education.**

- Indicators of Achievement
  - (a) A detailed assessment of the quality of general education program, including benchmarks and appropriate responses to data.  
Benchmark: yes or no on completed assessment report. (See examples at [11-12](#) and [12-13](#))

### **Rationale**

Indicator (a) is the assessment tool used by Montana Tech to determine the level at which A.S. and B.S. degree-seeking students are meeting the expected outcomes of the general education curriculum.

## **Core Theme 2: Student Achievement**

Montana Tech is committed to helping students realize their academic potential. Inclusive within this commitment is the continual evaluation of graduation and retention rates. This type of evaluation is critical when determining the strength of Montana Tech's academic programs. There are, of course, many factors that influence student retention and thus student achievement at Montana Tech.

### **Objective 1: Students make acceptable progress towards their Montana Tech degree**

- Indicators of Achievement
  - (a) The graduation rates for both the North and South campus. These rates are based on cohorts consisting of students who are first-time, degree/certificate seeking, full-time freshmen when they enrolled for some specified fall semester at Montana Tech.  
Benchmark: Not yet determined.
  - (b) The graduation rates for subcohorts at both the North and South campus. The subcohorts are defined as all first-time, full-time freshmen within a declared major or certificate program, when they enrolled for some specified fall semester at Montana Tech.  
Benchmark: Not yet determined.
  - (c) Transfer-in graduation rate. This rate will be based on student cohorts consisting of Montana Tech students who previously attended another college or university, including South campus students who enroll in a North campus program following a break in enrollment. The Montana Tech degree earned at graduation will also be reported.  
Benchmark: Not yet determined.
  - (d) Freshmen, Sophomore, and Junior retention rate for Montana Tech students. For example, the North Campus freshmen retention rate is calculated as the percentage of first-time, degree-seeking, full-time freshmen from the previous fall who are again enrolled, full-time, the current fall semester.  
Benchmark: Not yet determined.

### **Rationale**

Indicators (a) through (d) are all quantitative measures of progress towards a degree. For indicators (a), (b), and (c), progress is measured by calculating the rate at which students obtain degrees. Indicator (d) measures progress by determining the persistence level demonstrated by students moving from semester to semester, or through successive school years. Benchmarks for the institution have yet to be determined. Although data is being collected (see example at [retention](#)) discussions are ongoing as to appropriate benchmarks.

**Objective 2: Students are prepared for employment, a four-year degree program, graduate school, or professional school after graduating from Montana Tech**

- Indicators of Achievement

(a) For each annual program assessment report, the employment rate per major. This indicator will include both degree related employment, enrollment rate for a four-year program (for those students graduating with a two-year degree), and enrollment in graduate or professional school.

Benchmark: yes or no per assessment report.

**Rationale**

Indicator (a) measures student preparation by determining employment and four-year, graduate or professional school acceptance rates for Tech students. (See objective 3 under core theme 1: Education & Knowledge, for indicators of how programs prepare students for careers.)

**Objective 3: Students have the opportunity to obtain academic distinction while attending Montana Tech**

- Indicators of Achievement

(a) For each annual program assessment report, a summary of academic distinction opportunities available to students and what distinctions have been achieved over the last year. Examples: Scholarships, distinctions based on GPA (e.g., Deans List), and team competitions (e.g., Computer Science students placing well in a national programming competition).

Benchmark: yes or no per assessment report.

**Rationale**

The indicator provides direct, quantitative measurements of opportunities for academic distinction. As with other program review indicators, the specific department will determine whether the academic opportunities and participation rate represent a strength or weakness.

### **Core Theme 3: Engaged Faculty**

Essential to supplying knowledge and education through a strong curriculum augmented by research and service, are faculty that excel in teaching, research, scholarship, and both discipline specific and civic service. Montana Tech promotes and retains faculty who are not only excellent classroom instructors but who are also active scholars.

#### **Objective 1: Faculty engage in the pursuit of successful teaching**

- Indicators of Achievement

- (a) For each annual program assessment report, a summary, per faculty member, of teaching. This indicator will include courses taught, with the enrollment and credits hours for each course.  
Benchmark: yes or no per assessment report.

#### **Objective 2: Faculty engage in research, scholarly activity, and/or in professional development.**

- Indicators of Achievement

- (a) For each annual program assessment report, a summary of research, scholarly activity, and professional development, per faculty member, which is part of the abbreviated resumes each departmental faculty member will supply.  
Benchmark: yes or no per assessment report.

#### **Objective 3: Faculty engage in service to their profession, the campus, and/or to the community.**

- Indicators of Achievement

- (a) For each annual program assessment report, a summary of service, per faculty member, which is part of the abbreviated resumes each departmental faculty member will supply.  
Benchmark: yes or no per assessment report.

### **Rationale**

For all three objectives, the respective indicator consists of summary statistics. A measure of quality for the indicators is based on each department's definition of quality, as found in respective department standards for promotion and tenure.

## **Core Theme 4: The Montana Tech Community**

The Montana Tech community is broadly defined as Tech students, faculty, staff, alumni and friends of Montana Tech. To meet the changing needs of society, Montana Tech must maintain a diverse and inclusive campus with the appropriate infrastructure; in addition, it must provide safe, healthy, living environments. Montana Tech is very fortunate to receive strong and enduring support from its alumni, local city government, local businesses, and from national and international industries. Alumni and friends give Montana Tech a voice throughout the world, and Tech actively fosters these mutually beneficial relationships.

### **Objective 1: Promote a diverse and inclusive campus environment.**

- Indicators of Achievement

(a) For each annual assessment report, the following distributions are determined:

- i. Gender distribution for both students and faculty.
- ii. Minority distribution for both students and faculty.
- iii. In-state and out-of-state distribution for students.
- iv. U.S. and International distribution for both students and faculty.
- v. The distribution of grants, scholarships, and waivers. This distribution will include Pell grants, fee waivers, and scholarships designed specifically for minority students.

Benchmark: yes or no per assessment report.

### **Rationale**

Indicator (a) provides several descriptive measures of the various forms of diversity occurring on the Montana Tech campus.

### **Objective 2: Provide instructional, research and living environments that enhance the educational experience.**

- Indicators of Achievement

(a) The distribution of the following instructional/research resources:

- i. Academic buildings
- ii. Classrooms
- iii. Computer labs
- iv. Multi-media classrooms
- v. Research laboratories

Benchmark: Not yet determined.

(b) An annual assessment of residence halls and dining services.

Benchmark: Not yet determined.

(c) An annual assessment of campus safety.

Benchmark: Not yet determined.

### **Rationale**

Indicator (a) measures the instructional/research infrastructure necessary for a positive educational experience. Indicators (b) and (c) are measures of the quality of student living environments that are essential for a student's well-being.



**Objective 3: Provide events and programs that serve the Montana Tech community.**

- Indicators of Achievement

- (a) The distribution, per year, of events open to the public that include:
  - i. concerts
  - ii. plays
  - iii. lectures
  - iv. specialty events (e.g., the annual holiday bazaar)

Benchmark: Not yet determined.

- (b) An assessment of the impact that athletic programs have on the Tech community.

Benchmark: Not yet determined.

**Rationale**

Indicator (a) is a straightforward, descriptive measure of events that are open to the general public. Indicator (b), an assessment of Tech's athletic programs, is obviously an assessment of events that serve the Montana Tech community. Thus, Tech's Athletic Director will be part of the committee that determines the measures and benchmarks used in assessing athletic programs.

**Objective 4: Engage Montana Tech alumni and friends.**

- Indicators of Achievement

- (a) Based on an annual assessment report prepared by the assessment committee, an assessment of the effectiveness of the Alumni Association.

Benchmark: Not yet determined.

- (b) Based on an annual assessment report prepared by the assessment committee, an assessment of the effectiveness of the Montana Tech Foundation.

Benchmark: Not yet determined.

**Rationale**

Indicators (a) and (b) are assessments of two groups charged with keeping Montana Tech alumni and friends engaged. The Vice Chancellor for Development & University Relations, who also serves as President of the Montana Tech Foundation, will be a leader in determining the appropriate form of the assessment report and benchmarks.

## **CHAPTER TWO: RESOURCES AND CAPACITY**

### **Executive Summary of Eligibility Requirements 4 through 21**

#### **Operational Focus and Independence**

Montana Tech of The University of Montana is one of four separately accredited institutions of The University of Montana. As found in Board of Regents [Policy 205.2.1](#):

*A chancellor is the chief executive officer responsible for the management of a four-year campus affiliated with a university. The chancellor shall provide leadership and coordination for all campus activities, including academic, fiscal, and student affairs.*

Montana Tech has sufficient operational independence and is responsible for meeting its own Northwest accreditation standards and eligibility requirements.

#### **Non-discrimination**

Montana Tech does not discriminate against any students based on sex, marital or parental status, race or color, religion, age, or on national origin. An [Equal Educational Opportunity Policy](#) is published in the Catalog and states:

*It is the policy of Montana Tech to provide equal educational and employment opportunity (EEO) to all persons regardless of race, color, religion, creed, sex, national origin, age, mental or physical disability, marital status, sexual preference, or political belief with the exception of special programs established by law.*

#### **Institutional Integrity**

The importance that both the Montana University System and Montana Tech place on institutional integrity is reflected in the numerous policies and procedures that address the ethical and professional conduct of administrators, faculty, staff, and of students. In addition to these policies and procedures, many members of the faculty and staff, as licensed or registered professionals in their specific disciplines, voluntarily subscribe to codes of professional conduct that are explicit and, in many cases, legally binding. Moreover, various segments of the institution also subscribe to codes of conduct appropriate to their functions. For example, Student Services adheres to the American College Personnel Association National Association for Student Personnel Administrators (ACPA-NASPA) Standard of Ethics, and the Business Office adheres to the National Association of College and University Business Offices (NACUBO) Code of Ethics.

## **Governing Board**

As described on the Board of Regents website (<http://mus.edu/board/default.asp>)

*The governance and administration of the Montana University System is vested with the Board of Regents, which has full power, responsibility, and authority to supervise, coordinate, manage and control the Montana University System, and supervise and coordinate other public educational institutions assigned by law.*

*The Board consists of seven members appointed by the Governor, and confirmed by the Senate, to seven year overlapping terms. One of the members of the board shall be a student appointed by the Governor who is registered full-time at a unit of higher education under jurisdiction of the board. The length of the term of the student member is one year with possibility of reappointment to successive terms.*

No member of the Board of Regents has a contractual or employment relationship with Montana Tech.

## **Chief Executive Officer**

Montana Tech's chief executive officer is the Chancellor, who is appointed by the Board, is accountable for the operation of the institution, and reports to the President of the University of Montana. Board Policy 205.2.1 delegates to the Chancellor responsibility for the management, "*leadership and coordination of all campus activities, including academic, fiscal, and student affairs*" and to administer the applicable board-approved policies. No Montana Tech employee chairs the governing board.

## **Administration**

Montana Tech's leadership team consists of five qualified administrators: the Chancellor and four Vice Chancellors. The Vice Chancellor for Academic Affairs also carries the title, "Provost." Each Vice Chancellor reports to the Chancellor and has a position description describing the position's delegated responsibility and accountability. The Vice Chancellors are responsible respectively for academic and student affairs; finance and administration; research and graduate programs; and institutional development. Each Vice Chancellor is charged with planning, organizing, managing, and assessing the institution's achievements and effectiveness-both within and across designated areas of responsibility. Moreover, each Vice Chancellor is a member of the Self-Study team for accreditation and works towards the fulfillment of the mission and core themes.

## **Faculty**

In the Fall of 2012, Montana Tech employed 189 full-time faculty and 92 part-time faculty, composed of 78 regular part-time faculty and 14 full-time staff who taught for extra compensation. Of the tenurable full-time faculty, 53% are tenured. All non-tenure track faculty-whether full- or part-time-are considered to be adjunct. By this measure 47% of the full- and part-time faculty is adjunct with most of these being research faculty in the Montana Bureau of Mines and Geology (MBMG). Of the full-time faculty, 49% hold a doctoral degree, usually a Ph.D., and 39% hold a

Master's degree. All tenure/tenure-track faculty holding rank below full professor are reviewed annually by their respective Department Head and Dean. Using a similar process, full professors are reviewed every third year by their Department Head and Dean. Thus, Tech employs appropriately qualified faculty in sufficient number to achieve its educational objectives.

## **Educational Program**

The goals of all educational programs at Montana Tech are developed by the faculty within the program, and most often in conjunction with an external review board and accrediting bodies. Goals are then reviewed by the respective college Dean, by the Curriculum Review Committee (CRC), and by the Provost. This review process serves as a further check that the program objectives fit with the mission of Montana Tech. The mission and objectives of every program are published in the Montana Tech catalog.

## **General Education and Related Instruction**

General education requirements for degree programs at Montana Tech are coherent, transparent, and clearly laid out in the catalog. A total of 30-31 credits in the general education core is the overall requirement needed to satisfy the general education component of all A.S. and B.S. degree granting programs at Montana Tech. In addition to this, all baccalaureate degree-seeking students must complete a designated writing course at the 300- 400 course level. For programs of study for which Certificates or Associate of Applied Science degrees are granted, the general education requirements include a course in communication, computation, and human relations (please see 2.C.9 for additional details). In addition, every bachelor and graduate degree requires a planned program of study in that specialization, all of which are published in Tech's catalog.

## **Library and Information Resources**

The library's mission is consistent with Montana Tech's mission, core themes, programs, and services.

*The Montana Tech Library is an integral part of Montana Tech because its highly trained staff of information experts advances the university's mission by consistently providing access to resources, support for research, and to an array of services that meet the changing information needs of students, faculty, staff, and the community.*

Tech's library provides access to extensive scholarly collections for students in the four-year and graduate programs on the North Campus and for students in the two-year programs at Highlands College (five miles away). In addition, the Learning Center at Highlands also has a small collection which supports its associate degree and certificate programs (please see 2.E.1 for additional details).

## **Physical and Technological Infrastructure**

The physical facilities at Montana Tech have always been planned, designed, and constructed with its core themes and mission in mind. Each facility was originally conceived with a specific purpose depending on the existing institution mission, goals and program needs. As the mission has expanded and goals changed, facilities planning for updates, renovations, and new construction have kept pace.

Strategic plans of five, ten, fifteen years and beyond have been a consistent theme at Tech and generally followed as facility needs were confirmed.

## **Academic Freedom**

The institutional setting for academic freedom at Montana Tech is described in the introduction to Section 203, Faculty Code of Conduct in the [Faculty Staff Handbook](#).

*The Institution is devoted to the pursuit of learning in the broadest sense. Its public responsibilities include the transmission of learning, the creation of knowledge, and the performance of services in related endeavors. Traditionally, colleges have served not only as transmitters of learning and repositories of knowledge, but also as institutions for the development of that innovation and criticism without which civilization cannot progress. In the fulfillment of these traditional obligations, the Institution and its members are occasionally put in a position of apparent conflict among themselves and society. It is sometimes inevitable that new knowledge should find itself at odds with the old. Experimentation with new ideas and criticism of society is the inevitable and desirable result of a properly functioning institution. These conflicts between the Institution and the community, and within the Institution itself, must not be allowed to interfere with the effective operation of the Institution. It is essential that the membership of the Institution be guaranteed freedom of expression, inquiry, association, criticism, and dissent without fear of reprisal, bodily harm, or physical disorder. The responsibility of maintaining academic freedom is shared by the Institution and through the persons of its students, its faculty, its administrators and its regents and by society.*

## **Admissions**

The Montana Tech Catalog publishes Tech's [admission policy](#).

## **Public Information**

Montana Tech publishes accurate information regarding its mission and core themes; admission requirements and procedures; grading policy; information on academic programs and courses; tuition, fees, and other program costs; refund policies and procedures; opportunities and requirements for financial aid; and the academic calendar in its catalog. Names, titles, and academic credentials of administrators and faculty are published on Tech's [website](#). Rules and regulations for student conduct can be found in the [Student Handbook](#).

## **Financial Resources**

The FY14 Montana Tech annual operating budget for all fund types is just under \$77 million. This operating budget is comprised of \$30,805,449 in general funds, \$18,478,583 in restricted funds, \$6,727,291 in designated funds, \$5,303,289 in auxiliary funds, and \$11,484,037 in plant funds.

Historically, Montana Tech's financial practice is to incorporate a contingency into the current unrestricted operating budget of 2% of revenue. If enrollment targets are met, the Director of Financial Planning & Analysis invites the campus stakeholders to submit One-Time-Only proposals. These are funded by using the contingency based upon a prioritization process which incorporates input from the

Executive Budget Council, the deans, and department heads. This contingency allocation process ensures that even if enrollment targets aren't met, basic programs will still be insulated from funding cuts in the current fiscal year.

In addition to the contingency, Montana Tech maintains a Reserve Revolving account pursuant to Board of Regents [Policy 901.15](#). This policy allows each unit of the Montana University System to establish a reserve revolving account to specifically manage and mitigate the impacts of unanticipated revenue shortfalls and/or unanticipated and unavoidable increases in expenditures. (See 2.F.1 for more details.)

### **Financial Accountability**

Annual Consolidated Financial Audits and Biennial Consolidated Financial-Related Audits for Montana Tech are done by the Legislative Audit Division. Funding for this legislative audit is a line item in the general fund legislative appropriation at the system level. The University of Montana affiliation receives an allocation as part of the biennium budget, and Montana Tech pays its prorated share of the audit costs. (See 2.F.7 for more details.)

The Legislative Audit Division prepares an Audit Recommendation for Montana Tech. This report specifies an action for each recommendation, and the action plan on all past recommendations pertaining to Montana Tech have been implemented and completed.

### **Disclosure**

Montana Tech accurately discloses to the Commission all required information. This is done through the Provost's office.

### **Relationship with the Accreditation Commission**

Montana Tech accepts the policies and standards of the Commission and agrees to comply with these standards and policies as currently stated or as modified in accordance with Commission policy. Montana Tech understands and agrees that the Commission may, at its discretion, make known to any agency or members of the public that may request such information, the nature of any action, positive or negative, regarding the institution's status with the Commission.

## Standard 2.A–Governance

### Standard 2.A.1

**The institution demonstrates an effective and widely understood system of governance with clearly defined authority, roles, and responsibilities. Its decision-making structures and processes make provision for the consideration of the views of faculty, staff, administrators, and students on matters in which they have a direct and reasonable interest.**

As a unit of the Montana University System (MUS), Montana Tech benefits from an effective, stable, and widely understood system of governance that has been in place for nearly 20 years, with clearly defined authority, roles, and responsibilities. MUS Board of Regents has governance authority established by the Montana Constitution, with details covered in Montana law and in bylaws and [policies](#) updated by the Regents and legislature. The Board’s decision-making structures and processes have numerous mechanisms for consideration of the views of faculty, staff, administrators, and students. Among these mechanisms are formal scheduled meetings with each of these stakeholder populations within the agenda of every in-person Board meeting. Meetings are rotated to take place on different campuses in the system, so that each campus hosts a meeting every two years. No significant changes in this system have occurred in recent years. The Board met at Montana Tech in September 2010, 2012, and 2013—providing ample opportunity for Montana Tech’s stakeholders to state their views.

Institutionally, Montana Tech is led by a chancellor and four vice chancellors. The roles, responsibilities, and authorities of these leaders, others who report to them, and the numerous committees participating in the decision-making structures, are spelled out in the [Faculty and Staff Handbook](#). The *Handbook* is also provided in hard copy for each new employee, who must read it within the first 30 days. Through the committees, formal and informal meetings and forums, email, and other methods, the views of faculty, staff, administrators, and students are both invited and considered. Alumni and employer stakeholders are also consulted frequently. These individuals serve on the external advisory committee associated with each academic program to allow for the consideration of their important views on the content and operation of each program and its effectiveness in preparing students for future success.

An example of how this engagement typically works in an area of high interest to everyone can be found in the recently completed strategic planning process. Recognizing that the mission and priorities of Montana Tech are of significant interest to faculty, staff, students, and to the larger off-campus community, Montana Tech initiated in 2011 a very inclusive and participatory strategic planning process, which produced a new Strategic Plan, *A Philosophy of Excellence*, in spring 2013. The web site which shared the process and drafts is at <http://www.mtech.edu/about/strategic-plan/index.htm>. The final version is posted at [http://issuu.com/montanatech/docs/strategic\\_plan\\_final\\_feb\\_2014](http://issuu.com/montanatech/docs/strategic_plan_final_feb_2014). Representatives of all stakeholder groups participated; there were several open meetings to gather input and formulate priorities; updates on the process and

contents were routinely shared on the campus web site, directly from a “strategic plan” link on the bottom of the home page; and input was sought and obtained for the final priority setting through formal meetings, on-line polling, and informal means. Currently this plan is being used to guide priorities, budgeting, and investments.

### **Standard 2.A.2**

**In a multi-unit governance system, the division of authority and responsibility between the system and the institution is clearly delineated. System policies, regulations, and procedures concerning the institution are clearly defined and equitably administered.**

The division of authority and responsibility continues to be clearly delineated and documented on the [Board of Regents](#) website. At the institutional level, Montana Tech’s policies are clearly defined, equitably administered, and documented on both the Campus web site and in the [Faculty and Staff Handbook](#), which is distributed to every new employee and which is also available through the campus web site. In addition, the *Collective Bargaining Agreements* for the various unionized employees (faculty, classified staff) include the human resources policies and procedures applicable to the covered workforce. No significant changes in the policies, regulations, and procedures concerning Montana Tech have occurred in recent years. Whenever changes occur they are communicated via emails, meetings, and through bimonthly “State of Tech” open meetings on campus, which are led by the Chancellor. Overall, procedures are in place to administer policies, regulations, and procedures equitably and effectively.

### **Standard 2.A.3**

**The institution monitors its compliance with the Commission’s Standards for Accreditation, including the impact of collective bargaining agreements, legislative actions, and external mandates.**

Montana Tech constantly monitors compliance with the Commission’s Standards. The Provost (a vice chancellor) takes the lead for this monitoring, with major participation by the Vice Chancellor for Administration and Finance. Three major strategies are employed: reviewing the Commission’s publications and web site; sending representatives to the Commission’s workshops; and providing several faculty and administrators as volunteer reviewers for the Commission’s accreditation of other institutions. Whenever external mandates, legislative actions, collective bargaining agreements, and campus- or board-initiated policy changes are contemplated or instituted, this compliance is confirmed. Finally, whenever a self-study or progress report—such as this one—is developed, the process includes a thorough, top-to-bottom verification of compliance.



## **Governing Board**

### **Standard 2.A.4**

**The institution has a functioning governing board\* consisting of at least five voting members, a majority of whom have no contractual, employment, or financial interest in the institution. If the institution is governed by a hierarchical structure of multiple boards, the roles, responsibilities, and authority of each board—as they relate to the institution—are clearly defined, widely communicated, and broadly understood.**

Montana Tech's governing board is the Board of Regents for the Montana University System. The Board has seven members, who are appointed by the Governor and confirmed by the Montana Legislature. Each member serves a 7-year term, except for the one student member, who must be enrolled full time at one of the institutions and who serves a 1-year, renewable term. The roles and responsibility of the Board are defined explicitly by the laws of the State of Montana and by policies of the Board. This information is publicly available on the Montana University System [Board of Regents](#) web site. Only rarely might any member of the Board have any contractual, employment, or financial interests in Montana Tech. As it happens, one of the current Board members is a teacher at a nearby high school. She teaches "dual enrollment" advanced courses, whereby the high-school students can earn simultaneous high-school and college credit. For this service, she is paid a small stipend by Montana Tech, which is the nearest university to the school, and therefore responsible for overseeing the dual-enrollment courses and awarding the college credit.

### **Standard 2.A.5**

**The board acts only as a committee of the whole; no member or subcommittee of the board acts on behalf of the board except by formal delegation of authority by the governing board as a whole.**

All Board actions are taken at scheduled meetings, with public notice and public web posting of the agenda and all materials in advance. Each Board meeting is broadcast in video over the internet. Board Committee meetings are held sequentially the first day of the Board meeting. Decisions are made by the full board, as a committee of the whole, typically on the second day of each Board meeting.

### **Standard 2.A.6**

**The board establishes, reviews regularly, revises as necessary, and exercises broad oversight of institutional policies, including those regarding its own organization and operation.**

All Board actions are taken at scheduled meetings, with public notice and public web posting of the agenda and all materials in advance. Each Board meeting is broadcast in video over the internet. Board Committee meetings are held sequentially the first day of the Board meeting. Decisions are made by the full board, as a committee of the whole, typically on the second day of each Board meeting.

### **Standard 2.A.7**

**The board selects and evaluates regularly a chief executive officer who is accountable for the operation of the institution. It delegates authority and responsibility to the CEO to implement and administer board-approved policies related to the operation of the institution.**

Montana Tech's chief executive officer is the Chancellor, who is appointed by the Board, is accountable for the operation of the institution, and reports to the President of the University of Montana (UM). [Board Policy 205.2.1](#) delegates to the Chancellor responsibility for the management, "leadership and coordination of all campus activities, including academic, fiscal, and student affairs". In addition, it is the Chancellor's responsibility to administer the applicable board-approved policies. Board Policy 705.2 addresses the performance evaluation of Presidents, who are responsible for reviewing the performance of the Chancellor. In executive session, the President reviews with the Board the performance of his upper level administrators, including Chancellors.

### **Standard 2.A.8**

**The board regularly evaluates its performance to ensure its duties and responsibilities are fulfilled in an effective and efficient manner.**

[Board Policy 705.1](#) requires the Board of Regents to conduct a self-study of its stewardship every three to four years. This process is covered by a separate procedural statement, subject to review by the Board. Every member of the Board provides a written assessment of the Board's performance, as part of this process. In addition, at least once in every five years of a Commissioner's incumbency, the Board and Commissioner together participate in a comprehensive joint review by external consultants.

## **Leadership and Management**

### **Standard 2.A.9**

**The institution has an effective system of leadership, staffed by qualified administrators, with appropriate levels of responsibility and accountability, who are charged with planning, organizing, and managing the institution and assessing its achievements and effectiveness.**

Montana Tech's leadership team consists of five qualified administrators: the Chancellor and four Vice Chancellors. The Vice Chancellor for Academic Affairs also carries the title, "Provost." Each Vice Chancellor reports to the Chancellor and has a position description which is summarized in Section I-2, paragraph 107 of the [Montana Tech Faculty and Staff Handbook](#), which covers the position's delegated responsibility and accountability. The Vice Chancellors are responsible respectively for academic and student affairs; finance and administration; research and graduate programs; and institutional development. Each Vice Chancellor is charged with planning, organizing, managing, and assessing the institution's achievements and effectiveness—both within and across designated areas of responsibility. Moreover, each of the four Vice Chancellors is a member of the Self-Study team for accreditation.

Please see the resumes for the [Chancellor](#), [Provost](#), [Vice Chancellor for Administration and Finance](#), [Vice Chancellor for Research and Dean of Graduate Students](#) and [Vice Chancellor for Development and University Relations](#).

### **Standard 2.A.10**

**The institution employs an appropriately qualified chief executive officer with full-time responsibility to the institution. The chief executive officer may serve as an ex officio member of the governing board, but may not serve as its chair.**

The Chancellor, Dr. Donald M. Blacketter, is appropriately qualified and has full-time responsibility to the institution. The Chancellor is not a member of the governing board.

### **Standard 2.A.11**

**The institution employs a sufficient number of qualified administrators who provide effective leadership and management for the institution's major support and operational functions and work collaboratively across institutional functions and units to foster fulfillment of the institution's mission and accomplishment of its core theme objectives.**

Montana Tech employs a lean but efficient number of qualified administrators who work collaboratively and who provide effective leadership and management. Montana Tech's [organization chart](#) highlights the positions and reporting relationships of all qualified administrators. These administrators not only provide lean and effective leadership and management for the support and operational functions, but they also work collaboratively to foster fulfillment of the institution's mission and accomplishment of its major objectives. The major internal governance boards and committees, and their functions and responsibilities are described in the [Faculty and Staff Handbook](#). These committees foster communication and information flow, engagement by stakeholders, and support and help inform decision making by the responsible administrator.

For example, the Executive Council, comprised of the Chancellor and Vice-Chancellors, is organized to focus the leadership team and through them the major support and operational functions on fulfilling the mission and serving its constituencies. One major role of the Executive Council is to advise the Chancellor on budget allocations. Staffed by the Budget Director and the Assistant to the Chancellor, the Executive Council annually invites and reviews budget proposals for every unit of the campus. Academic departments, athletic teams, administrative offices, support functions, etc. are each invited to provide input and to present their budgets and priorities, aligned with those of the institution. Unit leaders are provided with a budget template, pre-filled with prior-year data, and given an opportunity to identify areas where investments could foster significant progress on the core theme objectives. The invitation for budget input for the following year (which starts July 1) is extended in January. Each unit leader provides both written input on the template and presents in person the unit's budget request to the Executive Council. These budget "hearings" are held through February and March, and they are open to observers from the campus community. This process helps focus attention on institutional priorities, helps raise issues and concerns the

leadership needs to address, and helps prioritize funding needs across the institution. As a result, collaborations are fostered across institutional functions so that solutions will typically emerge whereby units are actually helping each other achieve success. This process and the collaborations maximize the value accomplished with each dollar. The end results are cooperation, transparency, and reinforced focus on Montana Tech's overall mission.

## **Policies and Procedures**

### **Academics**

#### **Standard 2.A.12**

**Academic policies—including those related to teaching, service, scholarship, research, and artistic creation—are clearly communicated to students and faculty and to administrators and staff with responsibilities related to these areas.**

Academic policies are published in the [Academic Catalog](#) and/or in the [Montana Tech Faculty and Staff Handbook](#), both of which are available to all faculty, staff, administrators, and students. Some of the most important ones are also included in the [Student Handbook](#). New faculty and staff participate in new employee orientation and are required to read the Handbook within 30 days of starting their employment at Montana Tech. This Handbook is regularly updated to reflect the requirements of the applicable collective bargaining agreements. In addition, the applicable academic policies are communicated by means of the supervisory chain to each member of the faculty and staff, and to students through the dean, department, faculty, advisors, and through the Enrollment Services staff. Program-specific academic policies are published and disseminated within many programs. In addition, students, faculty, and staff are aware that if they have questions about academic policies, they can obtain answers or referrals from the provost, deans, department chairs, and from the associated support staff.

#### **Standard 2.A.13**

**Policies regarding access to and use of library and information resources—regardless of format, location, and delivery method—are documented, published, and enforced.**

Montana Tech's [Library](#) ("Library") has a web page to provide users with access to library resources. The Library and its information resources are available to faculty, staff, and to students through the Library's on-line portal. In addition, whenever information resources requested by a specific faculty member are not available in the Library, arrangements are made for them to be provided through interlibrary loan.

The principal documents describing the Montana Tech's Library access and use policies include: *Public Services Policies and Procedures Manual*; *Technical Services Policies and Procedures Manual*; and *Collection Development Policy*. These documents are available on the [Library's](#) web site and they describe how the library ensures access and manages use of both print and electronic library and information resources. In addition, policies are published on the Library website for

[Interlibrary Loan](#) and [Library Hours and Staff Directory](#). In addition to these formal, written policies, the Library also prints bookmarks which are distributed with each checked out item; they include Library hours, due dates, and policies for renewals and fines. Late fees are calculated by the Library's computer system, Voyager. To enforce fines, the system generates and sends emails to users with reminders of due dates and fine notices. These emails also include replacement costs for lost books as appropriate. As a last resort until fines are paid, holds may be placed in the university's Banner system (software that manages user data), which blocks the negligent user's ability to register for classes or have transcripts copied until the fines are paid and borrowed items are returned.

For computer and network use, Montana Tech has a three-tiered policy structure. At the highest level are The Board of Regents IT policies covering all the campuses in the Montana University System. At the next level are The University of Montana IT policies governing not only the Missoula campus but also the UM affiliates; finally, each campus has developed its own policies. For Montana Tech, these [policy](#) sets are located at the publicly accessible web site.

#### **Standard 2.A.14**

**The institution develops, publishes widely, and follows an effective and clearly stated transfer-of-credit policy that maintains the integrity of its programs while facilitating efficient mobility of students between institutions in completing their educational programs.**

Credit is awarded and transferred based on definitions and policies found in the [Montana Tech Catalog](#). With respect specifically to transfer credit, Montana University System [Policy 301.5](#) requires the transfer of college-level credit into all Montana campuses, including Montana Tech, from any regionally accredited institution, including community colleges. This policy is quoted in the [Montana Tech Catalog](#). Also addressed in this policy are requirements for credit to be awarded for education from non-collegiate institutions and for evaluating prior learning of military and veteran students. Within the past few years, the Montana University System (MUS) has put into a place a common course-numbering system adopted by all the campuses in the MUS. This system facilitates matching courses across campuses and against degree requirements. It also makes it easy for credit to transfer between and among various campuses in the MUS.

### **Students**

#### **Standard 2.A.15**

**Policies and procedures regarding students' rights and responsibilities—including academic honesty, appeals, grievances, and accommodations for persons with disabilities—are clearly stated, readily available, and administered in a fair and consistent manner.**

Policies and procedures regarding students' rights and responsibilities are clearly stated and available in the [Student Handbook](#), which is updated, published, and distributed to students annually in hard copy. The *Handbook* includes a section on students' academic rights and responsibilities (p.5), student conduct (p. 5), academic honesty (p. 15), grade appeals (p. 19), other policies and appeals

(throughout), methods for resolving grievances (p. 5), and accommodations for persons with disabilities (p. 12 and 16). These policies are administered by the appropriate authorities. Two committees (the Student Disciplinary Appeals Committee and the Student Judicial Board) both provide routes for appeal and thereby a mechanism for ensuring fair and consistent administration. The Student "J Board" is administered by the Associated Students of Montana Tech. The Disciplinary Appeals Committee is co-chaired by the Provost and the Dean of Students; and its membership includes faculty, staff, students, and a representative of the Faculty Senate.

### **Standard 2.A.16**

**The institution adopts and adheres to admission and placement policies that guide the enrollment of students in courses and programs through an evaluation of prerequisite knowledge, skills, and abilities to assure a reasonable probability of student success at a level commensurate with the institution's expectations. Its policy regarding continuation in and termination from its educational programs—including its appeals process and readmission policy—are clearly defined; widely published, and administered in a fair and timely manner.**

Board of Regents Policies [301](#) and [301.1](#) govern admissions standards. Montana Tech's admission and placement policies are described in the College [Catalog](#) (a web document updated annually). Admissions requirements for Freshman are specified in the [catalog](#). Briefly, to enter Highlands College, students must have graduated from high school (or have a GED). For placement, they take appropriate Compass tests, and many are placed in developmental level math, reading, and/or writing, as needed to help them develop the skills needed to succeed in college-level courses. Standards are specified in the catalog for admission into a baccalaureate program. They include completion of a college preparatory program, a high school GPA above 2.50, and exceeding a specified score threshold on the math and English tests of the ACT or SAT. Admissions requirements for transfer students are also specified at the same location in the Catalog. [Graduation requirements](#) and policies and procedures regarding continuation in, termination from, and readmission to degree programs are also described in the [catalog](#). These policies are administered as described, with established mechanisms for appeals.

Admission to Montana Tech's [Graduate School](#) is described in a section of the catalog. Briefly, graduate admissions requirements are program specific, with a minimum requirement by all programs being that an applicant must have the equivalent of a US bachelor's degree in an applicable discipline with a GPA for full admission of at least 2.9, along with adequate English-language proficiency, a personal statement, and reference letters. Many programs also require GRE scores, and some require a résumé, writing samples, or other materials.



### **Standard 2.A.17**

**The institution maintains and publishes policies that clearly state its relationship to co-curricular activities and the roles and responsibilities of students and the institution for those activities, including student publications and other student media, if offered.**

Montana Tech has several types of co-curricular activities, including student clubs around interest areas, student clubs or professional organizations centered in academic departments, club-type sports, and student publications. The [Student Handbook](#) introduces the Associated Students of Montana Tech (ASMT) (p. 9), co-curricular support services (Career Services, Learning Center, HPER, Athletics, etc.) and other student organizations, which can be organized by students, and approved after review by the ASMT, the Director of Student Union Activities, and the Dean of Students. Information about special activities organized for students, such as movies, trips, celebrations, etc., clearly state who is organizing and sponsoring the activity. The Student Handbook introduces the student newspaper, *The Technocrat*, and the radio station, KMSM-FM, and describes the associated standards and oversight responsibilities as well as processes whereby students could initiate additional media projects or other student clubs. Depending on the interests and initiatives of current students, some clubs and co-curricular activities increase in activity, while others go dormant from year to year. Where appropriate, the clubs affiliate with national organizations—the normal process for academically or professionally oriented clubs.

For example, Montana Tech has had a chapter of the national organization, American Indian Science and Engineering Society AISES in the past. This chapter was dormant until 2012/13, when a few American Indian students took the initiative to reactivate it, enlist new faculty/administrative sponsors, invite membership, and update the affiliation with the national organization. In 2014, the Montana Tech AISES Chapter has been selected to host the spring 2014 AISES Region I annual conference on campus on April 4-5, 2014. Region I includes Alaska, the three western Canadian provinces, and the northwestern states in the US. AISES chapters in high schools, colleges, tribal colleges, and universities within this region are invited to participate, and we are looking forward to hosting their visit.

## **Human Resources**

### **Standard 2.A.18**

**The institution maintains and publishes its human resources policies and procedures and regularly reviews them to ensure they are consistent, fair, and equitably applied to its employees and students.**

As a member of the Montana University System, Montana Tech is subject to the human resources policies established by the Board of Regents. The two applicable sections are Section 700 (Personnel) and Section 800 (Compensation) (see [Board of Regents Policies](#)). In addition, Montana Tech maintains and publishes campus-specific human resources policies and procedures and reviews them regularly to ensure they are consistent, fair, equitably applied, and current. Much of the information relevant here is included in the [Faculty Staff Handbook](#), which is

updated as needed. In addition, human resource information and forms are available on the campus web site at [Human Resources Information and Forms](#).

### **Standard 2.A.19**

**Employees are apprised of their conditions of employment, work assignments, rights and responsibilities, and criteria and procedures for evaluation, retention, promotion, and termination.**

All Montana Tech employees go through a new employee orientation process. Tech has several employee types (executives, administrators, contract professionals, union faculty, non-union faculty, unionized classified staff and non-unions classified staff). Terms and conditions of employment for union job classifications are described in the appropriate collective bargaining agreement. The conditions of employment, rights and responsibilities, and criteria and procedures for evaluation, retention, promotion, and termination for other types of employees are described generically in the Faculty and Staff Handbook. All contract employees receive both an annual appointment letter and an annual appraisal/evaluation.

Finally, individual departments orient their new faculty to departmental policies and procedures generally, as well as departmental standards for tenure and promotion specifically.

### **Standard 2.A.20**

**The institution ensures the security and appropriate confidentiality of human resources records.**

Human resources records are kept securely and confidentially because Montana Tech has a Human Resources Office (payroll/personnel) which is charged with maintaining the security and confidentiality all relevant records. As a result, all new employee searches follow a strict, standardized process assures the security of applications and the confidentiality of applicants. See [Human Resources Office](#) under "Recruitment."

Montana Tech abides by all appropriate human resource guidelines which include all policies specifically dealing with security and confidentiality, as identified by state policy in the [Code of Ethics: Standards of Conduct for State Employees](#) (State Human Resources Division, Department of Administration, March 2011).

## **Institutional Integrity**

### **Standard 2.A.21**

**The institution represents itself clearly, accurately, and consistently through its announcements, statements, and publications. It communicates its academic intentions, programs, and services to students and to the public and demonstrates that its academic programs can be completed in a timely fashion. It regularly reviews its publications to assure integrity in all representations about its mission, programs, and services.**

To ensure that Montana Tech consistently represents itself in a clear, concise, and accurate manner, the offices of Marketing and Public Relations, Enrollment



Services, and Athletics cooperatively develop, distribute, and oversee all communications conducted through electronic and print media; these include the website, all major publications, audio and video materials, and media relations. Prior to release, all externally-directed communications are rigorously edited and reviewed by the Director of the Office of Public Relations and Marketing to assure their integrity and uniformity, usually following a thorough review by the Chancellor or appropriate Vice Chancellor. An example of Montana Tech's initiative to work with its constituents is provided in the [Vision 2025](#) document.

Montana Tech's primary publications are the [Montana Tech Catalog](#) and the website. The catalog is now in digital form and is available on Tech's website. This approach allows Tech to make catalog updates on a real time basis, with the exception of updates to program curricula. Following the May Board of Regents meeting, the curriculums are updated annually each summer for publication of the next edition of the catalog.

The University consistently communicates the most pertinent statistical data publicly through the [Institutional Research](#) webpage. Data on enrollment, retention, and degrees awarded are publicly available through this office.

## **Standard 2.A.22**

**The institution advocates, subscribes to, and exemplifies high ethical standards in managing and operating the institution, including its dealings with the public, the Commission, and external organizations, and in the fair and equitable treatment of students, faculty, administrators, staff, and other constituencies. It ensures complaints and grievances are addressed in a fair and timely manner.**

The importance that both the Montana University System and Montana Tech place on institutional integrity is reflected in the numerous policies and procedures that address the ethical and professional conduct of administrators, faculty, staff, and of students. In addition to these policies and procedures, many members of the faculty and staff, as licensed or registered professionals in their specific disciplines, voluntarily subscribe to codes of professional conduct that are explicit and, in many cases, legally binding. Moreover, various segments of the institution also subscribe to codes of conduct appropriate to their functions. For example, Student Services adheres to the American College Personnel Association – National Association for Student Personnel Administrators [ACPA-NASPA Standard of Ethics](#); and the Business Office adheres to the National Association of College and University Business Offices [NACUBO Code of Ethics](#).

As employees of the State of Montana, the administrators, faculty, and staff of Montana Tech are all subject to rules of conduct provided by law. [MCA § 2-2-103](#) prefaces these rules by stating that "the holding of public office or employment is a public trust, created by the confidence that the electorate reposes in the integrity of public officers, legislators, and public employees. A public officer, legislator, or public employee shall carry out the individual's duties for the benefit of the people of the state." Rules of conduct are specified in [MCA § 2-2-121](#) and are incorporated by reference in the [Faculty Staff Handbook](#).

In addition to the statutory rules, additional rules of conduct are provided by the following key policies on ethical and professional conduct:

- ***Ethics Standards of Conduct for State Employees.*** Issued by the Montana Department of Administration, this document covers the rules specified by [MCA § 2-2-121](#) and applies to all employees of the State of Montana. Clearly addressed are items such as conflicts of interest, gifts, and use of public property for private purposes. ([Code of Ethics: Standards of Conduct for State Employees](#))
- ***Code of Expectations for the Montana Board of Regents of Higher Education.*** This statement, adopted by the Board of Regents in 2003, contains a set of principles imposed by the Regents on their own conduct ([Board of Regents Code of Expectations](#)).
- ***Equal educational and employment opportunity.*** The equitable treatment of students, staff, faculty, and administrators is embodied in two closely related documents: the Equal Educational Opportunity and the Equal Employment Opportunity Statements, both of which are contained in the catalogs, in the student handbooks, and in the [Faculty Staff Handbook](#). In addition, the Minority and Gender Equity Achievement Plan and the Access for Persons with Disabilities, contained in the [Student Handbook and Calendar](#), further expand Montana Tech's commitment to these principles.
- ***Faculty Code of Conduct.*** The Faculty Code of Conduct contained in Section II, paragraph 203 of the [Faculty Staff Handbook](#) addresses how to handle conflicts between the institution and the community and conflicts within the institution. This code of behavior encourages responsibly exercised academic freedom in an atmosphere of collegiality and mutual respect, thereby furthering the mission and objectives of the institution.
- ***Conflicts of interest.*** Issues associated with conflicts of interest help employees recognize and avoid those circumstances that cause conflicts of interest, and they ensure that any actual or potential conflicts of interest are properly reviewed and, where necessary, are managed according to applicable laws and regulations. Additionally, the Associate Vice Chancellor for Academic Affairs and Research recently completed a campus-wide project in which all faculty members were required to complete Montana Tech's [Conflict of Interest and Disclosure Form](#).
- ***Consulting services.*** While recognizing the value of engaging in consulting activities, the Board of Regents also makes clear that teaching, research, and public service are the primary responsibilities of faculty members. Both Regents [Policy 401.1](#) and Section II, paragraph 219 of the [Faculty Staff Handbook](#) clearly spell out that formal permission must first be obtained for anyone to engage in consulting activities.
- ***Employment-related actions.*** In addition to the equal employment opportunity statement referred to above, Section II, paragraphs 204 through 214, and various paragraphs in Section V of the [Faculty Staff Handbook](#) all cover detailed procedures for employment-related actions.

- **Intellectual property.** The development, ownership, and use of intellectual property is governed by *Policies 401.2* (on inventions and patents), by *401.3* (on copyrights), by *406* (on ownership of electronic course material), by *407* (on technology transfers to business entities), and by *1901.1* (on copying and use of computer software) which is promulgated both by the Board of Regents ([Board of Regents Policies](#)) and by Section II, paragraphs 217 and 218 of the [Faculty Staff Handbook](#).
- **Research activities.** Research and other scholarly activities are addressed by a number of policies which are listed in the [Principal Investigators Handbook](#) and in its associated supplement. Moreover, several of the policies that deal with conflicts of interest also specifically apply to research activities and include the [general policy on conflicts of interest](#).
- **Student conduct.** At the beginning of every academic year, each student is given a student handbook that lists expectations for conduct. Included here are rules associated with privacy, safety, and sexual harassment, with use of alcohol, drugs, and tobacco, with use of facilities, firearms, and information technology. The current edition of the handbook is the [Student Handbook and Calendar](#). Other documents addressing student conduct are:
  - [College Community Expectations Program](#) This document contains procedures to resolve any issues resulting from alleged infringements of individual rights that might arise from student conduct.
- **Student Judicial Program.** The student-run Judicial Board (J-Board) acts as a forum for students to settle disputes in a controlled environment. The Dean of Students oversees the J-Board where the majority of disputes are resolved by peers working together to adjudicate the situation.
- **Academic dishonesty.** Section III, paragraph 308 of the Montana Tech Faculty and Staff Handbook, the [Montana Tech Catalog](#), and [Student Handbook and Calendar](#) all address issues arising from academic dishonesty. Enrollment at Montana Tech is a voluntary act. By enrolling, a student thereby enters an academic community and assumes the specific obligations and responsibilities of appropriate academic behavior which are required by the institution. These obligations and responsibilities are more specific than those imposed on citizens by civil and criminal law. However, Tech students who believe that the academic rules have been applied to them unfairly can ultimately appeal their case to the Academic Standards Committee which is chaired by the Provost.
- **Student Expectations.** Within the last year, the campus developed an "Academic Rights and Responsibilities Statement" that is included in the [Student Handbook and Calendar](#). This statement addresses the students' rights on campus as well as the expectations that the campus has of them as Montana Tech students.
- **Right to privacy.** Protections accorded to student academic records by the Family Educational Rights and Privacy Act (FERPA) are restated in the [Montana Tech Catalog](#) and the [Student Handbook and Calendar](#). They are further detailed in Section III, paragraph 306 of the [Faculty Staff Handbook](#).

- **Use of information technology.** The use of information technology is governed by a series of policies issued by the Board of Regents and is further governed by a more detailed series of policies issued by Montana Tech's Campus Technology Services. The acceptable use of hardware, software, e-mail, and network resources; privacy; system security; and software piracy are all addressed by these policies.

### **Standard 2.A.23**

**The institution adheres to a clearly defined policy that prohibits conflict of interest on the part of members of the governing board, administration, faculty, and staff. Even when supported by or affiliated with social, political, corporate, or religious organizations, the institution has education as its primary purpose and operates as an academic institution with appropriate autonomy. If it requires its constituencies to conform to specific codes of conduct or seeks to instill specific beliefs or world views, it gives clear prior notice of such codes and/or policies in its publications.**

Conflict of Interest is prohibited by Board Policy 770 ([Board of Regents Policies](#)) and a Montana Tech policy [general policy on conflicts of interest](#). The Board policy applies to the governing board and to all campus personnel. The Montana Tech policy applies to campus personnel and to some students. It requires an annual disclosure of possible conflicts of interest, with a case-by-case management plan put in place in those cases where the disclosed potential conflicts could be problematic. As a public university, education is Montana Tech's primary purpose, and it operates in a manner that prevents social, political, corporate, or religious organizations from exercising inappropriate influence over its academic programs.

### **Standard 2.A.24**

**The institution maintains clearly defined policies with respect to ownership, copyright, control, compensation, and revenue derived from the creation and production of intellectual property.**

The development, ownership, and use of intellectual property is governed by [Policies 401.2](#) (on inventions and patents), by [401.3](#) (on copyrights), by [406](#) (on ownership of electronic course material), by [407](#) (on technology transfers to business entities), and by [1901.1](#) (on copying and use of computer software) which is promulgated by the Board of Regents [Board of Regents Policies](#) and Section II, paragraphs 217 and 218 of the [Faculty Staff Handbook](#). The policy is also located in the [Montana Tech Catalog](#).

Montana Tech's Research Office provides training workshops two or three times per year for "principal investigators." Principal investigators are faculty or staff members, who plan to submit and/or manage sponsored projects, funded by entities outside of Montana Tech. The PI training includes four sequential sessions: PI training, Conflict of Interest, Responsible Research, and Intellectual Property. Occasionally, Responsible Research sessions are provided to students, faculty, and staff at other times, because this topic is required of students who will be doing research. All training sessions are announced campus wide, and they are open to anyone. Records are kept of attendees. The Responsible Research training curriculum includes overview information on conflict of interest and intellectual

property topics. The Intellectual Property curriculum deals extensively with policies and procedures related to ownership, copyright, control, compensation, and revenue derived from the creation and production of intellectual property. The presentation material from the latest training workshop (all parts) is available on the [Research Office web site](#), under [Principal Investigator Training](#). Every time the training session is offered, the material is replaced with the newest file.

### **Standard 2.A.25**

**The institution accurately represents its current accreditation status and avoids speculation on future accreditation actions or status. It uses the terms “Accreditation” and “Candidacy” (and related terms) only when such status is conferred by an accrediting agency recognized by the U.S. Department of Education.**

Montana Tech indicates its regional accreditation status on its website and in its publications. Many individual programs are accredited by the appropriate professional accrediting agency and indicate their accreditation status on the website and in published materials. Review of both website and publications demonstrates that accreditations are stated accurately and objectively.

### **Standard 2.A.26**

**If the institution enters into contractual agreements with external entities for products or services performed on its behalf, the scope of work for those products or services—with clearly defined roles and responsibilities—is stipulated in a written and approved agreement that contains provisions to maintain the integrity of the institution. In such cases, the institution ensures the scope of the agreement is consistent with the mission and goals of the institution, adheres to institutional policies and procedures, and complies with the Commission’s Standards for Accreditation.**

Montana Tech enters into contractual agreements with external entities only through procurement processes conducted in accordance with Section 603 of the [Faculty Staff Handbook](#) and [Montana Tech's procurement processes](#). The scope of work for products and services in contractual agreements are clearly defined and written in procurement requisitions and documents, as prescribed in the procurement laws of the Montana Code Annotated and the Administrative Rules of Montana. Additionally, all construction and planning contractual agreements must follow the laws of the Montana Code Annotated, as well as State and University policies and procedures. The policies and procedures referenced in the Faculty Staff/Handbook are in sync with the policies and procedures prescribed by the University of Montana – Missoula for all of the campuses in the UM affiliation. As such, there are only a few key individuals authorized to enter into agreements for Montana Tech, including the Chancellor, Vice Chancellor for Finance and Administration, and the Director of Financial Planning & Analysis. Agreements for goods and services up to \$50,000 are reviewed and approved by the Director of Financial Planning & Analysis. Agreements for goods and services over \$50,000 are reviewed and approved by the Director of Procurement for the University of Montana – Missoula, pursuant to a delegation of purchasing authority agreement between the State of Montana’s Department of Administration and UM – Missoula. Once an agreement is approved by the appropriate manager, and technical/scope

oversight of the contract is provided by an employee, who is held accountable for the results. Full payment is not made until the University is satisfied with the delivered product(s) or service(s). For example, Montana Tech has contracted with Spectrum which is an Enrollment Management Platform used by Montana Tech to recruit students. Although Spectrum manages its communication plan for Tech, Montana Tech still retains the authority to review and approve the design and messaging of the communication to recruits prior to implementation of the communication plan.

## **Academic Freedom**

### **Standard 2.A.27**

**The institution publishes and adheres to policies, approved by its governing board, regarding academic freedom and responsibility that protect its constituencies from inappropriate internal and external influences, pressures, and harassment.**

The institutional setting for academic freedom at Montana Tech is described well in the introduction to Section 203, Faculty Code of Conduct in the [Faculty Staff Handbook](#).

*The Institution is devoted to the pursuit of learning in the broadest sense. Its public responsibilities include the transmission of learning, the creation of knowledge, and the performance of services in related endeavors. Traditionally, colleges have served not only as transmitters of learning and repositories of knowledge, but also as institutions for the development of that innovation and criticism without which civilization cannot progress. In the fulfillment of these traditional obligations, the Institution and its members are occasionally put in a position of apparent conflict among themselves and society. It is sometimes inevitable that new knowledge should find itself at odds with the old. Experimentation with new ideas and criticism of society is the inevitable and desirable result of a properly functioning institution.*

*These conflicts between the Institution and the community, and within the Institution itself, must not be allowed to interfere with the effective operation of the Institution. It is essential that the membership of the Institution be guaranteed freedom of expression, inquiry, association, criticism, and dissent without fear of reprisal, bodily harm, or physical disorder. The responsibility of maintaining academic freedom is shared by the Institution and through the persons of its students, its faculty, its administrators and its regents and by society.*

Montana Tech's policies on academic freedom are based on the [Montana Board of Regents Policy 302](#).

This policy, in turn, is based on the 1940 Statement of Principles on Academic Freedom and Tenure of the American Association of University Professors that can be found both in [AAUP 1940 Statement of Principles on Academic Freedom and Tenure](#) and in subsequent revisions of this statement. Montana Tech's policies on



academic freedom are specifically addressed in: [Faculty Staff Handbook](#), Section 202, Academic Freedom and Section 203, Faculty Code of Conduct.

*Faculty members may appeal to the Academic Freedom and Tenure Committee in situations where they feel that their academic freedom has been impaired or threatened. This committee consists of only tenured non-administrative faculty members, who have been elected by the faculty. Moreover, this committee rarely has cause to meet.*

### **Standard 2.A.28**

**Within the context of its mission, core themes, and values, the institution defines and actively promotes an environment that supports independent thought in the pursuit and dissemination of knowledge. It affirms the freedom of faculty, staff, administrators, and students to share their scholarship and reasoned conclusions with others. While the institution and individuals within the institution may hold to a particular personal, social, or religious philosophy, its constituencies are intellectually free to examine thought, reason, and perspectives of truth. Moreover, they allow others the freedom to do the same.**

Section 202 of the [Faculty Staff Handbook](#) reinforces Montana Tech's commitment to academic freedom and reinforces and promotes everyone's right to think independently in the pursuit and dissemination of knowledge. The institution does not expound any particular personal, social, or religious philosophy; moreover, it recognizes and protects the right of all individuals to examine thought, reason, and perspectives and reach their own conclusions. At the same time, it protects the rights of other constituencies in the campus community to do the same. Here, Montana Tech endeavors to foster reasoned and respectful discussion and dialogue on these matters, and does not tolerate infringements of the rights and academic freedoms by its employees and students.

### **Standard 2.A.29**

**Individuals with teaching responsibilities present scholarship fairly, accurately, and objectively. Derivative scholarship acknowledges the source of intellectual property, and personal views, beliefs, and opinions are identified as such.**

In the classroom, faculty, as public employees are expected to abide by the Code of Ethics, as identified in the Montana Code Annotated, 2011, Government Structure and Administration, [Standards of Conduct, Part 1. Code of Ethics](#), statement concerning public trust and public duty.

Research integrity is primarily the purview of the [Institutional Review Board](#) (IRB). Institutional Review Board (IRB) review and approval is required by US Federal Policy for all research involving human subjects, or any research that collects information relating to human subjects. Montana Tech does not have its own campus IRB because it does not have the volume of such research. Instead, Tech uses the University of Montana IRB, and appoints a Montana Tech faculty member volunteer to serve on the UM IRB. All Montana Tech IRB proposals are received and reviewed by the Tech member of the UM IR

## Finance

### **Standard 2.A.30**

**The institution has clearly defined policies, approved by its governing board, regarding oversight and management of financial resources—including financial planning, board approval and monitoring of operating and capital budgets, reserves, investments, fundraising, cash management, debt management, and transfers and borrowings between funds.**

[Montana Board of Regents Policy Section 900](#) establishes the policies and addresses oversight and management of financial resources. The Board both approves and monitors operating and capital budgets, reserves, cash management, debt management, and transfers and borrowings. All fees and fee waivers must be approved by the Board. Although the Board does not have direct control over the various campus-affiliated Foundations charged with philanthropic fundraising, the Board requires them to submit annual reports and audited financial statements for Board review as a way of ensuring integrity of operation.



## Standard 2.B–Human Resources

### Standard 2.B.1

**The institution employs a sufficient number of qualified personnel to maintain its support and operations functions. Criteria, qualifications, and procedures for selection of personnel are clearly and publicly stated. Job descriptions accurately reflect duties, responsibilities, and authority of the position.**

#### Personnel Resources

In the fall of 2012, Montana Tech had a total of 387 full-time employees as shown in Table 2.B.I.

**TABLE 2.B.I FULL-TIME EMPLOYEES AT MONTANA TECH**

|                                                | Full-Time | Percent (%) |
|------------------------------------------------|-----------|-------------|
| Number Total                                   | 387       |             |
| Number of Full-Time Faculty                    | 189       | 49%         |
| Number of Full-Time Administrators & Directors | 34        | 9%          |
| Number of Full-Time Staff                      | 164       | 42%         |

Montana Tech also employs a number of temporary and part-time staff and faculty, and in the fall of 2012 there were 78 faculty and 70 staff employed in these categories. In addition, Montana Tech had 61 graduate teaching assistants (GTAs) to help with instruction.

Policies and procedures governing recruitment of faculty and staff are addressed in the [Faculty Staff Handbook](#), Section 204, *Recruiting and Selecting New Faculty* and Section 501, *Hiring Procedures*; in the [MTFA-CBA](#), Article 10, *Recruiting and Selecting of New Faculty*; in the Montana Two Year College Faculty Association or [MTYCFA-CBA](#), Article 9.5, *Extended Postings and Hiring Between Colleges*; and in documents available in the Montana Tech Personnel Office and on the [Montana Tech Human Resources Website](#). Finally, a list current job opening, and materials and policies related to seeking a job at Montana Tech can be found on the [Montana Tech Employment Website](#).

#### Personnel Selection Process

Recruitment begins when the need to hire a full-time faculty member arises at the department level and is typically in response to a retirement, resignation, leave of absence, termination, or sometimes in response to a sabbatical. With advice from the dean of the college, the department first prepares a formal [Personnel Request Application \(PRA\)](#) for the position. The PRA is then brought to the Dean's Council, where the discussion centers on balancing specific departmental needs with the general needs of the institution. Subsequently, the PRA is either approved or not by the Executive Budget Committee, which considers the request's overall budgetary impact.

## Employment Conditions

To be sure, adjunct faculty play an important role at Montana Tech, not only in giving the institution flexibility in meeting its curricular demands, but also in providing the special kind of expertise not available in the full-time faculty. A good example would be a nutrition course taught by a registered nutritionist. In general, Montana Tech's adjunct faculty members complement the full-time faculty and enrich the curricular offerings available to our students. Adjunct faculty are those faculty who are not tenure track and include part-time faculty paid on a per course basis, visiting faculty, professors of practice, and include research faculty, who may either be part-time or full-time.

To ensure that adjunct faculty are informed with respect to the institution, to work assignment, to rights and responsibilities, and to conditions of employment, adjunct faculty are provided with a copy of the [Faculty Staff Handbook](#). Here, adjunct faculty are subject to the same appropriate policies, as are full-time faculty. For example, the evaluation of adjunct faculty who teach in four year programs is addressed in the [Faculty Staff Handbook](#), *Section 206.4 Evaluation of Part-Time Faculty*. The instructional performance of adjunct faculty who teach is evaluated in each semester they teach. Part-time faculty are generally not expected to serve on institutional committees or pursue scholarly research; however, they are welcome to participate in both, if they wish.

### Standard 2.B.2

**Administrators and staff are evaluated regularly with regard to performance of work duties and responsibilities.**

Staff are evaluated annually by their immediate supervisors, who solicit input from appropriate parties, using a specific [Performance Review Form](#) available on the [Montana Tech Forms Website](#). These staff evaluations normally occur at the end of the fiscal year. In this process, department heads are evaluated annually by the Deans of their colleges with input from the faculty in their departments. The criteria by which department heads are evaluated can be found in the [Faculty Staff Handbook](#), *Section 206.4.5 Evaluation of Department Heads* and in the [MTFA-CBA](#), *Article 22.50, Evaluation of Department Heads*. Next the Deans are evaluated annually by the Provost, and these criteria can be found in the [Faculty Staff Handbook](#), *Section 206.4.6 Evaluation of Deans*. Professionals and Vice Chancellors are evaluated annually by their direct supervisors, who solicit input from appropriate members of the Montana Tech Community. Finally the Chancellor of Montana Tech is evaluated annually by the President of the University of Montana, who solicits input from appropriate members of the Montana Tech community.

### Standard 2.B.3

**The institution provides faculty, staff, administrators, and other employees with appropriate opportunities and support for professional growth and development to enhance their effectiveness in fulfilling their roles, duties, and responsibilities.**

Faculty are encouraged to attend at least one regional or national meeting per year and are further encouraged to present the results of their scholarship at these

meetings. Support to attend these meetings typically involves a combination of funds from the faculty member's department, the appropriate dean, the Vice Chancellor for Research, and the Provost. Tenure track faculty are eligible to apply for a sabbatical every six years. Faculty wishing to pursue a sabbatical must first submit a formal sabbatical request, as described in the [Sabbatical Request Memorandum](#), outlining how they intend to spend their sabbatical and what they intend to accomplish. The request must provide a plan for covering their courses during their absence. Faculty may apply for either a one semester or a full academic year sabbatical. During the sabbatical, Montana Tech covers two thirds of their state funded salary for the period in question. In the 2012-2013 academic year, seven of eight sabbatical applications were approved. Currently Montana Tech provides up to \$1,500 in support per year for approximately 11 faculty who are pursuing doctoral degrees. Montana Tech's administrators and staff are both encouraged and supported in taking advantage of various professional development opportunities. Many of them do so.

#### **Standard 2.B.4**

**Consistent with its mission, core themes, programs, services, and characteristics, the institution employs appropriately qualified faculty sufficient in number to achieve its educational objectives, establish and oversee academic policies, and assure the integrity and continuity of its academic programs, wherever offered and however delivered.**

Consistent with Core Theme 3: Engaged Faculty, as articulated in [Montana Tech's Year One Report](#) to NWCCU in 2011; Montana Tech recruits, rewards, and retains faculty who are excellent instructors, active scholars, and who are committed to service. In the Fall of 2012, Montana Tech employed 189 full-time faculty and 92 part-time faculty (composed of 78 regular part-time faculty and 14 full-time staff who taught for extra compensation). Of the tenurable full-time faculty, 53% are tenured. All non-tenure track faculty—whether full- or part-time—are considered to be adjunct. By this measure, 47% of the full- and part-time faculty are adjunct with most of these being research faculty in the Montana Bureau of Mines and Geology (MBMG). Of the full-time faculty, 49% hold a doctoral degree, usually a Ph.D., and 39% hold a Master's degree. These degrees are either directly in or closely related to the fields in which faculty teach and pursue research and scholarly activity. Of the tenure track instructional faculty teaching in B.S. programs, 74% hold a doctorate. Table 2.B.II summarizes the rank and tenure status of full and part-time faculty.

**TABLE 2.B.II QUALIFICATIONS AND COMMITMENT OF THE FACULTY**

|                                                                         | Full-Time | Part-Time |
|-------------------------------------------------------------------------|-----------|-----------|
| Number Total                                                            | 189       | 92        |
| Number Holding Doctorate                                                | 93        | 10        |
| Percent of 4 Year Tenure Track Instructional Faculty With Doctorate (%) | 74        |           |
| Number Holding Masters                                                  | 73        | 48        |
| Tenured                                                                 | 71        |           |
| Probationary Tenure Track                                               | 63        |           |

Data on the characteristics of the faculty is provided in the following tables. Table 2.B.III - [\*Summary of Faculty Characteristics\*](#) provides a snapshot of the faculty at Montana Tech in the fall of 2012. Please also see Table 2.B.IV – [\*Institutional Faculty Profile\*](#) for faculty in fall 2012 at Montana Tech.

In addition to instructional faculty, Montana Tech has a significant number of full-time faculty (24%) whose primary responsibility is research. Of the 45 full-time research faculty at Montana Tech, 38 of these faculty are in the Montana Bureau of Mines and Geology (MBMG). In the fall of 2012 all, but one, of the remaining research faculty were associated with the Center for Advanced Mineral Processing (CAMP), which is currently undergoing a significant restructuring.

Table 2B.V (on the following page) lists degrees of tenure track instructional faculty by department and does not include two administrators who hold faculty rank, but who do not regularly teach.

**TABLE 2.B.V DEGREES OF TENURE TRACK  
INSTRUCTIONAL FACULTY BY DEPARTMENT**

| <b>Four-Year Programs</b>            |            |              |              |              |              |
|--------------------------------------|------------|--------------|--------------|--------------|--------------|
| <b>Department or Program</b>         | <b>Doc</b> | <b>% Doc</b> | <b>Mast.</b> | <b>Bach.</b> | <b>Other</b> |
| Biological Sciences                  | 6          | 85.7%        | 1            | 0            | 0            |
| Business & Information Technology    | 3          | 50.0%        | 3            | 0            | 0            |
| Chemistry                            | 7          | 100.0%       | 0            | 0            | 0            |
| Computer Science                     | 4          | 80.0%        | 1            | 0            | 0            |
| Electrical Engineering               | 5          | 100.0%       | 0            | 0            | 0            |
| Environmental Engineering            | 6          | 85.7%        | 1            | 0            | 0            |
| General Engineering                  | 7          | 87.5%        | 1            | 0            | 0            |
| Geological Engineering               | 5          | 100.0%       | 0            | 0            | 0            |
| Geophysical Engineering              | 4          | 80.0%        | 1            | 0            | 0            |
| Health Care Informatics              | 1          | 33.3%        | 2            | 0            | 0            |
| Liberal Studies                      | 9          | 100.0%       | 0            | 0            | 0            |
| Mathematical Sciences                | 6          | 67.7%        | 3            | 0            | 0            |
| Metallurgical Engineering            | 6          | 100.0%       | 0            | 0            | 0            |
| Mining Engineering                   | 4          | 100.0%       | 0            | 0            | 0            |
| Information Technology               | 0          | 0.0%         | 1            | 0            | 0            |
| Nursing                              | 0          | 0.0%         | 10           | 0            | 0            |
| Petroleum Engineering                | 2          | 40.0%        | 3            | 0            | 0            |
| Professional & Technical Comm.       | 4          | 80.0%        | 1            | 0            | 0            |
| Safety, Health, & Industrial Hygiene | 5          | 71.4%        | 2            | 0            | 0            |
| <b>TOTAL</b>                         | <b>84</b>  | <b>73.7%</b> | <b>30</b>    | <b>0</b>     | <b>0</b>     |
| <b>Two-Year Programs</b>             |            |              |              |              |              |
| <b>Department or Program</b>         | <b>Doc</b> | <b>% Doc</b> | <b>Mast.</b> | <b>Bach.</b> | <b>Other</b> |
| Business Technology                  | 0          | 0.0%         | 3            | 1            | 0            |
| Health Programs                      | 0          | 0.0%         | 0            | 3            | 0            |
| Information Technology               | 0          | 0.0%         | 0            | 2            | 0            |
| Trades & Technology                  | 0          | 0.0%         | 0            | 4            | 1            |
| Learning Center                      | 0          | 0.0%         | 1            | 0            | 0            |
| <b>TOTAL</b>                         | <b>0</b>   | <b>0.0%</b>  | <b>4</b>     | <b>10</b>    | <b>1</b>     |

### **Standard 2.B.5**

**Faculty responsibilities and workloads are commensurate with the institution's expectations for teaching, service, scholarship, research, and/or artistic creation.**

### **Teaching Workload**

While not chiseled in any stone, Montana Tech's workload policy for faculty in four year programs is based on 15 credits of load per semester. For full-time tenure track faculty, 3 credits of load are automatically assigned to account for advising and institutional service. For probationary faculty, who are expected to develop an active/productive research/scholarship program in order to meet the standards for promotion and tenure, 3 credits of load may, with the Department Head's approval, be assigned for this effort. This same criterion applies to research-active faculty. The remaining 9 to 12 credits of load are assigned to instruction. In the area of instruction, one lecture credit equals one credit of load, and one laboratory credit equals two credits of load. The assignment of load for laboratory instruction

reflects the increased contact hours involved in laboratory instruction and is consistent with Montana Tech's policy of paying twice as much per credit for laboratory instruction, as for lecture instruction. Faculty who do not advise, who are not active in institutional service, and/or who are not active in scholarship and research are expected to assume higher instructional loads. In conclusion, these workload guidelines are being further refined and codified in departmental standards, which are under current development.

For faculty at Highlands College, language contained in their collective bargaining agreement governs their workload:

*The instructional workload for full-time faculty shall normally fall within the range of 30 to 32 credits per academic year. The instructional assignment for a full-time faculty member shall normally not exceed 25 hours per week. Where instructional assignments consist of primarily laboratory, clinical, shop, internship or cooperative work experience supervision, the assignment for a full-time faculty member shall not exceed 30 hours per week. Faculty teaching more than thirty-two (32) credits or the hours defined above shall be eligible for overload compensation or a reduction in non-instructional assignments at the discretion of the campus administration. Bargaining unit faculty who teach at least 15 credits in a semester shall not receive a pro-rated salary during that semester.*

## **Research Workload**

Faculty, who have budgeted part of their time for work on funded research grants, may buy out of the appropriate portion of their instructional duties, thus shifting some of their instructional workload to scholarship. Faculty may choose to use their "research salary," i.e., the appropriate College and University and Professional Association (CUPA) salary average for their rank and discipline, in preparing their grant applications, because they are competing nationally for funding against faculty who make up these CUPA salary averages. As an example of how this works, consider a research-active faculty. Assume this person normally teaches 9 credits per semester, performs 3 credits per semester of research (total of 12 credits per semester), and earns a state salary of \$60,000 per nine month academic year. Further assume, this same person has a funded grant which is budgeted for one-quarter of release time for the year at a CUPA or research salary of \$90,000 per nine month year. With this 3 credit release time, the faculty member's teaching load would drop to 6 credits per semester. Since one quarter of this faculty member's salary (3/12) would be paid at a rate of \$90,000 per year and three quarters (9/12) would be paid at \$60,000 per year, this same faculty member would be paid a salary of \$67,500 per nine month year. This increase in 9 month salary from \$60,000 to \$67,500 for faculty who are able to secure funded research grants provides an incentive for faculty to pursue research at this level.

## **Standard 2.B.6**

**All faculty are evaluated in a regular, systematic, substantive, and collegial manner at least once within every five-year period of service. The evaluation process specifies the timeline and criteria by which faculty are evaluated; utilizes multiple indices of effectiveness, each of which is directly related to the faculty member's roles and responsibilities, including evidence of teaching effectiveness for faculty with teaching responsibilities; contains a provision to address concerns that may emerge between regularly scheduled evaluations; and provides for administrative access to all primary evaluation data. Where areas for improvement are identified, the institution works with the faculty member to develop and implement a plan to address identified areas of concern.**

### **Faculty Evaluation Process**

All instructional faculty, with the exception of full professors, are evaluated annually at the departmental level. Full-professors are only evaluated every three years, on a rotating basis, with approximately one-third of all the full professors being evaluated in any given year. All faculty evaluations are based on a review by the department head of a portfolio prepared by the faculty member who is under review. However, the department head may solicit confidential opinions from other faculty on the individual's performance. Finally, review of part-time faculty is only based on and only addresses instruction.

Procedures and expectations for evaluation, tenure, and promotion of faculty at Montana Tech are covered in the following:

- [\*Faculty Staff Handbook\*, Section 206, Evaluation, Promotion, and Tenure – North Campus Faculty](#) for all faculty in four year B.S. and M.S. granting programs;
- [\*MTFA-CBA\*, Article 14, Faculty Evaluation](#), for faculty in four year B.S. and M.S. granting programs, who are part of the MTFA Collective Bargaining Unit (where The Faculty Staff Handbook and the MTFA-CBA differ, the MTFA-CBA takes precedence);
- [\*Faculty Staff Handbook\*, Section 207, Evaluation, Promotion, and Tenure – COT Faculty](#) for faculty in the certificate and two year programs in the College of Technology (COT);
- [\*MTYCFA-CBA\*, Article 7, Faculty Evaluation](#), for faculty in certificate and two year programs in the College of Technology (COT), who are part of the MTCFA Collective Bargaining Unit (where The Faculty Staff Handbook and the MTCFA-CBA differ, the MTCFA-CBA takes precedence);
- [\*Faculty Staff Handbook\*, Section 208. Classification and Promotion-Montana Bureau of Mines and Geology Professional Faculty and Staff](#) for faculty and staff in the Montana Bureau of Mines and Geology (MBMG), using the procedures and form outlined in the [\*MBMG Faculty Evaluation Procedures\*](#); and
- [\*Faculty Staff Handbook\*, Section 206.4 Evaluation of Part-Time Faculty](#) for part-time faculty who are expected to have students evaluate each of their

courses and to have the department heads in their instructional areas review their instructional performance.

## **Collective Bargaining**

On June 1, 2005 the Montana Board of Personnel Appeals certified the Montana Tech Faculty Association (MTFA), which is affiliated with the Montana Education Association - Montana Federation of Teachers (MEA-MFT). Thus, the MTFA became the exclusive representative for the bargaining unit, which is comprised of all teaching faculty in four year programs on academic appointment, department head(s) and/or department chairpersons, and lab director(s) with faculty status at Montana Tech. This bargaining unit excludes library faculty, nursing faculty, faculty represented by the Montana Two Year College Faculty Association (MTYCFA) collective bargaining agreement, part-time academic appointments of less than .5 (one-half) FTE, all employees of the Bureau of Mines and Geology, and those faculty who are professional engineers (PE) or engineers in training (EIT). Also excluded are coaching staff, museum staff, deans, non-teaching management personnel, visiting faculty, research assistants, post-doctoral fellows, and researchers with academic rank who would teach less than .5 (one-half) FTE.

The latest MTFA Collective Bargaining Agreement (CBA), which was ratified in October of 2013 and subsequently approved by the Montana Board of Regents, addresses issues and policies related to wages, benefits, and to working conditions for faculty who are members of this bargaining unit. Those faculty in the bargaining unit who teach in four year programs offering B.S. and M.S. degrees are largely concentrated in the College of Letters, Sciences, and Professional Studies. However, there are faculty in the College of Letters, Sciences, and Professional Studies who are not in the bargaining unit, notably nursing faculty. Also, some faculty in the School of Mines and Engineering are in the bargaining unit. Because of this, when the MTFA-CBA was first developed, care was taken to keep it in agreement with policies and procedures set forth in the Faculty Staff Handbook. In any instance where the MTFA-CBA and the Faculty Staff Handbook are not in agreement, the MTFA-CBA, as a contract, will take precedence over the Faculty Staff Handbook. Faculty evaluation for faculty teaching in four year programs is addressed in the [MTFA-CBA, Article 14, Faculty Evaluation](#). Faculty in two year programs are represented by the MTYCFA. Faculty evaluation for faculty teaching in four year programs is addressed in the [MTYCFA-CBA, Article 7, Faculty Evaluation](#).

## **Student Evaluation Process**

As required by the Faculty Staff Handbook Section 206.4, the MTFA-CBA Section 22.311, and by the MTYCFA-CBA, faculty instruction in all courses is evaluated by students just prior to the end of the course each time the course is taught. Students evaluate courses using the uniform campus-wide [Montana Tech Course Instruction Evaluation Form](#). This form was developed by a faculty committee and agreed to by a vote of the general faculty. This student evaluation form solicits Likert scale responses to 25 questions that address instructional behaviors and also allows for free response to three general questions:

- *What aspects of this course contributed to your learning?*
- *What aspects of this course did not contribute to your learning?*



- *Suggestions--What would you change to improve the course?*

Finally, the form allows departmental-specific questions to be added. This link provides an example of a [Sample Real Course Evaluation](#) with the professor's name and course identifying remarks removed.

### **Access to Evaluation Data**

Once grades have been submitted, faculty have on-line access to these evaluations, as do department heads for the faculty in their departments, deans for the faculty in their colleges, and the Provost for all faculty. If the evaluation has been filled out on-line, then the free responses are included in the on-line evaluation. On the other hand, if the evaluation was completed on paper, then the free responses are provided by departmental assistants to the both faculty members and department head separately. In either case, faculty and academic administrators have appropriate access to the raw student evaluation data. Every semester faculty members use these evaluations to assess and improve the quality of instruction in their courses. Moreover, these same evaluations are used by department heads, deans, the Provost, and others in the evaluation cycle to help make decisions on promotion and tenure. Access to student evaluations for faculty and administrators is available at [On-Line Access to Student Evaluations](#).

### **Sample Evaluation Process**

To give a flavor for the time-line and criteria used in Montana Tech's faculty evaluation, a sample evaluation process for a tenure track assistant professor teaching in a four year program and undergoing mid-tenure review will be described. Because faculty are eligible to apply for tenure in their sixth year, for a tenure track faculty, who was given no time credit toward tenure at the time of initial appointment, mid-tenure review would occur during the faculty member's third year at Montana Tech. The primary steps in the process are as follows:

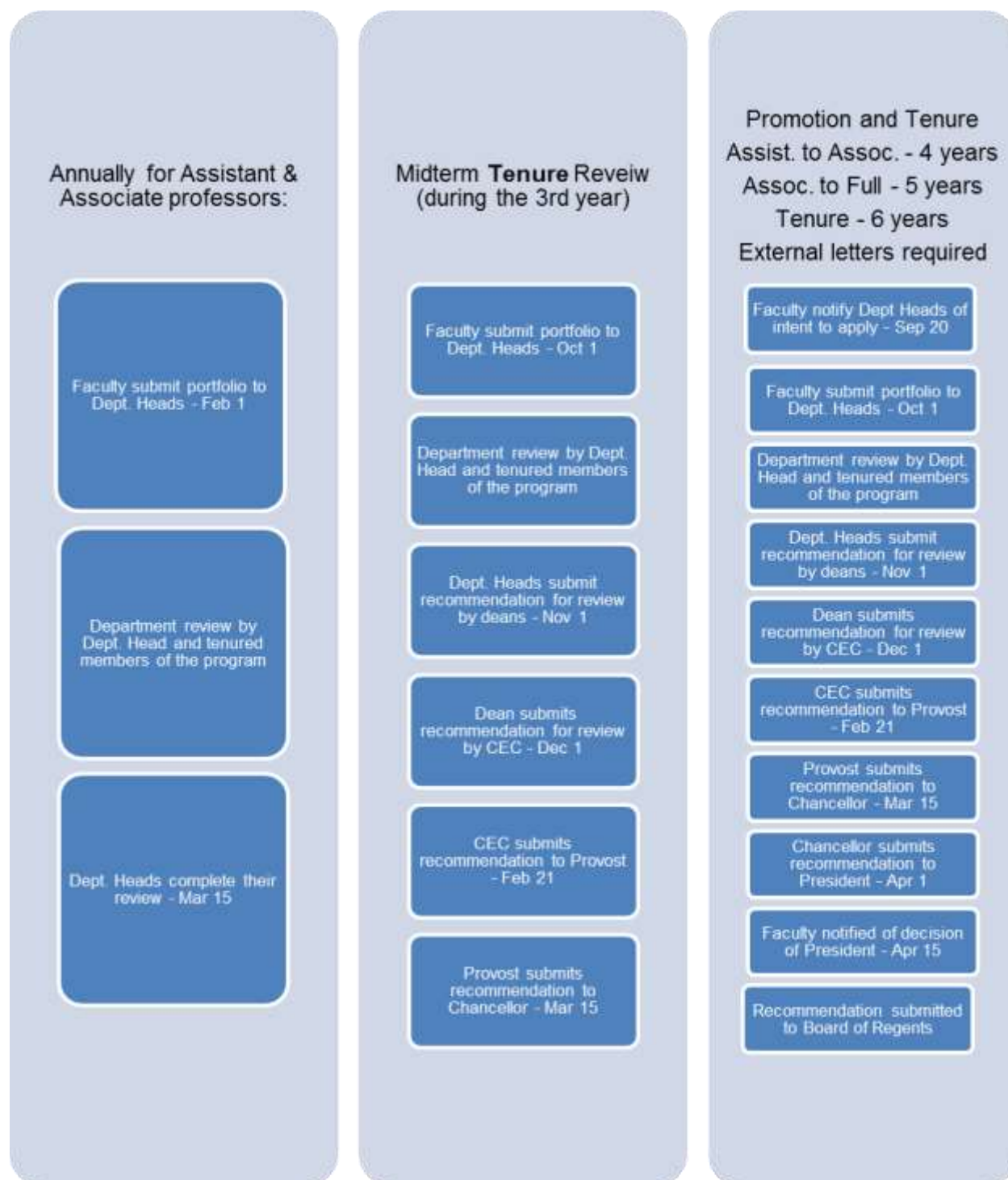
- The process begins with the faculty member preparing a portfolio which addresses accomplishments in the areas of instruction, research/scholarship, and service during the first three years at Montana Tech. This portfolio would contain a cover letter, letters of support from colleagues, copies of the faculty member's two prior annual departmental evaluations, an up-to-date vita, summaries of courses taught and student evaluations from these courses, evidence of research and/or scholarly activity, and details of service to the department, college, profession, and community.
- The entire portfolio is due to the department head by October 1<sup>st</sup>. Based on the portfolio, the department head first solicits input from the tenured departmental faculty (although other faculty and staff may be asked to comment) and then writes a letter of support or non-support for the faculty member under review.
- The portfolio, the department head's letter, and any additional evidence marshaled either by the department head or by the faculty member under review are next forwarded to the dean of the respective college by November 1<sup>st</sup>. Here, the dean reviews the portfolio, the department head's letter, and any other relevant evidence.

- The dean then writes a letter of support or non-support and submits the entire package to the Collegiate Evaluation Committee by December 1<sup>st</sup>. (Voting members of the Collegiate Evaluation Committee consist of full-time, tenured, full professors.) Two of these members are elected annually by the faculty from the College of Letters, Sciences, and Professional Studies; and two are elected from the School of Mines and Engineering. A fifth outside voting faculty representative is selected by the faculty member under review. The Collegiate Evaluation Committee reviews the candidate's materials, soliciting other information or seeking clarification as needed, and finally writes a positive, negative, or qualified recommendation before passing the review package to the Provost by February 21<sup>st</sup>.
- The Provost, in turn, evaluates all of the aforementioned materials and recommendations and then forwards a written recommendation on to the Chancellor by March 15<sup>th</sup>. The portfolio as it was after review by the Dean is archived in the Dean's office.
- By April 1<sup>st</sup> the Chancellor ultimately affirms or denies previous assessments of the faculty member's progress toward tenure, noting any areas of concern in a written reply to the faculty member.

At every stage of this process, faculty members may add to or modify their portfolio. However, they may not delete material from it. Within seven calendar days of the completion of any stage of the process, faculty members under review are to be notified in writing of the recommendations made at that stage. The process for applying for tenure or for promotion for instructors to Level II or III or for faculty to associate or full professor is essentially the same as that described above for mid-tenure review with the exception that the Chancellor's recommendation is forwarded to the President of The University of Montana and then ultimately to the State of Montana Board of Regents. Please see the Figure 2.B.1, Portfolio Flow Sheet, on the following page. It was developed by the Provost and is used to summarize the promotion and tenure process for both faculty applicants and new hires.

### **Addressing Concerns**

Concerns that emerge during the faculty evaluation process are addressed by the immediate supervisor, e.g., department heads for faculty in their department, in consultation with the affected faculty member. The next supervisor in the chain is expected to be aware that an evaluation concern is being addressed. This process may result in a written improvement plan with identified benchmarks to which both the department head and affected faculty member have agreed. For faculty teaching in four year programs and subject to collective bargaining, see the [MTFA-CBA](#), Article 22.313, *Criteria for Evaluation of Instructional Performance*, point 2 for related language.



**Figure 2.B.1 - Portfolio Flow Sheet**

## Standard 2.C–Education Resources

### Standard 2.C.1

**The institution provides programs, wherever offered and however delivered, with appropriate content and rigor that are consistent with its mission; culminate in achievement of clearly defined student learning outcomes; and lead to collegiate–level degrees or certificates with designators consistent with program content in recognized fields of study.**

The mission-appropriateness of all new or expanding programs is first determined by the academic department in which the particular program under consideration will be housed. The Departmental faculty initially assess whether or not sufficient faculty and other resources are available either to create or to continue programs in support of the University's overall strategic plan.

Here, mission-consistent content and rigor of programs are assured by a specific internal curricular review process which consists of the following six considerations:

- Pursuant to Montana Board of Regent's policy 303.10, Montana Tech publishes its academic program plans for the next three-year period. The academic program planning list contains all programs that the campus may submit to the Board of Regents for its consideration in the upcoming year.
- As previously mentioned, any changes to a department's curriculum or the consideration of any new programs must first begin with the faculty in the department. All curricular changes are required to be documented by using the standardized [Curriculum Review Committee \(CRC\) form](#).
- Once curricular changes are approved at the department level, the completed CRC form is then sent to the respective Academic Dean for consideration and approval.
- The CRC form is then considered by the Curriculum Review Committee and, if approved by the CRC, sent to the Faculty Senate for further and final approval.
- If any General Education requirements are involved, then the General Education Committee (GEC) must review these course applications which are to be included in the list of campus-approved courses that satisfy [General Education requirements for graduation](#) . Departments are required to use the [General Education Application Form](#) when requesting consideration of their course(s). Once approved by the General Education Committee, these recommendations are sent to the Faculty Senate for final approval (see sections 2.C.9 and 2.C.10).
- Courses that may be used to satisfy the writing ("W") requirement for graduation are reviewed both by the CRC and by the Faculty Senate.

In the last analysis, Montana Tech assures additional mission-appropriate content and rigor by relying on external program-review provided by program-specific accrediting bodies such as the Accreditation Board for Engineering and Technology (ABET). All of Montana Tech's engineering programs are ABET accredited, and a

number of other programs have discipline-specific accreditation, such as the Commission on Collegiate Nursing Education (CCNE) accreditation of the Nursing degree. These periodic reviews of curricula by faculty in preparation for accreditation visits from their discipline-specific accrediting bodies ensure that programs, both new and proposed, are in alignment with Montana Tech's mission. Finally, annual program reviews required of academic programs ensure that each program is mission-appropriate.

### **Standard 2.C.2**

**The institution identifies and publishes expected course, program, and degree learning outcomes. Expected student learning outcomes for courses, wherever offered and however delivered, are provided in written form to enrolled students.**

Degree and program learning outcomes are published annually in the [Montana Tech catalog](#). Expected learning outcomes for courses are oftentimes stated in the course syllabus, which is provided to enrolled students per the [Montana Tech syllabus policy](#).

Course, program, and degree learning outcomes are developed by the faculty within the particular program, and most often these outcomes are developed in conjunction with an external review board and/or discipline-specific accreditation entity.

### **Standard 2.C.3**

**Credit and degrees, wherever offered and however delivered, are based on documented student achievement and awarded in a manner consistent with institutional policies that reflect generally accepted learning outcomes, norms, or equivalencies in higher education.**

Montana Tech's definition of academic credit is clearly stated in the [Academic Regulations and Requirements](#) section of the catalog and adheres to NWCCU's [Credit Hour Policy](#) and [federal policies](#). Documented student achievement, credit, and course grades are based on explicit definitions and policies embedded in national norms. All courses, whether campus-based, hybrid/blended, or completely online, adhere to this definition of academic credit. The content coverage in a three credit online course is equivalent to 45 hours of face-to-face content coverage. An example of this is demonstrated by comparing the [syllabus in a face-to-face course](#) with the [syllabus of the same courses delivered online](#).

For the Montana Tech semester system, one semester credit is assigned for a minimum of 15 hours. The minimum in-class time commitment may include, but is not limited to lectures, discussions, laboratories, fieldwork, and problem solving.

Student achievement is documented by the requirement that graduating students must complete a formal application for graduation during the semester prior to the expected semester of completion. This requirement, which is coupled with the Curriculum, Advising, and Program Planning (CAPP) analysis available to faculty and students, clearly documents student achievement.

## **Standard 2.C.4**

**Degree programs, wherever offered and however delivered, demonstrate a coherent design with appropriate breadth, depth, sequencing of courses, and synthesis of learning. Admissions and graduation requirements are clearly defined and widely published.**

### **Appropriate Breadth, Depth, and Sequencing of Courses**

Ensuring the appropriate breadth, depth, and sequencing of courses begins at the department level. Here, faculty are responsible for developing new courses and for revising existing courses within the department's curriculum so that these courses follow national norms on course breadth and depth. Additionally, a large number of courses offered at Montana Tech have recently undergone a state-wide "common course numbering" exercise designed to ensure appropriate breadth and depth in the course material. As part of the process, discipline-specific faculty from around Montana met to discuss course content, depth, breadth, learning outcomes, and other relevant topics. The goal of this exercise was to give students as well as the higher education units in Montana the confidence that, for example, if students take College Algebra at one college/university they would have had sufficient breadth and depth in the topic for the course to automatically transfer to any other higher education unit within the MUS.

Also, during the 2011-2012 academic year, the campus implemented a yearly program review process in which all academic programs participate. This annual program review supplements [Board of Regents policy](#) which requires campuses to review their academic programs at least once every seven years.

Finally, one of the roles of the Curriculum Review Committee is to ensure that new courses presented by an academic department have sufficient depth, breadth, and are sequenced properly. Every academic department publishes a semester-by-semester academic plan in the catalog that students can use as a guide to plan the sequence of courses in which they enroll. This recommended sequencing of courses--as well as the campus rubric used to identify courses (100 level vs. 200 level, etc.)--is used to properly sequence courses on the Montana Tech campus. Graduate level courses are reviewed using the same process as undergraduate courses with the exception of a review by the Graduate Council prior to being reviewed by the Curriculum Review Committee.

### **Synthesis of Learning**

Synthesis of learning is demonstrated by having students successfully completing the capstone course requirement specific to each degree. Additionally, senior seminars, internships, and other culminating experiences such as the ETS *Proficiency Profile* exam demonstrate synthesis of learning.

### **Admission and Graduation Requirements Clearly Defined and Published**

Admission and graduation requirements are clearly defined and published in a number of different locations available for students to access. Admission requirements can be found in the [Montana Tech catalog](#) as well as on the [Montana Tech webpage](#) and the [Montana Board of Regents webpage](#).



[Graduation requirements](#) are identified in the catalog and on the [Montana Tech webpage](#). Faculty, staff, and students also have access the Curriculum, Advising, and Program Planning (CAPP) degree audit system. This system apprises the user (faculty, staff, students) of progress toward a chosen degree as well as the remaining requirements for degree completion. Students who are considering changing their major can use CAPP to identify the courses that they would need to complete should they decide to change their major.

## **Graduate Programs**

Admission and graduation requirements for Montana Tech's graduate programs are clearly defined and published in the [catalog](#) and on the [graduate school's webpage](#). All graduate degree programs demonstrate a coherent design with appropriate breadth, depth, sequencing of courses, and synthesis of learning. A graduate student's program of study is developed by the individual student in coordination with and approved by the student's graduate committee chair and committee members. The committee chair must approve the program of study to ensure that program requirements are met. Finally, additional information on graduate school programs can be found in Standard 2.C.13 of this NWCCU report.

### **Standard 2.C.5**

**Faculty, through well-defined structures and processes with clearly defined authority and responsibilities, exercise a major role in the design, approval, implementation, and revision of the curriculum, and have an active role in the selection of new faculty. Faculty with teaching responsibilities take collective responsibility for fostering and assessing student achievement of clearly identified learning outcomes.**

## **Curriculum Planning**

Faculty members of instructional departments propose and develop the curriculum. They also play the primary role in approving the curriculum through their participation in the Graduate Council, Curriculum Review Committee, and Faculty Senate.

As an example of faculty involvement in curricular planning, consider the process by which a new course is added to the curriculum. The idea for a new course generally originates with a faculty member who will often have first taught the course as a special topics course, which has proven successful and generated a positive student response. This same faculty member will then bring a request to the appropriate department to add this course to the curriculum. If the faculty members in that department agree with the request, a formal submission for a new course will be prepared. This formal submission will include a suggested course number, title, credits, catalog description, and prerequisites; will have an attached sample syllabus; and will clearly identify any known effects on library resources and other programs. The following link provides an [Example Curriculum Review Request](#) from the Mathematical Sciences Department. This formal request will then be vetted by the departments and the faculty in the college in which the request originated. If the appropriate college approves, the request next passes to the Curriculum Review Committee, which has faculty representation from each

instructional program and only faculty are voting members of this committee. Once the request is approved by the Curriculum Review Committee, it is presented to the Faculty Senate, which is largely composed of instructional faculty, for final approval. Clearly, the faculty own the curriculum.

## **Learning Outcomes**

Departmental faculty are principally responsible for developing the learning outcomes for discipline-based degrees, and these outcomes can be found in the [Montana Tech Catalog](#) in the general information area for each department. For example, the learning outcomes for the computer science course, CSCI 438, The Theory of Computation, can be found in the syllabus for this course, [CSCI 438 Syllabus](#). Course learning outcomes are typically assessed through some combination of assignments, quizzes, exams, and/or project.

## **Selection of New Faculty**

Policies and procedures governing recruitment of faculty and staff are addressed in the [Faculty Staff Handbook](#), *Section 204, Recruiting and Selecting New Faculty* and *Section 501, Hiring Procedures*; in the [MTFA-CBA](#), *Article 10, Recruiting and Selecting of New Faculty*; in the [MTYCFA-CBA](#), *Article 9.5, Extended Postings and Hiring Between Colleges*; and in documents available in the Montana Tech Personnel Office and on the Montana Tech website, <http://www.mtech.edu/administration/hr/index.htm>.

Recruitment begins when the need to hire a full-time faculty member first arises at the department level and is typically in response to a retirement, resignation, leave of absence, a termination, or sometimes to a sabbatical. With advice from the dean of the college, the department prepares a formal [Personnel Request Application \(PRA\)](#) for the position. The PRA is then brought to the Dean's Council, where the discussion centers on balancing specific departmental needs with those overall needs of the institution. If the PRA is approved by the Dean's Council, the request for a faculty hire results in the PRA being forwarded to the Executive Council, where the impact of the hire on the institution's finances is considered. An active PRA requires signatures by the Department Head, Dean, Provost, by the Affirmative Action/EEO Officer, Vice Chancellor for Administration and Finance, and, ultimately, by the Chancellor.

Once fully approved, the requested position is posted on the Montana Tech website under employment and advertised locally, regionally, and/or nationally as appropriate. A snapshot of the Montana Tech employment web site can be found at <http://www.mtech.edu/employment/index.htm>. The text of the advertisement is part of the PRA and is largely written by the affected department but with oversight from the Dean, from the Provost, and from the AA/EEO Officer. Finally, appropriate venues for advertising the position are suggested by the department.

## **Selection Process**

Concurrent with actually advertising for the position, a search committee is formed. This committee consists of at least three faculty members representing the academic department and one faculty member from outside the department. Student involvement is encouraged and may include a student member who is appointed to the search committee by the Department Head. Both the search committee and the chair of the committee, who is usually the affected department



head, develop an applicant screening matrix of required and preferred criteria to help sharpen the focus of the candidate review process. Just prior to the advertised date for reviewing applications, the search committee meets with the Equal Employment Opportunity Officer as part of an orientation process on the rules and regulations governing the search process.

The search committee then reviews applications and typically classifies these applications as Tier I (two to four candidates to be invited in for an interview); Tier II (potential candidates, if a hire doesn't materialize from Tier I); and Tier III (candidates who are not to be considered further). At this point references are checked on Tier I candidates, interview arrangements are made for Tier I candidates, and Tier III candidates are notified that they are no longer being considered. Interviews typically require one to two days, during which time the candidate meets with the department and other interested faculty, with students in the affected majors, with a representative of the Personnel Office, and with the Dean of the College. The candidate also meets with the Vice Chancellor for Research and Graduate Studies, the Provost, and, of course, with the search committee. Typically, the interview process includes a discipline-specific presentation given to the search committee and other interested faculty, staff, and students. This presentation is an effective indicator in judging the candidate's ability to teach.

### **Employment Guidelines**

After the search committee makes its recommendation, the Department Head, Dean, and Provost put together an employment offer. This offer covers salary, credit toward promotion and tenure, moving expenses, and any other conditions of the initial hire. Guidelines on allocation of moving expenses can be found in the [\*Faculty Staff Handbook\*, Section 501, Relocation Expenses](#). Montana Tech may offer one to two years toward promotion to associate professor and one to two years (rarely) toward tenure for prior experience that the candidate has in a tenure track position at an accredited college or university. When less than ideal circumstances require Tech to hire a candidate with only a master's degree (where the doctorate is the normal terminal degree), Tech may in the letter of appointment require the new hire to complete an appropriate doctorate as a condition of future promotion or tenure. In any case, upon the Chancellor's approval, the candidate is notified of the offer. If the candidate accepts the offer, the remaining candidates are notified that the position has been filled. Meanwhile, the new hire's completed search file is forwarded to the Montana Tech Personnel Office for archiving.

### **Standard 2.C.6**

**Faculty with teaching responsibilities, in partnership with library and information resources personnel, ensure that the use of library and information resources is integrated into the learning process.**

As an example of ensuring that both the library and various information resources are integrated into the learning process, the library collaborates with instructors who teach required writing courses and discipline-specific "W" courses (those with a designated writing component). Here, library personnel engage in on-going conversations with the Director of Writing, the Director of Student Success, and with other key teaching faculty. Together, librarians and faculty develop library

instruction sessions that include the kind of assignments and outcomes best designed to educate students in accessing, finding, evaluating, and in using library resources. Library faculty daily assist students with course work assignments and also provide in-depth research help to senior design students, to those working on undergraduate research projects, and to graduate students.

Some faculty and departments have even developed specific courses to introduce students to library and information resources. For example, Library and Chemistry faculty team-teach a required chemistry literature class specifically designed for chemistry majors. This class meets in the library and is designed to guide students and provide hands-on experience in finding scientific and technical information. Library staff also work with faculty in creating on-line [subject guides](#) that provide discipline-specific assistance.

The library hosts instruction sessions which are tailored to specific classes and which usually last 50 minutes. These are offered to undergraduates in writing, speech, nursing, in occupational safety and health, and in other classes as needed. Sessions introduce students to services such as interlibrary loan and train them on how to find, access, and assess information for research papers. In addition, the library provides in-depth consultations to graduate students to introduce them to advanced materials and resources related to thesis research. The library also works with individual faculty to help them develop skills in searching and retrieving information.

Both faculty and students participate in library planning and development through membership on the Library Committee. This committee is comprised of 25 faculty (two from the Highlands College), two student senators, and even a representative from the Montana Bureau of Mines and Geology. Here, they serve as direct advisors to the Library Director and are charged with informing their constituents about library resources and services. Faculty also help with library development by making regular requests for book purchases and intermittent suggestions for journal or database purchases. Faculty, staff, and students can suggest library acquisitions through the library's "[Suggest Items](#)" interface. Finally, the Curriculum Review Committee guidelines require all faculty to list library resources for both course content changes and for new courses.

The library also provides global access to campus Scholarship and archives campus events through [Digital Commons @ Montana Tech](#).

An extensive web-page, [Montana Tech Library webpage](#), is maintained by Tech's library. It provides information on library resources and on-campus electronic access to e-journals and other electronic resources. Please see Standard 2.E of this NWCCU report for a more detailed discussion of how the library and instruction are integrated.

### **Standard 2.C.7**

**Credit for prior experiential learning, if granted, is: a) guided by approved policies and procedures; b) awarded only at the undergraduate level to enrolled students; c) limited to a maximum of 25% of the credits needed for a degree; d) awarded only for documented student achievement equivalent to expected learning achievement for courses within the institution's regular curricular offerings; and e) granted only upon the recommendation of appropriately qualified teaching faculty. Credit granted for prior experiential learning is so identified on students' transcripts and may not duplicate other credit awarded to the student in fulfillment of degree requirements. The institution makes no assurances regarding the number of credits to be awarded prior to the completion of the institution's review process.**

Montana Tech does not grant credit for experiential learning. However, students who believe that their industrial work experience, military work experience, their employer-sponsored courses or training, or their self-study qualifies them for particular course credit may request to challenge a course. By challenging a course, students seek to earn course credit by passing appropriate examinations rather than by attending class and meeting usual course requirements. Please see the [Montana Tech Catalog Challenge Procedure - Credit by Examination](#), for more detail.

### **Standard 2.C.8**

**The final judgment in accepting transfer credit is the responsibility of the receiving institution. Transfer credit is accepted according to procedures which provide adequate safeguards to ensure high academic quality, relevance to the students' programs, and integrity of the receiving institution's degrees. In accepting transfer credit, the receiving institution ensures that the credit accepted is appropriate for its programs and comparable in nature, content, academic quality, and level to credit it offers. Where patterns of student enrollment between institutions are identified, the institution develops articulation agreements between the institutions.**

Among units within the Montana University System (MUS), there is a highly developed and consistent transfer agreement based on common course numbering. These transfer agreements were developed by Faculty Learning Outcome Councils (FLOCs), with discipline-focused faculty representation from all units in the MUS. One goal of this agreement is to ensure that the evaluation of general education transfer credits within the Montana University System is a fair and consistent process. This initiative has resulted in the "block transfer procedure," which is described in the Montana Tech Catalog as follows:

*An undergraduate student who has completed the lower division coursework in an approved general education program at one of the institutions noted above, and who transfers to another of those institutions, cannot be required to take additional general education coursework at the lower division level.*

For more information on the transfer of courses within the Montana University System, please see the [MUS Transferability Initiative Website](#). Here, transfer within the Montana University System is governed by system policies which can be viewed at [Montana University System Policies](#). The system policy is further elaborated by institutional transfer policies at Montana Tech, which can be found in [Montana Tech Transfer Credit Policies](#). Questions on the transfer of credits from both within and without the Montana University system are determined by faculty at the department level. Institutional policies governing the transfer of credit from outside the United States can also be found on the Montana Tech website under [Transfer of International Credit](#). This web-site provides examples of articulation agreements that recognize long standing patterns of transfer enrollment into Montana Tech's engineering programs. Most of the examples involve Canadian students from the [Southern Alberta Institute of Technology](#), the [Northern Alberta Institute of Technology](#), and from the [British Columbia Institute of Technology](#).

Graduate students may transfer up to six credits taken at other graduate schools to a Montana Tech graduate program—provided that these credits meet the following requirements:

- The course was acceptable for graduate credit at the school where it was taken.
- A grade of at least a "B" was earned.
- Final determination of transfer credits is made by the student's graduate committee.

Any transfer credit requests older than six years from the anticipated graduation date of the student not only must meet the transfer credit requirements but must also be approved by the Dean of Graduate Studies.

## **Undergraduate Programs**

### **Standard 2.C.9**

**The General Education component of undergraduate programs (if offered) demonstrates an integrated course of study that helps students develop the breadth and depth of intellect to become more effective learners and to prepare them for a productive life of work, citizenship, and personal fulfillment. Baccalaureate degree programs and transfer associate degree programs include a recognizable core of general education that represents an integration of basic knowledge and methodology of the humanities and fine arts, mathematical and natural sciences, and social sciences. Applied undergraduate degree and certificate programs of thirty (30) semester credits or forty-five (45) quarter credits in length contain a recognizable core of related instruction or general education with identified outcomes in the areas of communication, computation, and human relations that align with and support program goals or intended outcomes.**

As described in Standard 1.B, Montana Tech's General Education program is aligned with the objective to provide all students with a general education, which in turn, falls under the core theme Education & Knowledge. An important part of the process of achieving this objective is to ensure that all students enrolled in an Associate of Science or Baccalaureate Degree program have access to their

respective general education component via the [Montana Tech Catalog](#). Here, the requirements are given in a form consistent with a coherent and recognizable core.

As shown in Table 2.C.9.I, the core general education curriculum at Montana Tech is structured around five general, academic, core areas: 1) Communications; 2) Humanities/Fine Arts; 3) Mathematical Sciences; 4) Physical & Life Sciences; and 5) Social Sciences. These five areas, which serve as the foundation for a traditional liberal arts curriculum, provide a gateway through which students explore basic knowledge, methodologies, and pathways to productive citizenship. Moreover, as displayed in the catalog, within each core area a course distribution model is presented. A student fulfills Tech's general education program by selecting and passing courses within each respective course distribution model, until the minimum number of required credits has been met. (Table 2.C.9.I also gives the course credits required within each core area.)

**TABLE 2.C.9.I CORE AREAS**

| <b>Area</b> |                                                         | <b>Credits</b> |
|-------------|---------------------------------------------------------|----------------|
| (1)         | Communications                                          | 6              |
| (2)         | Humanities/Fine Arts                                    | 6              |
| (3)         | Mathematical Sciences                                   | 6              |
| (4)         | Physical & Life Sciences (1 course with a lab required) | 6-7            |
| (5)         | Social Sciences                                         | 6              |

Thus, a total of 30-31 credits are required to satisfy the general education component of all A.S. and B.S. degree granting programs at Montana Tech. Additionally, all baccalaureate degree-seeking students must complete a designated writing course at the 300-400 course level.

To best determine whether the general education core is helping students develop the breadth and depth of intellect necessary for the active pursuit of personal fulfillment as well as for the sustainability of a democratic society, eight student outcomes have been identified by Montana Tech and are also published in the [catalog](#). They are the following:

- a) Students will be able to use writing as a means to engage in critical inquiry by exploring ideas, challenging assumptions, and by reflecting on and applying the writing process.
- b) Students will be able to speak with clarity, accuracy, and with fluency in public contexts.
- c) Students will be able to reason both analytically and quantitatively at an algebraic level.
- d) Students will be able to use an understanding of the physical and natural world to identify and solve problems.
- e) Students will demonstrate an understanding of ethics, cultural endeavors, and legacies of world civilizations.

- f) Students will be able to describe the biological, social, political, and economic forces that influence human behaviors and attitudes.
- g) Students will be able to demonstrate the processes and proficiencies involved with creating and/or interpreting creative works.
- h) Students will be able to demonstrate proficient critical thinking skills.

Accordingly, as students achieve each of the eight outcomes through engagement with their general education course work, they will not only acquire but also practice the skills needed to form a foundation upon which effective learning is built.

As shown in Table 2.C.9.II, all the student outcomes are mapped to specific core areas. Clearly, there will be multiple mappings for many of the outcomes. For example, outcome (a) students will be able to write as a means to engage in critical inquiry, describes a proficiency of critical importance for many of the courses within the core areas communication, humanities, and social sciences. As a result of these multiple mappings, the student outcomes of the general education curriculum represent an integrated set of accomplishment when applied to the general education core.

**TABLE 2.C.9.II STUDENT OUTCOMES**

| <b>General Education Student Outcome</b> | <b>Core Area Aligned With the Outcome</b> |
|------------------------------------------|-------------------------------------------|
| a                                        | 1,2,5                                     |
| b                                        | 1,2                                       |
| c                                        | 3,4                                       |
| d                                        | 3,4                                       |
| e                                        | 2,5                                       |
| f                                        | 2,5                                       |
| g                                        | 1,2                                       |
| h                                        | 1-5                                       |

As demonstrated by both the general education core and the corresponding student outcomes, Montana Tech has made a commitment to a general education program that requires students to assimilate basic knowledge and methodologies. Moreover, assessment of the program is integral to Tech's quest for continual improvement of its general education core. As noted in Table 2.C.9.II, all student outcomes are mapped directly to core areas. Thus, assessment of the core involves assessing the level of attainment students achieve for each outcome. Both a complete description and the results of Tech's assessment of general education can be found at [11-12](#) and [12-13](#).

A general education curriculum is also required for all Certificate and Associate of Applied Science degree programs at Montana Tech. As described in the [catalog](#):

*Programs of study for which a Certificate of Applied Science (C.A.S.) or an Associate of Applied Science (A.A.S.) degree are conferred include a course in 1) communication, 2) computation, and 3) human relations. Related courses are identified as those numbered below 100 and are not considered as a general education transfer course. The required general education/related instruction varies for each program with a minimum of 12 credits required for the Associate of Applied Science Degree.*

### **Standard 2.C.10**

**The institution demonstrates that the General Education components of its baccalaureate degree programs (if offered) and transfer associate degree programs (if offered) have identifiable and assessable learning outcomes that are stated in relation to the institution's mission and learning outcomes for those programs.**

Assessment of the general education curriculum at Montana Tech involves measuring how successful the overall student population is in attaining the student outcomes. Tools used for obtaining measurements include the Educational Testing Service Proficiency Profile Exam, the grade distribution for some specified courses within each of the five cores, and the level of attainment observed for course outcomes mapping to at least one general education student outcome. Detailed description of the assessment of these outcomes can be found at [11-12](#) and [12-13](#).

### **Standard 2.C.11**

**The related instruction components of applied degree and certificate programs (if offered) have identifiable and assessable learning outcomes that align with and support program goals or intended outcomes. Related instruction components may be embedded within program curricula or taught in blocks of specialized instruction, but each approach must have clearly identified content and be taught or monitored by teaching faculty who are appropriately qualified in those areas.**

As described in 2.C.9, the related instruction components of C.A.S. and A.A.S. degree programs are defined as courses numbered below 100. These courses are taught by qualified instructors and have outcomes that both align with and support program student outcomes. Examples of program student outcomes, as well as a listing of course instructors, are published in the program review example for [Highlands College](#). For many of the related instruction courses, the assessable course outcomes have been defined by groups comprised of faculty from public universities within the Montana University System (MUS). Defining course goals was a natural follow-up to the process used in determining a common course numbering system for courses taught throughout the MUS system. More information on common course numbering can be found [here](#).

How course goals align with program student outcomes can be determined by inspection of both. For example, M095, Intermediate Algebra, is used by many C.A.S. and A.A.S. programs to fulfill the computation requirement. The course outcomes for M095 are provided to illustrate this alignment.



Upon completion of this course, a student will be able to:

- Solve linear, absolute value, quadratic, rational, and radical equations;
- Simplify polynomial, radical, and rational expressions;
- Solve linear and absolute value inequalities;
- Graph linear and quadratic equations;
- Recognize and determine equations of lines;
- Recognize, evaluate, and perform operations on functions; and
- Recognize logarithmic and exponential expressions and equations.

Continuing this example, M095 is a related instruction component of the A.A.S. Medical Assistant degree program, where a partial listing of program student outcomes includes the following:

- Graduates may pursue additional academic degrees and certifications;
- Graduates demonstrate administrative and clinical competencies by completing a skills check list; and
- Graduates demonstrate the ability to work effectively/cooperatively in healthcare teams as part of the clinical evaluation process.

Realization of the M095 course goals are required for the technical aspects detailed in the program student outcomes. For example, the level of mathematical sophistication required to achieve the course goals will be useful as graduates pursue other degrees or demonstrate administrative competencies. Please see the [program review](#) for more details.

## **Graduate Programs**

### **Standard 2.C.12**

**Graduate programs are consistent with the institution's mission; are in keeping with the expectations of their respective disciplines and professions; and are described through nomenclature that is appropriate to the levels of graduate and professional degrees offered. They differ from undergraduate programs by requiring greater depth of study and increased demands on student intellectual or creative capacities; knowledge of the literature of the field; and ongoing student engagement in research, scholarship, creative expression, and/or appropriate high-level professional practice.**

Consistent with its mission, Montana Tech's graduate programs provide degree and certificate opportunities in several engineering, science, and health fields that meet the changing needs of today's society. Tech's recruiting [brochure](#) clearly links the programs with the institution's mission and heritage. The program portfolio includes several master's degrees, one graduate certificate (in health-care informatics), one new collaborative Ph.D. program in materials science, an interdisciplinary master's program, and an interdisciplinary Ph.D. program (in partnership with and degree awarded by the University of Montana-Missoula). As described in the catalog, the "Graduate School provides opportunities for advanced study and research in science, engineering, and communication. Its aim is to foster a community of



closely associated faculty and post-baccalaureate scholars imbued with a common interest in advanced professional study and creative effort while seeking to stimulate extensive academic achievement by encouraging diverse development in creative thought and accomplishment.” The difference between undergraduate and graduate programs, is that graduate programs and courses are more advanced, go to a greater depth, and require students to take more initiative and demonstrate more independence than is the case for undergraduate programs and courses. In cases where 400-level and 500-level courses have similar titles, the 500-level courses have deeper learning goals and more demanding assignments (see example [syllabi](#) for Transportation Engineering courses: EGEN 452 and ECIV 552).

Montana Tech’s graduate degree programs are strongly connected with and guided by the expectations of their respective disciplines and professions. To maintain relevancy and obtain professional feedback, each program benefits from the advice of an external advisory committee. The members of these committees are professionals in the field and/or leaders in companies that employ graduates. To provide graduate-study opportunities to full-time working technical professionals beyond southwest Montana, Tech offers two non-thesis master’s degree programs via distance technologies. These degree programs are in project engineering management and in industrial hygiene. For most of the on-campus master’s degrees, both thesis options and non-thesis options are available. The only exception is the on-campus master’s program in industrial hygiene (IH), which requires a thesis, thereby complementing the non-thesis IH distance program.

All graduate degree programs, certificates, and new courses are reviewed by the Graduate Council—a mostly faculty committee that functions in an oversight and review capacity and that helps ensure consistency and quality in and across graduate programs. Montana Tech also offers the [Interdisciplinary Master of Science degree \(IMS\)](#). Under this degree program, individual students can tailor a master’s degree curriculum to their professional needs. However, to ensure the quality, depth, and advanced character of individualized IMS curricula, a student’s proposed degree curriculum must be developed and approved prior to the student matriculating into the program. Thus, the prospective student first must meet with the Graduate Dean and then work directly with at least two faculty members (at least one of whom is active in an established graduate program) to design the student’s IMS curriculum. This program plan is then approved by the student, the faculty members, and ultimately by the Graduate Dean. This process helps ensure that individualized interdisciplinary degree programs require the appropriate depth of study and are aligned with the institution’s mission, core themes, and strengths.

To be sure that graduate students and prospective students are aware of the requirements and policies associated with their graduate programs, Montana Tech updates its [Graduate Student Handbook](#) annually, publishes it on the Graduate School web site, and provides it to new students on a flash drive at a formal New Graduate Student Orientation session at the start of each semester.

### **Standard 2.C.13**

**Graduate admission and retention policies ensure that student qualifications and expectations are compatible with the institution's mission and the program's requirements. Transfer of credit is evaluated according to clearly defined policies by faculty with a major commitment to graduate education or by a representative body of faculty responsible for the degree program at the receiving institution.**

Clear information on the content, focus, research opportunities, and requirements of each of [Montana Tech's graduate programs](#) is available to prospective students on the campus web site. [Admission](#) policies are described in the catalog. The [application](#) web page describes the specific material every applicant must submit. This information is used by faculty in each program to evaluate the prospective student's qualifications. In short, all programs require the following materials: transcripts from every undergraduate and graduate institution the prospective student has attended; three letters of reference; and a personal professional statement outlining academic and professional goals. Additional [program-specific admissions](#) materials are required by several of the programs and specified clearly. Examples of "additional program-specific" materials include GRE scores for several programs, a special test for Electrical Engineering, writing samples and project ideas for Technical Communications, and two years of applicable work experience for the distance-learning master's programs.

[International student](#) applicants face additional admission requirements. These items include a demonstration of English proficiency and course-by-course evaluation of the transcripts from foreign universities either by the World Education Services (WES) or by Educational Credentials Evaluators (ECE). These requirements are publicized, along with the requirements for all applicants.

Once an application is complete, it is reviewed by faculty, who are involved in the specific graduate program. Prospective students who do not satisfy the formal admissions requirements are not admitted. However, if their applications provide evidence of capability to succeed in their program of choice, they could be admitted provisionally or on probation. For example, students who are changing to a different field, may face the requirement of taking some undergraduate course(s) their first semester or two, to gain missing background.

To transfer credit from courses taken at another institution into a Montana Tech graduate program, students must submit a petition to transfer credit ([Petition to Transfer Credit Form](#)). No more than six credits may be applied to a degree program. Such courses must have been at the graduate level where they were taken, they must apply to the Montana Tech degree program, and the student must have earned a grade equivalent to B or better. The final decision about transfer credit is made by the faculty in the degree program.

### **Standard 2.C.14**

**Graduate credit may be granted for internships, field experiences, and clinical practices that are an integral part of the graduate degree program. Credit toward graduate degrees may not be granted for experiential learning that occurred prior to matriculation into the graduate degree program. Unless the institution structures the graduate learning experience, monitors that learning, and assesses learning achievements, graduate credit is not granted for learning experiences external to the students' formal graduate programs.**

Montana Tech does not award graduate credit for experiential learning prior to matriculation. When programs require or include an optional internship or field experience, the individual student would register for the internship or field credits during the applicable term. In such cases, the internship or other experience is structured, monitored, supervised, and included within the formal graduate program.

The Industrial Hygiene (Professional Track) distance MS program accepts applicants who are Certified Industrial Hygienists (CIH), Certified Safety Professionals (CSP), or Certified Professional Ergonomists (CPE) as meeting the requirements for admission, regardless of their undergraduate major or courses. This exception is only provided to applicants whose undergraduate GPA satisfies Montana Tech's overall graduate admissions requirements. To be sure, these professional certifications are based on rigorous examinations and formal training (though not necessarily from accredited colleges or universities). Students with these professional credentials do not receive academic credit toward their degree from Montana Tech, but they may have one or two specific courses (up to six credits) of the 37-credit degree program "waived" in recognition of these credentials and the knowledge/skill base involved.

### **Standard 2.C.15**

**Graduate programs intended to prepare students for research, professional practice, scholarship, or artistic creation are characterized by a high level of expertise, originality, and critical analysis. Programs intended to prepare students for artistic creation are directed toward developing personal expressions of original concepts, interpretations, imagination, thoughts, or feelings. Graduate programs intended to prepare students for research or scholarship are directed toward advancing the frontiers of knowledge by constructing and/or revising theories and creating or applying knowledge. Graduate programs intended to prepare students for professional practice are directed toward developing high levels of knowledge and performance skills directly related to effective practice within the profession.**

Overall, Montana Tech's graduate programs are intended to prepare students for research and/or professional practice in their fields and professions. Thus, each graduate program has been designed to engage its graduate students directly in activities where they can perform and practice the professional skills, scholarship, and research expected of a graduate degree recipient in that field. As a result, by

the time they complete the degree requirements, they are prepared to demonstrate the high level of responsibility, expertise, originality, and critical analysis expected of a graduate degree recipient in the field. Finally, Montana Tech's master's theses are submitted to ProQuest in digital form; therefore they are accessible online to scholars and researchers and can be downloaded from anywhere with web access. To provide evidence of the effectiveness of the degree programs in preparing students for research or scholarship, we have arranged with ProQuest to provide free access to [Montana Tech master's theses](#) for the accreditation team until March 31, 2014. In the event this arrangement cannot be completed, here are links to recent theses in a few fields: [Geosciences \(Geology\)](#), [Industrial Hygiene](#), [Interdisciplinary Master's](#), [Technical Communication](#), and [Metallurgy](#).

## **Continuing Education and Non-Credit Programs**

### **Standard 2.C.16**

**Credit and non-credit continuing education programs and other special programs are compatible with the institution's mission and goals.**

Montana Tech's [mission](#) includes meeting "the changing needs of society by supplying knowledge and education" to the community. Furthermore, [Core Theme 4, The Montana Tech Community, Objective 3](#) states that Montana Tech will "provide events and programs that serve the Montana Tech community" and will indicate achievement of this objective by conducting "assessment of Continuing Education courses based on an assessment report developed by the assessment committee." Montana Tech's continuing education programs and other special programs are compatible with our mission and core themes in that all courses offered through these programs meet the same standards for academic quality which are required of Tech's regular, traditional academic courses.

### **Standard 2.C.17**

**The institution maintains direct and sole responsibility for the academic quality of all aspects of its continuing education and special learning programs and courses. Continuing education and/or special learning activities, programs, or courses offered for academic credit are approved by the appropriate institutional body, monitored through established procedures with clearly defined roles and responsibilities, and assessed with regard to student achievement. Faculty representing the disciplines and fields of work are appropriately involved in the planning and evaluation of the institution's continuing education and special learning activities.**

Montana Tech retains responsibility for course offerings, evaluation of student achievement, and the fiscal integrity of its programs. Established academic policies and procedures for program and course approval are managed by the faculty, department heads, and deans of the respective colleges. Many of the courses offered as continuing education courses are taught by Montana Tech faculty.

### **Standard 2.C.18**

**The granting of credit or Continuing Education Units (CEUs) for continuing education courses and special learning activities is: a) guided by generally accepted norms; b) based on institutional mission and policy; c) consistent across the institution, wherever offered and however delivered; d) appropriate to the objectives of the course; and e) determined by student achievement of identified learning outcomes.**

Through the centralized management of Continuing Education in the Office of Enrollment Services, institutional policies are adhered to with consistency. The Office of Enrollment Services must approve all course offerings. When courses are offered for academic credit, the regulations of the academic curriculum are followed. Standards for student contact hours, costs, and transcribing are applied to all continuing education opportunities. When offering courses that award Continuing Education Units, Montana Tech works directly with the Office of Public Instruction to ensure that the courses meet current standards. Additionally, when the [Institute for Educational Opportunities](#) offers special learning activities, the policy followed is in accord with national guidelines as established by the [International Association for Continuing Education and Training \(IACET\)](#). Furthermore, when students are awarded continuing education credit based on outcomes, the credits are substantively equal to the outcomes of the students taking the class via a traditional model. This process is ensured in that the instructor and department offering the continuing education course are also responsible for the traditional course. Table 2.C.18 contains examples of the variety of continuing education courses that Montana Tech has offered in the past.

**TABLE 2.C.18 – EXAMPLES OF CONTINUING EDUCATION COURSES**

|           |                                   |
|-----------|-----------------------------------|
| CAPP 158  | MS Access                         |
| D.T. 0125 | AUTOCAD I                         |
| ENVE 594  | Environmental Engineering Seminar |
| HPRV 220  | Historical Preservation: Plaster  |

### **Standard 2.C.19**

**The institution maintains records which describe the number of courses and nature of learning provided through non-credit instruction.**

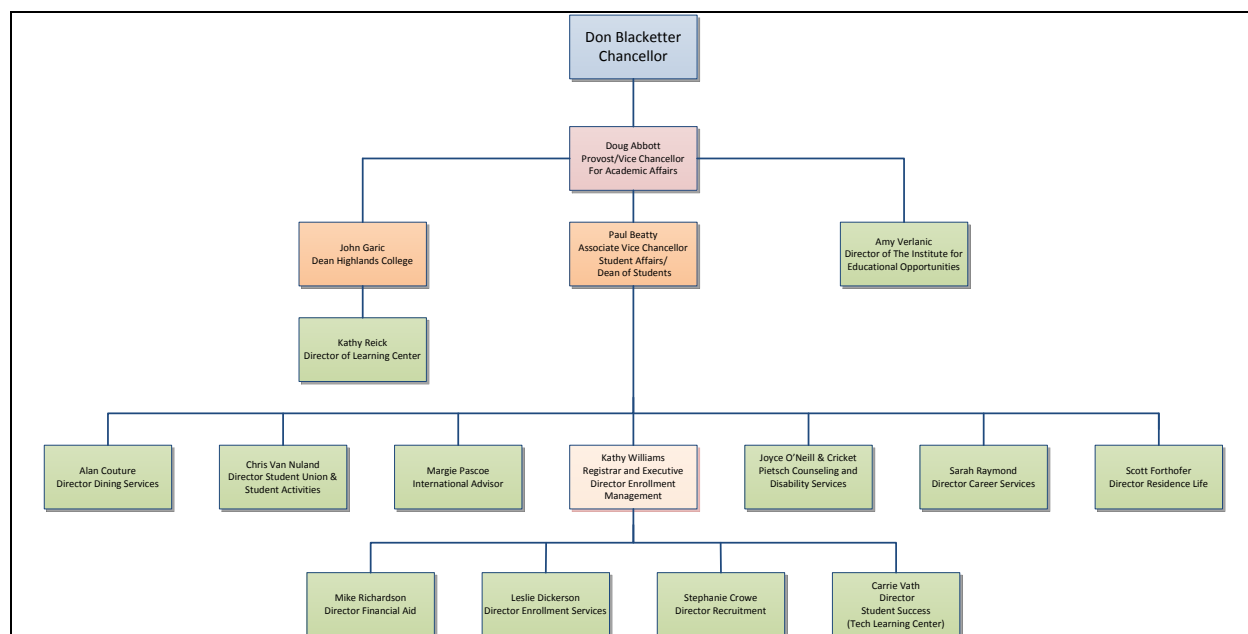
Montana Tech does not offer non-credit programs or courses.

## Standard 2.D–Student Support Resources

### Standard 2.D.1

**Consistent with the nature of its educational programs and methods of delivery, the institution creates effective learning environments with appropriate programs and services to support student learning needs.**

Montana Tech’s Student Services provides academic and support services with appropriate programs and services to support student learning needs. Under the primary leadership of the Provost, a coordinated student-centered approach is in place to provide services. Figure 2.D.1 shows the structure of Montana Tech’s Student Services Organization as it assists students at both the Montana Tech and the Highlands College campuses.



**Figure 2.D.1: Student Services Organizational Chart**

Student Services is structured to provide focused and consistent services to Tech students.

The student services organization includes the following 12 key resource areas, highlighted in green, to support student learning needs:

- [Tech Learning Centers](#)  
Two Montana Tech Learning Centers provide walk-in, appointment, and on-line tutoring services on both the Main and Highlands campuses to help students achieve their full academic potential.
- [The Institute For Educational Opportunities](#)  
Montana Tech’s TRiO Student Success Services (SSS) supports first-generation, economically disadvantaged students as well as those students with disabilities. In addition, SSS supports opportunities for academic development and provides academic tutoring, financial and economic literacy

training, mentoring, and advocacy and motivates students toward successfully completing of their postsecondary STEM education.

- [Counseling](#)  
Two fulltime licensed therapists provide mental health services and promote wellness programming. In addition, the therapist's coordinate disability services.
- [International Students](#)  
The international student advisor works with foreign students to maintain proper immigration status and supports them throughout their academic experience at Montana Tech.
- [Student Union/Activities](#)  
The Student Union, the hub for campus information and activities, is staffed by the Director of the Student Union/Activities, a Campus Scheduling Officer, and by necessary support personnel.
- [Residence Life](#)  
The Director of Residence Life and necessary support staff assist students in all facets of residential living.
- [Career Services](#)  
The Career Services Director and support staff link students with alumni and recruiters for purposes of career exploration. This process helps explain why Tech Students are consistently well-prepared for interviews and "In Demand" by recruiters. It also helps explain why Tech consistently posts a significantly high placement rate of 94% within the Montana University System.
- [Student Health Services](#)  
The Health Center staffed by a physician two hours a day and a nurse four hours a day provides walk-in services for health related issues Monday through Friday. Healthy students tend to be effective students.
- [Dining Services](#)  
The Director of Dining Services, management, and support staff are dedicated to providing a variety of nutritious, well-balanced meals at reasonable prices.
- [Financial Aid](#)  
This office administers grants, loans, and scholarships. Approximately 90 percent of our first-time students receive some form of financial aid.
- [Enrollment Services](#)  
Enrollment Services provides all services related to enrollment. Services include admissions, class registration, financial aid, veteran's services, transfer credit evaluations, and graduation. The Enrollment Services staff is cross-trained to assist both prospective and current students in all of these important areas, providing an effective one-stop shop to make the enrollment process at Montana Tech as hassle-free as possible for our customers.
- [Recruiting](#)  
Montana Tech's Strategic Plan establishes our commitment to improve retention by increasing the recruitment of students who do not require remedial coursework, and by striving to have the best instructors in our introductory math and science courses for those students that do require remediation.



## **Standard 2.D.2**

**The institution makes adequate provision for the safety and security of its students and their property at all locations where it offers programs and services. Crime statistics, campus security policies, and other disclosures required under federal and state regulations are made available in accordance with those regulations.**

Montana Tech is committed to keeping the campus community safe and secure for all students, faculty, staff, and for all visitors. The Safety Committee, which is comprised of faculty, staff, and students, is one of the most active committees on campus. Tech's Safety Committee obtained funding for several important safety improvements. Included here were funding for Automated External Defibrillators (AED), funding for additional exterior lighting for safety and security, funding for changing the type of locks on classroom doors, and funding for a new outdoor siren/PA system. Finally, successful safety grant proposals in FY 12 and FY 13 enabled Montana Tech to purchase additional snow removal equipment so that the campus streets, parking lots, and sidewalks are now a safer place to travel.

All students who are enrolled in a lab where hazardous materials are used or where a hazardous environment exists are required to do online lab safety training every semester. This program is run through Moodle, and instructors require the students to complete the training and pass a test with a 90 percent before they are ever allowed to work in the laboratory. Moreover, records of participation are maintained in the Environmental Health & Safety Office.

## **Emergency Response**

Montana Tech annually publishes the [Student Life Programs Emergency Procedures Manual](#) and the [Emergency Procedures](#) is referenced the [Student Handbook](#) (2013-2014 Handbook pages 27-29 & Emergency Contacts on page 5). The "Montana Tech Emergency Plan Instructions" are disseminated via email to the campus at the beginning of the academic year and include information on evacuation of buildings and assembly areas as well as many other aspects of the plan. Montana Tech's Alcohol Policy is found on page 16; the Drug Free Workplace Policy on page 18; the Gun Policy on page 20; the Sexual Harassment policy on page 21; and finally the [Annual Security Report](#) on page 23.

Montana Tech runs evacuation drills at the beginning of every Fall semester for all buildings on campus and once a semester for the dormitories. Here, an email notification is sent to faculty, staff, and students at the beginning of the semester to remind them of the protocol and procedures for evacuations. Signs are posted in all buildings to indicate the location of the assembly area for that particular building.

Montana Tech's emergency notification system includes an outdoor siren/PA system for emergency notification for those outdoors and also provides a means to declare an "all clear" when an emergency is over. The Wireless Emergency Notification System ("WENS") is used for emergency text messaging, emails, and for desktop pop-up notification. Faculty, staff, and students are highly encourage to "opt-in" to the system and are sent the links for signing up via email. Over 1900 have opted-in



2013 Fall Semester. Montana Tech also works closely with Butte Silver Bow Law Enforcement to utilize the 21<sup>st</sup> Century Communications system. This system is a public safety communications system used by Butte Silver Bow Law Enforcement to communicate with groups of people in a defined geographic area. It uses a database of telephone numbers and associated addresses, which, when tied into geographic information systems (GIS), can be used to deliver recorded emergency notifications to a selected set of telephone service subscribers.

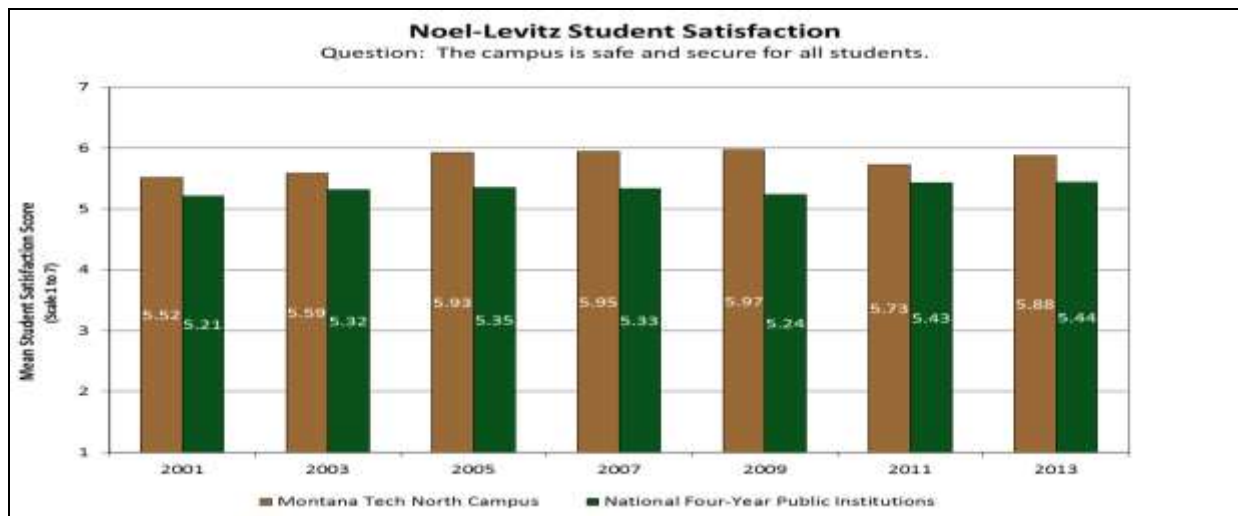
### [Campus Security](#)

Montana Tech's Security provides services such as investigation of thefts, handling of alcohol-related behavior or other on campus behavior problems, and providing late night escort services to campus buildings and parking lots. Officers are trained in law enforcement, crisis management, and in advanced first-aid. Campus security also works closely with Butte/Silver Bow Law Enforcement, which can be reached by dialing 911; and campus security can be reached by dialing 496-4357 (HELP).

In Fall 2011, we required all new students 18-21 to take an online AlcoholEdu, including the sexual assault prevention module now called HAVEN. AlcoholEdu for college is a 1.5-2.5 hour Web-based alcohol prevention program that uses the latest prevention techniques and science-based research to educate students. Since 2011, over 1200 Tech students successfully completed the course, thereby resulting in significant prevention of alcohol abuse and sexual misconduct. ([See Montana Tech's AlcoholEdu for College 2011/2012](#) and [2012/2013 Executive Summaries.](#))

Montana Tech's [Annual Security Report](#) is published in the student handbook and on the web.

Students feel the campus is safe and secure, and Montana Tech is committed to providing a safe working and learning environment for students, faculty, and staff. Figure 2.D.2 depicts student responses on the Noel-Levitz Student Satisfaction Inventory (SSI) surveys. Students consistently report above national averages compared to four-year public institutions because they feel the campus is safe and secure.



**Figure 2.D.2: Student Satisfaction Surveys**

### **Standard 2.D.3**

**Consistent with its mission, core themes, and characteristics, the institution recruits and admits students with the potential to benefit from its educational offerings. It orients students to ensure they understand the requirements related to their programs of study and receive timely, useful, and accurate information and advising about relevant academic requirements, including graduation and transfer policies.**

Beginning with the recruiting cycle and continuing beyond graduation, Montana Tech gathers and analyzes information on individual student needs and on demographic trends. Every semester, Enrollment Services compiles and disseminates a 3<sup>rd</sup> Week Enrollment Summary & OCHE (Office of the Commissioner of Higher Education) Enrollment Reports. This document reports student characteristics such as: international students, male/female ratios, transfer students, special admit types (Jump Start & WUE), as well as overall headcount and FTE. These data are then used to drive institutional decision making and programming. (See [Enrollment Comparison Report](#))

Educational needs are identified during the recruiting and admissions process. ACT/SAT scores, high school GPA, Compass assessment (instrument used to assess placement of students in appropriate math and writing classes), high school courses, and past college courses/GPA are all used to help students enroll in programs and courses that best fit their level of preparedness.

Students are oriented to admission requirements (which include required course work for acceptance, math and English standards, and GPA through the future students' website), admissions publications, and through personal counseling via email, standard mail, and personal interaction. Montana Tech's ten year average overall placement rate of 94% for graduates is one indication of recruiting good students with the potential to benefit from Montana Tech's educational programs.

Beginning with the 2013/2014 academic year, Montana Tech has invested in an enrollment management platform [Spectrum](#) that allows us to target students that are more academically prepared for our rigorous programs of study. This platform includes a private social network for admitted students which encourage them to reach out and develop relationships with other admitted students with whom they share common interests, thereby providing prospective students with an early support system.

#### **Standard 2.D.4**

**In the event of program elimination or significant change in requirements, the institution makes appropriate arrangements to ensure that students enrolled in the program have an opportunity to complete their program in a timely manner with a minimum of disruption.**

As found in the Board of Regents Policy and Procedures Manual ([Section 303.4](#)), Montana Tech may impose a program moratorium prior to eliminating a program. This approach gives students the opportunity to complete the program in a timely manner. In addition, a student may choose the degree requirements of any catalog published while they are enrolled at Montana Tech. Thus, if a significant change is made in a degree requirement during a student's tenure at Montana Tech, the student may choose to follow the corresponding requirements of an earlier catalog.

#### **Standard 2.D.5**

**The institution publishes in a catalog, or provides in a manner reasonably available to students and other stakeholders, current and accurate information that includes:**

The Montana Tech [catalog](#) serves as a guide for students, faculty, and others interested in the institution; it also covers academic regulations and requirements, admission, expenses, financial aid, student life, and undergraduate academic requirements.

The 2013/2014 Catalog provides all general and specific academic and student services information required by prospective and currently-enrolled students.

- a) [Institutional mission and core themes](#);
- b) [Entrance requirements and procedures](#);
- c) [Grading policy](#);
- d) Information on academic programs and courses, including degree and program completion requirements, expected learning outcomes, required course sequences, and projected timelines to completion based on normal student progress and the frequency of course offerings;

Through the catalog and website, Montana Tech provides accurate and current information to students and the public. Staff regularly reviews publications and the

website to ensure currency and integrity. A list of the information maintained for students and other stake holders is provided in the below.

### **College of Letters, Sciences, & Professional Studies**

- [Biological Sciences](#)
- [Business & Information Technology](#)
- [Chemistry](#)
- [Computer Science](#)
- [General Science](#)
- [Health Care Informatics](#)
- [Liberal Studies](#)
- [Mathematical Sciences](#)
- [Network Technology](#)
- [Nursing](#)
- [Professional & Technical Communication](#)
- [Software Engineering](#)
- [Statistics](#)

### **School of Mines & Engineering**

- [Electrical Engineering](#)
- [Environmental Engineering](#)
- [General Engineering](#)
- [Geological Engineering](#)
- [Geophysical Engineering](#)
- [Metallurgical & Materials Engineering](#)
- [Mining Engineering](#)
- [Petroleum Engineering](#)
- [Safety, Health & Industrial Hygiene](#)

### **Highlands College**

- [Associate of Science](#)
- [Business Technology](#)
- [Health](#)
- [Network Technology](#)
- [Trades and Technical](#)

- e) [Names, titles, degrees held, and conferring institutions for administrators and full-time faculty;](#)
- f) [Rules, regulations for conduct, rights, and responsibilities;](#)
- g) [Tuition, fees, and other program costs;](#)
- h) [Refund policies and procedures for students who withdraw from enrollment;](#)
- i) [Opportunities and requirements for financial aid; and](#)
- j) [Academic Calendar](#)

## **Standard 2.D.6**

**Publications describing educational programs include accurate information on: a) National and/or state legal eligibility requirements for licensure or entry into an occupation or profession for which education and training are offered; b) Descriptions of unique requirements for employment and advancement in the occupation or profession.**

The [Nursing Program](#) is the only Montana Tech Degree that has licensure requirements specific to this standard. The Nursing Department ensures that all its documents and publications are both accurate and current. A website is updated by the department's administrative associate so that it reflects changes in the program, provides current information about the nursing degrees, students and graduates, board results, and notifies prospective and current students of admission deadlines and policies.

Whenever there is a change in a departmental document or publication, all constituents are notified through a variety of methods. For instance, when the decision was made to convert the bachelor courses to an online format and to apply for CCNE accreditation, several steps were involved. First, the Director of Nursing met with all bachelor students in spring of 2012 to discuss and answer questions on courses, clinical requirements, and on the accreditation status of the bachelor degree program. Next, the department website was updated to notify potential students and an email was sent to all pre-nursing and nursing students well in advance of registration.

Each semester, nursing faculty review and revise, if necessary, the Nursing Department's own [Student Handbook](#). All new and returning students are provided with an electronic copy of the Nursing Student Handbook before semester courses begin. During the semester, if changes are made to academic policies, requirements, information, evaluation of student performance, or to general policies, a specific process is followed. First, the Director of Nursing meets with each cohort to explain the change and answer student questions/concerns. Second, all nursing students are given a written explanation of the change and are required to sign off on it. Third, in addition to keeping the students informed, all program documents, publications, websites, and other information sources are updated by the departmental administrative associate to reflect the change and keep current and potential students informed.

In the summer of 2012, a new nursing brochure was developed to recruit nursing students. It highlights both the Associate of Science and the Bachelor of Science nursing degrees and also highlights curriculum, placement, salary, and on-line course offerings. A new addition is the inclusion of testimonials by graduates of both the ASN and BSN degree programs.

Academic progression requirements for the (BSN) Completion program are outlined in the [Nursing Student Handbook](#) and in the Montana Tech [catalog](#). All nursing students are given this information during the initial advising session and via an online program orientation.

### **Standard 2.D.7**

**The institution adopts and adheres to policies and procedures regarding the secure retention of student records, including provision for reliable and retrievable backup of those records, regardless of their form. The institution publishes and follows established policies for confidentiality and release of student records.**

Current student records, including transcripts, are maintained on the Banner Student Information System Database, which is backed up weekly and secured off-site. Records that pre-date implementation of Banner (1989) are stored in fire-proof file cabinets or electronically in NOLIJ™ (the system used to store/retrieve scanned documents). This system is backed up weekly and secured off-site.

All employees with access to student records were required to complete a refresher FERPA training in August/September of 2011. All new employees are required to complete the training prior to being granted access to relevant student records. Our policy regarding confidentiality and release of student records is located in the Montana Tech [catalog](#).

### **Standard 2.D.8**

**The institution provides an effective and accountable program of financial aid consistent with its mission, student needs, and institutional resources. Information regarding the categories of financial assistance (such as scholarships, grants, and loans) is published and made available to prospective and enrolled students.**

Montana Tech has an effective and accountable program of federal and state aid which is consistent with its mission. All federal and state aid programs are published on the [website](#) of Montana Tech. The March 1<sup>st</sup> priority filing deadline is published and made available to both prospective and returning students, and information is available at the [FAFSA website](#). Montana Tech awards approximately 15 million dollars per year through federal/state grants, work study programs, and federal loans. Per federal guidelines, the mission of financial aid is to award students to the best of our ability to meet their unmet need. All Scholarship opportunities at Montana Tech are published on the website with priority deadlines of January 15<sup>th</sup> for new students and February 1<sup>st</sup> for returning students. Montana Tech awards over 1 million dollars in scholarships per year to over 400 students.

### **Standard 2.D.9**

**Students receiving financial assistance are informed of any repayment obligations. The institution regularly monitors its student loan programs and the institution's loan default rate.**

Students are required to do online entrance and exit counseling if they borrow federal student loan funds and also have to attend mandatory sessions on campus for repayment obligations for their student loans. In addition, sessions on financial literacy cover the importance of monthly budgeting, student loan borrowing, and credit cards. Every year, Montana Tech receives preliminary default rate data in February and final cohort default rate data in September through the Department of Education.

In the fall of 2013, Montana Tech was awarded a \$25,000 sub-grant by the Office of the Commissioner of Higher Education and by the [Office of Student Financial Services](#) (SFS). The purpose of this sub-grant was to develop and coordinate campus-based financial literacy programs as part of a broader and more inter-connected university system-wide and statewide financial literacy effort. Expectations are that this initiative will produce a greater sense of financial responsibility among Montana's college graduates.

### **Standard 2.D.10**

**The institution designs, maintains, and evaluates a systematic and effective program of academic advisement to support student development and success. Personnel responsible for advising students are knowledgeable of the curriculum, program requirements, and graduation requirements and are adequately prepared to successfully fulfill their responsibilities. Advising requirements and responsibilities are defined, published, and made available to students.**

#### **Initial Student Placement**

Montana Tech gives high priority to placing students in the most appropriate math courses on the basis of their current skill and knowledge base. All new students are required to provide standardized test scores, previous college level math coursework, and/or are tested at Montana Tech for math assessment purposes. Based upon these early assessment results, each student is then carefully advised and placed in the most appropriate math course. For example, a student must have a 27 Math ACT or equivalent assessment to be placed in Calculus I. Moreover, freshman students admitted to Montana Tech "At-Risk" or who are placed on probation are required to take MT 1016 Montana Tech Success.

#### **Advising Process**

A discipline-specific faculty advisor is assigned to those students who have a declared major. Normally, this faculty member will remain the student's advisor during the entire period that the student is continuously pursuing the same degree. This arrangement usually develops a strong and lasting relationship between the student and advisor, primarily because the student is required to meet with this advisor at least once each semester to pre-register for the next semester's courses. During this required visit and perhaps during other visits, both the faculty member and the student discuss the student's career aspirations and curricula choices. Depending on the discretion of the advisor, an alternate pin number can be made available to those students who choose to register themselves online. These alternate pin numbers change each semester and are only available from the academic advisor. The [advising website](#), which is available for faculty, contains information on advising tips, learning communities, math and writing placement policy, and on general education requirements.

During the summer registration events, volunteer faculty advise and guide the Enrollment Services Office in managing the new student registration process. Special care is made to ensure proper math and English placement of each student, based on ACT, SAT, or Compass test scores. Students then connect with their individual advisor during the Fall orientation departmental meetings. In the

summer of 2012, Highlands College even established a system where faculty are expected to be available for advising/registering one day a week

### **Student Development and Success**

In the fall of 2011, Highlands College established an Associate of Science program (AS) to allow transferability to a baccalaureate program either at Montana Tech or elsewhere across the state or nation. This program is specifically designed for those students who do not meet the minimum standards for entrance directly into one of Montana Tech's four-year degree programs. As a result, students now have the opportunity to still become a student at Montana Tech through Highland's College. While taking developmental courses to strengthen their Math and/or English skills, students work with their AS advisor to design an individualized and flexible program that allows the student to take other transferrable courses that fulfill either General Education or Program specific requirements. Upon completion of the developmental courses, students in the AS can choose either to finish the AS program or to transfer into the four-year degree program of their choosing.

In the fall of 2010, Montana Tech brought on line its Foundations of Engineering and Science Program (FESP) for those students who were unprepared for calculus and/or college level science courses. Beginning in the fall of 2014, Tech will launch its new Freshmen Engineering Program (FEP) which will be the entry point for all those beginning engineering students who are math science ready. The mission of this student-orientated service program is to recruit, advise, teach, and retain outstanding students for Montana Tech's School of Mines and Engineering.

Finally, the responsibilities of the North Campus Learning Center were also restructured to sharper focus on student success. The Director of Student Success has responsibilities which include: Research, develop, and implement student success programs that will assist the campus in increasing retention; act as the freshman advisor to students in the College of Letters, Sciences, and Professional Studies; supervise and direct the Learning and Advising Center; research, develop, and implement "best practices" in the Advising Center; and develop, nurture, and grow a campus-wide advising program.

### **Standard 2.D.11**

**Co-curricular activities are consistent with the institution's mission, core themes, programs, and services and are governed appropriately.**

The Director of the Student Union/Student Activities develops, promotes, and manages co-curricular programs at Montana Tech. Student activity forums, field trips to National Parks, such as Yellowstone and Glacier, target all students. Activities for the entire student body include: comedy shows, movies, magic shows, music, and scavenger hunts; also included are trips to Lewis and Clark Caverns, to Fairmont Hot Springs, and trips to the Discovery Ski Resort. American Indian Heritage Day and Veterans Day appreciation luncheons are annual events are indicators of achievement related to Core Theme 4: The Montana Tech Community, Objective 1: Promote a diverse and inclusive campus environment.

The Associated Students of Montana Tech (ASMT) hires a student in a paid stipend position, as the Student Activities Chair (SAC), to provide co-curricular activities.



SAC programming for fall 2013 included Club Rush, spirit bus to Carroll College, homecoming activities, Addiction Incorporated Documentary Screening, and the annual Holiday Stroll.

Club Rush, an annual semester event, is offered to entice students to join and formulate campus clubs and organizations. Montana Tech has [47 clubs](#) that are active and that meet regularly. A number of clubs attend national conventions that are related to a specific academic degree area. Overall, clubs help with campus and community events, such as the Circle K and student athletes' annual involvement with the community-wide food drive.

The Highlands Student Leadership also promotes a sense of community within the South Campus, to enhance a sense of belonging with Montana Tech at large and to provide service to the Butte community in general. This is done through various activities and events which offer fun and educational components to enrich the college experience for students. Activities include but are not limited to the Welcome Back Lunch, Homecoming participation, Halloween Open House, Thanksgiving Lunch with educational theme, collections for food baskets, Easter event, and Graduation celebration/lunch.

### **Standard 2.D.12**

**If the institution operates auxiliary services (such as student housing, food service, and bookstore), they support the institution's mission, contribute to the intellectual climate of the campus community, and enhance the quality of the learning environment. Students, faculty, staff, and administrators have opportunities for input regarding these services.**

### **Preview**

Montana Tech operates auxiliary services in the following areas: Residence Halls, Apartment Housing, Health Physical Education Recreation Complex (HPER) Facilities, Dining Services, Bookstore, Student Union, and Student Health Services. Each of these auxiliary enterprises makes its own unique contribution to the overall Montana Tech community. Key services are described below.

### **Residence Halls and Apartment Housing**

Residence Halls and Apartment Housing, fall under the direction of the Office of Residence Life which is dedicated to assisting students in all facets of residential living and which is committed to furthering college students' development outside the classroom. Here, its priority is to promote and foster growth in all areas of students' lives: these areas include social, emotional, physical, cultural, and ethical issues.

#### [Residence Halls](#)

Tech's residence halls provide a safe, clean, and orderly environment in which students are enabled to develop and grow. The housing staff includes four full-time employees. The Director, a live-in professional, oversees all operations of the program and is a member of the Association of College and University Housing Officers-International (ACUHO-I) and the Association of Intermountain Housing Officers (AIMHO). An administrative associate aids the Director with day-to-day

operations and office paperwork, and two professional custodians maintain residence hall cleanliness. Students are also employed as desk workers and as custodians to provide additional services to residents.

Each floor in the residence halls is staffed by a Resident Assistant (RA), an upper-class student who lives in the residence halls and who is primarily concerned with the welfare of the students on his/her floor. RAs enforce university policies, disseminate campus information, and plan educational and social programs/activities. RA training typically is 10 days focused on educating the RA to meet student needs by developing communication and confrontation skills, and by increasing knowledge of campus, and community resources and by developing the whole student. All RAs also attend CPR, First-Aid, and emergency response training. In the fall of 2013, a new student position was added to help enhance the student experience in the residence halls. This Resident Assistant Director (RAD) position includes supervising all aspects for the residence hall desk operations including developing educational programs.

The RAs, RAD and the Director develop a full calendar of programs that address student learning, engagement, and development in the residence halls. RA programming gives students in the residence halls an opportunity to connect with other students in the residence halls and on campus. Each RA is required to plan at least three educational programs, three passive educational programs (a common example would be a floor bulletin board), and 14 activities a semester. Activities include organizing students from a given floor to go as a group to campus wide events, such as sporting events, movies, and guest speakers presented on campus.

The Residence Hall Association (RHA), a student-led organization for residence hall students, also plans programs. Traditional RHA programs include Laser Tag events, bowling, movie nights, and various holiday celebrations. RHA also supports the Butte community by providing a warm and safe trick or treating environment on Halloween. Typically over 600 children from the community attend this event with their parents.

### [Apartment Housing](#)

Montana Tech's Apartment Housing is comprised of 60 apartment units located approximately one mile north of the main campus. Apartments are rented to university-related tenants according to a priority list. Priority is given to students with dependents and upper-class students, followed by faculty/staff. A student apartment manager lives on-site and is available to assist with tenant needs, perform routine maintenance, and to report necessary repairs.

### [Student Union](#)

The Student Union and Activities Office provides the support and leadership for operation of student clubs and organizations. The Student Union Building located in the middle of the campus houses many more of Montana Tech's auxiliary enterprises and is a center for activities and services for the entire Montana Tech Community. This building is home to the auxiliary enterprises of Dining Services, Bookstore, and Student Health Services. Tech's Student Union also provides space for other campus services and facilities that include: conference rooms, study areas, a computer lab, a shipping center, Central Duplicating, the Digger Card

Center, KMSM Radio Station, Associated Students of Montana Tech (ASMT) offices, and the very important Student Activities offices. The Mill Building, managed by the Student Union Director, houses the recently renovated game room, Alumni lounge, Chancellor's Room, and the Coffee Mill.

### [Dining Services](#)

Campus Dining Services includes the Marcus Deli Main Dining Hall, Fire House Grill, Digger Subs, and a convenience store all centrally located in the Student Union Building. This dining hall atmosphere allows all of the campus population to have a meal in the same facility, thus encouraging greater interaction and a strong sense of community. Montana Tech Dining Services also provides two satellite operations: the Coffee Mill located in the Mill Building; and the Highlands College Grill, located at the Highlands College (South Campus), thereby providing meal services to the students at that facility. The Marcus Deli Buffet provides a variety of nutritious, buffet-style meals including an ever-changing choice of entrees, homemade soups, extensive salad bar, fresh fruits, baked desserts, and traditional fast-food favorites. The Fire House Grill features traditional favorites including hearty burgers, fries, breakfast items, fresh subs, and much more. The convenience store carries a wide variety of grab-and-go products for those on the run. The Coffee Mill provides a cozy atmosphere, featuring Starbucks gourmet coffee and espresso, a fast and efficient grab-and-go menu, and fresh baked pastries. Even at the South Campus, the Highlands College Grill features traditional fast food favorites that include burgers, sandwiches, made-to-order subs, salads, fries, and of course, breakfast items. This operation also carries a variety of grab-and-go selections, which include beverages, baked goods, snacks, and chips.

All Dining Services staff are trained through the Serve-Safe program. This comprehensive program, from the National Restaurant Association, provides training in the proper handling of food products for public consumption and is approved by Montana's State Health Department. In this regard, all employees of dining services are required to be Serve-Safe certified, or become certified within one year of hire. Tech provides training annually to ensure that all food service products and practices follow nationally recognized standards for nutrition, health, and for safety.

### [Bookstore](#)

Montana Tech provides a full service, on-campus bookstore that has a textbook support system, a full array of academic/office supplies, computer supplies, candy/snacks, and college logo clothing. These items are available for purchase both in the store and online through the bookstore website. In an effort to help students keep the cost of their course materials down, all required materials are posted in a timely manner in accordance with the Higher Education Affordability Act. Tech's bookstore even began offering textbook rentals during the fall of 2013 in order to stay competitive in the market and to offer Tech students a lower price option for their textbooks. Finally: specialized items can be special ordered for customer convenience; the store is conveniently located in the lower level of the Student Union Building; and hours of operation are favorable to both students and faculty/staff alike.

## [HPER COMPLEX](#)

The HPER Complex, home to Oredigger Men's and Women's basketball. The HPER complex underwent a \$3.6 million overhaul. The expansion includes upgraded cardio fitness and weight room facilities, locker room space, heating, ventilation, air conditioning and lighting systems.

## [Student Health Services](#)

Montana Tech also provides as an auxiliary enterprise a Student Health Center. Located on the first level of the Student Union Building, the Student Health Center provides services to North Campus students who are registered for seven or more credits and to Highlands College students who have opted to pay the Health-Center Fee. The Health Center is open Monday through Friday from 10 am to 2 pm, and a physician is available between 11 am and 1 pm. Health-Center professionals administer throat cultures, give allergy shots, offer health care counseling, and are available to treat sprains, to give and remove stitches, and aid with other health problems.

## **Feedback on Auxiliary Services**

Montana Tech's students, faculty, staff, and administrators have a variety of avenues and opportunities to provide input and feedback on auxiliary services. Tech formally evaluates all student services, including auxiliary services, by using surveys and advisory groups. Montana Tech administers the National Student Satisfaction Inventory (SSI) every other year. SSI satisfaction survey results have driven programmatic changes, and survey results have consistently improved. To improve student satisfaction and address concerns, satisfaction item gaps of **one or greater** (>1) are identified each assessment year. A performance gap is simply the importance score, minus the satisfaction score. The larger the performance gap, the greater the discrepancy between what students expect and their current level of satisfaction. Therefore, the smaller the performance gap, the better the institution is at meeting student expectations.

[SSI composite scale scores](#) have improved since the fall of 2003.

Campus specific surveys of Montana Tech residents also have historically shown an above average level of satisfaction with residence hall living.

- [Residence Hall Survey](#)
- Dining Hall
  - [Comment Card](#)
  - [Survey Form](#)
  - [Survey Results](#)

Input on bookstore policies is gained by the Bookstore Advisory Committee, which is co-chaired by the Bookstore Director and the Director of the Student Union. The committee, inactive since 2010, is being reactivated this year. Representatives from ASMT, Faculty Senate, and RHA will meet as needed with the Bookstore Advisory Committee.

Montana Tech also utilizes [advisory groups](#), such as the Campus Access Committee, the Bookstore Advisory Board, Strategic Planning Committee, and the Chancellor's Cabinet to provide on-going feedback for auxiliary services.

### **Standard 2.D.13**

**Intercollegiate athletic and other co-curricular programs (if offered) and related financial operations are consistent with the institution's mission and conducted with appropriate institutional oversight. Admission requirements and procedures, academic standards, degree requirements, and financial aid awards for students participating in co-curricular programs are consistent with those for other students.**

Athletics at Montana Tech has the kind of clear mission and sense of vision which enables the College on the Hill to constantly stay focused on its overall goals and objectives.

#### MISSION

Tech's Athletic Department is committed to the campus's main institutional mission in which Montana Tech through exemplary undergraduate and graduate education, workforce development, research, and service builds on a strong heritage in engineering, in science, and in technology to blend theory with practice in meeting the changing needs of society and the responsible development and use of natural resources. More specifically, the Athletic Department's mission focuses on three interrelated communities:

1. **Student-Athletes:** The mission here is to provide the student-athlete with opportunities and support that will allow the student athlete to compete both academically and athletically at the highest level. Thus the emphasis is on the mission building life-long characteristics of dedication, excellence, pride, and leadership.
2. **University Community:** The mission here is to operate with quality and integrity as a focal point for school identity and spirit while complementing both the academic culture and social facets of college life.
3. **Butte Community:** The mission here is to support the local community through public service and to be a source of pride and entertainment to Butte and southwest Montana with successful programs that graduate student-athletes and thereby benefit the local and state economies.

### **Performance**

Prior to each academic year, the coaches submit their goals and expectations to the Athletic Director. At that time the Athletic Director communicates to the coaches the expectations of the University. At the end of the year, the coach and his/her respective program is reviewed. The annual performance reviews are completed by the Athletic Director and provided to the athletic staff. The areas of review include, but are not limited to: recruiting, coaching effectiveness, scheduling, preparation, public relations, and student-athlete development, and budget-to-actual fiscal performance.

Montana Tech's Athletic Committee is comprised of faculty, staff, and administration. This committee meets quarterly and reviews coaches' evaluations

and sets policy for athletics. The committee's priority is to develop a student-athlete handbook to better communicate what Montana Tech expects from its student-athletes. At Montana Tech, student comes before athlete, and our goal is to compete for championships with students that graduate. The motto created for our student athletes is *students, leaders, champions*.

## **Oversight**

The Athletic Director reports directly to the Chancellor so that both agree on how the entire athletic program can best enhance the overall mission of the institution. The Athletic Department's policies and procedures are evaluated by the Chancellor every year. The Chancellor will review coaches' performance, graduation rates, community involvement, student-athlete experience, and fiscal prudence. The Athletic Director is responsible for the management and fiscal operations of the Athletic Department. Accounting for the financial activities of the Athletic Department is done through the University's Business Office, which reports to the Vice Chancellor of Administration and Finance, who, in turn, reports to the Chancellor. In addition to athletic fees, Athletics is supported by the Digger Athletics Association (DAA). Financial investments made by Montana Tech alumni, fans, and friends to the Digger Athletic Association Annual Fund are directly invested in the academic expenses awarded to those deserving student-athletes who have chosen to compete in intercollegiate athletics at Montana Tech. These expenses are the direct responsibility of the Diggers Athletic Association and its members.

## **Academic Integrity & Fairness**

Montana Tech is an active and contributory member of the Frontier Conference of the National Association of Intercollegiate Athletics (NAIA) and fully complies with the rules, regulations, and policies of both governing bodies.

Montana Tech treats student-athletes and non-student-athletes exactly alike. A prospective student-athlete must complete all of the admission, registration, and academic standards requirements of the University.

For the purpose of admissions, all student-athletes must meet NAIA eligibility standards and Montana Tech admission standards. Admission of student athletes is evaluated by Enrollment Services which uses the same process and standards for all Tech students. Athletic eligibility is verified at the beginning of each season by the Office of Enrollment Processing, Athletic Director, coach, and faculty representative. Privately-funded athletic scholarships and state-awarded waivers are chosen by recommendation of the coaching staff.

## **Financial Aid**

In terms of financial aid, student-athletes apply for all state, federal, and non-athletic department scholarships through Enrollment Processing as do non-athletes. The Athletic Department's privately-funded scholarships are chosen from the recommendations of the respective coaching staff, and Montana Tech abides by the NAIA rules as to the number of scholarships allowed for each athletic program. Montana Tech does not provide the full level of scholastic aid allowed by the NAIA. A report is filed each Fall with the NAIA outlining Montana Tech's Institutional Financial Aid.

Academic standing is evaluated for all students by the Enrollment Services Office each sports season. Additionally for student-athletes, eligibility is verified at the beginning of each season by the Enrollment Services and signed by the Director of Enrollment Services, Athletic Director, coach, and by the faculty representative. Finally, graduation and degree requirements for all students are handled by the academic departments and Enrollment Services who both use the same process and criteria for athletes as for non-athletes. ([See Catalog.](#))

### **Standard 2.D.14**

**The institution maintains an effective identity verification process for students enrolled in distance education courses and programs to establish that the student enrolled in the distance education course or program is the same person whose achievements are evaluated and credentialed. The institution ensures the identity verification process for distance education students protects student privacy and that students are informed, in writing at the time of enrollment, of current and projected charges associated with the identity verification process.**

### **Policies**

Authentication credentials for students are created within 24 hours of registering for classes. These credentials allow students access to email, MyMtech (the campus portal), to the learning management system (Moodle), and to the video conferencing tool (Wimba).

Upon retrieving their username and password for the first time, students are required to set a user defined question and answer. If students forget their password, then their Student Id, their Last Name, Question, Answer, and date of birth are required in order to retrieve the information again.

Authentication credentials are validated by Microsoft Active Directory. The Central Authentication Service (CAS) interfaces with the Active Directory in order to provide single-sign-on capability for web applications that include MyMtech, Moodle, and Wimba.

All of Montana Tech computer systems are covered by [policies](#) found on the web. Students are also held accountable to the Montana Tech [Student Conduct Code](#).

Faculty, staff, and teaching assistants are required to take a FERPA course before being allowed access to any student information. Additional security practices vary from course to course, and from instructor to instructor.

### **Distance Learning**

For example, a professor is delivering his Auditing 1 course to students here at Tech and to students at Helena College. They meet on Wednesday nights at 6:00. Helena has a portable Tandberg that they call our room, located in the Natural Resource Building (NRB), Room 226. Because the students can see each other in real time, they need to be in attendance when class is held. The Helena students are registered at Montana Tech and therefore have authentication credentials which

allow them to access their homework assignments and to upload the answers back into Moodle. In this way, the lectures are recorded, but the students can't get them unless they first sign into Moodle.

Another example is a distance statistics class. The professor requires that both the three midterm exams and the final exam be proctored. If a student is unable to attend the exam on campus, then the student needs to apply for a proctor within the first two weeks of school. After the proctor application is received, a proctor is contacted by Suzan to assure that he/she understands and agrees to carry out the responsibilities of an examination proctor and is not related or otherwise close to the student(s) being proctored. Each exam package includes a proctor agreement to be signed and instructions for administering the exam; moreover, details regarding this process are posted in the course syllabus and announced on the course website.

Yet another example is Tech's Nursing Program. The majority of assessments and assignments within this program require the student to write several papers in A.P.A. format and to participate in discussion groups. This extensive communication allows the instructor to get a feel for the level of quality and use of language the student provides.



## Standard 2.E–Library and Information Resources

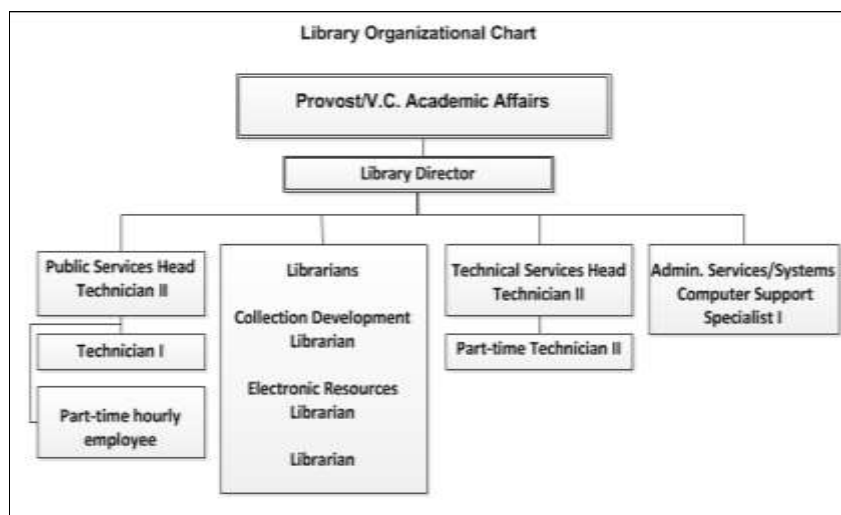
### Standard 2.E.1

**Consistent with its mission and core themes, the institution holds or provides access to library and information resources with an appropriate level of currency, depth, and breadth to support the institution’s mission, core themes, programs, and services, wherever offered and however delivered.**

### Library Mission Statement

The library’s mission is consistent with [Montana Tech’s mission](#), core themes, programs, and services. “The Montana Tech Library is an integral part of Montana Tech because its highly trained staff of information experts advances the university’s mission by consistently providing access to resources, support for research, and to an array of services that meet the changing information needs of students, faculty, staff, and the community.”

The Organizational Chart (See Figure 2.E.1) illustrates that the library staff includes a director, two full-time and one part-time library faculty, and four full-time and two part-time support staff.



**Figure 2.E.1 Library Organizational Chart**

Tech’s library provides access to extensive scholarly collections for students in the four-year and graduate programs on the North Campus and for students in the two-year programs at Highlands College (five miles away). In addition, the Learning Center at Highlands also has a small collection which supports its associate degree and certificate programs.

### HOLDINGS

The library owns or provides access to a broad range of current academic resources that support all academic programs. These resources include both electronic and

print journals and books, special collections, archives, technical reports, patents, and maps. The library participates in the Federal Depository Library Program and holds U.S. Government publications related to mining and natural resources dating from the 1800's. The library owns and receives regular updates to its large, unique collection of Federal Superfund Documents related to the remediation and clean-up of mine waste in Butte, located at the headwaters of the largest superfund site in America. Documents from the State of Montana, the Montana Bureau of Mines and Geology, and from other U.S. states and foreign documents are also held. Moreover, Tech's library is the only designated Patent and Trademark Resource Center in Montana and provides specialized patent services. The library also has institutional support to expand its holdings for the university's forthcoming Ph.D. program in Materials Science (Fall 2014).

## **Electronic Collections**

Most of Tech's collections are in electronic format. The extensive breadth of its e-collections is evident not only in the library's [160 scholarly databases](#) which contain 41,000 e-journal titles, but also in [130,000 e-books](#) which support all programs, academic disciplines, and research areas, see [Collection Development Policy, p.3](#). Most databases contain full-text information and are searchable from the [Library Homepage](#) in a single search box called Digger Search. As the state's only Patent and Trademark Resource Center, the library provides access to PubWEST, the internal U.S. Patent and Trademark Office database for use by patent examiners, by professional patent searchers, and by the public.

## **Print Collections**

The library owns 77,000 books arranged by the Library of Congress Collection Classification system, with all titles searchable in the [online catalog](#). Included here is the largest collection of historical mining resources in the entire Pacific Northwest and extensive documents from the U.S. Bureau of Mines and the U.S. Geological survey. The print serials collection currently includes 1,870 titles, 186 of them current. Some of the historical serials in science, mining, and chemistry date from 1827. Special Collections contains approximately 1,800 volumes including Montana history, works by Montana authors, and historic works in mining, in geology, and in metallurgy. The Archives section contains 60 linear feet of university records and 80,000 maps. For details, see [Collection Development Policy, pp.6-10](#).

## **Expanding Holdings**

In April of 2013 Montana Tech Library hosted a meeting for Deans and Directors of Montana's academic libraries on forming a state-wide consortium to share purchases. As a result, the library deans at the state's two largest academic libraries, the University of Montana Missoula and Montana State University Bozeman, negotiated a deal for seven university libraries to jointly purchase software capable of simultaneously searching each library's electronic resources. This strategy resulted in a cost saving to Montana Tech of more than \$10,000 with future collaborative efforts enabling the library to continue expanding its holdings.

## **ACCESS**

A critical aspect of librarianship in today's technological environment is providing access to the collections, so all of Tech's electronic resources are accessible to its users 24/7 through the library's website via proxy server. Community users are

provided access within the library building only which is open 79.5 hours per week with extended hours for Finals.

The library uses Voyager and Primo software for searching, cataloging, and circulation; the Electronic Resources Librarian and the Library Systems Support staff monitor and maintain these systems. Technical Services staff ensures access to non-electronic resources through timely processing and shelving of print and media resources. Public Services staff members use and maintain the ILLiad software system for interlibrary loan providing access to materials (for free) not owned by the library. Public Services staff also provides Document Delivery; they use citations to find and send articles directly to faculty and graduate students.

To help undergraduates function within the magnitude of online and print resources and locate the right resources quickly, the librarians collaborate with teaching faculty and create online [Subject Guides](#). The guides identify books, databases, journals and websites which are directly related to specific disciplines or courses as needed. Librarians also offer one-on-one research consultations to all students and faculty. At faculty's request, librarians teach hour-long library instruction sessions for students on how to access resources. Also they attend departmental and library committee meetings to update teaching faculty on new additions to the library's collection and how to use them.

The library provides global access to campus research through [Digital Commons @ Montana Tech](#), the university's open access repository for publishing faculty and student research and scholarship. Since its launch in May 2012, this site's content has been downloaded more than 4,500 times from such diverse places as India, Poland, Peru, Vietnam, and South Africa.

## **CURRENCY, DEPTH, BREADTH**

Currency, depth, and breadth of the electronic and print collections is ensured by the Collection Development Team which meets weekly and includes two librarians and two staff members. Here, members are responsible for developing and implementing policy and for analyzing and evaluating all collections. They use specific criteria to evaluate the currency, depth, and breadth, of Tech's library collections. See [Collection Development Policy, Selection Criteria, p. 5, and Collection Depth Indicators, Appendix E](#).

### **Standard 2.E.2**

**Planning for library and information resources is guided by data that include feedback from affected users and appropriate library and information resources faculty, staff, and administrators.**

### **Planning Feedback**

Planning for resources is consistently based both on the expertise of the librarians and on the feedback received from faculty, students, and staff. Librarians also get feedback by serving on the Curriculum Review Committee and on the Graduate Council and by meeting regularly with teaching faculty. Other components of planning data include budget analysis (see [Collection Development Policy, Appendix A, p.15](#), contract negotiations, and usage statistics.

Feedback is systematically received through the Curriculum Review Committee's required, Curriculum Change Request Form. See Figure 2.E.2.

**I have consulted with \_\_\_\_\_, faculty member and librarian, and discussed the online and print resources needed to support the *academic content* in a new course or change(s) in the *academic content* of an existing course, including existing resources and possible acquisitions.**

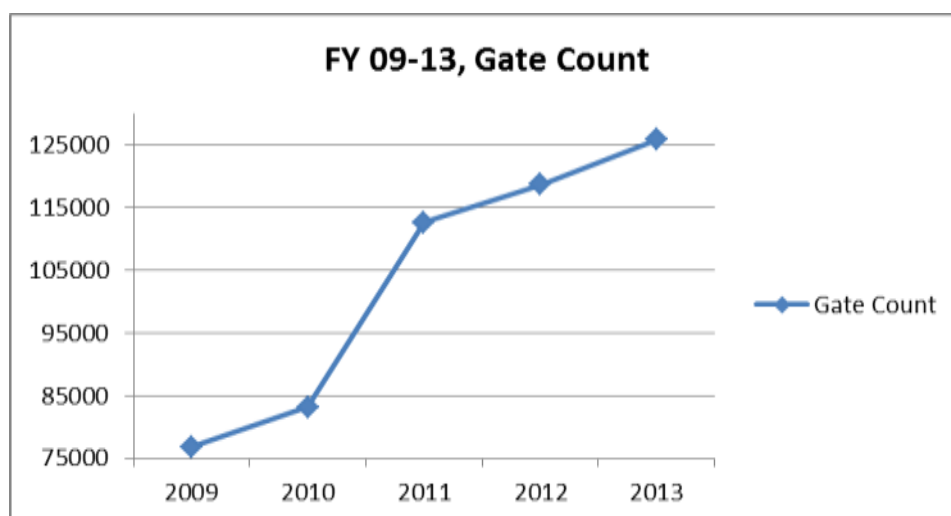
**\_\_\_\_\_ No consultation is required since changes are only in the course number, course name, or course pre-requisites.**

**Figure 2.E.2 Curriculum Change Request Form**

This valuable type of feedback enables the library to plan for and acquire resources needed to support new courses and content. It is also an opportunity to remind faculty of library resources already owned.

Faculty from all campus departments serve on Tech's Library Committee. At regular committee meetings they provide specific feedback and make key recommendations about library programs, initiatives, policies, and collections. As a result all faculty are encouraged to suggest titles; there is also a [Suggest Items](#) link on the library's website and a suggestion box in the library. These are reviewed regularly for feedback.

Students also serve on the Library Committee and provide input. In response to their feedback, the library received more than \$100,000 over the last three years to renovate study rooms and learning spaces. After the renovation was complete in 2011, use of the building increased 35%. See Figure 2.E.3. This improvement also addresses NWCCU's 2010 concern about adequacy of study space for current users.



**Figure 2.E.3 Library Gate Count**

Tech's librarians developed and conducted a [Library Student Satisfaction Survey](#) in November of 2013, which included an open-ended response that asked students what services and resources they would like the library to offer. [Analysis of the 174 responses](#) indicated that 24% wanted better computers and 27% wanted longer hours. This feedback quantified students' needs and supported librarians' requests for increased funding for equipment and staff.

Among the library staff, feedback is agile and occurs informally on a daily basis and formally at the bi-weekly staff meetings. This type of environment fosters innovative ideas that save money; increase services and enhance the library's collection.

In addition to feedback from affected users, the library also uses WorldShare Collection Analysis software to evaluate the various collections' currency and compare them to peer institutions.

### **Standard 2.E.3**

**Consistent with its mission and core themes, the institution provides appropriate instruction and support for students, faculty, staff, administrators, and others (as appropriate) to enhance their efficiency and effectiveness in obtaining, evaluating, and using library and information resources that support its programs and services, wherever offered and however delivered.**

### **Instruction and Support**

The library advances the university's mission to provide "exemplary undergraduate and graduate education" by providing instruction and support that enhances efficiency and effectiveness in finding, retrieving, evaluating, and using library resources. Library faculty use several methods to achieve this goal.

In recent years, an innovative shift has occurred in academic librarianship toward a new paradigm called "embedded librarianship." This process occurs when librarians become an integral—rather than external—part of the instruction process. Embedded librarianship is illustrated in the move away from giving fifty-minute, one-time instruction sessions, to becoming collaborators with teaching faculty by providing library instruction as an integral part of a specific course. Currently, librarians co-teach semester-long courses in Chemical Literature, Research Methods, and an Honors Seminar. These courses include comprehensive instruction on library resources specific to the course.

However, Tech's library faculty do continue to teach the fifty-minute sessions as requested by faculty, and also provide instruction and support through point-of-need reference. Overall, the "embedded librarian" shift also means that librarians are meeting in their offices more often with students and are providing in-depth consultations, extensive research help, and encouragement. The net result is that students discover relevant resources quickly.

To support and instruct distance learners, librarians offer several online instruction options. These include [Subject Guides](#), [Tutorials](#), and the [Ask a Librarian](#) service.

To inform faculty about library resources and services, librarians are assigned subject areas and also act as [liaisons](#) to specific departments. Faculty are also informed during new faculty orientation, departmental meetings, workshops, and during one-on-one discussions. Librarians typically demonstrate new databases at each Library Committee meeting. They also developed, for faculty, an online [Library Instruction Request form](#).

In addition, teaching and training workshops are developed both for the campus and for the local community. For example, in Fall 2013 the library gave a seminar to introduce and train campus and community users on the library's new, [Core Collections](#) for the Foundation Center's [Funding Information Network \(FIN\)](#). FIN targets under-resourced and underserved populations that need useful information and training to become successful grant seekers. Access to FIN is provided by funding from Montana Tech's Research Office.

#### **Standard 2.E.4**

**The institution regularly and systematically evaluates the quality, adequacy, utilization, and security of library and information resources and services, including those provided through cooperative arrangements, wherever offered and however delivered.**

#### **RESOURCE EVALUATION**

Library evaluation methods have been enhanced since Montana Tech's 2010 self-study through the formation of the Collection Development Team and its work, as mentioned earlier in 2.E.1. They use numerous professional tools and methods to evaluate the quality, adequacy, use, and security of resources.

##### **Quality**

To evaluate overall resource quality, Tech's librarians consult the Association of College and Research Libraries publication, *Choice* – the premier source for reviews and recommendations in higher education. Also used are the *American Journal of Nursing*, *Book List*, and the *Library Journal*, all of which provide recommendations for academic libraries. Librarians also generate "Journal Citation Reports" through Elsevier; these indicate the top-cited journals in specific disciplines. Librarians also use "Google Scholar Metrics" which provides reports on recent citations in publications which are useful to those faculty who need to know where to publish new research.

To further enhance evaluation of resources, Montana Tech librarians started an initiative to develop "Program Profiles" for all disciplines. Each uses major input from departmental faculty and contains a program description, teaching and research areas, and collection focus and analysis. This outreach gives the librarians a thorough understanding of individual programs and specific resources needed to support them. See the Chemistry and Nursing profiles in the [Collection Development Policy, pp.12-14](#).

Tech Library's principal partner in cooperative arrangements for joint purchasing is the University of Montana's Mansfield Library. Evaluation of the quality of shared purchases includes using a database review matrix to assess content, price, and

licensing. In addition, when a purchase or cancellation is being considered in STEM program resources, Tech is given access to test databases and consulted about cancellations.

## Adequacy

Adequacy of the collection is calculated by using standards (developed at Cornell and widely used by Academic Libraries) called *Collection Depth Indicators*. These are numerical values (0-5) that indicate the scope of those materials which libraries intentionally need to collect. These resources identify the comprehensiveness of the collection and ensure that the library collects the appropriate type of resources to support Tech's programs. Most of the Tech library's collections are in the 3b and 3c ranges, indicating support for upper division undergraduate courses and master's degree programs. For all indicators, see [Collection Development Policy, Appendix E](#).

Adequacy is also measured by comparing database content using software such as the Academic Database Assessment Tool (ADAT), see Table 2.E.I from the Center for Research Libraries. The ADAT example below indicates that BIOSIS has only 2,034 unique titles compared to Web of Science's (WoS) 9,205, and the WoS total title count is more than double that of BIOSIS. This type of information, combined with usage statistics and faculty needs, is used to analyze and make determinations about database contract renewals and cancellations.

**TABLE 2.E.I ACADEMIC DATABASE ASSESSMENT TOOL**

|                                                  | Overlap Titles       | Unique Titles        | Total Titles          |
|--------------------------------------------------|----------------------|----------------------|-----------------------|
| <a href="#">BIOSIS Previews (1969 - present)</a> | <a href="#">3106</a> | <a href="#">2034</a> | <a href="#">5140</a>  |
| <a href="#">Web of Science</a>                   | <a href="#">3106</a> | <a href="#">9205</a> | <a href="#">12311</a> |

WorldShare® Collection Analysis software, identified earlier in section 2.E.2 as an effective planning tool, is also used in evaluating adequacy. It identifies the currency of the collections as well as the gaps and overlaps.

Shared purchasing with the UM Mansfield Library greatly enhances Tech's ability to provide adequate resources that it could not afford otherwise. In this regard, Tech is always asked to critique proposed purchases and to make recommendations. In FY 2013, the library jointly purchased [16 databases](#) with UM. Mansfield also negotiates contracts that offer resources to Tech's library at no cost. For example, in 2012-13 Tech received *free* access to 96 additional databases.

Librarians also monitor trends in vendor policies to ensure adequate resources at affordable prices. As a result, the library recently purchased, at a dramatically reduced price specifically for small school, Lexis/Nexis® (law) and SciFinder® (a chemical structure database). In this instance, *shared* purchasing offered no advantage.

Montana Tech's library also has cooperative agreements with the State of Montana to purchase the premier nursing database CINAHL®, and with the membership



organization, Lyris<sup>®</sup>, to purchase Springer resources and MathSciNet<sup>®</sup>. Each of these operates on an “opt-in or opt-out” purchasing model.

## Utilization

Use of the library’s collections is determined by gathering and analyzing statistics. These include data harvested from the library’s website, proxy server, print materials circulated, from individual databases, number of downloaded articles from selected publishers, list of e-journal titles, in-house print journal use, from interlibrary loans and borrowing, documents delivered, library lab computer use, Library Guides, Digital Commons, and from Google Analytics.

“Page Views” statistics indicate how often a web page is visited. In academic year 2012-13, the [Library Homepage](#) ranked third highest at Montana Tech in page views – preceded only by the University Homepage and by Campus Email. The library alone received 115,550 views which illustrate how strong an interest there is in the library.

Some statistics also prove very helpful with budget allocations. The Table 2.E.II below shows results of a FY 13 study done by the Collection Development Librarian to determine “cost-per-use” of print journals. Included are both circulation and in-house usage statistics which focus on print journals that might be considered for cancellation or for purchase in electronic format only. The latter would necessitate shifting funds from the print to the electronic budget.

**TABLE 2.E.II PRINT SERIALS, COST-PER-USE**

| Print Serials, Cost-Per-Use, FY 2013            |         |            |              |
|-------------------------------------------------|---------|------------|--------------|
| Title                                           | Cost    | Times Used | Cost Per Use |
| Epidemiology & Infection                        | \$1,985 | 6          | \$330        |
| Chemical Society London, Quarterly Reviews      | \$1,980 | 1          | \$1,980      |
| Industrial Minerals                             | \$1,869 | 6          | \$312        |
| Journal of Physical and Chemical Reference Data | \$1,732 | 1          | \$1,732      |

Each fiscal year, the Electronic Resources Librarian runs standard reports from database vendors. Table 2.E. III below illustrates the number of full-text articles downloaded from specific databases. It indicates that ScienceDirect<sup>®</sup> – a leading scientific, technical, and medical resource – is by far the most-used database on campus.



**TABLE 2.E.III FULL-TEXT ARTICLES DOWNLOADED**

| <b>Database</b>                | <b>Full-Text Downloads<br/>FY2013</b> |
|--------------------------------|---------------------------------------|
| ScienceDirect                  | 15209                                 |
| Academic Search Complete       | 5408                                  |
| Wiley                          | 3609                                  |
| EBSCO Business Source Complete | 3515                                  |
| EBSCO CINAHL                   | 2375                                  |

## **Security**

Campus Network Services maintains fire walls and virus-detection software that safeguard all computers and online resources. Here, the library inserts magnetic security strips in print resources which are detected by the security gate and which set off an alarm when materials have not been checked out and desensitized. In addition, there are also five security cameras in the library to deter theft.

## **SERVICE EVALUATION**

The library uses several methods to evaluate the quality, adequacy, and utilization of its services; methods include surveys and statistical analyses *to identify strengths and weaknesses. In 2010, NWCCU recommended that the library develop an assessment plan for evaluating library services.*

## **Surveys**

*In response to NWCCU's recommendations, Montana Tech librarians developed the [Library Student Satisfaction Survey](#) that will be administered every Fall to evaluate services over time. This survey includes questions on the quality, adequacy, and utilization of library services. Preliminary analysis of results indicated the students' dissatisfaction with library hours and with computers. Students also voiced their continued satisfaction with interlibrary loan services and with the helpfulness of circulation staff and the librarians. These data identify both areas of strength and areas for improvement.*

Montana Tech uses the Noel-Levitz Student Satisfaction Inventory; it included [two library questions](#) that assess student satisfaction with the library staff, resources, and services. Student satisfaction levels in all three areas are above the national average.

Montana Tech's Faculty Senate developed and administered a Fall 2013 Faculty Opinion and Satisfaction Survey. In an email to the Library Director, the Chair of the Faculty Senate wrote, "Congratulations to you and your staff! The response to [question 26](#) was by far the most positive response of the entire survey." Interestingly, faculty concerns with limited hours and antiquated computers mirror the responses in the *Library Student Satisfaction Survey*.

## **Statistical Analyses**

The library measures reference questions answered and reference consultations given. Other services measured include interlibrary loan and circulation, and document delivery. One online service that is tracked is use of library [Subject Guides](#), mentioned on p. 3, which direct students to relevant resources. In 2012, the librarians observed a noticeable drop (34%) in the use of the guides. To address this decline, in 2013 they actively promoted use of these guides, particularly to students in the health sciences, biology, and in computer science. The result was a noteworthy increase in use of 124%.

## **Standard 2.F–Financial Resources**

### **Standard 2.F.1**

**The institution demonstrates financial stability with sufficient cash flow and reserves to support its programs and services. Financial planning reflects available funds, realistic development of financial resources, and appropriate risk management to ensure short-term solvency and anticipate long-term obligations, including payment of future liabilities.**

The FY14 Montana Tech annual operating budget for all fund types is just under \$77 million. This operating budget is comprised of \$30,805,449 in general funds, \$18,478,583 in restricted funds, \$6,727,291 in designated funds, \$5,303,289 in auxiliary funds, and \$11,484,037 in plant funds.

Historically, Montana Tech’s financial practice is to incorporate a contingency into the current unrestricted operating budget of 2% of revenue. If enrollment targets are met, the Director of Financial Planning & Analysis invites the campus stakeholders to submit One-Time-Only proposals. These are funded by using the contingency based upon a prioritization process which incorporates input from the Executive Budget Council, the deans, and department heads. This contingency allocation process ensures that even if enrollment targets aren’t met, basic programs will still be insulated from funding cuts in the current fiscal year.

In addition to the contingency, Montana Tech maintains a Reserve Revolving account pursuant to [Board of Regents Policy 901.15](#). This policy allows each unit of the Montana University System to establish a reserve revolving account to specifically manage and mitigate the impacts of unanticipated revenue shortfalls and/or unanticipated and unavoidable increases in expenditures. This policy allows Montana Tech to maintain up to 5% of the prior year’s revenue to meet these needs. Current unrestricted revenues in FY13 were \$29,726,024, which would translate to a maximum allowable reserve of \$1,486,301. Montana Tech’s actual balance in the reserve account at the end of FY13 was \$1,416,231. To date, Montana Tech has not had to rely on using the reserve account balance to meet any of its obligations.

Auxiliary building projects are often funded by proceeds from the issuance of bonds. Montana Tech is one of the affiliated campuses of The University of Montana. These campuses collectively issue bond instruments which are cross-pledged and administered by The University of Montana – Missoula campus and its debt management group. This debt management group contains members from each of the affiliated campuses of the University of Montana and meets on a regular basis to review the outstanding debt load, to review the revenues pledged to meet that debt load, and to ensure that if any one of the campuses needs help in meeting its obligations, then the rest of the affiliated campuses are able to help out. The collective debt management group also explores different options to acquire financing for future capital projects for all of the affiliated campuses of the University of Montana.

Bond payments are typically funded by revenue from auxiliary enterprises, land grant income, and from building fees. A debt-service plan is first created for the life of the bonds prior to their issuance in order to ensure that the campus involved can meet its future repayment obligation. Excess auxiliary funds are deposited into individual plant funds to pay for renovation and maintenance of auxiliary buildings or to purchase equipment. These bond obligations most often represent the majority of outstanding debt the institution carries. To be sure, the various affiliated campuses of The University of Montana undergo a bond audit on an annual basis to ensure that appropriate debt coverage is maintained among the various stakeholders.

Another funding mechanism available to the agencies of the State of Montana is the InterCap Loan Program which is jointly administered through both the Montana Department of Commerce and the Montana State Board of Investments. This program allows state and local government agencies to borrow funds to deal with temporary cash flow issues, as well as to fund capital and real property improvements. While Montana Tech has not needed to utilize loans to cover shortfalls, it has on occasion used InterCap Loan funds to finance projects such as campus internet/intranet infrastructure improvements and HPER renovations.

### **Standard 2.F.2**

**Resource planning and development include realistic budgeting, enrollment management, and responsible projections of grants, donations, and other non-tuition revenue sources.**

Montana Tech develops a budget on an annual basis for all fund types that includes the following: current unrestricted funds, Auxiliary, Designated, Loan, Endowment, Restricted, Plant, and Agency (Montana Bureau of Mines and Geology). These various budgets are submitted on an annual basis to the Board of Regents for approval each September, and the budgets for all campuses of the Montana University System (MUS) are published to their website and are referenced throughout the year. The Director of Financial Planning and Analysis for Montana Tech monitors the budgets and prepares forecasts of where each fund type will end the year versus the actual budget. Any material budget variances must be explained and submitted to the Office of the Commissioner of Higher Education (OCHE), the central administrative unit of the MUS. A report of the prior year's material variances (in excess of %10) for both revenue and expenses for all fund types are included in the [Operating Budget Checklist](#) that is signed by the Director of Financial Planning & Analysis and submitted to OCHE with the annual operating budget submission.

### **Standard 2.F.3**

**The institution clearly defines and follows its policies, guidelines, and processes for financial planning and budget development that include appropriate opportunities for participation by its constituencies.**

Financial planning and budget development follows an eight step process which was formalized during the FY 2013 budgeting process and approved by the Chancellor ([Montana Tech Budget Guidelines](#)). Once the state allocation of funds to the campus is determined, the process of allocating internal resources begins. Montana

Tech's Executive Budget Council (Chancellor, Provost, Vice Chancellor for Administration and Finance, Vice Chancellor for Research, and Vice Chancellor for Development and University Relations) meets with the managers (Deans, Department Heads, Department Chairs, Program Managers, and Directors) in forums designed to address each individual department's need for the upcoming fiscal year. The Director of Financial Planning & Analysis provides each manager with a [Budget Planning Template](#) that summarizes and categorizes the current fiscal year's budget and provides space on the template to request anticipated needs for the next fiscal year. The Director of FP&A works with all department heads to ensure that each one has all the information that they need to successfully complete the templates. The template is designed so that it can incorporate funding from all available sources that an individual department has access to or control over; included here are state current unrestricted funds, auxiliary funds, designated funds, sales and services accounts, foundation accounts, program tuition accounts, indirect cost reimbursement accounts, and class and lab fee accounts. One-time-only (OTO) proposals are presented as part of the budget request. All players involved in Tech's budget know that submitting OTO requests early in the budget process leads to quick turnaround in allocating and spending funds from the contingency. Hence, they act efficiently to meet requirements and deadlines.

Overall, any information gathered from these meetings leads to better decisions on allocating available resources during the budget development process. In addition, every two years, departments are asked to assess any need for increases in course/program fees. All fee increases, such as tuition and course, and program fees, are subject to approval by the Board of Regents and are only reviewed once every two years. However, these fee increases may be subject to legislative freezes or may be limited by legislative agreement. Throughout the entire budget process, every effort is made to maximize input, enhance communication, and increase efficiency. This collegial approach not only assures fiscal control and responsibility but also promotes transparent accountability.

Once managers have had ample opportunity to present their requests, Montana Tech's Executive Budget Council approves a balanced Internal Operating Budget. Here, budget allocations are made to each department's various responsibility centers or indexes. The Director of Financial Planning & Analysis distributes copies of the appropriate section of the budget to each manager. All managers are trained on and have access to the UM data warehouse to track budget allocations, expenditures, and revenues. A variety of reports are available through this data warehouse. Vice Chancellors, Deans, Department Heads, Department Chairs, Program Managers, and Directors are responsible for managing their own operating expenditures. In addition, the Director of Financial Planning & Analysis produces on a monthly basis a series of management reports which cover the usage and balance of various key operating and fee accounts. These reports are distributed to key stakeholders on the Tech campus to ensure balances remain positive. Additionally, all operating accounts are queried regularly in the last half of the fiscal year and managers are alerted if their balance is over or is anticipated to be over.

Montana Tech's approved internal operating budget and other fund group budgets are submitted annually to OCHE for its approval at the September board meeting. OCHE also publishes annual operating budgets for all campuses on the system website ([Montana University System Operating Budgets](#)), and the Board of Regents approves the individual campus operating budgets. In addition to the campus budget, the current unrestricted portion of Montana Tech's budget is published in [The University of Montana Budget Book](#). This budget book includes State appropriated, auxiliary, and designated budgets for all affiliated campuses and agencies.

Throughout the year, budget control and variance reports incorporating projected revenues and expenditures are submitted in timely fashion to Tech's Executive Budget Council. An example of one of these reports is the [Montana Tech Comparative Summary of Revenue and Fund Balance Projection](#). Here, the Executive Budget Council approves any additions, deletions, and modifications to Tech's operating budget. The BOR or its designee approves increased spending authority due to excess tuition and other revenue. As a follow-up, The Director of Financial Planning & Analysis takes appropriate action to ensure that the budget is amended and balanced in a manner consistent with formal policies and procedures.

#### **Standard 2.F.4**

**The institution ensures timely and accurate financial information through its use of an appropriate accounting system that follows generally accepted accounting principles and through its reliance on an effective system of internal controls.**

All units of the Montana University System, including Montana Tech, use Banner by Ellucian, an integrated suite of applications, as their accounting system. Thus, all major administrative systems (Human Resources, Payroll, and Finance) belong to the Banner suite, which is a comprehensive, highly integrated, and complex set of systems specifically designed for the higher education environment. Currently, Montana Tech runs and manages its own separate Banner student system. This software was designed to follow generally accepted principles of accounting.

The Internal Audit Office of The University of Montana performs financial, operational, electronic data processing, and compliance reviews of departments, colleges, and processes throughout the University of Montana affiliation – including Montana Tech. The Internal Audit Office is independent from the finance function and reports directly to the President of the University of Montana to maintain the integrity of internal controls.

As part of implementing the Statement on Auditing Standards (SAS) 112 – Communicating Internal Control Related Matters Identified in an Audit, the Legislative Audit Division of the State of Montana requested that The University of Montana affiliation create an Inventory of Specific Internal Control Activities. This [Internal Control Inventory](#) contains a comprehensive assessment of the control activities of Montana Tech and is periodically reviewed and updated.

## **Standard 2.F.5**

**Capital budgets reflect the institution's mission and core theme objectives and relate to its plans for physical facilities and acquisition of equipment. Long-range capital plans support the institution's mission and goals and reflect projections of the total cost of ownership, equipment, furnishing, and operation of new or renovated facilities. Debt for capital outlay purposes is periodically reviewed, carefully controlled, and justified, so as not to create an unreasonable drain on resources available for educational purposes.**

### **Overview**

Montana Tech's capital planning is essential to fulfilling all four core themes originally identified by Montana Tech in its [Strategic Plan](#) and is funded primarily through the following four sources: 1) the State of Montana Long Range Building Program (LRBP); 2) Auxiliary funds; 3) student fees; and 4) Foundation.

#### **1. State of Montana Long Range Building Program**

The LRBP focuses on major building projects, renovation projects, and on maintenance projects. It is the primary mechanism through which the Montana University System and all other state agencies request state-funded building projects from the Montana Legislature. Requests for the Montana Tech campus are compiled by the Director of Physical Facilities who works in collaboration with the Chancellor, the Vice Chancellor for Administration and Finance, and with the Provost. In this process, careful consideration is given to the needs identified through input from the various committees. Eventually, a prioritized campus list is submitted to The University of Montana system committee for prioritization with the other three affiliated campuses. The outcome of that process is integrated or prioritized with those of the Montana State University campuses, and the final list is submitted to the Board of Regents for review and approval prior to being submitted to the Department of Administration for legislative action.

Part of the communication mechanism that accompanies this process is a visit by the Commissioner of Higher Education to every campus in the Montana University System. As part of this visit, the Commissioner outlines the specific priorities agreed on both for Montana Tech and for the rest of the University of Montana Affiliation. The [presentation](#) is open to all on campus so that questions and feedback are welcomed and encouraged. These presentations are also open to the Regents and to members of the immediate community so that they have a chance to see and participate firsthand in the continuous LRBP process.

All Montana University System building projects are integrated with those of other state agencies and submitted to the legislature. The Montana Legislature approves, changes, or disapproves the LRBP and the associated funding for approved projects. This funding may come from a variety of sources including cash appropriations, campus contributions (e.g. donor funding, allocation of campus reserves), or the issuance of bonds.



During the last biennium, Montana Tech received state funding for additional classroom and laboratory space known as the Natural Resources Research Center. The new space is to be added to the existing Engineering Laboratory Classroom (ELC) building. Five (\$5) million in funding was [approved from the legislature](#), with an additional \$5 million in spending authority for Montana Tech to raise through donor contributions. This project will be used to support both undergraduate and graduate level research and instruction, and is directly tied to Theme 2D of [Montana Tech's Strategic Plan](#), to Grow the Graduate School and Graduate Program through creating and implementing doctoral programs in a small number of niche strategic areas.

## **2. Auxiliary Funds**

Auxiliary building projects are often funded by proceeds from the issuance of bonds or through the InterCap loan program. The affiliated campuses of the University of Montana collectively issue bond instruments which are cross-pledged and administered through the University of Montana – Missoula campus.

Bond payments are typically funded by revenue from auxiliary enterprises, land grant income, and from building fees. A debt-service plan is first created for the life of the bonds prior to their issuance to ensure that the campus affiliation can meet its future repayment obligation. Any excess auxiliary funds are deposited into plant funds to pay for renovation and maintenance of auxiliary buildings or to purchase equipment.

Montana Tech maintains an Auxiliary Projects Plan for both short and long term goals for capital improvements to auxiliary facilities.

## **3. Student Fees**

In addition to supporting bond payments, student fees are also used to pay for capital classroom equipment. Montana Tech's Student Equipment Fee accounts at both the North and South campuses are designated to purchase capital equipment. Every year, the Provost contacts the academic deans and department heads for capital equipment requests. Based on estimated revenue projections, these requests are compiled and prioritized by the Deans. Those campuses affiliated with the University of Montana have in the past issued bonds for educational and general classroom and laboratory improvements on campus. To pay this debt, students are assessed an academic facilities fee. For the record, this student fee was originally implemented with the understanding that any fee revenues generated would be used to repay the debt associated with classroom and laboratory renovations, and that any annual excess revenues would be dedicated to further classrooms/laboratories improvements. This process has been very effective in maintaining financial resources for educational purposes.

Student Fees have also been used to support renovation and expansion of the HPER complex. Most recently, the HPER was renovated and expanded to include new weight and cardio workout equipment. Prior to the fees being assessed, Tech's student body voted overwhelmingly to approve the addition of this fee for



renovation of the HPER (see [Board of Regents Agenda Item 144-1504](#)). Next up on the agenda is the future repair of the Montana Tech pool located in the HPER complex. Student fees also support the following: ongoing replacement and maintenance of student computer labs and networking equipment; life cycle accounts for the repair and replacement of campus equipment and parking structures; licensing of student software; and finally replacement of faculty and staff computers.

#### **4. Foundation**

The Montana Tech Foundation is a separate 501c(3) organization that serves as Montana Tech's development office. The Montana Tech Foundation has led several successful capital campaigns for projects designed to specifically achieve Montana Tech's strategic goals. For example, the Foundation was a major contributor to the Natural Resources Building that currently houses the Montana Bureau of Mines and Geology. Also, the Foundation raised all the funding for the Frank and Ann Gilmore University Relations Center, which is currently occupied by the Montana Tech Foundation, Career Services, Public Relations, and by Alumni Affairs. The Foundation also administers individual accounts for academic and administrative departments of Montana Tech; these accounts are often used to fund capital equipment which is donated to the campus for classrooms and laboratories. The President of the Montana Tech Foundation is employed as the Vice Chancellor for Development and University Relations. This position has a dual role to ensure that the philanthropic activities of the Foundation are kept in perfect alignment with the strategic goals of Montana Tech. Additionally, a formal [operating agreement](#) exists between the Foundation and Montana Tech. It clearly specifies that at least annually Tech's Chancellor will present to the Foundation board of directors its fund raising priorities to be considered by the Foundation. The Foundation has its own separate board of directors. They are not only responsible for reviewing and approving the operating and capital budgets of the Foundation, but they are also responsible for independently leading and directing the activities for the mutual benefit of the Foundation and the Montana Tech campus.

#### **Standard 2.F.6**

**The institution defines the financial relationship between its general operations and its auxiliary enterprises, including any use of general operations funds to support auxiliary enterprises or the use of funds from auxiliary services to support general operations.**

Both the educational and general funds and the auxiliary funds are operated separately and independently of each other at Montana Tech. Tech's general operating account is used to support the institution's primary objective: instruction, research, academic affairs, student affairs, institutional support, operation and maintenance of plant, and waivers. The sharpness of this financial distinction ensures that all the revenues and expenditures are spent as appropriated by the legislature and as approved by the Board of Regents. Finally, the institution ensures that there is no deficit spending.

Auxiliaries are budgeted and accounted for separately. There is a yearly administrative charge assessed to auxiliaries for the services which the institution

provides to the auxiliaries. That assessment amounts to \$15,000 annually. This assessment includes the cost incurred by the campus to provide administrative overhead services, such as accounting, billing, purchasing, payables, and human resources.

### **Standard 2.F.7**

**For each year of operation, the institution undergoes an external financial audit, in a reasonable timeframe, by professionally qualified personnel in accordance with generally accepted auditing standards. Results from the audit, including findings and management letter recommendations, are considered in a timely, appropriate, and comprehensive manner by the administration and the governing board.**

[Annual Consolidated Financial Audits](#) and [Biennial Consolidated Financial-Related Audits](#) for the four affiliated campuses of the University of Montana are done by the Legislative Audit Division. Funding for this legislative audit is a line item in the general fund legislative appropriation at the system level. The University of Montana affiliation receives an allocation as part of the biennium budget, and Montana Tech pays its prorated share of the audit costs.

Financial statements are prepared to conform to standards recommended both by the National Association of College and University Business Officers and by the Industry Audit Guide of the American Institute of Certified Public Accounts. The Legislative Audit Division audits Montana Tech and the resulting two year Financial—Compliance Audit is presented to the Legislative Audit Committee of the Montana State Legislature. Audit results of all four affiliated campuses are combined into one document at the request of The University of Montana. Ultimately, audit recommendations are addressed to The University of Montana but relate to each of the affiliated campuses.

The Legislative Audit Division prepares an Audit Recommendation, and each campus prepares an Action Plan in response to any audit findings. This report specifies an action for each recommendation, and the action plan on all past recommendations pertaining to Montana Tech have been implemented and completed. The independent auditor's report has consistently included an unqualified opinion for the institution.

### **Standard 2.F.8**

**All institutional fundraising activities are conducted in a professional and ethical manner and comply with governmental requirements. If the institution has a relationship with a fundraising organization that bears its name and whose major purpose is to raise funds to support its mission, the institution has a written agreement that clearly defines its relationship with that organization.**

Montana Tech is a unit of the State of Montana. Financial statements for Montana Tech include only the activities, funds, and accounts of the institution and the Bureau of Mines. Private nonprofit organizations affiliated with the institution include the Montana Tech Foundation, the Digger Athletic Association, and the Montana Tech Alumni Association. Both the Foundation and the two Associations

operate exclusively to encourage, promote, and support programs, research, scholarly pursuits, and athletics at or in connection with Montana Tech. In exchange, Montana Tech provides the Foundation with support services that include operational maintenance of the Frank and Ann Gilmore University Relations Center (housekeeping, landscaping, and utilities) as well as computer/telecommunications support for that building (see [Foundation Operating Agreement](#)).

The institutional policy governing foundations and fundraising activities is found in [Board of Regents Policy 901.9 – Campus-Affiliated Foundations: Montana University System](#). This policy promulgates foundation compliance with local, state, and federal laws in terms of fund raising, separately accounted for and audited financial statements, and requires a written operating agreement between the foundation and campus. These requirements are all designed to maintain the public's confidence in the professional and ethical manner in which funds are raised for the Tech campus.

Montana Tech is very fortunate to receive strong and enduring support from its alumni, local government, from local businesses, and from national and international business and industry. Tech fosters active, ongoing, and genuine interaction and communication linkages between its academic programs and constituencies from all sectors of society. These mutually beneficial relationships are enhanced by the fact that Montana Tech has a well understood academic, research, and public service mission. Montana Tech clearly demonstrates to all concerned its commitment to these purposes.

Montana Tech has always had in place an appropriate contractual relationship with its Foundation. Montana Tech and the Montana Tech Foundation have a formal operating agreement that delineates the rights and responsibilities of both parties. This operating agreement recognizes the independent nature of the Foundation, but at the same time clarifies the partnership that exists between the two parties. Protected in this operating agreement are the interests of the Foundation, Montana Tech, and the donors who contribute to Montana Tech.

Recently, the Regents adopted more stringent guidelines in these contracts for fundraising and development services with the campus foundation. These guidelines, delineated in [Policy 901.9 – Campus Affiliated Foundations](#), discuss how foundations should most properly represent the school and work on activities for the benefit of the associated institution. This Regents policy assures proper accounting and use of funds. Qualified officers and staff in the Foundation administer all Foundation funds. A Foundation Board of Directors provides general policy and oversight with appropriate involvement of the Chancellor.

The Contract of Operations - Foundation between Montana Tech and the Foundation authorizes the Foundation to manage endowments and transfer funds to the institution in accordance with terms and conditions of the gift instrument. The Foundation's records are reviewed annually through an Independent Audit. A copy of this audit report is submitted to the Business Office and to the Board of Regents after the close of the fiscal year (typically in November), and then made available to state auditors for review to substantiate Montana Tech's related parties footnote.

## **Standard 2.G–Physical and Technological Infrastructure**

### **Standard 2.G.1**

**Consistent with its mission, core themes, and characteristics, the institution creates and maintains physical facilities that are accessible, safe, secure, and sufficient in quantity and quality to ensure healthful learning and working environments that support the institution’s mission, programs, and services.**

#### **Physical Facilities**

In 1896, the original Montana School of Mines laid the cornerstone for its first building, Main Hall. Today, after several name changes and many campus improvements, Montana Tech of the University of Montana is comprised of two main campus sites: the north campus and the south campus. The north campus is approximately 142 acres and is the bachelors, masters, and PhD academic program campus. The south campus has two separate sites of approximately 40 acres and 11 acres each. The south campus is currently called Highlands College and is the primary college of technology campus. Overall, a total of 42 buildings occupy these three sites along with associated utility infrastructure, parking facilities, athletic, intramural, and campus recreation fields. Included here are a golf course and biking and hiking trails. The gross square footage (GSF) area of all the 42 buildings is just under 891,000 GSF.

A map of the north campus along with links for Highlands College and parking facilities is available at [Visitors map of Montana Tech](#).

The physical facilities at Montana Tech have always been planned, designed, and constructed so as to support the academic mission. Each facility was originally conceived with a specific purpose which depended on the existing institution mission, goals, and program needs. Over the years the mission has expanded and goals have changed, but facilities planning for updates, renovations, and new construction have kept pace. Strategic plans of five, ten, fifteen years and beyond have been a consistent theme at Tech and have been generally followed as facility needs were confirmed.

#### **Regulatory Changes**

Facilities are consistently designed and constructed according to codes, regulations, and accepted standard practice of the time period. However, these codes, regulations, and practice are subject to change as knowledge increases and as new technologies emerge. Major facility renovation work always includes code and regulation updates for systems and building areas in the project scope. Areas of special attention in new construction and major renovations include energy use and efficiency efforts, life safety systems, accessibility requirements and solutions, security analysis and solutions, and architectural design adherence to the university facility themes.

In 2008 the north campus participated in an accessibility audit performed by the Seattle office of the US Department of Health and Human Services Office for Civil

Rights (OCR). Findings from the audit were reviewed within the Tech community, and a plan of action was established between Tech and OCR. As a result, OCR issued a letter of acceptance of work performed by Tech on September 12, 2012 and specified that OCR was closing review of the agreement. Similar to any campus with some older facilities, not all of Tech's campus spaces are accessible according to current code. However, Tech always includes accessible design requirements in programming, planning, and designing for facility renovation and new construction. Tech also has a very good record of working one-on-one with disabled students, faculty, and staff to solve their specific needs when identified.

## **Facilities Management**

Facilities are maintained and operated according to current standard practice methods and procedures. Montana Tech is a member of APPA, Leadership in Educational Facilities, and the National Association of College and University Business Officers (NACUBO) professional organizations. Tech subscribes to APPA and NACUBO for training programs and materials, information resources for best practices in facilities management, and participates in key performance indicator studies and peer review and benchmarking. [APPA](#) and [NACUBO](#) are recognized internationally as leading organizations in the higher education business, facilities management, and environmental compliance fields.

Response priorities are governed by modern facilities management principles that include identifying highest priority systems and classifying systems and buildings according to mission, goals, and assigned use. Life safety concerns are always given highest priority but followed by life quality concerns such as indoor air quality, accessibility, temperature control, and lighting. For example, high infrastructure density research space receives more maintenance effort comparatively than does an outdoor stand-alone storage shed. Similarly, high frequency use lecture halls and computer labs see more maintenance effort than infrequently used departmental general areas.

Maintenance of the building envelope and systems is imperative to protecting the institution's facility and equipment assets and helps ensure availability of the facility for its intended use. The Physical Facilities Department uses a computer based maintenance management system (CMMS) to log and track customer requests and maintenance and repair response. CMMS reports are routinely reviewed to analyze the effectiveness of assigned work. A good example would be the quantity of open work orders by shop and the time period a work order was open. The department is currently investigating ways to use the CMMS to improve preventive maintenance of facilities and systems and in turn increase customer satisfaction. Exploration and implementation of best practices in the field of facilities management are encouraged across the entire facilities organization.

## **Space Planning**

The quantity of facilities and assigned space for the existing mission and goals of the institution is currently adequate. As an illustration, many states have adopted assignable space standards, and national publications are available for reference to space type and assignment along with utilization studies. The Post Secondary Education Facilities Inventory and Classification Manual (FICM) published by the National Center for Education Statistics, is a recognized higher education space

standard that many state standards reference. These standards typically recommend 15 to 20 net assignable square feet (NASF) per student for general classrooms. Montana Tech's general classrooms have just over 20 NASF per student. The recommended standard for general student computer labs is 30 to 35 NASF per station; Tech labs typically see almost 35 NASF per station. The number of classrooms and many other space types are considered adequate on the basis of utilization numbers which are related to both student contact hours and to student population numbers.

Among other resources, Tech maintains an active broad based campus space planning committee, which is heavily engaged in space programming review and in suggesting proposed space use changes. Increases in student program demand and the resulting increases in student population – along with increased campus research activity recently - has mandated the institution add new facilities and different types of space. As a result Montana Tech has responded by constructing a new Petroleum Engineering and Bureau of Mines and Geology building, currently known as the Natural Resources Building (NRB). The original Petroleum Engineering building has undergone major renovation into new contemporary space for the Nursing program and other users and is known now as the Health Sciences Center (HSC). Also a new Wellness facility has been added to the existing Health & Physical Education Building (HPER). A grass football and athletic field has been converted to state of the art sports turf playing surface along with stadium facility upgrades. Moreover, surface parking improvements and landscape and hardscape improvements have been completed. Finally, a new Foundation and Alumni Relations building has recently been finished on the Montana Tech campus.

### **New PhD Program**

In 2013, Montana Tech received approval to grant its first PhD degree program and immediately went to work on funding to design and construct research space for this new program. Five million dollars of state funds were appropriated for what will eventually become a new ten million dollar campus research facility. Tech has already engaged a top notch design team that today is deep into specific program review for this new research space. Programming efforts will flow into facility design choices and quickly be converted to specific design components of a brand new state of the art facility.

Some existing space will be vacated as various research programs move into the new facility. Programming and planning design for renovation of this vacated space is a component of the new facility design scope. In addition, Tech has committed to a review of the existing [Campus Master Plan](#) (CMP) as a result of the impact of the new facility and the potential change of existing facility use. This process illustrates the continuing theme of planning and space analysis that Tech embraces. All stakeholders partake in the planning process by stages and their requirements are either included in the current project or are recorded and then assigned new priorities in the next project.

### **Campus Safety**

Safety and security of students, faculty, and staff are always first priority. A vital part of the Physical Facilities Department is an in-house security group that is on campus 24/7/365; hence, security and maintenance staff are available around the



clock for assistance. Life safety systems for fire detection, alarm, and necessary evacuation procedures from any facility are in place and are inspected, tested, and exercised regularly. Also, Tech maintains a strong relationship with local and state emergency responders. Butte Silver Bow (BSB) city/county police, fire, and ambulance departments are familiar with the Tech campus and are typically included in Tech emergency response planning and drills.

The Physical Facilities Department and Tech's Environmental Health and Safety (EH&S) routinely perform campus assessments for security, safety, and for accessibility deficiencies. The university has a very active broad spectrum Safety & Health Committee that meets multiple times per semester to review concerns and to make recommendations for corrective action as necessary. An example of recent committee [meeting minutes](#) illustrates breadth of committee involvement.

## **Emergency Response**

Montana Tech is located on the northern Rocky Mountain Continental Divide where weather is highly varied and changes rapidly to create emergency conditions with little warning. The university in its history has understood first-hand the need for emergency planning according to weather conditions and natural disasters. As a university theme, Tech has taken its weather emergency planning to all levels of emergency response planning. Earth quakes, forest fires, intense periods of sustained low temperatures, and of course newer threats of internal or external terrorism are consistently on the minds of university officials. To be sure, these issues are addressed by response planning groups and policy makers.

Over the past year Tech has been involved with several state agencies and specialty consultants in updating our [Pre-Disaster Mitigation Plan \(PDM\)](#). This plan identifies risks from possible disaster emergencies and outlines policy, procedure, and physical actions that should be taken to potentially mitigate extent of damage, injury, and loss of life on campus during disasters. On January 13, 2014 the Denver office of the Federal Emergency Management Agency (FEMA) notified the State of Montana that Tech's updated plan will be approved.

Another example of pro-active emergency response planning at Tech is the ability of community members to enroll in wireless emergency communication notifications. Service on the Wireless Emergency Notification System (WENS) has been procured and is available to any Tech [student](#), [faculty or staff](#) who wishes to enroll and receive emergency text messages and emails.

In addition to the local planning and drills with BSB units, university staff have access to resources from the University of Montana-Missoula (UM), the Montana University System (MUS), and other state and regional regulatory and response resources. The following state agencies: Department of Environmental Quality (DEQ), Department of Administration (DOA), Architecture and Engineering Division (A&E), and the Risk Management and Tort Defense Division (RMTD) are all heavily connected with Tech business operations and serve partnership roles in the success of the university. Examples of joint agency practice drills on the Tech campus include quarterly Residence Hall fire drills, annual fire drills for all university facilities, annual earthquake drills, and periodic active shooter drills.

## **Standard 2.G.2**

**The institution adopts, publishes, reviews regularly, and adheres to policies and procedures regarding the safe use, storage, and disposal of hazardous or toxic materials.**

### **Hazardous Materials Management**

With the various academic and research programs that use chemicals on the two Montana Tech campuses, previously identified as the north campus and the south campus, Montana Tech maintains a fairly large inventory of chemicals. The Environmental Health and Safety (EH&S) Director oversees the management of the hazardous materials program.

The following information covers the Montana Tech hazardous materials and hazardous waste management programs and the radiation safety program.

As stated in the Montana Tech [Hazard Communication Program](#), all laboratories that use and/or store chemicals are required to have a copy of the [Chemical Hygiene Plan](#) readily accessible, along with copies of the Safety Data Sheets (SDSs) for each chemical in the lab or storeroom.

In general, flammable and corrosive chemicals are stored in appropriate cabinets, and other chemicals are stored on shelves by compatibility, with a lip to prevent them from falling off the shelves.

Chemicals are managed and tracked through an online chemical software management program called the Vertere Inventory Management System (VIMS). Each department that maintains a chemical inventory at Montana Tech has a chemical acquisition manager (CAM) who is the "gatekeeper" for all chemical acquisitions. Everyone (faculty, staff, and students) must go through a designated CAM to acquire chemicals. The CAM's duties are outlined in the [Chemical Hygiene Plan](#).

The VIMS program allows easy access to our entire chemical inventory. Information can be retrieved by campus, building, department, or room. Chemicals can be looked up by bar code number or name. Currently, all CAMs and the Environmental Health and Safety Director have access to the VIMS system. However, limited access is granted to other individuals on an as-needed basis.

### **Training**

All students who are enrolled in a lab where hazardous materials are used or where a hazardous environment exists are required to do an online lab safety training every semester. The program is run through Moodle, a software e-learning platform, also known as a Learning Management System, or Virtual Learning Environment. Instructors require the students to complete the training and pass a test with a minimum 90 percent score before they are allowed to work in the laboratory. Records are maintained in the EH&S office. If a faculty member chooses not to participate in the online lab safety program, he/she is responsible for documenting the safety training they do and for maintaining the records.



## **Hazardous Waste**

Montana Tech's hazardous waste program is also managed by the Environmental Health and Safety Director according to Tech's [Hazardous Materials Management Plan](#). When departments or individuals have waste to dispose of, EH&S is contacted, a Montana Tech internal manifest is completed, and the materials are transferred to the hazardous waste storage room located in the Chemistry/Biology Building. Here, the materials are labeled as hazardous waste and are added to the inventory of hazardous waste. The containers are stored in cabinets appropriate for the waste until shipping time. The storage room maintains 10 air exchanges per hour for ventilation and is under negative pressure in the event of a chemical release or spill.

Montana Tech is currently classified as a conditionally exempt generator of hazardous waste. Hazardous waste was last shipped January 2012. A spring/summer 2014 shipment is being planned. Overall, the Montana Tech waste minimization program is well designed and has been very effective.

In the past, Montana Tech has been classified as a large generator of waste which requires a Hazardous Materials Management Plan and an EPA identification number. For the record both are in place. Montana Tech currently falls under the umbrella of the University of Montana's contract with PSC Environmental Services, LLC for hazardous waste disposal. When preparing to do a hazardous waste shipment, a list of the hazardous waste is first sent to the provider, who then comes in and characterizes, sorts and packs the waste, and provides all the labeling and paperwork.

## **Radioactive Materials**

The EH&S Director serves as the Montana Tech Radiation Safety Officer. The campus has been able to dispose of all of the instrumentation that utilized radioactive sources except for one well-logging instrument that contains an Am/Be-241 source. Tech is currently working with another group to transfer that source as well. We also have two departments that use x-ray machines. Employees who work in the areas with the x-ray machines are required to wear radiation badges that are sent in for analysis every three months.

Tech does not have any faculty who are working with radioisotopes at this time, and is not aware of any plans to do so in the near future.

## **Standard 2.G.3**

**The institution develops, implements, and reviews regularly a master plan for its physical development that is consistent with its mission, core themes, and long-range educational and financial plans.**

Montana Tech was originally established with strong consideration of local needs, but those local desires and plans eventually proved global in nature. Thus, long range vision and planning has been built into Tech's fabric as an institution of higher learning since its very beginning.

As introduced in **2.G.1** above, physical facilities at Montana Tech have always been planned, designed, and constructed with its mission in mind. Each facility was originally conceived with a specific purpose which depended on the existing institution mission and goals and program needs. As the campus mission has expanded and goals changed, facilities planning for updates, renovations, and new construction have always kept pace. Strategic plans of five, ten, fifteen years and beyond, connected to financial possibilities have been a consistent theme at Tech and generally followed as facility needs were confirmed and as funding sources were available.

In recent years, the institution has been engaged in long range strategic planning in cooperation with other higher education entities in the state such that all could best deliver the required services in the most efficient and effective way thought possible for Montanans, regional, national, and international students. Montana Tech produced a Campus Master Plan that involved many stakeholders and has continued a process of updating that master plan at adequate intervals and engagement of new stakeholders.

Within the last year, Tech has focused not only on a general upgrade to its [Campus Master Plan](#) (CMP), but also on the development of specific components of that plan. Producing more specified sub-plans as a part of the overall master plan will make it more likely to succeed. Sub-plans, or components of the CMP, include designing requirements and process for putting together a Campus Landscape and Lighting Plan, (CLP), a Campus Parking Plan (CPP), and a Campus Land Use and Acquisition Plan, (LAP).

The institution charges the Physical Facilities Department as the steward of the Campus Master Plan (CMP) and its sub-plans and supporting data and records. Physical Facilities works closely not only with local and state agencies but also with the University of Montana-Missoula (UM) and the Montana University System (MUS) in producing and reviewing campus facility assessments used in both short and long range planning.

Long term capital construction of new facilities and capital maintenance or renovation of existing facility needs and the master planning effort connected to state funding, are addressed through the state process known as Long Range Building Plan (LRBP). Here, Tech develops and maintains its own CMP and deferred maintenance list used for prioritizing funding requests. Montana Tech's funding requests are combined with the other University of Montana units, and the president of UM makes the final choice on UM priorities. UM priorities are combined with requests from Montana State University (MSU) and are assembled as a singularly prioritized funding request of the entire Montana University System (MUS). Eventually the MUS funding request list is reviewed and included in budget information submitted for final review and acceptance into the governor's overall LRBP proposed budget. Click here for a MUS [LRBP Overview](#).

Review of the LRBP, the CMP and its sub-plans, and the funding needs and budget impact are accomplished through a series of meetings, presentations, and feedback-negotiation sessions which take place throughout the university and state communities. Consistent with the core theme "Tech Community," faculty, staff,

and students are greatly encouraged to actively participate in planning sessions and to closely review the plans. Likewise, the local Butte community and government officials, alumni, and the Tech Foundation and its members are very involved in proposing ideas, participating in planning sessions, and design plan review.

#### **Standard 2.G.4**

**Equipment is sufficient in quantity and quality and managed appropriately to support institutional functions and fulfillment of the institution's mission, accomplishment of core theme objectives, and achievement of goals or intended outcomes of its programs and services.**

The general mechanical and electrical equipment associated with basic facilities systems, such as Heating, Ventilating, Air Conditioning (HVAC), electrical power distribution, and general purpose task lighting are maintained and managed by the Physical Facilities Department and are considered adequate to support institutional functions and to accomplish goals. These are long lifespan and capital-intensive systems and equipment and are generally chosen as the best available for the requirements at the time of installation. New technology and different program demands have made some facilities equipment less than ideal before its intended lifespan was achieved. However, the institution has been successful in modifying some equipment or its operational use in order to provide satisfactory service.

General academic classroom and laboratory equipment and furnishings are adequate in quantity and quality and are maintained properly to support institutional functions. The department of Physical Facilities works closely with academic units, the administration, and the Registrar to review general classroom and laboratory equipment needs and to plan necessary additions or changes. Funding for equipment replacement or additions is provided through a variety of means. Major classroom renovation and new equipment installation planning are part of the university budget request cycle.

Each year an equipment fee is assessed on students, which in the 2013-14 academic year raised just under \$400,000. Departments are asked annually to prepare a prioritized list of equipment needs for purchase from these funds. With input from the departments, the Deans further prioritize and distribute these funds across the department requests. These monies help departments and programs purchase, for example, everything from microscopes costing a few hundred dollars each to a humanoid robot costing \$16,000. Here, the guiding principle in allocating these funds is to spend them where they will bring the greatest educational benefit and return on investment.

Additionally, students pay an academic facility fee each semester. Monies from this fee are controlled and prioritized by the Provost with input from the Deans and are primarily used for general classroom and related equipment upgrades.

Research laboratory equipment is usually funded by grant money. The grant process involves multiple on-campus reviews prior to request submission to help ensure adherence to the university mission and intended goals. The grant may be federal, state, local, or private funds. Access to research equipment is often tightly controlled because it is considered highly specialized, very sensitive, and very

expensive. It is not unusual for research equipment to include dedicated installation and maintenance plans performed by manufacturer trained technicians.

Equipment maintenance is performed according to procedures and timelines recommended by the manufacturer. Equipment operation and safety training prior to operation is again performed according to manufacturer recommendations and university safety policies and procedures. Each department that has laboratories assigns specific personnel with the duties of Lab Director. The Lab Director has responsibility for safety and maintenance oversight of the equipment as well as recommending new equipment as needs arise.

## **Technological Infrastructure**

### **Standard 2.G.5**

**Consistent with its mission, core themes, and characteristics, the institution has appropriate and adequate technology systems and infrastructure to support its management and operational functions, academic programs, and support services, wherever offered and however delivered.**

Montana Tech's Campus Technology Services (CTS) provides the campus with a multitude of computing resources and technology to support the campus mission and core themes. Three service areas comprise CTS: Network Services, Information Services, and Telephone Services. Additionally, because the number of students in online learning is constantly increasing, a Distance Learning Coordinator is now employed. Reporting directly to the Vice Chancellor of Academic Affairs and Research, this new Coordinator provides Montana Tech faculty with a resource who understands all of the available technologies and academic principles necessary to create high quality online courses. In addition, this position also facilitates all campus video conferencing logistics.

### **Infrastructure**

For wide area connectivity, the campus is networked via a 1 Gb/s transport to the Internet. For local area connectivity, all buildings interconnect via multimode and single-mode fiber at 1 Gb/s to the routing cores. Network Services is in the initial phase of upgrading the infrastructure completely with single-mode fiber which will build in redundancy and eliminate any future bandwidth limitations.

Campus desktop computing consists of more than 1,000 workstations supported by four computer support specialists. The computer support specialists are linked to CTS for technical direction, but they are managed by the Deans of each respective college. Separately, the Montana Bureau of Mines & Geology (MBMG) has information resources which are supported by their own computer support specialist. The Bureau collects and disseminates information about Montana's geologic, groundwater, energy, and mineral resources. For the record, Montana and the Nation are reliant on the data the Bureau collects, maintains, and produces.

In support of campus video conferencing, a dedicated conferencing room, located in the Health Sciences Building, is in place to specifically address any conferencing not

directly related to classroom instruction. Additionally, classroom video conferencing can be scheduled into any one of three high tech classrooms which are equipped with integrated video conferencing capabilities.

All campus core computing services are environmentally, physically and electrically protected in the central Data Center to assure 24x7x365 availability in meeting the IT needs of Montana Tech's entire community. The Data Center supports 53 physical servers and 82 virtual servers. These servers deliver the following IT resources: Banner, Web, E-mail, File, and print services. In addition, the Data Center supports a 22-node (350 core) High Performance Computer (HPC) cluster, and each node of the HPC includes dual Intel Xeon E5-2660 processors. The HPC supports collaborative research and instruction within Montana and the University System.

On the North Campus, five instructional computer labs and 13 departmental or student use computer labs are supported. In addition, four general purpose multimedia conference rooms in the Student Union Building (SUB) and various other conference rooms on campus offer audio/video multimedia support. All classrooms of 24 seats or more are equipped with audio/video presentation capabilities, and lower capacity classrooms are currently being equipped with audio/visual capabilities as budgets allow. In addition, Montana Tech supports three high tech classrooms, CBB001, NRB 226, and ELC 202. These classrooms integrate the latest technology to support audio, video conferencing, and presentation capabilities.

Highlands College on the South Campus supports 17 physical servers and 30 virtual servers. The virtual servers provide a dynamic number of hosts depending upon student and faculty use at any given time. Highlands College supports eight instructional labs with 25 computers each and a Learning Center with 19 computers.

## **Technology Systems**

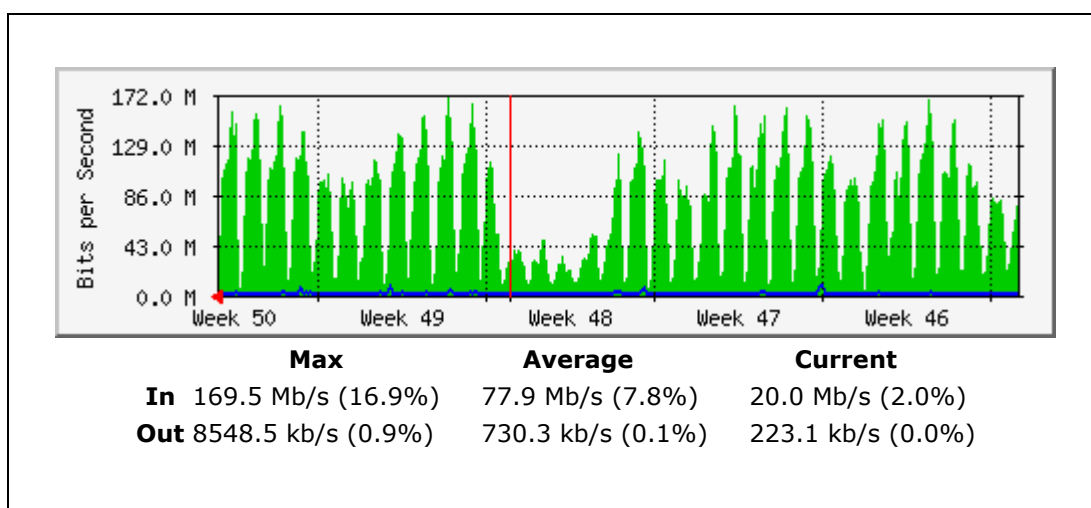
Both the North and the South campuses have a comprehensive enterprise wireless system. The system uses Aruba wireless controllers and thin access points to provide dual band concurrent 802.11a/b/g/n access. This type of system delivers extensive integrated security by providing physical layer security, data encryption, virtual private networks, and firewall protection to users on the network. Overall, the wireless system provides reliable access to students, to employees, and for special events at Montana Tech via 173 access points. Network Services regularly monitors and maps wireless coverage with the intent to provide essential service by strategically deploying the wireless access points.

Network Services recently upgraded connectivity both to the Highlands College and to the Campus Apartment Housing with 500 Mb/s licensed microwave (point-to-point) technology. Moreover, Network Services is also looking at interconnecting these two remote locations by participation on the MERDI Fiber Ring. The MERDI Fiber Ring is an initiative to network the Butte Community with a hybrid fiber optic ring which provides for the following three classes of customers: (1) The Butte School District; (2) Economic Development anchor tenants (local government, non-profits, community assets, and large businesses); and (3) those customers that can take advantage of unmanaged dark fiber. Montana Tech fits into the third

classification. It may be possible for the school district, through Montana Tech, to take advantage and gain connectivity to Internet2. This, coupled with more bandwidth utilization expected because of increasing utilization of the HPC, obliges Tech's Network Services to stay ahead of the curve and begin planning for an upgrade on the UM-Tech transport from 1 Gb/s to 10 Gb/s.

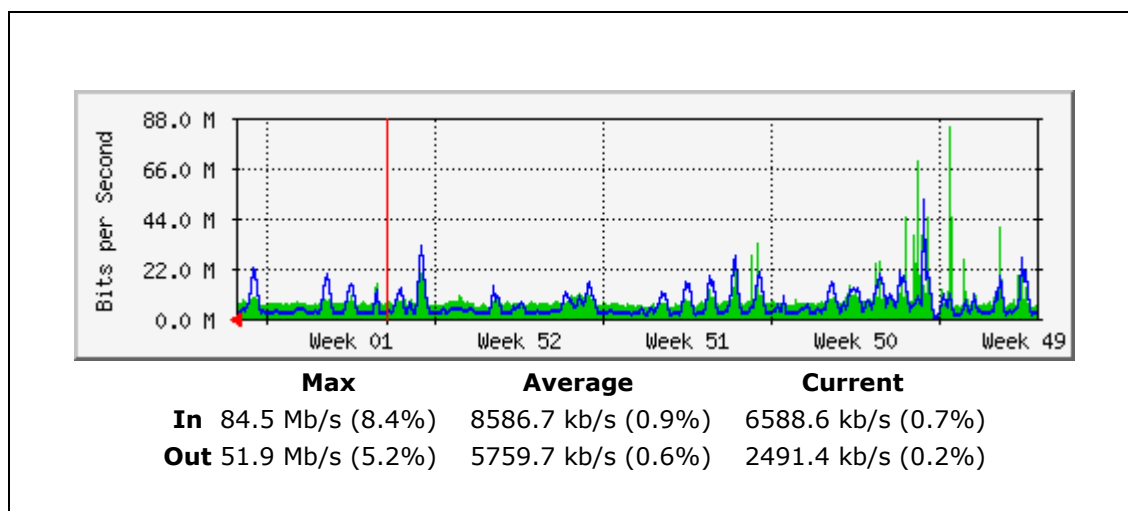
## Operational Functions

Network Services regularly monitors bandwidth utilization to determine adequacy of both the wide area and local area network links. For example, the UM-Tech transport is currently provisioned for 1 Gb/s (1000 Mb/s). Current average utilization runs less than 10% (<100 Mb/s), with spikes running less than 20% (<200 Mb/s). See Figure 2.G.1.



**Figure 2.G.1 UM-Tech Monthly Utilization**

Activity on the local area network is shown in Figure 2.G.2. Monthly Utilization of the Natural Resources Building (NRB) is very representative of typical bandwidth utilization on the campus network. The NRB is occupied by the Bureau of Mines and Geology, by the Petroleum Department, and by several student use computer labs.



**Figure 2.G.2 NRB Monthly Utilization**

All buildings on campus connect to the routing cores at 1 Gb/s (1000Mb/s). The NRB average aggregate bandwidth utilization shown in Figure 2.G.2 is less than 1% of capacity with an individual spike only at ~85 Mb/s (<10%) for the monthly snapshot. This also demonstrates that 100 Mb/s to the desktop adequately supports all user needs. Nonetheless, Network Services is planning ahead of the curve to coincide infrastructure upgrades well in advance of anticipated utilization needs.

## Support Services

The Montana Tech network is an extension of The University of Montana's network and travels regionally, nationally, and internationally via:

- Commodity internet to non-university endpoints;
- Subsidized/restricted Internet2 network to member university endpoints; and
- Subsidized/restricted extreme National Lambda Rail (NLR) and Northern Tier Networks between selected member endpoints.

Through the Northern Tier Network, the University of Montana has a 10 Gb/s network connecting to Internet2 via Seattle (the West bound connection) and a 10 Gb/s connection to the Northern Lights Gigapop in Minneapolis (the East bound connection). The University of Montana also has a 10Gb/s connection to Idaho Regional Optical Network through Spokane, Washington, and through a 10 Gb/s connection to Montana State University through Billings, Montana. Because of this arrangement in the network architecture, benefits of network connectivity derived at The University of Montana ultimately extend to Montana Tech's campus. The Northern Tier Network transports both I2 and commodity internet to the University of Montana-Missoula campus. The University of Montana-Missoula currently contracts for 1Gb/s of commodity internet service for UM-Missoula and all of its affiliated campuses.

Montana Tech is covered with a three-tiered network/computer use policy structure. At the highest level are The Board of Regents IT policies covering The University of Montana (UM) and Montana State University (MSU) and its affiliates. At the next level are The University of Montana IT policies governing not only the Missoula

campus but also the UM affiliates; finally, each campus has developed its own policies. These policy sets are located at the publicly accessible web site link, [Network/Computer Use Policies](#).

Montana Tech is enrolled in the Microsoft Campus Agreement for all of its Microsoft software needs. Most desktop operating system upgrades and core software are licensed through this Campus Agreement. As part of other centralized software, Montana Tech is licensed to operate 28 Adobe Concurrent Master Suite sessions which are managed under a license server listed with 300 clients. Essentially, any Montana Tech computer can be set up with the Adobe Master Suite and includes instructional labs (which are given priority).

Montana Tech subscribes to the McAfee security suite of software which includes McAfee total endpoint protection, a student option for residence halls, e-policy orchestrator (provides unified management of endpoint, network and data security), and various other network security tools. In addition, Montana Tech benefits from the availability of a full time IT Security Officer on the UM-Missoula campus who recommends industry standard best practices, provides incident advice, and works with the affiliated campuses on policy development.

In order to support its management and operations functions, academic programs, and its support services, Montana Tech Information Services provides access to the following:

- **Moodle** - a learning management system which is used both for blended and for distance only classes; here faculty manage course content, facilitate class discussions, and assess topics learned.
- **Blackboard Collaborate/ Wimba** - a conferencing tool which allows faculty and students the use of an online whiteboard as well as video conferencing and chat capabilities.
- **MyMtech** - Montana Tech's portal system, which allows easy access to classes, important links and announcements, and to campus news.
- **Banner** - the campus Student Information System which allows students to register, pay tuition, and fees; the system also allows staff to maintain course catalog and faculty assignments.
- **Blackboard Transact** - an Ecard system which allows students to purchase on campus items, print, and to access designated electronic locks.
- **The UM Data Warehouse** - a large store of data which allows faculty and staff to monitor budgets and expenditures.

### **Standard 2.G.6**

**The institution provides appropriate instruction and support for faculty, staff, students, and administrators in the effective use of technology and technology systems related to its programs, services, and institutional operations.**

Training sessions are offered to faculty, staff, and to students the week prior to the start of a new semester but at different days and times in order to accommodate the schedules of users. Classes offered are as follows:



- Technology Orientation (Basic Computer Skills);
- Introduction to Moodle;
- Advanced Moodle training; and
- UM Training.

One-on-one training sessions are also available to faculty, staff, and to students upon request throughout the year.

The Campus Technology Services' Helpdesk is available to all faculty, staff, and to all students. The CTS Helpdesk is open 7:30 am to 7:00 pm, Monday – Friday.

The publicly accessible web site <http://www.mtech.edu/cts> is available 24/7 to assist those who need help during off hours. The CTS Helpdesk primarily answers questions related to campus email, Moodle, Orediggerweb (student information system self-service), and questions related to MyMtech (campus portal).

### **Standard 2.G.7**

**Technological infrastructure planning provides opportunities for input from its technology support staff and constituencies who rely on technology for institutional operations, programs, and services.**

Campus Technology Services (CTS) is structured to facilitate support and is under the direction of the Vice Chancellor for Administration & Finance. The directors and managers from Telephone Services, Network Services, and from Information Services comprise the Directors Council which advises Montana Tech's administration on technical issues, developments, and direction. The Directors Council receives planning input from the Deans, Desktop Computer Support Specialists, from Faculty, Students, and from the *Computer and Telecommunications Advisory Committee*. Customized support is distributed to the College of Letters, Sciences, and Professional Studies; to the School of Mines & Engineering; and to the Highlands College. Computer Support Specialists are linked to CTS for technical direction but are managed by the Deans of each respective college. Network Services regularly meets with the Computer Support Specialists to solicit input, hear problems, and to provide direction and consistency.

One very strategic planning process is via the *Computer and Telecommunications Advisory Committee*. This committee is made up of representatives from across the campus, includes student representation, and advises Tech's administration. Decisions on computer replacement schedules, software purchases, and on network expansion (such as wireless, multi-media expansion to classrooms, and OS platform) are some of the decisions discussed and recommendations rendered. Moreover, this committee has oversight for the computer use fee assessed to all students each semester. Finally, guests are always welcomed to committee meetings so they can represent or voice an area of concern or expertise pertinent to a particular subject or academic area/department which is not directly represented by committee membership.

## **Standard 2.G.8**

**The institution develops, implements, and reviews regularly a technology update and replacement plan to ensure its technology infrastructure is adequate to support its operations, programs, and services.**

Several designated fee accounts are dedicated to laboratory and computing equipment. An important account is the Computer Use Fee which is used for equipment, software, maintenance, or for related items that will benefit a particular instructional program. Here, the use of this fee is determined through annual meetings of the *Computer and Telecommunications Advisory Committee*, which typically projects a computer use plan out for the following five years. This plan looks at replacing all workstations in the campus computer labs at least once every four years and contains allocations for workstations, for network/departmental servers, for software, for paper/toner, and for lab printers. Please refer to the [Computer Use Plan](#).

Major laboratory and educational equipment purchases are funded through the Equipment Fee. Both the North and South campuses have separate equipment fees, and on an annual basis, the deans contact department heads on their equipment needs for the upcoming fiscal year. Here the Deans Council reviews the compiled list of requests and allocates funding for the upcoming year based on projected fee revenues. The Vice Chancellor of Academic Affairs and Research oversees this process and regularly reviews the spending throughout the year.

The Montana Tech campus also uses a Technology Fee to support the technology infrastructure for academic and administrative systems. On an annual basis, the workstation needs of both faculty and staff are assessed, and replacement workstations are purchased from this account. Typically, faculty and staff computers are replaced on a four year replacement schedule. In addition, Network Services continues to upgrade and improve the wireless network and is in the planning/design stage for building a new network fiber backbone.

An Academic Facility Fee is also assessed to students and is used primarily as a classroom improvement account. Faculty or staff members who recognize a need for classroom improvements submit a request to the Vice Chancellor of Academic Affairs and Research. Usually, these requests include classroom furniture (such as tables, desks, chairs, and podiums) and classroom fixtures (such as white boards, overhead projectors, Smart Boards, and Smart Podiums). Table 2.G.I below summarizes funds utilized from FY 2008 through FY 2012.

**TABLE 2.G.I DESIGNATED FEE ACCOUNT EQUIPMENT FUNDING**

| Montana Tech                             |                    |                    |                    |                    |                    |
|------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Designated Fee Account Equipment Funding |                    |                    |                    |                    |                    |
| Fee Account                              | FY09               | FY10               | FY11               | FY12               | FY13               |
| Equipment Fee (BEQMTF)                   | 272,014            | 297,822            | 427,612            | 368,900            | 419,100            |
| Computer Fee (BCOMPU)                    | 215,402            | 249,882            | 209,266            | 242,904            | 373,428            |
| Academic Facilities Fee (BAFMGB)         | 102,981            | 75,369             | 46,060             | 153,403            | 164,250            |
| Technology Fee (BTECFE)                  | 307,596            | 288,315            | 382,625            | 351,017            | 322,491            |
| COT Equipment Fee                        | 67,664             | 28,835             | 10,056             | 46,882             | 85,868             |
| Cot Computer Fee                         | 50,810             | 71,555             | 74,638             | 73,140             | 68,555             |
| <b>Total</b>                             | <b>\$1,016,467</b> | <b>\$1,011,778</b> | <b>\$1,150,256</b> | <b>\$1,236,246</b> | <b>\$1,433,692</b> |

The Computer Support Specialists and IT staff are often in the best position to recognize the educational and administrative requirement of the campus; they frequently bring recommendations to the *Computer and Telecommunications Advisory Committee* for consideration. These recommendations include which workstations and servers to replace, recommendations for software and support, and any individual departmental needs to be addressed by planning.

## **CONCLUSION**

All educational programs at Montana Tech are sufficiently supported with human, physical, and financial resources to achieve individual program objectives, which are consistent with Tech's core themes and mission.

### **Faculty**

In the Fall of 2012, Montana Tech employed 189 full-time faculty and 92 part-time faculty, composed of 78 regular part-time faculty and 14 full-time staff who taught for extra compensation. Of the tenurable full-time faculty, 53% are tenured. All non-tenure track faculty, whether full- or part-time, are considered to be adjunct faculty. By this measure, 47% of the full- and part-time faculty is adjunct with most of these being research faculty in the Montana Bureau of Mines and Geology (MBMG). Of the full-time faculty, 49% hold a doctoral degree, usually a Ph.D., and 39% hold a Master's degree. Montana Tech's workload policy for faculty in four-year programs is based on 15 credits of load per semester. For full-time tenure track faculty, 3 credits of load are automatically assigned to account for advising and institutional service. For probationary faculty, who are expected to develop an active/productive research/scholarship program in order to meet the standards for promotion and tenure, 3 credits of load may, with the Department Heads approval, be assigned for this effort. This same criterion applies to research-active faculty.

### **Physical Resources**

In general, the physical resources at Montana Tech adequately supply the students with classroom and lab space, computer resources, housing, and with recreation. The following abbreviated list highlights some of Montana Tech's physical assets: North Campus

- Currently, the North Campus has ten buildings housing labs, classrooms, and faculty offices.
- A new Natural Resources Building, which opened in January 2010, provides an additional 7,595 square feet of classroom space and an additional 5,904 square feet of lab space.
- The new Frank and Ann Gilmore University Relations Center (URC). The URC is the first 100% privately funded building on the Tech campus and speaks to the dedication of our alumni.
- Renovation of the Health Sciences Building (formally the Petroleum Building).
- A 31,084 square foot Library with collections that include 77,000 books, 160 scholarly databases which contain 41,000 e-journal titles, and 130,000 e-books which support all programs, academic disciplines, and research areas.
- Renovation and expansion of the Health, Physical Education & Recreation (HPER) building.
- The Student Union Building (SUB) where the dining hall, campus mail room, student health service, bookstore, and offices of the Associated Students of Montana Tech (ASMT) are located.
- Two residence halls with space for 300 students.

- On the North Campus, five instructional computer labs and 13 departmental or student use computer labs are supported. In addition, four general purpose multi-media conference rooms in the Student Union Building (SUB) and various other conference rooms on campus offer audio/video multimedia support. All classrooms of 24 seats or more are equipped with audio/video presentation capabilities, and lower capacity classrooms are currently being equipped with audio/visual capabilities as budgets allow. In addition, Montana Tech supports three high tech classrooms, CBB 001, NRB 226, and ELC 202. These classrooms integrate the latest technology to support audio, video conferencing, and presentation capabilities.

## **Financial Resources**

Montana Tech has become extremely proficient at allocating financial resources wisely. Because of this fiscal acumen, Montana Tech remains an institution that provides an excellent education at an affordable price. The FY14 Montana Tech annual operating budget for all fund types is just under \$77 million. This operating budget is comprised of \$30,805,449 in general funds, \$18,478,583 in restricted funds, \$6,727,291 in designated funds, \$5,303,289 in auxiliary funds, and \$11,484,037 in plant funds.

After the review of the year one report in spring 2011, a concern was raised by the Commission that Montana Tech may have too many indicators of achievement. Montana Tech has addressed this concern by reducing the number of indicators of achievement from 37 to 28. A recommendation was made to develop the necessary benchmarks required for meaningful assessment of indicators of achievement. Montana Tech has made significant progress in this regard as evidenced by benchmarks embedded in program reviews. In general, program review benchmarks are determined based on program specific strengths and weaknesses. In addition, Tech has developed well defined benchmarks for General Education, the Foundation of Engineering and Science Program, and the College Success course. However, particularity under core theme *The Montana Tech Community*, the Institution will continue to work in developing appropriate benchmarks. For all the 15 total objectives, Montana Tech will continue to explore and develop meaningful benchmarks for the respective indicators of achievement.

The process used to formulate Tech's Year Three Report included both a review and analysis of our mission. This type of inclusive analysis has provided a window through which Tech administration, faculty, staff, and students can now view how we achieved the level of success described above, and what steps we now need to undertake in order to maintain and enhance this level of success. That is, our mission serves as our foundation, and through continual assessment of our core themes we will find ways not only to improve where we are lacking but also identify the methodologies employed in sustaining what we do well.