

Northwest Commission on Colleges
and Universities

Year One Self-Evaluation Report



MontanaTech

Submitted by
Donald M. Blacketter, Ph.D.
Chancellor

February 23, 2018

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Institutional Overview

Montana Tech of The University of Montana traces its roots to the Enabling Act of 1889 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 changed its name to the Montana College of Mineral Science and Technology. On January 21, 1994, the Montana Board of Regents (BOR) adopted a plan to restructure the entire Montana University System (MUS) followed by adoption of a resolution on July 6, 1995, initiating a second phase. This restructuring created the MUS and gave the college its new official name, Montana Tech of The University of Montana, or in our vernacular Montana Tech. Highlands College, formerly the Butte Vocational Technical Center, was incorporated into Montana Tech as a result of restructuring. Highlands College has the feel of a community college and primarily offers two-year and certificate programs.

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 doctoral, master's, bachelor's, associate's, and certificate levels. The student body presents a national and global snapshot with 43 territories and states and 18 foreign countries represented. Montana Tech now has an approximate enrollment of 2,700 students, providing graduates with the knowledge and skills necessary for successful lives and careers, conducting basic and applied research, and providing related services to the people 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. All of Montana Tech's engineering programs are accredited by the Accreditation Board for Engineering and Technology (ABET). Moreover, many of Montana Tech's engineering programs are not only unique to the region but are also among only a few in the country. For example, Montana Tech is one of only two U.S. schools that offer a bachelor of science (BS) degree in geophysical engineering, one of ten that offer a BS degree in metallurgical engineering, one of nineteen that offer a BS degree in mining engineering, and one of only twenty that offer a BS in petroleum engineering. Montana Tech also offers the more traditional engineering programs including Mechanical, Civil, Electrical, and Environmental Engineering. In addition, Montana Tech also offers non-engineering degree and certificate programs that are not offered by other MUS units. These include, but are not limited to, BS degrees in Healthcare Informatics, Professional and Technical Communication, Liberal Studies, Data Science, and Statistics, in addition to 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).

The campus plays an integral role in education, research, and economic development within the state and region. Montana Tech is strategically positioned within the MUS to assist the BOR 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 state agency mandate is to collect and publish information on Montana's geology to promote orderly and responsible development of Montana's energy, groundwater, 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. The MBMG's research faculty also closely collaborate with the academic faculty on a number of relevant research programs and in the mentoring of graduate students.

Montana Tech has 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 agencies.

Montana Tech's world-renowned reputation is based on the successes of over 100 years of graduates in the institution's heritage programs of extractive engineering fields and in the associated sciences. 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 have significantly broadened the diversity of degree programs. In turn, the diversity attracts a larger number of students who have more varied career interests and objectives. The changes in Montana Tech over the past years have only served to amplify our role and mission as "Montana's STEM institution."

Preface

Update on Institutional Changes Since Last Report

There have been a number of changes since the Year Seven Self Evaluation Report was submitted to NWCCU on February 27, 2017. At the March 10, 2017 meeting, the Montana Board of Regents (BOR) approved a fourth institutional classification for higher education units in the state. The new classification, Special Focus Four-Year Universities, of which Montana Tech is the only unit, was added to the previous three classifications: Two-Year Colleges, Four-Year Regional Universities, and Research Doctoral Universities. Prior to its new classification, Montana Tech was included in the Four-Year Regional Universities classification.

As a response to its new institutional classification by the BOR, Chancellor Blacketter formed WIRE (Workgroup for Institutional Realignment for Excellence) in late March 2017. The charge given to WIRE by Chancellor Blacketter was to "define what it means to Montana Tech to be classified as the only Special Focus Four-Year University in the state." The 13-member committee, comprised of faculty, staff and administrators, met with a wide range of campus constituents and stakeholders to discuss the impact of the new classification.

On June 1, 2017 Dr. Dan Trudnowski replaced Dr. Pete Knudsen on an interim basis as the New Dean of the School of Mines and Engineering. On January 30, 2018, Dr. Trudnowski became the Dean of the School of Mines and Engineering.

After a nation-wide search, Dr. Dave Gurchiek replaced Dr. John Garic upon his retirement on July 1, 2017 as the new Dean of Highlands College.

In October 2017, the campus held a ground breaking ceremony for the newest campus building, the Living Learning Center (LLC). The three-story, 81,000 ft² building will include a 166 bed dormitory on the first two floors. The top floor, known as the Student Success Center (SSC), will house the Enrollment Services Office, Business Office, and the Academic Center for Excellence. In addition to these student-service offices, the SSC will also provide collaborative and state of the art learning space and new dining options for our students.

In the fall of 2017, the Montana State Governor called a special session of the legislature due to state revenue short falls. As a result, the overall State support has declined by 5.2% since FY2017 but is expected to remain level through the next biennium. The State appropriations now only represents 45% of Montana Tech's revenue with the remaining 55% being generated from tuition. Enrollment has declined 8.5% from FY2017 but is expected to remain flat for the next few years at 2,450 students. We continue to have balanced budgets through extensive budget reviews and reducing staff where appropriate that reflects the changes in student enrollment. We have also begun program prioritization that will culminate with the new designation as a Special Focus institution.

Response to Topics Requested by the Commission

In April 2017, a NWCCU Evaluation Committee visited the Montana Tech campus for a Year 7 evaluation. The committee provided the campus with five commendations and five recommendations. Per the July 10, 2017 letter from President Elman to Chancellor Blackletter, Recommendations 1 and 2 are addressed in the addendums. Recommendations 3, 4 and 5 are to be addressed in an addendum to the Spring 2020 Mid-Cycle report. Please see the addendum at the end of this report for Recommendations 1 and 2.

Recommendation #1 The evaluators recommend that Montana Tech refines its indicators of achievement to ensure that they are meaningful, assessable, and verifiable, so that they will provide a stronger basis for evaluating accomplishment of the objectives. It also recommends that there be a greater focus on assessing quality and on alignment of benchmarks with objectives. (Standard 1.B.2.)

Recommendation #2 The evaluators recommend that Montana Tech improves its communication of policies and procedures related to academic honesty and accommodations for persons with disabilities, as well as ensuring that those policies and procedures are administered in a fair and consistent manner. (Standard 2.A.15.)

Recommendation #3 The evaluators recommend that Montana Tech improves its comprehensive planning processes to more effectively collect and utilize data to inform these processes and to document the use of data in planning. (Standard 3.A.3.)

Recommendation #4 The evaluators recommend that Montana Tech improves its system of evaluation of programs and services, wherever offered and however delivered, to evaluate achievement of program goals or intended outcomes. The institution should ensure that results of core theme assessments and results of assessments of programs and services are based on meaningful indicators of achievement and are used for improvement by informed planning, decision making, and allocation of resources and capacity. (Standards 4.A.2 and 4.B.1.)

Recommendation #5 The evaluators recommend that Montana Tech better documents and evaluates its cycle of planning practices, resource allocation, application of institutional capacity and assessment of results to ensure their adequacy, alignment and effectiveness. (Standard 5.B.2.)

Mission, Core Themes, and Expectations

Executive Summary of Eligibility Requirements 2 and 3

Authority

Montana Tech of the University of Montana (UM) is part of the Montana University System (MUS) which is governed by the Montana Board of Regents (BOR) of Higher Education with its constitutional authority to operate public higher education in Montana. Montana Tech has a Chancellor, who serves as the full-time executive officer. As part of the UM affiliation, the Chancellor has reported to the President of UM-Missoula, and through the President to the Commissioner of Higher Education and the BOR. As a result of transitions with the UM-Missoula President beginning in December 2016, the Chancellor of Montana Tech currently reports to the Montana Commissioner of Higher Education. Montana Tech is authorized to award certificates, certificates of applied science, associate's degrees, bachelor's degrees, graduate certificates, master's degrees, and doctoral degrees.

Mission and Core Themes

The mission and core themes of Montana Tech are clearly defined, published in the [Montana Tech Catalog](#), and have been reviewed and approved by the Montana BOR on November 21, 2014. The educational interests of Montana Tech's students are the primary purposes of the institution. Substantially all of our resources are dedicated to these purposes.

Standard 1.A—Mission

Standard 1.A.1

The institution has a widely published mission statement—approved by its governing board—that articulates a purpose appropriate for an institution of higher learning, gives direction for its efforts, and derives from, and is generally understood by, its community.

Montana Tech, through exemplary undergraduate and graduate education, workforce development, research, and service, builds on a strong heritage in engineering, science, and technology that blends theory with practice in meeting the changing needs of society and the responsible development and use of natural resources.

Montana Tech's strategic goals, as given in the most recent strategic plan completed in Fall 2016, represent the Core Themes of the institution:

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

In 2013–2014, Montana Tech's 2004–2005 mission statement was revised. The revised mission statement was developed through a collaborative process involving administrators, both the faculty and staff senates, and the general Montana Tech community. The Montana Tech [mission statement](#) was approved by the Board of Regents on November 21, 2014.

Montana Tech's mission statement is aligned with the [mission](#) statement articulated by the Board of Regents for the Montana University System (MUS) and adopted on October 19, 2001, as follows:

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.

Through a shared process involving input from Montana Tech's Northwest Commission on Colleges and Universities (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 and Knowledge**—The following three 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. Provide students a gateway for transfer education.
- 2. Student Achievement**—The following two objectives have been identified within this core theme:
 - a. Students make acceptable progress towards their Montana Tech degree.
 - b. Students are prepared for employment, a four-year degree program, graduate school, or for professional school after graduating from 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 the community.
- 4. The Montana Tech Community**—The following three objectives have been identified within this core theme:
 - a. Promote a diverse and inclusive environment.
 - b. Enhance the campus experience
 - c. Provide events and programs that serve the Montana Tech community.

Standard 1.A.2

The institution defines mission fulfillment in the context of its purpose, characteristics, and expectations. Guided by that definition, it articulates institutional accomplishments or outcomes that represent an acceptable threshold or extent of mission fulfillment.

Mission fulfillment is achieved when all core themes have been met. A core theme is met when at least half of the objectives within a core theme have been accomplished. Table 1.A.I summarizes the number of objectives per core theme necessary for Montana Tech to achieve mission fulfillment.

Table 1.A.I Objectives Per Core Theme Necessary for Mission Fulfillment

| | Number of Objectives | Necessary Objectives per Core Theme |
|---|----------------------|-------------------------------------|
| Core Theme 1 Education and Knowledge | 3 | 2 |
| Core Theme 2 Student Achievement | 2 | 1 |
| Core Theme 3 Engaged Faculty | 3 | 2 |
| Core Theme 4 The Montana Tech Community | 3 | 2 |
| Total | 11 | 7 |

Similarly, an objective is accomplished when at least half of the indicators of achievement within the objective have met or exceeded their respective benchmark. Table 1.A.II summarizes the number of indicators of achievement per objective necessary for Montana Tech to achieve an objective.

Table 1.A.II Indicators of Achievement Objective Necessary for Objective to Be Met

| | Number of Indicators of Achievement | Indicators of Achievement Necessary to meet Objective |
|---|-------------------------------------|---|
| Core Theme 1 Education and Knowledge | 16 | |
| Objective 1—Create and sustain strong graduate, baccalaureate, associate, and certificate programs | 3 | 2 |
| Objective 2—Facilitate student learning through diverse educational experiences. | 12 | 6 |
| Objective 3—Provide students a gateway for transfer education. | 1 | 1 |
| Core Theme 2 Student Achievement | 14 | |
| Objective 1—Students make acceptable progress towards their Montana Tech degree. | 12 | 6 |
| Objective 2—Students are prepared for employment, a four-year degree program, graduate school, or professional school after graduating from Montana Tech. | 4 | 2 |
| Core Theme 3 Engaged Faculty | 3 | |
| Objective 1—Faculty engage in the pursuit of successful teaching. | 1 | 1 |
| Objective 2—Faculty engage in research, scholarly activity, and/or professional development. | 1 | 1 |
| Objective 3—Faculty engage in service to their profession, the campus, and/or the community. | 1 | 1 |
| Core Theme 4 The Montana Tech Community | 12 | |
| Objective 1—Promote a diverse and inclusive environment. | 1 | 1 |
| Objective 2— Enhance the campus experience | 6 | 3 |
| Objective 3—Provide events and programs that enhance the Montana Tech Community. | 5 | 3 |

The threshold of at least half being fulfilled was selected for both objectives and indicators of achievement under each Core Theme because relatively high benchmarks were set for obtaining the indicators of achievement. The justification for setting high benchmarks for the indicators of achievement is to achieve “exemplary undergraduate and graduate education, workforce development, research, and service” as detailed in our mission.

The goal at Montana Tech is to attain every indicator of achievement and every objective, and those not met will be addressed the following year. In addition, the variability in the level of difficulty in achieving each indicator of achievement will influence how many indicators of achievement are met each cycle. These two factors, high benchmarks for obtaining indicators of achievement and the variability in the

difficulty of meeting benchmarks, are the justification for the threshold of at least half being fulfilled for both objectives and indicators of achievement under each Core Theme.

Standard 1.B—Core Themes

Standard 1.B.1

The institution identifies core themes that individually manifest essential elements of its mission and collectively encompass its mission.

The four core themes identified by Montana Tech, along with the objectives embedded within them, collectively define and encompass the mission of Montana Tech. All the core themes must be met in order for Montana Tech to successfully realize its mission. To enable Montana Tech to *build on a strong heritage in engineering, science, and technology that blends theory with practice in meeting the changing needs of society and the responsible development and use of natural resources through exemplary undergraduate and graduate education, workforce development, research, and service* the following core themes must be manifested:

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

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

Standard 1.B.2

The institution establishes objectives for each of its core themes and identifies meaningful, assessable, and verifiable indicators of achievement that form the basis for evaluating accomplishment of the objectives of its core themes.

Core Theme 1: Education and Knowledge

A student at Montana Tech engages in more than just the study of a discipline. At Montana Tech, education grows into knowledge through the exploration of science, technology, ideas, 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 conditions required for knowledge to be integrated into meaningful applications.

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

Indicators of Achievement

- (a) Within program reviews (including General Education), identification of benchmarks and program quality metrics for recruiting, enrollment, advising, retention, teaching, engagement, and research on the basis of evidence supplied by (where appropriate): student satisfaction, faculty teaching evaluations, NSSE, ETS, etc.

Benchmark: 90% of departments meet 75% of the benchmarks identified in the program review for each of the seven areas (recruiting, enrollment, advising, retention, teaching, engagement, and research).

- (b) Graduate, baccalaureate, associate, and certificate programs tracked by number of graduates.

Benchmark: \geq 3-year average

- (c) Within each program review, student learning outcomes are assessed through various methods which could include course successes rates, external exams, etc.

Benchmark: 90% of departments meet 75% of the benchmarks identified in the program review.

Rationale

All three indicators assess Montana Tech’s effectiveness in sustaining successful programs. Indicator (a) requires programs to identify strengths and weaknesses while assessing quality metrics. Indicator (b) asks for specific information on the graduates at the institution, while indicator (c) requires programs to evaluate student learning within their program.

The outcomes evaluation within a program review is done by the department with assessment of performance criteria leading to programmatic changes.

Objective 2 Facilitate student learning through diverse educational experiences

Indicators of Achievement

- (a) For each program review, the programs will summarize the educational opportunities (and participation rate) available to students in the program and participation of graduates.

| | Number of Department Participants | Number of Awards |
|---|-----------------------------------|------------------|
| Techxpo | | |
| Undergraduate Research Program (URP) | | |
| Summer Undergraduate Research Fellowship (SURF) | | |
| Conference Presentations | | |
| Team Competitions | | |
| Internships | | |
| Service Learning | | |
| Symposium | | |
| Other (describe): | | |

| | Department Name (Year) |
|---|------------------------|
| Number of Graduates | |
| Participated in 0 of the opportunities prior to graduation | |
| Participated in 1 of the opportunities prior to graduation | |
| Participated in 2 or more of the opportunities prior to graduation | |
| Percent of Graduates participating in 2 or more of the opportunities prior to graduation | |

Benchmark: At least 80% of graduates will participate in at least two of these events.

(b) Distance education offerings tracked by:

- i. Number of degrees and certificate programs offered through distance education, per year.

Benchmark: \geq 3-year average

- ii. Number of degrees and certificates awarded through distance education, per year.

Benchmark: \geq 3-year average

- iii. Number of courses offered through distance education, per year.

Benchmark: \geq 3-year average

- iv. Student Credit Hours (SCH) in distance education courses, per year and per type.

Benchmark: \geq 3-year average

- v. Distance Learning Program Review

Benchmark: 75% of benchmarks are met as defined within the program review.

(c) Program review of the following programs designed to help students be successful in college.

- i. An annual assessment of the Tech Success course

Benchmark: 75% of benchmarks are met as defined within the program review.

- ii. An annual assessment of the Freshman Engineering Program
Benchmark: 75% of benchmarks are met as defined within the program review.
- iii. An annual assessment of North Campus Academic Center for Excellence (ACE)
Benchmark: 75% of benchmarks are met as defined within the program review.
- iv. South Campus ACE (ACES)
Benchmark: 75% of benchmarks are met as defined within the program review.
- v. Advising
Benchmark: 75% of benchmarks are met as defined within the program review.
- vi. Institute for Educational Opportunities
Benchmark: 75% of benchmarks are met as defined within the program review.

Rationale

Indicator (a) determines how each department provides and engages students in enriching educational experiences. Indicator (b) provides evidence of diverse delivery through distance education. Indicator (c) assesses programs designed specifically to facilitate student learning and success.

Objective 3 Provide students a gateway for transfer education.

Indicators of Achievement

- (a) The Associate of Science will track and monitor the percent of students from each freshman cohort who transfer per semester to another institution, remain in the AS, transfer to an AAS program, or transfer to a BS program at Montana Tech.
Benchmark: 75% of the department benchmarks are met.

Rationale

Indicator (a) provides specific, quantitative evidence that Montana Tech's Associate of Science program and courses are often used for transfer education as designed.

Core Theme 2: Student Achievement

Montana Tech is committed to helping students realize their academic potential. 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 the North campus. These rates are based on cohorts consisting of students who are first-time and transfer, degree/certificate seeking students when they enrolled for the fall semester at Montana Tech.
Benchmark: \geq 3-year average

- (b) The graduation rates for the South campus.
Benchmark: ≥ 3 -year average
- (c) 2nd fall retention rate for Montana Tech students. For example, the North Campus freshmen retention rate is calculated as the percentage of first-time, degree-seeking freshmen from the previous fall who are again enrolled the current fall semester. The retention rate will also include students who graduated.
Benchmark: ≥ 3 -year average
- (d) 3rd fall retention rate for Montana Tech students.
Benchmark: ≥ 3 -year average
- (e) 4th fall retention rate for Montana Tech students.
Benchmark: > 3 -year average
- (f) 2nd fall retention rate for South campus students.
Benchmark: ≥ 3 -year average
- (g) 3rd fall retention rate for South campus students.
Benchmark: ≥ 3 -year average
- (h) 4th fall retention rate for South campus students.
Benchmark: ≥ 3 -year average
- (i) Percent of full time Montana Tech students completing 30 credits the first year.
Benchmark: ≥ 3 -year average
- (j) Percent of full time South campus students completing 30 credits by the end of the first year.
Benchmark: ≥ 3 -year average
- (k) Percent of full time Montana Tech students completing 60 credits the second year.
Benchmark: ≥ 3 -year average
- (l) Percent of full time South campus students completing 60 credits by the end of the second year.
Benchmark: ≥ 3 -year average

Rationale

Indicators (a) thru (l) are all quantitative measures of progress towards a degree. For indicator (a) and (b), progress is measured by calculating the rate at which students obtain degrees. Indicators (c) through (h) measures progress by determining the persistence level demonstrated by students moving from semester to semester, or through successive school years. Indicators (i) through (l) measure the process towards a degree through credit accumulation.

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

Indicator of Achievement

- (a) Percent of graduates completing an experiential learning opportunity prior to graduations.
Benchmark: ≥ 3 year average

(b) Percent of associate degree graduates continuing in a 4-year program

Benchmark: \geq 3 year average

(c) Percent of bachelor degree graduates continuing in graduate school and professional school

Benchmark: \geq 3 year average

(d) Percent of graduates passing standardized professional exams (i.e. ETS, NCLEX, EIT, etc.)

Benchmark: \geq 3 year average

Rationale

Indicator (a) measures student preparation for employment through the experiential learning of the graduates. Indicators (b) and (c) measure the preparation for continuing education based off the enrollment of graduates in 4 year, graduate, and professional studies. Indicator (d) measures the preparation of graduates from their performance on standardized exams including discipline specific exams.

Core Theme 3: Engaged Faculty

Faculty who excel in teaching, research, and scholarship are essential to supplying knowledge and education through a strong curriculum augmented by research and service. Montana Tech promotes and retains faculty, who are not only excellent classroom instructors but who are also active in scholarship and service.

Objective 1: Faculty engage in the pursuit of successful teaching

Indicator of Achievement

(a) Summarized institutional, college, and departmental percentages of reviewed faculty meeting the departmental standards in successful teaching.

Benchmark: 90% of tenure-track faculty reviewed in an academic year meet departmental standards in teaching.

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

Indicator of Achievement

(a) Summarized institutional, college, and departmental percentages of reviewed faculty meeting the departmental standards in research, scholarly activity, and/or in professional development.

Benchmark: 90% of tenure-track faculty reviewed in an academic year meet departmental standards in research, scholarly activity, and/or in professional development.

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

Indicator of Achievement

(a) Summarized institutional, college, and departmental percentages of reviewed faculty meeting the departmental standards in service to their profession, the campus, and/or the community.

Benchmark: 90% of tenure-track faculty reviewed in an academic year meet departmental standards in service to their profession, the campus, and/or the community

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. The departmental faculty members will also submit abbreviated resumes with all three indicators of achievement addressed.

Core Theme 4: The Montana Tech Community

The Montana Tech community is broadly defined as Montana Tech students, faculty, staff, alumni, and friends of Montana Tech and the broader local community and region. 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 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 Montana Tech actively fosters these mutually beneficial relationships.

Objective 1: Promote a diverse and inclusive campus environment.

Indicator of Achievement

- (a) A program review of campus diversity and inclusivity

Benchmark: 75% of the benchmarks identified in the program review have been met.

Rationale

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

Objective 2: Enhance the campus experience.

Indicators of Achievement

- (a) Capital dollars invested in classrooms, laboratories, technology, and buildings.

Benchmark: Meet or exceed national current replacement value (NCV) benchmarks

- (b) An annual review of residence life.

Benchmark: 75% of the benchmarks identified in the program review have been met.

- (c) An annual review of dining services.

Benchmark: 75% of the benchmarks identified in the program review have been met.

- (d) An annual review of campus safety.

Benchmark: 75% of the benchmarks identified in the program review have been met.

- (e) An annual review of student activities

Benchmark: 75% of the benchmarks identified in the program review have been met.

- (f) An annual review of prospective student and recruitment

Benchmark: 75% of benchmarks identified in the program review have been met.

Rationale

Indicator (a) measures the investment of the institution in instructional/research infrastructure necessary for a positive educational experience. Indicators (b), (c), (d) and (e) are measures of the quality of student living environments that are essential for a student's well-being. Indicator (f) measures the campus experience of prospective students within recruitment.

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

Indicators of Achievement

(a) The distribution, per year, of events that enrich public culture and educational opportunities:

- i. Academic events (i.e. external lectures, internal lectures)
- ii. Non Academic cultural events (i.e. concerts)
- iii. Specialty events (i.e. TRIO Programs)
- iv. Service events (i.e. volunteer fair)

Benchmark: 90% of internal benchmarks for open events have been met.

(b) Based on a review of the impact that athletic programs have on the Montana Tech community.
Benchmark: 75% of the benchmarks identified in the program review have been met.

(c) Based on a review of the effectiveness of Alumni Engagement.
Benchmark: 75% of the benchmarks identified in the program review have been met.

(d) Based on a review of the effectiveness of the Montana Tech Foundation.
Benchmark: 75% of the benchmarks identified in the program review have been met.

(e) Based on an review of the effectiveness of the Institute of Educational Opportunities community and outreach
Benchmark: 75% of the benchmarks identified in the program review have been met.

Rationale

Indicator (a) is a straightforward, descriptive measure of events open to the general public. Indicator (b), an assessment of Montana Tech's athletic programs, is an assessment of events that serve the Montana Tech community. Thus, Montana Tech's Athletic Director leads the committee that determines the measures and benchmarks used in assessing athletic programs. Indicators (c) and (d) provide an assessment of efforts to engage alumni and friends. Indicator (e) provides assessment of the outreach by the Institute of Educational Opportunities within the Montana Tech Community.

Conclusion

The NWCCU accreditation process has allowed Montana Tech to assess and reflect on its objectives, indicators of achievement, and benchmarks. This process has also afforded the Accreditation Steering Committee with the opportunity to address deficiencies in these areas. Where appropriate, revisions to benchmarks, indicators of achievement, and objectives were evaluated and revised to demonstrate mission fulfillment. These changes have likewise led to benchmarks aligning with our objectives. In this Year One Report Montana Tech continues to improve the implementation, communication, and

enactment of our Academic Honesty and Persons with Disability policies, efforts that will help to ensure that these policies are fairly and consistently implementable.

Addressing the first two recommendations that MT Tech received in the Year Seven Visit, and steps taken in the Year One Report, will assist MT Tech in keeping its focus on the Strategic Plan. This focus will allow for continual improvement of our institutional processes for following core themes and for further progressing towards mission fulfillment.

Addendum

Recommendation #1

The evaluators recommend that Montana Tech refines its indicators of achievement to ensure that they are meaningful, assessable, and verifiable, so that they will provide a stronger basis for evaluating accomplishment of the objectives. It also recommends that there be a greater focus on assessing quality and on alignment of benchmarks with objectives. (Standard 1.B.2.)

In August 2017, a presentation titled “Accreditation Focused Academic-Program Review” by the Dean of the School of Mines and Engineering was presented to all academic department heads. The presentation outlined a program review process including performance criteria, metrics, and outcomes assessment.

During the 2017-2018 academic year, all programs will submit the framework for the program outcomes assessment to the appropriate dean. Examples of a degree program framework ([BS Electrical Engineering](#)) and non-degree program framework ([Residence Life](#)) follow in this document and are available on the web. The outcomes evaluation will be done during the 2018/2019 academic year for the first time and every other year following. Mission fulfillment will be evaluated three times within the seven-year cycle using the results of the outcomes evaluation along with additional meaningful, assessable, and verifiable information.

The outcomes assessment for each program is based on meaningful, assessable, and verifiable metrics identified by the faculty and reviewed by the appropriate dean. Collectively, the outcomes assessment provides indicators of achievement to evaluate objectives and core themes.

Non-academic departments will follow a similar cycle of assessment and evaluation with alumni, students, faculty, staff and community. The framework of the program assessment in 2017-2018 will be reviewed by the appropriate Vice Chancellor or Dean. Some non-academic programs will be doing annual reviews.

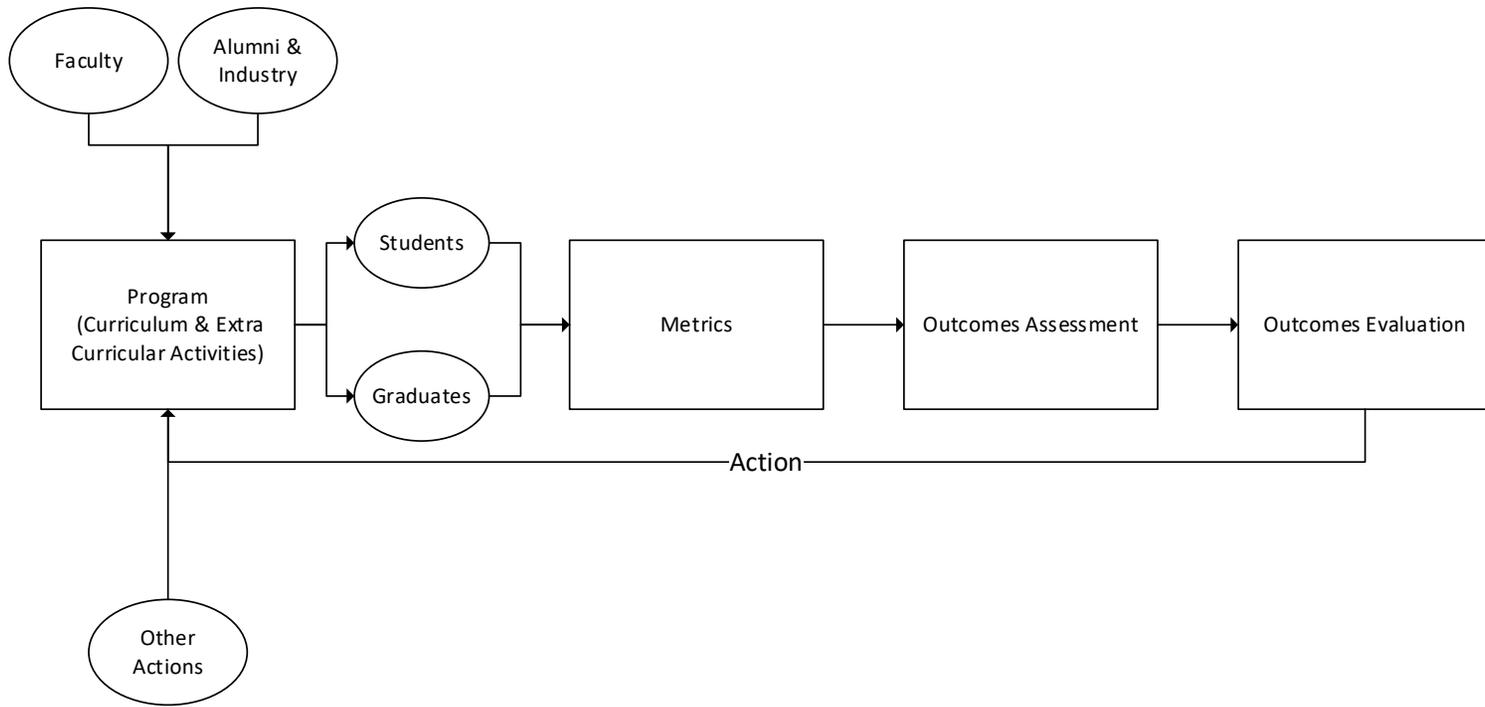


Figure 1. Academic Departments Assessment Cycle

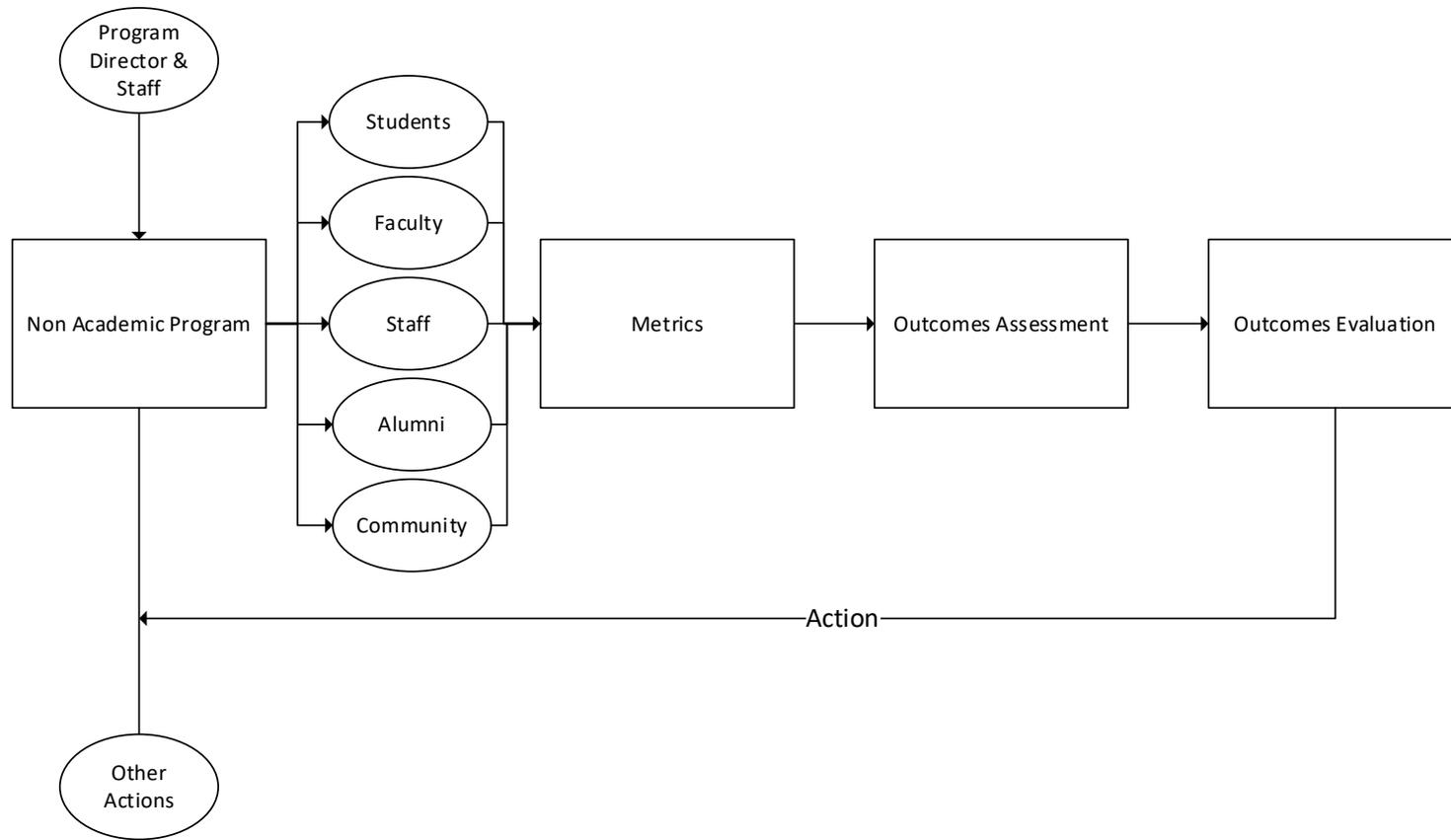


Figure 2. Non Academic Departments' Assessment Cycle



Figure 3. Timeline

BS Electrical Engineering Program Assessment Plan

By Dan Trudnowski
Spring 2018

What is your program mission statement?

The mission of the Electrical Engineering program at Montana Tech is to provide a quality education that stresses the fundamentals of engineering, mathematics, and science in order to prepare graduates to enter and continue the practice of electrical engineering at the professional level.

What are your program objectives? *Program educational objectives are broad statements that describe what graduates are expected to attain within a few years of graduation. Program educational objectives are based on the needs of the program's constituencies. List your program objectives. Describe the process and timeline used to periodically review the objectives.*

The objectives of the Electrical Engineering program are to produce graduates who achieve some of the following:

1. Successfully practice the Electrical Engineering profession as demonstrated by
 - a. continued professional employment,
 - b. job promotion,
 - c. expanding career responsibility.
2. Obtain professional registration.
3. Successfully complete an advanced EE degree.
4. Continued professional development such as society membership and participation.

Program objectives are reviewed each year at a dedicated meeting. All constituents (faculty, students, alumni, and industry) are represented at the meeting. Two critical questions are addressed: 1) are the objectives relevant; and 2) are they being fulfilled? Results of the meeting are used to implement program changes and/or changes to the objectives.

What are your program outcomes? *Student outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the skills, knowledge, and behaviors that students acquire as they progress through the program.*

- *List the performance indicators for each outcome.*
- *List the metrics for each performance indicator*

Electrical Engineering outcomes are numbered A thru M below. Performance indicators are sub-numbered (e.g., A.1). Metrics follow the performance indicators.

- A. An ability to apply knowledge of mathematics, science, and engineering
 1. Apply non-EE general engineering knowledge
 - i. Metric 1: course outcome grades - average grade in EGEN 201.
 - ii. Metric 2: course outcome grades - average grade in EGEN 202.
 2. Knowledge of engineering sciences fundamental to EE

- i. Metric 1: FE exam - ratio score on “Engineering Sciences” questions
- B. An ability to design and conduct experiments, as well as to analyze and interpret data
 - 1. Design and conduct experiments, as well as to analyze and interpret data
 - i. Metric 1: course outcome grades - scores on specific material from EELE 261.
 - ii. Metric 2: course outcome grades - scores on specific material from EELE 355.
- C. An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
 - 1. Design a system, component, or process to meet desired needs
 - i. Metric 1: course outcome grades - scores on specific material from EELE 317.
 - ii. Metric 2: course outcome grades - scores on specific material from EELE 488/489
 - 2. Incorporate realistic constraints into the design
 - i. Metric 1: course outcome grades - scores on specific material from EELE 488/489.
- D. An ability to function on multi-disciplinary teams
 - 1. Have and apply non-EE engineering knowledge
 - i. Metric 1: course outcome grades - average grade in EGEN 201.
 - ii. Metric 2: course outcome grades - average grade in EGEN 202.
 - 2. Demonstrated an ability to function in a team
 - i. Metric 1: course outcome grades - scores on specific material from EELE 355.
- E. An ability to identify, formulate, and solve engineering problems
 - 1. Identify, formulate, and solve engineering problems
 - i. Metric 1: course outcome grades - scores on specific material from EELE 321 and 445.
- F. An ability to understand professional and ethical responsibility
 - 1. Understand professional and ethical responsibility
 - i. Metric 1: FE exam – ratio score on “Ethnics and Professional Practice” questions.
 - ii. Metric 2: course outcome grades - scores on specific material from EELE 394.
 - iii. Metric 3: course outcome grades - scores on specific material from EELE 488/489.
- G. An ability to communicate effectively
 - 1. Writing communication
 - i. Metric 1: course outcome grades - average grade WRIT 321.
 - ii. Metric 2: course outcome grades - scores on specific material from EELE 488/489.
 - 2. Oral communication
 - i. Metric 1: course outcome grades - scores on specific material from EELE 210.
 - ii. Metric 2: course outcome grades - scores on specific material from EELE 488/489.
- H. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context

1. Understand engineering economics
 - i. Metric 1: FE exam – ratio score on “Engineering Economics” questions.
 - ii. Metric 2: course outcome grades - average grade EGEN 325.
2. Understand global, environmental, and societal issues
 - i. Metric 1: graduate exit interviews – specific question on exit survey.
 - ii. Metric 2: ETS exam – average scores on “Social Studies” and “Humanities” questions.
- I. A recognition of the need for, and an ability to engage in life-long learning
 1. A recognition of the need for, and an ability to engage in life-long learning
 - i. Metric 1: FE Exam – overall exam pass rate.
 - ii. Metric 2: course outcome grades – course outcome grades - scores on specific material from EELE 394.
 - iii. Metric 3: course outcome grades – course outcome grades - scores on specific material from EELE 488/489.
 - iv. Metric 4: graduate exit interviews - specific question on exit survey.
- J. A knowledge of contemporary issues
 1. A knowledge of contemporary issues
 - i. Metric 1: course outcome grades - scores on specific material from EELE 210.
 - ii. Metric 2: course outcome grades - scores on specific material from EELE 394.
 - iii. Metric 3: graduate exit interviews - specific question on exit survey.
- K. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice
 1. An ability to write and use computer programs
 - i. Metric 1: FE Exam – ratio score on “Computer Systems” questions.
 - ii. Metric 2: FE Exam – ratio score on “Software Development” questions.
 - iii. Metric 3: course outcome grades – scores on specific material from EELE 203.
 - iv. Metric 4: course outcome grades – scores on specific material from EELE 308.
 - v. Metric 5: course outcome grades – scores on specific material from EELE 317.
- L. The knowledge of advanced mathematics including differential and integral calculus, differential equations, linear algebra, complex variables, probability and statistics, and discrete mathematics
 1. have and apply knowledge of advanced algebra
 - i. Metric 1: FE exam - ratio score on “Mathematics” questions.
 - ii. Metric 2: course outcome grades - scores on specific material from EELE 203.
 2. have and apply knowledge of calculus
 - i. Metric 1: FE exam - ratio score on “Mathematics” questions.
 - ii. Metric 2: course outcome grades - average grade in M 273.
 3. have and apply knowledge of differential eqns.
 - i. Metric 1: FE exam - ratio score on “Mathematics” questions.
 - ii. Metric 2: course outcome grades - average grade in M 274.
 - iii. Metric 3: course outcome grades - scores on specific material from EELE 308.
 4. have and apply knowledge of linear algebra
 - i. Metric 1: FE exam - ratio score on “Mathematics” questions.
 - ii. Metric 2: course outcome grades - average grade in M 333.
 5. have and apply knowledge of complex variables

- i. Metric 1: FE exam - ratio score on "Circuits" questions.
 - ii. Metric 2: FE exam - ratio score on "Power" questions.
 - iii. Metric 3: course outcome grades - scores on specific material from EELE 203.
- 6. have and apply knowledge of probability and statistics
 - i. Metric 1: FE exam - ratio score on "Engineering Probability and Statistics" questions.
 - ii. Metric 2: course outcome grades - average grade in STAT 332.
 - iii. Metric 3: course outcome grades - scores on specific material from EELE 445.
- 7. have and apply knowledge of boolean mathematics
 - i. Metric 1: FE exam - ratio score on "Digital Systems" questions.
 - ii. Metric 2: FE exam - ratio score on "Computer Systems" questions.
 - iii. Metric 3: course outcome grades - scores on specific material from EELE 261.
- 8. have and apply knowledge of discrete-time mathematics
 - i. Metric 1: FE exam - ratio score on "Signal Processing" questions.
 - ii. Metric 2: course outcome grades - scores on specific material from EELE 308.
- M. The knowledge of basic sciences, computer science, and engineering sciences necessary to analyze and design complex electrical and electronic devices, software, and systems containing hardware and software components
 - 1. have and apply knowledge of microprocessors
 - i. Metric 1: FE exam - ratio score on "Computer Systems" questions.
 - ii. Metric 2: course outcome grades - average grade in CSCI 255.
 - 2. have and apply knowledge of circuit analysis
 - i. Metric 1: FE exam - ratio score on "Circuits" questions.
 - ii. Metric 2: course outcome grades - scores on specific material from EELE 203.
 - 3. have and apply knowledge of electronics
 - i. Metric 1: FE exam - ratio score on "Electronics" questions.
 - ii. Metric 2: course outcome grades - scores on specific material from EELE 317.
 - 4. have and apply knowledge of digital systems
 - i. Metric 1: FE exam - ratio score on "Digital Systems" questions.
 - ii. Metric 2: course outcome grades - scores on specific material from EELE 261.
 - 5. have and apply knowledge of electric machines and power
 - i. Metric 1: FE exam - ratio score on "Power" questions.
 - ii. Metric 2: course outcome grades - scores on specific material from EELE 355.
 - iii. Metric 3: course outcome grades - average grade in EELE 454.
 - 6. have and apply knowledge of electromagnetics
 - i. Metric 1: FE exam - ratio score on "Electromagnetics" questions.
 - ii. Metric 2: course outcome grades - average grade in PHSX 423.
 - 7. have and apply knowledge of signal and systems
 - i. Metric 1: FE exam - ratio score on "Signal Processing" questions.
 - ii. Metric 2: course outcome grades - scores on specific material from EELE 308.
 - 8. have and apply knowledge of control systems
 - i. Metric 1: FE exam - ratio score on "Control Systems" questions.
 - ii. Metric 2: course outcome grades - scores on specific material from EELE 321.
 - 9. have and apply knowledge of communication systems

- i. Metric 1: FE exam - ratio score on "Communication" questions.
- ii. Metric 2: course outcome grades - scores on specific material from EELE 445.

Describe your program outcome assessment process including timeline.

The program Assessment Coordinator (AC) collects and organizes metrics every semester. An assessment cycle is conducted every other year. For a given assessment cycle, the AC assesses each Performance Indicator (PI) using the metric data collected since the last cycle. The assessment is summarized in rubrics for presentation to the faculty at an evaluation meeting.

Describe the program outcome evaluation process.

At the evaluation meeting, the faculty review the PI assessment for each outcome. A "grade" of unsatisfactory, satisfactory, or excellent is assigned collectively by the faculty to each PI. A set of "recommended actions" for the program are assigned for each outcome using the evaluation results and the professional judgement of the faculty. Status and results of the actions taken are tracked by the AC and presented to the faculty at the next assessment/evaluation cycle

EXAMPLE: Residence Life

Spring 2018

Mission Statement

Residence Life supports the academic and student affairs mission of Montana Tech by fostering a vibrant living and learning community that cultivates personal development, celebrates diversity, promotes leadership, and enhances the educational experience of each resident. To achieve this, we:

- provide secure, comfortable, and inclusive spaces for living and learning;
- manage a team of well-trained professional and paraprofessional staff;
- encourage individual growth and academic success through meaningful programs and relationship building.

Objectives

1. Ensure that all eligible traditional first year students have on-campus housing (in accordance to Montana Board of Regents of Higher Education Policy 502.1)
2. Provide housing to all upper-class students seeking on campus housing
3. Train a qualified and committed undergraduate staff
4. Provide an environment that fosters holistic student development
5. Create unique spaces to residential areas

Performance Criteria (Objective 1):

1. 100% of eligible freshman will live on-campus

Assessment Method: Residence applications, enrollment data, Exemption applications

Performance Criteria (Objective 2):

1. 100% of upper-class students seeking on-campus housing will receive on-campus housing

Assessment Method: Residence applications

Performance Criteria (Objective 3):

1. 100% of RA's will fulfill the required programming requirements (3 educational programs, 3 educationally passive programs, and 10 activities; N= 16)
2. A minimum of 80% of residence respondents will rate the RA's as satisfactory availability, friendliness, referral knowledge, problem-solving, quiet environment, policy enforcement, fairness, event planning, promoting tolerance, appreciating diversity

3. A minimum of 80% of respondents will rate their overall satisfaction with RA's satisfied or very satisfied.
4. 80% of the respondents will rate their overall satisfaction living in the residence hall as satisfied or very satisfied.

Assessment Method: Program logs and Residence Hall surveys

Performance Criteria:

1. Unique spaces will be created and/or improved

Assessment Method: Annual inspection of spaces

Describe your program objective assessment process including timeline.

The Director of Residence Life collects and organizes metrics (data) each semester and provides a term summary to the Dean of Students at the close of the term. The complete assessment (full academic year) is reported annually and submitted to the Dean of Students by June 1st

Describe the program objective evaluation process.

The Dean of Students reviews the program review and a "grade" of unsatisfactory, satisfactory, or excellent is assigned. A set of "recommended actions" for the program are assigned for each outcome using the evaluation results and the professional judgement of the Dean.

Recommendation #2

The evaluators recommend that Montana Tech improves its communication of policies and procedures related to academic honesty and accommodations for persons with disabilities, as well as ensuring that those policies and procedures are administered in a fair and consistent manner. (Standard 2.A.15.)

Academic Dishonesty

On September 28, 2016, the Montana Tech Faculty Senate made a motion that “The faculty senate shall create a workgroup to update the Academic Dishonesty policy, sanctions, and processes of Montana Tech. The members of this group will include four faculty members representing the four academic colleges, two appointments from ASMT, the VCAA, the Dean of Students, and the Director of Student Success. This group will have a draft policy for Senate and ASMT review by January 2017.”

On February 3, 2017, the faculty senate approved the revised Academic Honesty Policy with minor edits. The 2016/2017 ASMT President and Treasurer served on the workgroup and presented the revised policy to ASMT. On July 1, 2017, the revised Montana Tech Academic Honesty Policy replaced previous policies and is published in the [2017-2018 Montana Tech Catalog](#) and [Montana Tech Student Handbook and Planner 2017-2018](#).

A presentation titled “The Honest Truth about Academic Dishonesty” was included in the [2017 Student Orientation](#). Presentations of the revised policy were made at the 2017 academic department head meeting and new faculty orientation. Montana Tech purchased Maxient’s *Conduct Manager* in 2015 and presentations are made annually on reporting academic dishonesty cases to the Vice Chancellor for Academic Affairs via the Academic Dishonesty Violation Referral form on [Montana Tech’s student conduct website](#).

The revised policy includes information about the student, faculty, staff and administrator responsibilities, definitions, and disciplinary actions. This policy is administered in a fair and consistent manner within the office of the Vice Chancellor of Academic Affairs and Academic Standards Committee.

Disability Services

Montana Tech’s policies and procedures regarding accommodations for persons with disabilities are available in the [Disability Services website](#), the [Montana Tech Catalog](#), and [Montana Tech Student Handbook and Planner 2017-2018](#). Montana Tech’s counselors serve as the disability service coordinators (DSC); they participate in the [Association on Higher Education And Disability® \(AHEAD\) of the Northern Rockies](#) and attend the conferences. As part of the University of Montana affiliation, Montana Tech DSCs consult [University of Montana Disability Service Office](#).

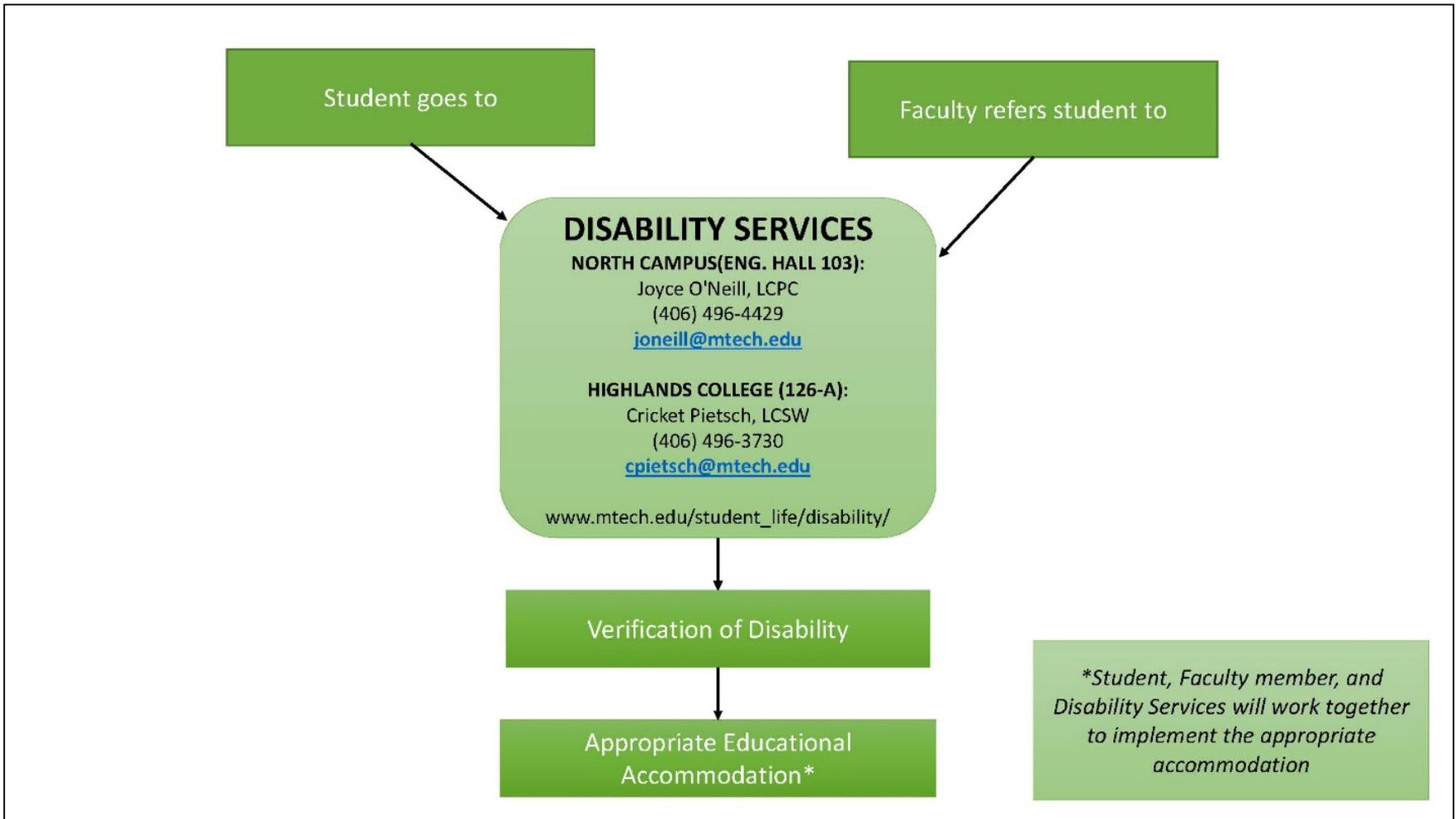
Montana Tech hosts admitted-student events months prior to the start of the semester. Disability Services is part of these events and DSCs discuss the [procedures for obtaining disability accommodations](#). Presentations by the Dean of Student Success regarding disability services were made at the 2017 academic department head meeting and new faculty orientation. As part of the annual employee training, Montana Tech employees in 2017 completed the “Americans with Disabilities Act and ADA Amendments Act for Higher Education” module along with three others.

Beginning Spring 2017, Montana Tech’s Office of Equal Opportunity & Affirmative Action presented a proposed revision to Montana Tech’s Service Animals, Emotional Support Animals and Pets Policy and

Procedure to the Campus Access Committee, [Staff Senate](#), [Faculty Senate](#), ASMT, Chancellor's Cabinet, and Executive Council. Once the policy is approved by the Chancellor, it will replace the previous [draft policy](#) created in March 2012.

Looking to the future, the Student Success Center under construction has space for advisors and rooms for additional testing accommodations. Currently, accommodations for additional time or a quiet space are facilitated through the faculty member, department assistant, Pearson VUE testing center, and/or the Dean of Student Success.

The following pages contain the flowchart of Disability Services at Montana Tech, Montana Tech Disability Services brochure, LEP Faculty handout, and DRAFT LEP Student handout. These documents were developed in an effort to improve communication of services. While maps published within a document are fixed at a point in time, the [Montana Tech Campus map](#) available online communicates the most up to date information.





MontanaTech

DISABILITY SERVICES

Montana Tech is committed to ensuring full and equal participation by all



MontanaTech

DISABILITY SERVICES

1300 West Park Street
Butte, MT 59701-9982
1-800-445-TECH

For more complete information and forms, please visit our web site.
Browse to www.mtech.edu/student_life and click on Disability Services.

REQUESTING ACCOMMODATIONS

To obtain a disability accommodation:

1. Submit an Application for Disability Services with supporting documentation (see below) to a Disability Services Coordinator (DSC)
2. Deliver documentation to DSC, preferably, 20 days prior to date needed. Note that interpreter services or textbook changes may take 45 days.
3. Meet with DSC to review paperwork and discuss needs
4. Obtain a letter of accommodation from DSC
5. Share letter of accommodation with faculty and discuss implementation
6. Make DSC and faculty aware of any accommodation changes should they occur; be aware that no accommodations are retroactive
7. Contact assigned DSC or Dean of Students if barriers arise in obtaining services

DOCUMENTATION REQUIREMENTS

The accommodation process usually requires documentation of the disabling condition and the functional limitations that result.

Ideally, it should include:*

1. A diagnostic statement identifying the disability for which accommodations are being sought.
2. Current functional limitations as it relates to academic success.
3. Name and credentials of the evaluator(s).
4. A description of current and past accommodations, services and/or medications.

**Montana Tech Disability Coordinators will be happy to assist you in answering any questions related to documentation, or lack thereof. Students should not hesitate to call for an appointment to discuss this.*

AMERICANS WITH DISABILITIES ACT (ADA)

Montana Tech adheres to the civil rights definition of a disability. Eligibility for civil rights protection requires the applicant to meet one of the following three criteria in the civil rights definition of disability:

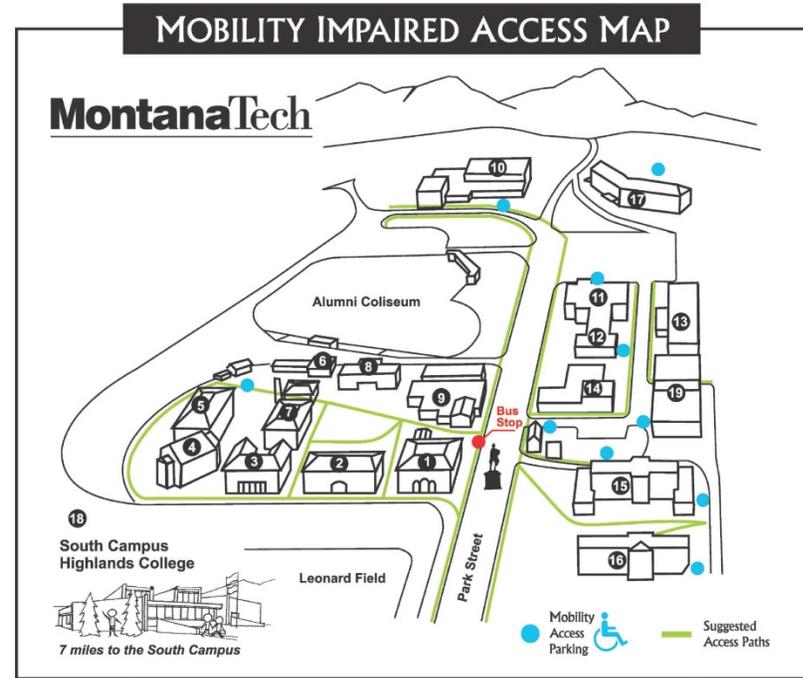
1. Have a physical or mental condition that substantially limits one or more major life activities.
2. Have a record of such a physical or mental condition.
3. Be regarded as having such an impairment.

MISISON

All persons with disabilities have the right to participate fully and equally in the programs and services of Montana Tech. Montana Tech is committed to ensuring full and equal participation by eliminating barriers and making the appropriate accommodations that allow persons with disabilities to have equal opportunity in all aspects of campus life.

Montana Tech is committed to the law, Section 504 of the Rehabilitation Act of 1973 and the American with Disabilities Act of 1990, and its own values that require all programs at the College to be readily accessible to and usable by people with disabilities in the most integrated setting appropriate to the needs of the individual and to the maximum extent reasonably possible. Person who are included in this consideration are students, faculty, staff, prospective students and all other guests and visitors to the campus.

For more complete information and forms, please visit our web site. Browse to www.mtech.edu/student_life and click on Disability Services.



A = Accessible Building B = Limited Access Building C = Not Accessible Building

- | | |
|---|---|
| 1. A Science & Engineering Buildings ▲ | 9. A Student Union Building ▲ |
| 2. B Engineering Hall ▲ ➤ First Floor Access West Entrance ➤ Second Floor . . . Stairway Access | 10. A HPER Complex |
| 3. C Main Hall | 11. A Library ▲ |
| 4. A Museum Building ▲ | 12. A Auditorium ▲ |
| 5. A Chemistry/Biology Building ▲ | 13. A Engineering Laboratory/Classroom Building ▲ |
| 6. C Physical Plant ➤ Second Floor . . . Stairway Access ➤ Services . . . Campus Parking | 14. A Mining-Geology Building ▲ |
| 7. A Mill Building | 15. A Prospector Hall |
| 8. A Health Science Building ▲ | 16. A Centennial Hall ▲ |
| | 17. A Natural Resources Building ▲ |
| | 18. A Highlands College (South Campus) ▲ |
| | 19. A Natural Resources Research Center (NRRC) ▲ |

▲ Access entrance with door opener to buildings

For information and assistance, contact the Student Life Programs Office, Engineering Hall, Room #101 or call (406) 496-4477.

DISABILITY COORDINATORS



Joyce O'Neill
Engineering Hall
Room 104
Voice: 406.496.4429
email: joneill@mtech.edu



Cricket Pietsch
Highlands College
Room 126-A
Voice: 406.496.3730
email: cpietsch@mtech.edu

Limited English Proficiency(LEP): Faculty

Who are Limited English Proficient (LEP) students?

The U.S. Department of Justice defines LEP persons as: "Persons who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English." According to the Census 2000 Brief by the U.S. Census Bureau, approximately 47 million people in the US spoke a language other than English at home. As of Fall Semester 2010, there were 427 international students enrolled at UM. There are also many Native American students on campus for whom English is a second language.

What are common issues LEP students may encounter in class?

Studying academic subjects through the medium of a language other than one's own is, at best, challenging. Not only does one have to understand the specialized vocabulary of the academic subject, but one also must understand what words like "explain," "analyze," and "discuss" mean. In addition, American English uses a number of nonstandard terms in common parlance, and students for whom English is their second language often have had no access to American vernacular English. As a result, LEP students may need additional time on exams or may need to use a general dictionary in order to parse test instructions and, in some cases, to shape their own responses in English or to distinguish between items given in a multiple-choice format.

What obligations do faculty, staff, administrators, and the University as a whole have for LEP persons?

As a recipient of federal financial assistance, Montana Tech is required to provide meaningful access to all programs and benefits to LEP persons. Title VI of the Civil Rights Act of 1964 prohibits discrimination based on national origin. Various regulations, policy guidance, and Executive Order 13166 clarify the responsibilities of recipients of federal financial assistance to take adequate measures to ensure that people who are not proficient in English can effectively participate in and benefit from the recipient's programs and activities. This would include ensuring that test requirements do not negatively impact LEP persons when there is no legitimate academic reason for assessing the English proficiency. A helpful Web site was developed by an [interagency working group on LEP](#).

How do we determine if we are providing meaningful access?

Whether particular barriers need to be removed for an LEP student is determined on a case-by-case basis. Removal of barrier should not unreasonably diminish academic standards.

Who decides how a language barrier should reasonably be removed?

The instructor should receive input from the student about what barriers are presenting an impediment. The instructor ultimately determines how the barrier may be removed without unreasonably interfering with academic standards.

What is the best practice for faculty?

Instructors should be accepting of requests from students to remove language barriers. Instructors might want to include a statement in their syllabi to notify students that options are available to ensure meaningful access for LEP students. Once a student makes a request, the instructor should be open to working with the student to find a reasonable way to remove a language barrier that does not unreasonably interfere with academic standards.

What is an example of course syllabus statement?

"Students from cultures which utilize different means of examination or learning methods other than those used in this course should contact me within the first few days of class to discuss more culturally appropriate testing approaches. Students for whom English is not their native language may discuss with me potential ways in which language barriers can be removed without unreasonably interfering with the academic standards."

What are resources available for LEP students and those who are not included in the definition of LEP but have similar difficulties with the English language?

- [Academic Center for Excellence \(ACE\)](#): ACE provides Tutoring support for math (Algebra through Differential Equations), Chemistry (Introductory, General, and Organic), Physics, and selected Engineering courses. Students that need help in how to study should make an appointment with one of the Academic Coaches or the Director. The writer's studio is able to help students with writing related assignments.
- **Read and Write** is a FREE application that can assist students with their reading and writing skills. It can be downloaded for free in your MyMtech account. Contact [Disability Services](#) if you need assistance.
- **Vocabulary Sheets**: ACE can provide vocabulary sheets related to commonly used math terms and essay terms explained. These can help students learn and identify terms before they enter into a testing environment.

What may LEP persons do if they believe they have been denied meaningful access to University programs and benefits?

LEP persons should be referred to the Equal Opportunity and Affirmative Action Office for filing a complaint:

Vanessa Van Dyk, Director
Human Resources/EEO
MG 211
406-496-4322
vvandyk@mtech.edu

Is there anything else I can do to ensure that I contribute to providing meaningful access for all students?

Yes. You can incorporate the concepts of Universal Design for Learning (UDL) into your program. UDL is the framework for designing educational environments that enable all learners to gain knowledge, skill, and enthusiasm for learning. Read more [about UDL](#) and learn [UDL guidelines](#).

Limited English Proficiency (LEP): STUDENTS

Who are Limited English Proficient (LEP) students?

The U.S. Department of Justice defines LEP persons as: "Persons who do not speak English as their primary language and who have a limited ability to read, speak, write, or understand English.

What obligations do faculty, staff, administrators, and the University as a whole have for LEP persons?

As a recipient of federal financial assistance, The University of Montana is required to provide meaningful access to all programs and benefits to LEP persons. Title VI of the Civil Rights Act of 1964 prohibits discrimination based on national origin. Various regulations, policy guidance, and Executive Order 13166 clarify the responsibilities of recipients of federal financial assistance to take adequate measures to ensure that people who are not proficient in English can effectively participate in and benefit from the recipient's programs and activities. This would include ensuring that test requirements do not negatively impact LEP persons when there is no legitimate academic reason for assessing the English proficiency.

How do we determine if we are providing meaningful access?

Whether particular barriers need to be removed for an LEP student is determined on a case-by-case basis. Removal of barrier should not unreasonably diminish academic standards.

Who decides how a language barrier should reasonably be removed?

The instructor should receive input from the student about what barriers are presenting an impediment. The instructor ultimately determines how the barrier may be removed without unreasonably interfering with academic standards.

What is the responsibility of the Student?

A student needs to specifically convey to the instructor what barriers are presenting an impediment. Although, it can be difficult to assess the barriers at the onset of a course for a student as soon as the student is able to recognize that their LEP status is affecting their ability to participate this needs to be communicated to the Instructor.

What are examples of how barriers can be removed?

The instructor ultimately determines how the barrier may be removed without unreasonably interfering with academic standards. Students are encouraged to bring ideas to their instructors that could help remove barriers.

Example: An Instructor lectures very quickly and the LEP student is unable to write down all of the information on the PowerPoint slides.

Possible Solution: The student asks if the Instructor is willing to provide them with the lecture slides

Example: The instructor gives essay exams

Possible Solution: the student asks the instructor if additional testing time could be given.

What are resources available for LEP students and those who are not included in the definition of LEP but have similar difficulties with the English language?

- [Academic Center for Excellence \(ACE\)](#): ACE provides Tutoring support for math (Algebra through Differential Equations), Chemistry (Introductory, General, and Organic), Physics, and selected Engineering courses. Students that need help in how to study should make an appointment with one of the Academic Coaches or the Director. The writer's studio is able to help students with writing related assignments.
- **Read and Write** is a FREE application that can assist students with their reading and writing skills. It can be downloaded for free in your MyMtech account. Contact [Disability Services](#) if you need assistance.
- **Vocabulary Sheets**: ACE can provide vocabulary sheets related to commonly used math terms and essay terms explained. These can help students learn and identify terms before they enter into a testing environment.