Standard 2.A- General Requirements

The institution offers collegiate level programs that culminate in identified student competencies and lead to degrees or certificates in recognized fields of study. The achievement and maintenance of high quality programs is the primary responsibility of an accredited institution; hence, the evaluation of educational programs and their continuous improvement is an ongoing responsibility. As conditions and needs change, the institution continually redefines for itself the elements and result in educational programs of high quality.

2.A.1 **The institution demonstrates its commitment to high standards of teaching and learning by providing sufficient human, physical, and financial resources to support its educational programs and to facilitate student achievement of program objectives whenever and however they are offered.**

All educational programs at Montana Tech are sufficiently supported with human, physical, and financial resources to achieve individual program objectives.

- Faculty
  For Fall Semester 2009, Montana Tech had a FTE student count of 2438 and a student-to-faculty ratio of approximately 15 to 1. Of the tenure-track full time instructional faculty in B.S. programs, 70% hold terminal degrees in their respective program discipline.
  Faculty workload at Montana Tech is commensurate with quality teaching. For faculty who are part of Bachelors or Masters degree granting programs (often described as North campus faculty), workload is described in Standard 4.A.3 as follows:

  "Workloads for faculty in the four year programs are based on a 15 credits of workload per semester model which guides assignment of effort. For faculty for whom advising and service to the college are expected, 3 credits of this workload are automatically awarded for effort in these areas. Faculty members that are active in research and scholarship are normally able to claim 3 credits of workload for their efforts with the approval of their department head. New and recent faculty hires for whom demonstrated research and scholarship are requirements for promotion and tenure are generally accorded 3 credits of workload to allow for effort in this area. For a faculty member who is advising students, serving on college committees, and pursuing research/scholarship; this typically leaves 9 credits of workload to be devoted to instruction per semester. One credit of lecture (1 hour per week) counts as one credit of instructional load and one credit of laboratory (3 hours per week) counts as two credits of instructional load."

  For faculty housed in programs granting only Associate degrees or Certificates (collectively referred to as South campus faculty), workload is defined in the VTEM-CBA
  (see Exhibit G.VI) as:

  "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."
  A thorough review of Montana Tech's faculty is found under Standard 4.

- 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

  (a) Currently, the North Campus has ten buildings housing labs, classrooms, and faculty offices for a total of 390,737 square feet.
  (b) 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.
  (c) A 31,084 square foot Library with collections that include 55,000 books, more than 400 current journal titles, and more than 1900 non-current journal titles. The Library's electronic collections include 32,000 online journals, 58,000 e-books, and 2700 newspapers and news sources online.
  (d) A recently remodeled gymnasium in the Health, Physical Education & Recreation (HPER) building.
  (e) The 16,812 square foot Mill Building which contains the Montana Tech Bookstore, a Starbucks Coffee Mill, and several lounge areas.
  (f) The Student Union Building (SUB) where the dining hall, campus mail room, student health service, and offices of the Associated Students of Montana Tech (ASMT) are located.
  (g) Two residence halls with space for 300 students.

  South Campus

  The primary structure on the South Campus is the College of Technology (COT) Building. During the summer of 2008, this 98,807 square foot building underwent a major renovation which improved all of the COT's classrooms' physical environments by updating the ventilation system and by adding new paint and carpeting.

  Computing

  Montana Tech has nine instructional computer labs and 17 student-use computer labs. A fully integrated local area network connects more than 1000 computers, supported by 55 physical servers and 52 virtual servers. Furthermore, all faculty and staff are provided a computer.

  More detailed descriptions of physical resources can be found within Standards 5 and 8.

- 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. For fiscal year 2009, resident students will pay approximately 42% of the cost of their education, while non-resident students will pay the entire cost of their education. Montana Tech also enjoys the support of people within the state, as evidenced in 2008 by the passage of a 6-Mill Levy that will cover approximately 7% of state support for higher education. For a complete review of Montana Tech's financial resources, see Standard 7.

2.A.2 **The goals of the institutions educational programs, whenever and however offered, including instructional policies, methods, and delivery systems, are compatible with the institutions mission. They are developed, approved, and periodically evaluated under established institutional policies and procedures through a clearly defined process.**

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 Vice

Chancellor for Academic Affairs and Research (VCAAR). 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. Please see Exhibit G.I for the Montana Tech catalog.

At yearly departmental meetings the validity of program goals are evaluated as well as methods for assessing these goals. Some programs assess goals according to guidelines published by professional organizations. As an example, the Chemistry Department follows program goals and curriculum guidelines established by the American Chemical Society (ACS). For other programs, the goals are reviewed according to the requirements of an external accrediting agency. For instance, the Environmental Engineering Department sets department goals based, in part, on requirements established by the Accreditation Board for Engineering and Technology (ABET). Other departments rely on input from an Industry Advisory Board when determining and reviewing department goals. An illustration of this is the Business Technology Department which uses input from members of its business advisory board when department goals are reviewed. Please see the departmental self-studies, Exhibit 2.A.I, for a complete listing of program goals and assessment procedures used to measure the success in accomplishing these goals.

2.A.3 **Degree and certificate programs demonstrate a coherent design; are characterized by appropriate breadth, depth, sequencing of courses, synthesis of learning, and the assessment of learning outcomes; and require the use of library and other information sources.**

One method of determining whether a program has a coherent design, with courses at an appropriate breadth and depth and with reasonable course sequencing, is to compare a Montana Tech program with similar programs at peer institutions. An example of this type of comparison is the common course numbering system developed for all campuses of the Montana University System (MUS). As described on the MUS Transfer Guide web site ($http://msudw.msu.montana.edu:9030/wfez/owa/musxfer.p\_CCN\_MAIN$),

"All undergraduate courses in the Montana University System (MUS) must go through a common course numbering process. This means that all courses deemed to be equivalent must possess the same course prefix, number, and title; such courses will directly transfer on a one-to-one basis with equivalent courses at the receiving institution."

This policy has afforded Montana Tech faculty an excellent opportunity to compare Tech's courses with similar courses offered at universities and colleges throughout the state. Please see policy 301.5.5 of the Board of Regents Policy and Procedures Manual, Exhibit G.II, for more detailed information. Also, please see Exhibit 2.A.II, which is the current course numbering matrix specific to Montana Tech. This matrix gives the former subject abbreviation and course number for a Montana Tech course along with the current abbreviation and number, which is aligned with all campuses of the Montana University System.

As described in section 2.A.2, many Montana Tech programs are certified or reviewed according to external organizations or review boards. This approach ensures that Tech's programs are at appropriate levels, and with measurable learning outcomes. Some examples of these organizations are the following:

- The Chemistry Department's program is certified by the ACS;
- The Electrical Engineering Department's program is reviewed by an Electrical Engineering Industrial Advisory Board.
- The Radiologic Technology Program follows the guidelines of the American Registry of Radiologic Technologists (ARRT);
- The Department of Mathematics option in statistics is consistent with guidelines established by the American Statistical Society (ASA), while the math option follows the guidelines established by the Mathematical Association of America (MAA); and
- All the programs in the School of Mines & Engineering follow program guidelines established by ABET.

In order to evaluate, initially, whether courses within programs are at an appropriate breadth and depth, the process of adding a new course requires that the course curriculum be reviewed by all Montana Tech faculty. As described in Standard 4.A.2:

"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 faculty member will then bring a request to the appropriate department to add this course to the curriculum. If the faculty members in the 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, catalog description, and prerequisites; will have an attached syllabus; and will note known effects on other programs."

Typically, once a course has been established, the course content is reviewed annually at department meetings. Furthermore, some programs have capstone projects or senior design projects that require literature reviews and extensive use of the library. Please see Exhibit 2.A.III for some examples of these projects.

2.A.4 **The institution uses degree designators consistent with program content. In each field of study or technical program, degree objectives are clearly defined: the content to be covered, the intellectual skills, the creative capabilities, and the methods of inquiry to be acquired; and, if applicable, the specific career-preparation competencies to be mastered.**

Degree programs at Montana Tech use designators which are consistent within the field, and, as described in 2.A.3, which are consistent throughout the Montana University System. For example, courses falling within the Chemistry Department program are designated with CHMY, and Metallurgical & Materials Engineering classes are designated with M& ME . See the Montana Tech Catalog, Exhibit G.I, and the course numbering matrix, Exhibit 2.A.II, for many more examples.

All programs at Montana Tech publish their respective departmental mission and program objectives in the Tech Catalog. Any required, career specific competencies are also published here. In addition, the catalog contains course descriptions of each course taught by the department, including content to be covered and any discipline-specific methods to be employed. For example, MIN 2100-Plane Surveying is a course offered through the Mining Engineering department and is described in the catalog as follows:

"Covers the basics of plane surveying, Linear measurement; errors; leveling; the use of transit, theodolite and total stations to make traverses; traverse adjustments; earthworks; and map construction. An introduction to GPS surveying. **Prerequisite:** M 151, or 171."

2.A.5 **The institution provides evidence that students enrolled in programs offered in concentrated or abbreviated timeframes demonstrate mastery of program goals and course objectives.**

No programs at Montana Tech are offered in concentrated timeframes.

2.A.6 **The institution is able to equate its learning experiences with semester or quarter credit hours using practices common to institutions of higher education, to justify the lengths of its programs in comparison to similar programs found in regionally accredited institutions of higher education, and to justify any program-specific tuition in terms of program costs, program length, and program objectives.**

As published in the Montana Tech catalog, a credit represents 50 minutes per week of lecture instruction each week of the semester. The length of programs at Montana Tech, in terms of minimum number of credits, is given in Table 2.A.I:

TABLE 2.A.I: MINIMUM CREDITS PER DEGREE

Degree	Minimum Credits
Associate of Science	65-75
Associate of Applied Science	65-75
Bachelor of Science	120-136
Master of Science	30-36

This requirement is similar to peer institutions in the region. Students may choose the requirements for a degree in the catalog they enter under or any subsequent catalog published while they are enrolled. However, students must complete the degree requirements within 6 years of the date of the chosen catalog.

Programs fees for students with declared majors in high cost programs are published in the Montana Tech Catalog and at the website: http://www.mtech.edu/business/Tuition_and_Fee.htm. Currently, there are the following program-specific fees:

- Nursing RN
- Metals Fabrication Technology
- Automotive Technology
- Health Care Informatics
- Professional Technical Communication
- School of Mines and Engineering
- Pre Apprenticeship Lineman Program
- Network Technology AAS

These additional fees are similar to charges at peer institutions and are approved by the ASMT Senate and Montana Board of Regents every two years.

2.A.7 **Responsibility for design, approval, and implementation of the curriculum is vested in designated institutional bodies with clearly established channels of communication and control. The faculty has a major role and responsibility in the design, integrity, and implementation of the curriculum.**

Procedure for design, approval, and implementation of curriculum at Montana Tech is clearly established, and the faculty are involved from the beginning. For example, changes in curriculum are typically initiated by a faculty member who requests a new course or changes to an existing course. This issue is discussed within the faculty members department and then sent to the Curriculum Review Committee (a committee comprised entirely of Montana Tech faculty), along with any supporting documentation. If the request is approved by the Curriculum Review Committee, it is then presented to the entire instructional faculty for approval. The new course must then be approved by both the Vice Chancellor of Academic Affairs and Research (VCAAR) and the Chancellor of Montana Tech. For major revisions within a program or for the addition of an entirely new program, approval must also come both from the President of the University of Montana and from the Montana Board of Regents.

2.A.8 **Faculty, in partnership with library and information resources personnel, ensure that the use of library and information resources is integrated into the learning process.**

To ensure that the library and information resources are integrated into the learning process, library faculty (librarians) may collaborate with instructors teaching required writing courses and discipline-specific W courses (those with a designated writing component). 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. For examples of papers from designated writing courses, see Exhibit 2.A.IV. Library faculty daily assist students with course work assignments and

also provide in-depth research help to senior design students, those working on Undergraduate Research Projects, and to Graduate students.

Librarians also develop instructions sessions tailored to specific classes. For example, Library and Chemistry faculty team teach a required chemistry literature class for chemistry majors. This class meets in the library and is designed to guide students in finding scientific and technical information. For more information on how the library is integrated into student learning, see Standard 5-Lib.

2.A.9 **The institutions curriculum (programs and courses) is planned both for optimal learning and accessible scheduling.**

Course scheduling at Montana Tech is the responsibility of Department Heads in conjunction with the Enrollment Management Office. Every effort is made to avoid course time conflicts.

Optimal learning is pursued through updated and relevant textbooks, faculty teaching in their area of expertise, appropriate use of technology, and through core courses normally offered every year and at least every other year. Optimal learning is assessed primarily at the department level through course evaluations, student and employer surveys, pass rates on nationally normed exams, and through faculty input at department meetings. See the individual program reviews, Exhibit 2.A.I, for more information and examples of optimal learning practices.

2.A.10 **Credit for prior experiential learning is awarded only in accordance with Policy 2.3 Credit for Prior Experiential Learning.**

Currently, no credit for prior experiential learning is given at Montana Tech.

2.A.11 **Policies, regulations, and procedures for additions and deletions of courses or programs are systematically and periodically reviewed.**

At Montana Tech, the procedure regarding deletions or additions of courses or programs typically starts at the department level, then proceeds to the faculty within the appropriate college, next goes to the Curriculum Review Committee (CRC), and from there proceeds to the general instructional faculty. Major department additions or deletions must also be approved by the VCAAR, by the Chancellor, and by the Board of Regents. This systematic procedure is reviewed on a yearly basis by the academic Deans and the VCAAR.

2.A.12 **In the event of program elimination or significant change in requirements institutional policy requires appropriate arrangements to be made for enrolled students to complete their program in a timely manner and with a minimum of disruption.**

As found in the Board of Regents Policy and Procedures Manual (Exhibit G.II), 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.B Educational Program Planning and Assessment

Educational program planning is based on regular and continuous assessment of programs in light of the needs of the disciplines, the fields or occupations for which programs prepare students, and other constituencies of the institution.

2B.1 **The institutions processes for assessing its educational programs are clearly defined, encompass all of its offerings, are conducted on a regular basis, and are integrated into the overall planning and evaluation plan. These processes are consistent with the institutions assessment plan as required by Policy 2.2 Educational Assessment. While key constituents are involved in the process, the faculty have a central role in planning and evaluating the educational programs.**

The process of assessing educational programs at Montana Tech is accomplished in many different ways. Program assessment tools include the following:

- Student evaluation of courses. See Exhibit 2.B.I for a summary of some student evaluations.
- Small group instructional diagnosis of courses (SGID). See Exhibit 2.B.II for examples.
- Evaluation of courses by using statistical methods. See Exhibit 2.B.III.
- The Noel-Levitz Student Satisfaction Inventory (SSI). See Exhibit G.III.
- The Educational Testing Service Measure of Academic Proficiency and Progress (MAPP) exam. See Exhibit 2.B.IV.
- Measuring student performance in capstone courses. See Exhibit 2.A.III for examples.
- Assessing student performance on program specific licensure exams.
- Assessing student performance on nationally normed knowledge exams.
- Calculating program-specific graduation rates. See Exhibit 2.B.VI for a listing of program graduation rates.
- Alumni surveys. See Exhibit 2.B.VII for examples.
- Placement Rate. See Exhibit 2.B.V for examples.
- Employer surveys. See Exhibit 2.B.VIII for examples.
- Advisory Boards.
- Using specialized program accreditation external guidelines as established by, for example, the Accreditation Board for Engineering and Technology (ABET).

See Table 2.B.I for a list of assessment procedures used within academic programs.

TABLE 2.B.I: DEPARTMENTAL ASSESSMENT DOCUMENTATION

Academic Department	Student Evaluations of Courses	Capstone Course/ Project	SSI Survey	Alumni Survey	Placement Rates or Employer Survey	Exit or Licensing Exam	Advisory Board	Specialized Accreditation	Intern-ship
COT									
Business Technology	√		√	√	√		√	√	
Trades & Technology	√		√	√	√		√	√	
Health Program	√		√		√	√	√		
Accounting Technology	√		√	√	√		√		
CLSPS									
Biology	√	√	√	√	√		√		
Business and Information Technology	√	√	√	√	√	√	√	√	
Chemistry & Geochemistry	√	√	√	√	√	√		√	
Computer Science	√		√	√	√	√	√	√	√
General Science	√		√	√	√				
Health Care Informatics	√	√	√	√	√		√		√
Liberal Studies	√		√	√	√		√		
Mathematical Sciences	√		√	√	√				
Network Technology	√		√	√	√	√	√		√
Nursing	√		√	√	√	√	√	√	
Professional and Technical Communications	√	√	√		√				
Software Engineering	√	√	√	√	√	√	√	√	
SME									
Electrical Engineering	√		√	√	√	√	√	√	
Environmental Engineering	√		√	√	√	√	√	√	
General Engineering	√				√			√	
Geological Engineering	√		√	√	√	√		√	
Geophysical Engineering	√	√	√	√	√	√	√	√	
Metallurgical & Materials Engineering	√	√	√	√	√	√	√	√	√
Mining Engineering	√		√	√	√	√		√	
Petroleum Engineering	√	√	√	√	√		√	√	√
Safety, Health and Industrial Hygiene	√	√	√	√	√	√	√	√	
Project Engineering & Management	√				√				

Specialized accrediting agencies play a significant role in academic programs at Montana Tech. These agencies include ABET, International Assembly for Collegiate Business Education (IACBE), the American Chemical Society (ACS), National Institute for Automotive Service Excellence (NIASE), and the Montana State Board of Nursing. When assessing programs, faculty use guidelines from these accrediting agencies to develop techniques for alumni and employer surveys, measurement of student learning, and determining the appropriateness of course material.

Additionally, the Montana University System Board of Regents requires every program within a public university to undergo an internal program review or self-study at least once every seven years. The Board of Regents schedule for program reviews at Montana Tech is found at
http://mus.edu/asa/ProgramReviewSchedule.pdf

A program self-study includes, in general, the program's mission, objectives, outcomes, and techniques to assess these outcomes. Additionally, a listing of program strengths and weaknesses, as well as what is being done to maintain strengths and correct weakness is also an expected part of these program self-studies. (Note that the respective faculty within a program are responsible both for defining the program mission and for establishing ways to assess the objectives of the mission objectives.) See Exhibit 2.A.I for all program self-studies.

Some assessment procedures are common to all programs. For example, every program is required to run student evaluations in all courses offered, every semester, and to use a common evaluation form campus-wide. Additional, department specific questions may also be added to the general evaluation form. As will be confirmed by a careful examination of the drafts of department standards for promotion and tenure (found in the respective appendix of the program self-studies), student course evaluations play a critical role in assessing teaching effectiveness of faculty, as well as measuring student opinion of course content.

To determine the placement status of Montana Tech graduates, Career Services surveys every graduate of every program (see Exhibit 2.B.VIII). As demonstrated in, for example, the Department of Mathematical Sciences self-study, the results of this survey can be used as a tool for course content assessment. Over the past five years, the survey indicates that a "significant number" of math graduates have gone to graduate school after completing their undergraduate education at Montana Tech. This trend, in turn, has lead to an increase in the depth of coverage for material in upper division mathematics courses. Thus, based in part on the survey conducted by Career Services, the Department of Mathematical Sciences decided that senior level math courses should all maintain a significant focus on the theoretical framework underlying the content of the course.

Programs in General Engineering and in Geophysical Engineering are examples of departments that require all seniors to complete a senior design project. See Exhibit 2.A.III for examples. These projects provide an overall assessment of how well each program is doing.

That is, in general, the senior design project gives a clear and measurable indication to department faculty of how well the student is prepared for a career or for graduate school.

Closing the Loop
A Chemistry Course Pass Rate

Chemistry Department faculty noted the "D," "F," and withdraw rate for students in the Chemistry course CHMY 141, College Chemistry I, was occurring at an unacceptably high level. A detailed statistical analysis (see Exhibit 2.B.III) determined what factors significantly influenced success in this course. This analysis determined that the math corequisite for the course needed to be changed from College Algebra to the more advanced Precalculus course. Analysis showed a significant correlation between success in the Chemistry course and the level of a student's mathematical sophistication. Preliminary results indicate the pass rate for the Chemistry course has improved since the change in the Math co-requisite. See Figure 2.B.1.

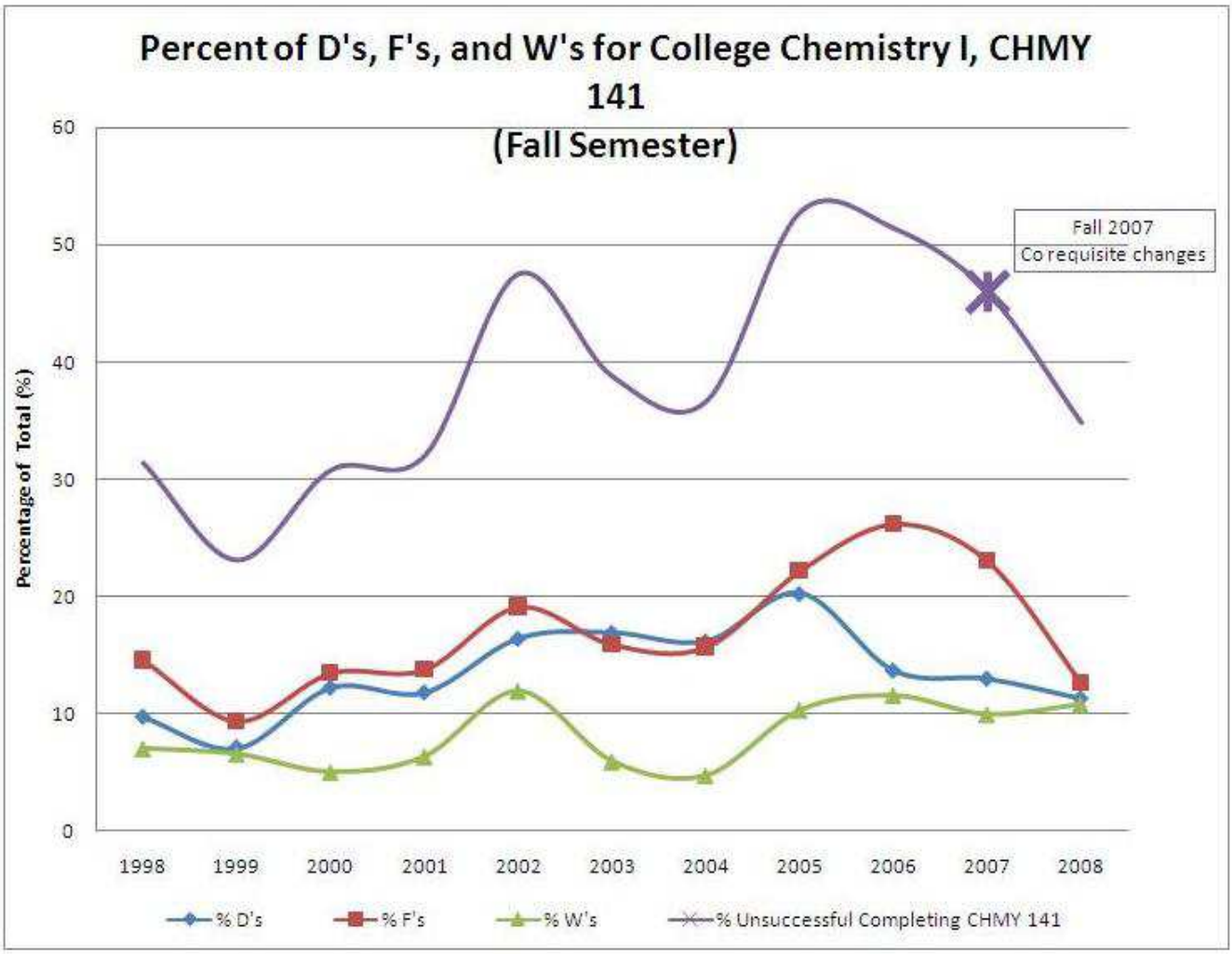

Figure 2.B.1: Percentage of D's and F's per Fall Semester for CHMY 141

Closing the Loop
FE Exam Pass Rate

Pass rates for the nationally normed Fundamental of Engineering (FE) exam, a required exam for many students in the School of Mines and Engineering, are calculated every year. In recent years, engineering faculty expressed concern over the pass rate for Montana Tech students, which fell below the national average pass rate of approximately 70%. During the fall semester of 2005, a committee evaluated methods for increasing the pass rate. The two primary recommendations of the committee were:

- *Programs that require students to sit for the exam also require that the students pass the exam.*
- *Increase the rigor of the review course for the exam.*

See Exhibit 2.B.IX for a copy of the report. Although students are currently not required to pass the exam in order to graduate, the review course for the exam has been redesigned. Subsequent to the review course update, the overall pass rate increased over a two year period, but has declined again recently. Faculty believe the primary reason for this decline is the simple fact that the exam only applies to professional licensure for engineers. For the majority of Tech's programs, this licensure does not represent an integral career milestone. See Table 2.B.II for an indication of the variability of scores within subject areas.

TABLE 2.B.II: FUNDAMENTALS OF ENGINEERING EXAM MEAN SCORES

Topic	Fall 05 Mean Score	Spring 06 Mean Score	Fall 06 Mean Score	Spring 07 Mean Score	Fall 07 Mean Score	Spring 08 Mean Score	Fall 08 Mean Score	Spring 09 Mean Score
Mathematics	42	53	53	57	57	49	60	57
Engineering Probability & Statistics	55	53	53	60	60	51	65	47
Chemistry	60	60	60	65	65	62	60	65
Computers	58	55	55	75	75	65	59	63
Ethics & Business Practices	78	70	70	76	76	68	83	78
Engineering Economics	73	73	73	62	62	64	61	81
Engineering Mechanics	48	55	55	61	61	56	54	54
Strength of Materials	51	60	60	52	52	48	42	41
Materials Properties	53	47	47	62	62	47	41	61
Fluid Mechanics	49	58	58	61	61	61	62	55
Electricity & Magnetism	52	51	51	56	56	39	46	60
Thermodynamics	53	46	46	53	53	52	61	52

Montana Tech practices student assessment throughout a student's career at the university. This process includes initial screening of student ability in mathematics and writing proficiency. Prior to enrolling in a program of study at Montana Tech, all first-time students are assessed on their writing ability and on their mathematical competence through scores they obtain on the ACT, SAT, or COMPASS tests. Student placement in the appropriate math or writing course is based on test scores and is strictly enforced. See Table 2.B.III and Table 2.B.IV below for math placement rules based on ACT/SAT scores followed at Montana Tech. Also, the rules for math and writing course placement can be found at Exhibit 2.B.X.

TABLE 2.B.III: MATH PLACEMENT FOR ENGINEERING/SCIENCE MAJORS

Course	ACT Math	SAT Math
M 90, Introductory Algebra	18-19	440-470
M 95, Intermediate Algebra	20-21	480-510
M 121, College Algebra	22-23	520-550
M 151, Precalculus	24-26	560-600
M 171, Calculus I	27+	610+

- ACT $<$ 18 or SAT $<$ 440 must take Compass test to be placed.

TABLE 2.B.IV: MATH PLACEMENT FOR BUSINESS/LIBERAL STUDIES/OTHER MAJORS

Course	ACT Math	SAT Math
M 90, Introductory Algebra	18-19	440-470
M 95, Intermediate Algebra	20-21	480-510
M 121, College Algebra	22-23	520-550
M 141, Mathematics for Business & Social Science I	24+	560+

- ACT $<$ 18 or SAT $<$ 440 must take Compass test to be placed.

Any challenge to these ACT/SAT placement scores must be based on Compass test scores.

- Compass Information:

  The compass test is a placement test that is used to place students in the appropriate Math and English classes. The following students are required to take the compass test:

  (a) Non-traditional freshmen
  (b) Transfer students–the test may be waived if college level math has been taken within the last two years, and a grade of C or better has been achieved in both math and English.
  (c) College of Technology freshmen –ACT or SAT scores may be used in lieu of the compass test if the student received a minimum score of 18 in math and English on the ACT, or a minimum score of 440 in math and English on the SAT.

The math placement rules are the result of a detailed study of "D," "F," and withdraw rates (D/F/W) over a three year period in the beginning calculus course at Montana Tech (see Exhibit 2.B.III). Also reviewed were policies at peer institutions. Since implementing these revised placement guidelines, the D/F/W rate for the beginning calculus course has gone from an approximate average of 35% to an average of 33%. This compares favorably to the national fail rate of 41.7% for a beginning calculus course. The Department of Mathematical Sciences faculty, Tech administrators, and staff of Enrollment Services are continually exploring ways to further reduce the D/F/W rate for this course while still maintaining appropriate rigor.

Montana Tech continues assessment procedures throughout a student's career. There are, of course, numerous assessment activities related to course efficacy that include course examinations, student portfolios, and design projects. Of particular importance is assessing the knowledge and skills students are in the process of acquiring. This is done not only within courses, through examinations and discipline-specific design projects, but also by means of Undergraduate Research Projects (URP) and the MAPP exam.

As described on the Montana Tech URP website,
(http://www.mtech.edu/research/undergrad/undergraduate_research.html)

"The Undergraduate Research Program (URP) was established to give motivated undergraduates a chance to participate in research and scholarly activity at Montana Tech to further their career and educational goals.

For purposes of the URP awards, research and scholarly activity is broadly defined and may include:

- Investigations of a cultural or historical question;
- Documentary or production arts; and
- Laboratory or field research more typically associated with the science or engineering disciplines."

See Standard 4.B.6 for a complete description of the URP.

Every student who has completed 75 credits of course work is required to take the Educational Testing Service Measure of Academic Proficiency and Progress (MAPP) exam before graduation. This exam is the primary assessment tool for measuring the outcomes of Tech's General Education program. MAPP exam results, which can be viewed at Exhibit 2.B.IV, provide strong evidence that the expected outcomes of the General Education program, which are described in the catalog, are being satisfied. The MAPP exam is discussed in greater detail in section 2.C.2.

The Student Satisfaction Inventory (SSI) survey (Exhibit G.III) is administered every odd-numbered year at Montana Tech. This survey plays an important role in assessing various programs offered at Montana Tech. For instance, the SSI is one tool used to determine student satisfaction with advising, instruction, financial aid, and with physical facilities.

Assessment of students during the senior year at Tech may include a student presentation of a senior thesis, final exams for capstone courses, or evaluation of student portfolios. Montana Tech also administers graduation exit interviews just prior to graduation. See Exhibits 2.A.III, 2.B.V, and 2.B.XI for examples.

After graduation, Montana Tech continues to assess the quality of educational programs through alumni (Exhibit 2.B.VII) and employer (Exhibit 2.B.VIII) surveys. Montana Tech faculty use these surveys to gauge whether graduates are successful in their post-graduate careers.

Montana Tech faculty are at the center of program assessment. As described in departmental self-studies, assessment is a continual process where measurement of educational outcomes takes place both at the classroom and program level. Commonly employed assessment tools are course exams, student evaluation of courses, nationally normed exams, and surveys. Departmental faculty play a significant role in determining both what outcomes to measure and what measurement tool to use. For many departments, measurement results and applications of these results are discussed every year at department meetings.

2.B.2 **The institution identifies and publishes the expected learning outcomes for each of its degree and certificate programs. Through regular and systematic assessment, it demonstrates that students who complete their programs, no matter where or how they are offered, have achieved these outcomes.**

All degree programs at Montana Tech publish their expected learning outcomes in the Montana Tech catalog. The following set of examples will indicate the high degree of validity that outcomes have within respective programs. Note, the following list of outcomes is not complete for each program, but the entire set of outcomes within a program can be found in the Montana Tech catalog (Exhibit G.I). The methods employed for assessment of outcomes are also listed in the catalog. These assessments demonstrate whether, and to what degree, students are meeting program objectives.

Certificate of Applied Science Degree Programs:

- Computer Assistant: Program housed in the College of Technology (COT).
  Graduates will be able to:
  (a) Demonstrate problem-solving, critical-thinking, oral, and written communication skills.
  (b) Demonstrate a competent use of a variety of software applications in the area of business technology.
  * Assessment
    (a) Montana Tech Placement Survey.
    (b) Montana Tech Graduate Survey.
    (c) Surveys of Local Businesses.
- Automotive Technology: Program housed in the COT.
  Graduates will be able to:
  (a) Demonstrate mechanical and problem solving skills in team and individual exercises.
  (b) Demonstrate a sense of pride in the student's work and the desire to progress and excel in the automotive field.
  * Assessment
    (a) Priority Performance worksheets.
    (b) Student Satisfaction Survey.
    (c) Advisory Board.

Associate of Applied Science Degree Programs:

- Accounting Technology Program: Program housed in the College of Technology (COT).
  Graduates will be able to:
  (a) Practice accounting and human resource skills in diverse business environments in a conscientious, precise, and deliberate manner.
  (b) Utilize informational literacy in problem solving.
  * Assessment
    (a) Placement Survey.
    (b) Graduate Survey.
    (c) Employer feedback through advisory boards.
    (d) Course assessment through student evaluations.
- Network Technology Program: Program house in the COT.
  Graduates will be able to:
  (a) Demonstrate competencies in computer maintenance and support.
  (b) Demonstrate competencies in appropriate network operating systems.
  * Assessment
    (a) Placement Survey.
    (b) Graduate Survey.
    (c) Industry Advisory boards
    (d) Student evaluations
    (e) Student peer evaluations

Bachelor of Science Degree Programs

- Nursing: Program housed in the College of Letters, Sciences, & Professional Studies (CLSPS).
  Graduates will be able to:
  (a) Demonstrate substantial specialized knowledge of life sciences, behavioral sciences, and of nursing practice and theory.
  (b) Utilize the nursing process to provide care for vulnerable populations.
    * Assessment
      (a) Student Evaluations
      (b) Pass rate on the National Council Licensure Examination for Registered Nurses
- Professional and Technical Communication: Program housed in CLSPS.
  Graduates will be able to:
  (a) Collaborate effectively with subject-matter experts and co-workers.
  (b) Assess and learn new technology and reach new audiences with new technology.
    * Assessment
      (a) Industry Advisory Board
      (b) Internship Student/Supervisor Evaluations
      (c) Instructional Diagnostic Tools
      (d) Student Evaluations
      (e) Student Peer Evaluations
      (f) Capstone Project/Thesis
      (g) Program Exit Surveys/Interviews
      (h) Graduate Placement Survey
- Geophysical Engineering: Program housed in School of Mines & Engineering (SME).
  Graduates will be able to:
  (a) Identify, formulate, and solve engineering problems.
  (b) Function on multi-disciplinary teams.
    * Assessment
      (a) Industry Advisory Board
      (b) Student evaluations
      (c) Alumni survey
      (d) Industry recruiters
- General Engineering: Program housed in SME.
  Graduates will be able to:
  (a) Apply knowledge of mathematics, science, and engineering.
  (b) Design and conduct experiments, as well as to analyze and interpret data.
    * Assessment
      (a) Industry feedback
      (b) Student evaluations
      (c) Alumni survey
      (d) Standardized exams

All programs offered at Montana Tech are assessed, whether courses are offered on campus or off, and whether delivered live or by some online method.

2.B.3 **The institution provides evidence that its assessment activities lead to the improvement of teaching and learning.**

At Montana Tech, program assessment is a continual process that is undertaken to improve, in general, the quality of all degrees offered. Program reviews (Exhibit 2.A.I) examine in detail how program assessment is accomplished. Some examples are given in the following:

- Computer Science: As part of the program review process, it was determined through departmental faculty meetings that the software engineering program of study had a deficiency. As stated in the Computer Science program review:
  "In the software engineering degree program there was some concern that students were not being exposed to software maintenance. This has been corrected by adding that component to the curriculum within the Senior Design project."
- Department of Health Care Informatics (HCI): One of the objectives of the HCI department is to keep students updated on the many recent advances in the field. The proposed method of realizing this objective was to create a senior seminar class. As stated in the HCI program review under plans to strengthen the option:
  "In December 2008 the Curriculum Review Committee approved the addition of an HCI senior seminar course which should afford Department faculty an opportunity to expose students to advanced concepts within the discipline."
- Department of Mathematical Sciences: As noted in the Mathematical Sciences program review, maintaining quality teaching and continually seeking to improve teaching skills is considered an essential component for the success of departmental faculty. Assessment is incorporated in the following way:
  "To help ensure the departments faculty are teaching at a high level, all assistant/associate professors earn points towards promotion and tenure with evidence of significant effort in the development of quality teaching. Acceptable evidence includes peer reviews of teaching, small group instructional diagnosis (SGID) reviews, writing a detailed class portfolio, or attending teaching workshops. All of these activities earn points for the faculty towards promotion or tenure, as described in the draft of the Department of Mathematical Sciences Promotion and Tenure Standards, which appears in the appendix of the program review."
- Department of Geological Engineering: To achieve a well-rounded and fundamentally sound education when learning the discipline of Geological Engineering, it is necessary to be adept with a variety of computer software packages. When assessing the computer capabilities in the program review for Geological Engineering, the following is reported:
  "In concert with the Mining Engineering Department, the Geological Engineering Department has one of the most comprehensive suites of engineering analysis and design software in the United States available for student use. This suite includes three mine-design software packages (SURPAC, VULCAN, and MINSCAPE), 2-D and 3-D rock mechanics analysis and design programs (including DDA and Itasca PFC), Schlumbergers suite of geological, geophysical, and reservoir engineering software (PETREL and ECLIPSE), and GMS software for groundwater flow and contaminant transport modeling."

For many other examples of significant assessment activities, see Standard 2.B.1 as well as individual program reviews, found at Exhibit 2.A.I.

Standard 2.C Undergraduate Program

The undergraduate program is designed to provide students with a substantial, coherent, and articulated exposure to the broad domains of knowledge.

The Commission encourages a tripartite structure for baccalaureate and academic or transfer associate degree programs: (1) general education requires students to master competencies for independent learning and to develop an awareness of the fundamental areas of knowledge; (2) the major requires students to achieve a knowledge base in a specific area of concentration; and (3) electives provide the opportunity for students to pursue other intellectual interests.

The Instructional program, as a whole, is based on a clear rationale with the component parts designed to reflect that rationale. Degree and certificate programs are characterized by clarity and order which are discernible in model curricula shown in official publications and are recorded in official student records of actual programs pursued.

Baccalaureate and academic or transfer associate degree programs include a substantial core of general education instruction with identifiable outcomes and require competence in (a) written and oral communication, (b) quantitative reasoning, (c) critical analysis and logical thinking, and (d) literacy in the discourse or technology appropriate to the program of study.

Associate degree programs are designed to prepare students for careers in vocational and technical fields, and for transfer to a senior institution. Accordingly, the educational requirements for these degrees must be carefully determined in order to fulfill their respective purposes.

Programs of study for which applied or specialized associate degrees are granted, or programs of an academic year or more in length for which certificates are granted, contain a recognizable body of instruction in three program-related areas: (1) communication, (2) computation, and (3) human relations described in Policy 2.1 General Education/Related Instruction Requirements.

2.C.1 **The institution requires of all its degree and pre-baccalaureate programs a component of general education and/or related instruction that is published in its general catalog in clear and complete terms.**

The general education component required of all students working toward an Associate of Science or Baccalaureate Degree is published in the Montana Tech Catalog (Exhibit G.I). 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. The general education core, as described in the catalog, consists of the following academic areas and respective credits:

- Communications (6 credits)
- Humanities (6 credits)
- Mathematical Sciences (6 credits)
- Physical & Life Sciences (6-7 credits, a lab course required)
- Social Sciences (6 credits).

This core may be satisfied by choosing from a list of courses within each academic area, where the list of courses satisfying general education credits is published in the catalog.

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 in
- human relations.

See the catalog for additional details.

2.C.2 **The general education component of the institutions degree programs is based on a rationale that is clearly articulated and is published in clear and complete terms in the catalog. It provides the criteria by which the relevance of each course to the general education component is evaluated.**

The expected outcomes of the general education curriculum are the following (as published in the catalog):

- Ability to express oneself both in written form and orally.
- Proficient critical thinking skills.
- Global and multi-cultural awareness.
- Appreciation for diversity.
- Understanding of scientific methods.
- Ability to function adequately at an algebraic level.
- An appreciation for life-long learning.

As discussed in Standard 2.B.1, these outcomes are assessed by requiring all students seeking a baccalaureate degree to complete The Educational Testing Service Measure of Academic Proficiency and Progress (MAPP) exam. For the 2008-2009 school year, Table 2.C.I reports percentile rankings for the average Montana Tech scores compared to other Masters granting institutions. For a complete listing of MAPP results, see Exhibit 2.B.IV.

TABLE 2.C.I: PERCENTILE RANKINGS ON MAPP EXAM, SPRING 2009

	N	Total score	Critical Thinking score	Reading score	Writing score	Math score	Humanities score	Social Sciences score	Natural Sciences score
All Tech Average	252	94%	98%	94%	86%	99%	95%	97%	99%
Biological Sciences	6	94%	99%	97%	65%	98%	99%	99%	97%
Business & Information Technology	46	83%	97%	77%	65%	78%	91%	92%	95%
Chemistry	5	99%	99%	99%	99%	99%	99%	99%	99%
CS & Software Engineering	4	99%	99%	99%	99%	99%	99%	99%	99%
Electrical Engineering	7	99%	98%	94%	86%	99%	74%	97%	99%
Environmental Engineering	12	99%	99%	99%	98%	99%	99%	99%	99%
General Engineering	40	99%	99%	97%	97%	99%	97%	99%	99%
Geological Engineering	10	99%	99%	99%	86%	99%	99%	99%	99%
Geophysical Engineering	5	99%	99%	97%	86%	99%	99%	99%	99%
Health Care Informatics	6	94%	99%	97%	97%	89%	97%	97%	99%
Liberal Studies	7	92%	99%	94%	65%	63%	99%	99%	97%
Mathematical Sciences	2	99%	99%	99%	99%	99%	99%	99%	99%
Metallurgical Engineering	4	96%	98%	92%	86%	99%	74%	99%	99%
Mining Engineering	10	98%	99%	97%	97%	99%	91%	99%	99%
Networking Technology	7	97%	99%	94%	65%	99%	74%	99%	99%
Nursing	13	94%	99%	92%	98%	78%	97%	92%	99%
Occupational Safety & Health	10	66%	93%	77%	86%	36%	74%	81%	95%
Petroleum Engineering	62	94%	98%	77%	65%	99%	74%	92%	97%
Professional & Technical Communication	4	80%	86%	94%	98%	36%	74%	92%	95%

- Example: 94% implies that 94% of the 118 institutions scored at or below Montana Tech's score

According to the MAPP user's guide (Exhibit 2.C.I), the exam

"is a test of college-level skills in critical thinking, reading, writing, and mathematics designed to measure academic skills developed through general education courses, rather than the subject knowledge specifically taught in those courses."

The test also measures proficiency within the academic context areas of the humanities, social sciences, and the natural sciences. As demonstrated in Table 2.C.I, Montana Tech students are doing well under this assessment.

To determine what courses are appropriate for the general education core, faculty within a department must first nominate a course for inclusion as a general education course. Details of the course, including

course content, are then submitted to both the Curriculum Review Committee (CRC) and to the General Education Committee. If both committees approve the course for general education, the course is passed on for discussion among the general faculty. Finally, the general faculty vote on whether the course should be included in the general education core.

Montana Tech faculty realize the above procedure for course inclusion in the general education core may not specifically address whether the course satisfies the educational objectives of general education. A committee has been formed to determine a procedure which bases course inclusion in general education on a measured comparison to the general education objectives. In addition, while the MAPP exam does assess writing, critical thinking, functioning at an algebraic level, and the level of understanding of scientific methods, it does not assess oral communication, multi-cultural awareness, appreciation of diversity, or life-long learning. The committee will examine ways of measuring how well the current general education core satisfies these outcomes as well.

2.C.3 **The general education program offerings include the humanities and fine arts, the natural sciences, mathematics, and the social sciences. The program may also include courses that focus on the interrelationships between these major fields of study.**

As described above, Montana Tech offers courses in the humanities, natural sciences, mathematics, and in the social sciences within the general education core. A deficiency within the Montana Tech general education core is the lack of a course fulfilling a fine arts offering. The Montana Board of Regents General Education Core
(See http://mus.edu/transfer/MUScorebyCampus.asp) includes courses in the fine arts. Tech is evaluating ways in which students can have access to these types of courses.

2.C.4 **The institutions policies for the transfer and acceptance of credit are clearly articulated. In accepting transfer credits to fulfill degree requirements, the institution ensures that the credits accepted are comparable to its own courses. Where patterns of transfer from other institutions are established, efforts to formulate articulation agreements are demonstrated.**

Among schools within the Montana University System, there is a developing transfer agreement based on common course numbering. For example, Statistics 216 is the common course number for an entry level statistics course with an algebra course prerequisite. This agreement is also described in Section 2.A.3. 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 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 general education courses within the Montana University System, see the Montana Tech catalog or the website
http://mus.edu/transfer/index2.asp. Transfer credits from outside the Montana University system are determined at the department level in conjunction with the Enrollment Services office. See the Montana Tech catalog (page 9) for a complete description of transfer credit policy.

2.C.5 **The institution designs and maintains effective academic advising programs to meet student needs for information and advice, and adequately informs and prepares faculty and other personnel responsible for the advising function.**

During the new faculty orientation, all new faculty are given training on how to be effective advisors. See the orientation packet, Exhibit 2.C.II, for details. Within departments, a reasonable effort is made to assign advisees to senior faculty, provided they are interested, rather than to junior faculty. This is done in the belief that the senior faculty's experience will benefit an advisee when a coherent schedule of classes is designed. Students are typically assigned an advisor at their initial enrollment, and, unless the student

changes his/her field of study, the advisor assigned at this time will advise the student throughout their course of study at Montana Tech. Based on the SSI survey (see Table 2.C.II) the procedure followed for academic advising at Montana Tech results in high average student satisfaction compared to the national average.

TABLE 2.C.II: MONTANA TECH AVERAGE ADVISING SATISFACTION VS NATIONAL AVERAGE

North Campus

Advising	Fall 2007 Montana Tech Average Satisfaction	Fall 2007 National Average Satisfaction	Fall 2005 Montana Tech Average Satisfaction	Fall 2005 National Average Satisfaction	Fall 2003 Montana Tech Average Satisfaction	Fall 2003 National Average Satisfaction
My academic advisor is concerned about my success as an individual	5.52	5.10	5.48	5.06	4.98	4.99
My academic advisor is knowledgeable about requirements in my major	5.92	5.40	5.77	5.40	5.46	5.33

South Campus

Advising	Fall 2007 Montana Tech Average Satisfaction	Fall 2007 National Average Satisfaction	Fall 2005 Montana Tech Average Satisfaction	Fall 2005 National Average Satisfaction	Fall 2003 Montana Tech Average Satisfaction	Fall 2003 National Average Satisfaction
My academic advisor is concerned about my success as an individual	5.43	5.05	5.31	5.00	4.99	4.96
My academic advisor is knowledgeable about my program requirements	5.77	5.36	5.83	5.32	5.60	5.26

Closing the Loop
Advising/Retention Committee

The Advising/Retention committee consists of representatives from administration, faculty, enrollment services, the business office, the library, and from student services. This committee was developed to identify and discuss issues related both to advising and to retention. Procedures have been implemented, as a result of this committee, to improve a student's likelihood of graduating and achieving his or her educational goals. One procedure initiated by the committee is to have advisors contact any advisees who receive at least one "D" or "F" grade at midterm and arrange a face-to-face meeting. At this meeting, any factors related to the grade are discussed as well as strategies to improve the student's academic performance . Although not enough data have been collected at this time to determine what effect this strategy is having, preliminary results support this type of advisor/advisee interaction. As shown in Figures 2.C.1 and 2.C.2 below, for the North campus the percentage of students who obtained a final course grade of "F" was lower for those students who met with an advisor than for those students who did not meet with an advisor.

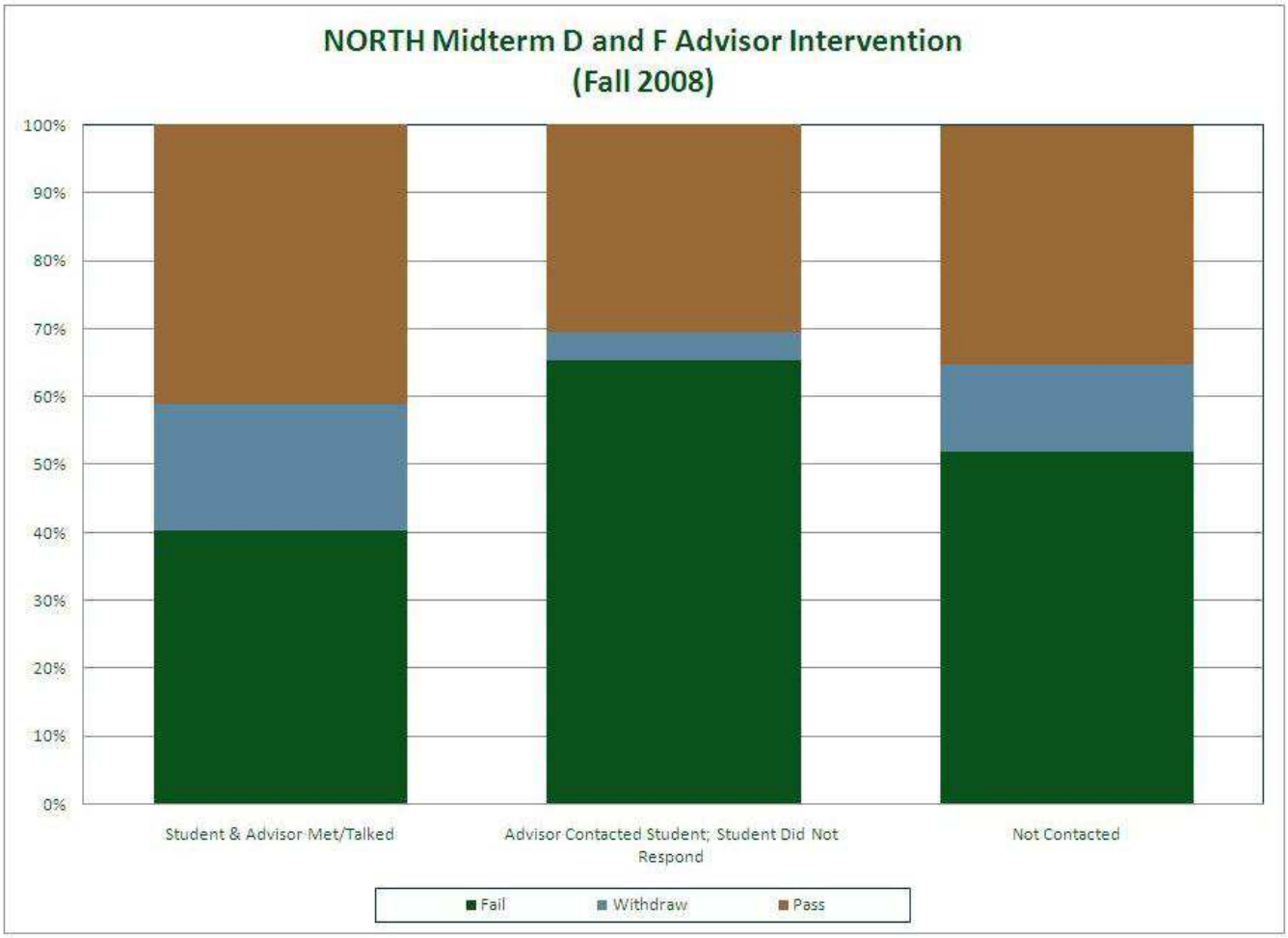

Figure 2.C.1: Final Grade Distribution After Advisor Intervention, Fall 2008

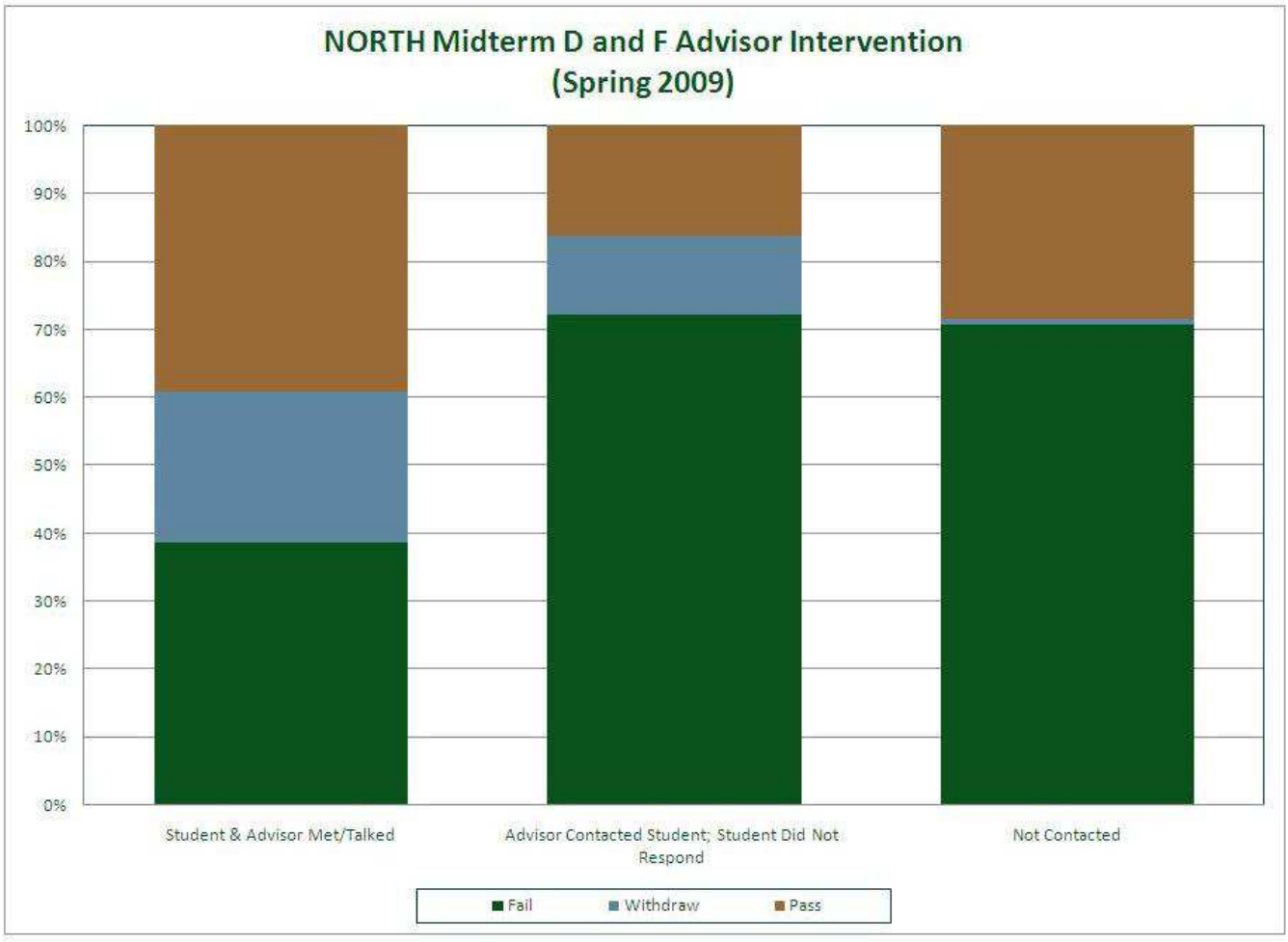

Figure 2.C.2: Final Grade Distribution After Advisor Intervention, Spring 2009

2.C.6 **Whenever developmental or remedial work is required for admission to the institution or any of its programs, clear policies govern the procedures that are followed, including such matters as ability to benefit, permissible student load, and granting of credit. When such courses are granted credit, students are informed of the institutions policy of whether or not the credits apply toward a degree.**

For admission to a baccalaureate degree program, students must demonstrate a minimum Math and Writing proficiency level. Math proficiency can be demonstrated with an ACT math score of at least 22 or an SAT math score of at least 520. However, a student with a math ACT score of 18-21, or a math SAT score of 440-510 may enroll on a provisional basis. However, to gain full admission status the student must enroll in the remedial math course M 95, Intermediate Algebra, and earn a grade of at least "C-." See Policy 301.15 in the Montana Board of Regents Policy and Procedures manual (Exhibit G.2), for complete details.

In a similar fashion, writing proficiency can be demonstrated with an ACT score of at least 18 on the combined English/Writing section, or an SAT score of at least 440 on the Writing section. Students who do not demonstrate writing proficiency may enter a baccalaureate program at Montana Tech on a provisional basis. One method the student can employ to earn full admission status is to earn a grade of at least "C-" in the remedial communication course WRIT 080, Building Basic Writing Skills. See Policy 301.16 in the Montana Board of Regents Policy and Procedures manual for further details.

The minimum Math and Writing proficiency levels do not apply to students who are seeking admission to a two-year degree program.

2.C.7 **The institutions faculty is adequate for the educational levels offered, including full-time faculty representing each field in which it offers major work.**

As described in Standard 4.A.1, the current faculty profile at Montana Tech consists of 176 full-time and 91 part-time employees. For full-time faculty, 50% hold a terminal degree in the field in which they teach or do research, typically a Ph.D.; and 41% hold a Masters degree in the field in which they teach, or in a closely related field. Nearly all the faculty who teach an undergraduate course hold at least a Masters degree. For the graduate program, every effort is made to have faculty with an appropriate terminal degree teach graduate level courses.

The sufficient staffing of faculty at Montana Tech is modeled on need and available finances. As evidence that the current staffing is adequate, the student to faculty ratio, at present and across campus, is 15 to 1. For the Fall 2008 semester, the overall average student credit hours (SCHR) taught per tenure track faculty was 198. Figure 2.C.3 gives the average student credit hours per tenure track faculty for each baccalaureate degree granting program.

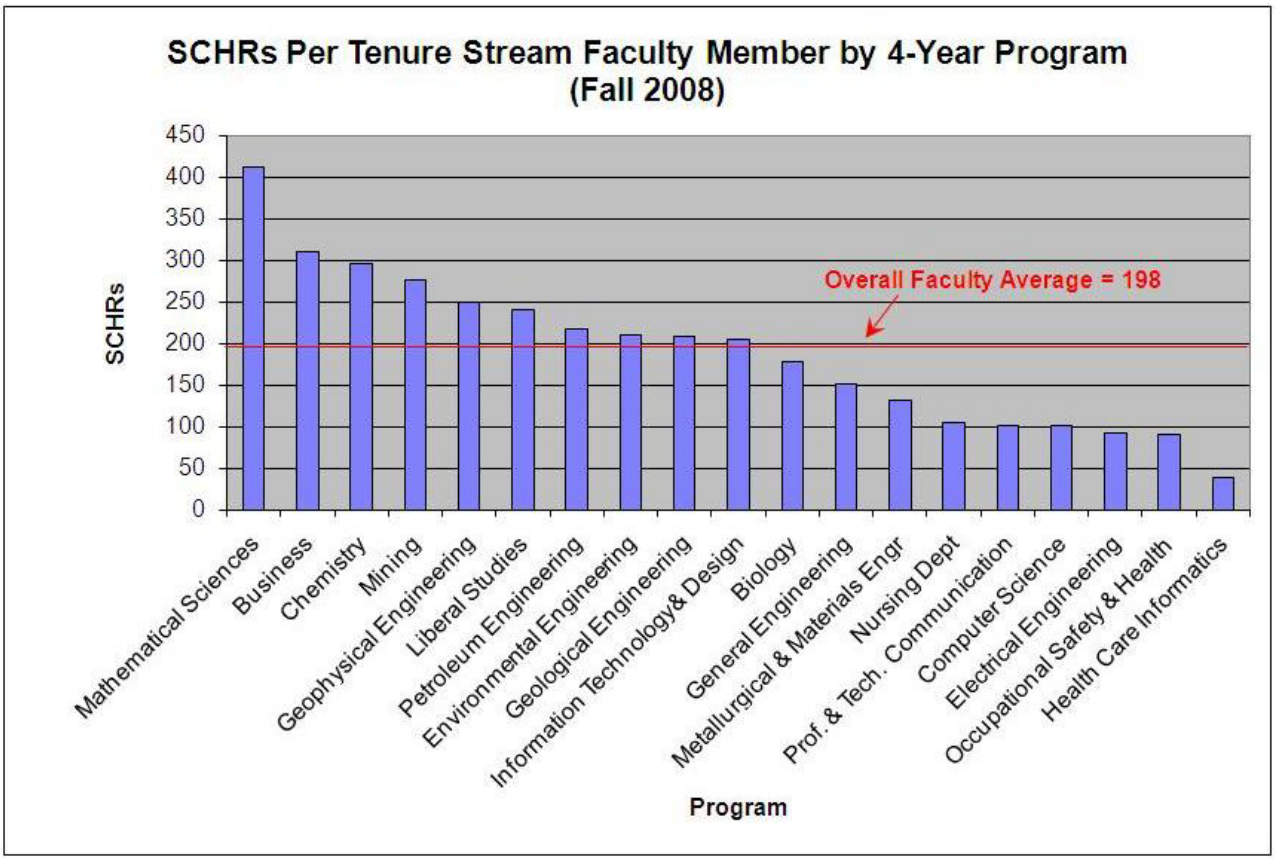

Figure 2.C.3: Average Student Credit Hours Taught Per Faculty Per Department

Montana Tech defines adjunct instructor as any instructor not in a tenure track position. As Table 2.C.III indicates, adjuncts play a significant role in teaching undergraduate students at Montana Tech.

TABLE 2.C.III: PERCENTAGE OF COURSES (EXCLUDING LABS) TAUGHT BY ADJUNCTS

	Percent of Lecture Sections Taught by Adjuncts per Academic Year				
Course Subject	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009
Automotive Technology	0% (8)	0% (7)	0% (10)	20% (10)	0% (7)
Applied Health Sciences	26% (19)	16% (19)	25% (20)	22% (18)	29% (21)
Biological Sciences	32% (53)	35% (52)	17% (58)	24% (51)	21% (56)
Business	23% (82)	28% (83)	22% (94)	21% (92)	32% (96)
Computer Sciences	0% (37)	0% (34)	17% (30)	16% (32)	46% (35)
Carpentry			0% (3)	57% (7)	0% (10)
Civil Engineering Technology	0% (7)	0% (7)	0% (8)	71% (7)	0% (10)
Chemistry	6% (49)	23% (43)	23% (43)	29% (52)	22% (46)
Construction Technology			0% (2)	0% (3)	0% (3)
Communications	21% (68)	32% (59)	30% (64)	28% (58)	34% (58)
Drafting Technology	0% (7)	0% (11)	0% (9)	43% (7)	38% (8)
Electrical Engineering					21% (19)
Economics	10% (10)	11% (9)	38% (8)	38% (8)	25% (8)
General Engineering, Electrical Engineering	16% (112)	22% (98)	24% (84)	17% (95)	16% (73)
Environmental Engineering	16% (25)	22% (23)	34% (32)	12% (34)	0% (35)
Geographic Information	67% (3)	75% (4)	60% (5)		
Geological Engineering	0% (18)	0% (17)	0% (16)	0% (20)	0% (16)
Geophysical Engineering	0% (14)	43% (14)	32% (19)	0% (16)	0% (19)
Historic Preservation Technology	100% (2)	50% (2)	100% (10)	60% (5)	100% (7)
Health Care Informatics	20% (15)	38% (13)	23% (13)	6% (17)	25% (16)
Health	67% (3)	88% (8)	55% (20)	35% (23)	46% (24)
Honors					0% (4)
Health, Physical Education, and Recreation	57% (7)	86% (7)	80% (5)	80% (5)	60% (5)
Humanities	14% (76)	12% (73)	20% (61)	33% (57)	45% (58)
Information Technology	28% (75)	33% (79)	26% (86)	24% (78)	26% (80)
Liberal Studies	0% (13)	0% (13)	0% (11)	0% (13)	0% (17)
Pre-Apprenticeship Lineman Program				18% (11)	30% (10)
Metallurgical & Materials Engineering	28% (29)	20% (25)	8% (26)	4% (28)	0% (27)
Mineral Economics	0% (6)	0% (5)	20% (5)	100% (5)	100% (5)
Mathematics	24% (112)	19% (105)	21% (110)	28% (109)	19% (110)
Metals Fabrication	92% (13)	86% (14)	93% (15)	31% (13)	38% (13)
Mining Engineering	5% (22)	0% (22)	24% (21)	14% (22)	16% (25)
Orientation/Student Success	77% (13)	93% (14)	85% (13)	73% (15)	57% (14)
Nursing	47% (45)	38% (40)	24% (37)	13% (45)	3% (35)
Occupational Safety & Health	5% (22)	5% (22)	5% (22)	13% (24)	17% (24)
Petroleum Engineering	34% (41)	20% (35)	37% (46)	27% (45)	15% (40)
Physics	43% (21)	68% (19)	48% (21)	36% (28)	25% (24)
Pre-Professional Health	0% (2)	0% (5)	0% (3)	0% (5)	0% (3)
Psychology	78% (9)	31% (13)	36% (14)	43% (14)	38% (13)
Professional & Technical Communications	28% (47)	17% (47)	43% (37)	38% (42)	61% (46)
Radiologic Technology	100% (2)	13% (8)	31% (13)	10% (10)	11% (9)
Software Engineering	0% (8)	0% (11)	11% (9)	0% (9)	0% (8)
Social Sciences			7% (14)	64% (11)	50% (10)
Society & Technology Studies	0% (3)	0% (2)	50% (2)	0% (2)	0% (2)
TOTAL	23%	25%	26%	24%	25%

- $(\cdot)$ gives the total number of sections taught that academic year.

Some specific examples of adjunct instructors employed by Montana Tech are the following:

- The Business & Information Technology Department has three actively employed CPA's helping as adjunct instructors, each with at least 10 years of real world experience to bring to the classroom. These three adjuncts are used as instructors in
  (a) Principles of Financial Accounting (ACTG 201), and
  (b) Auditing I & II (ACTG 411 and 412).
- The program in Health Care Informatics uses both an M.D. and R.N., employed by the local hospital, as adjuncts, teaching EHR in Medical Practice (HCI 340) and Health Care Facility Procedure (HCI 215), respectively.

2.C.8 **In an effort to further establish an institutions success with respect to student achievement, the Northwest Commission on Colleges and Universities shall require those institutions that offer pre-baccalaureate vocational programs to track State licensing examination pass rates, as applicable, and job placement rates.**

The AAS program in Radiologic Technology requires students to sit for a national certification exam developed by the American Registry of radiologic Technologists (ARRT). Table 2.C.IV gives exam pass rates and job placement rates for the program over the last four years:

TABLE 2.C.IV: RATES FOR AAS DEGREE IN RADIOLOGIC TECHNOLOGY

Academic Year	Number of Radiologic Technology Graduates	Percent of Graduates who took ARRT Exam	ARRT Pass Rate	AAS Radiologic Technology Graduate Placement
2008-2009	15	93%	100%	collect
2007-2008	20	90%	89%	90%
2006-2007	17	94%	94%	94%
2005-2006	7	100%	100%	100%
Average	15	94%	96%	95%

Students in the Associate of Science in Nursing (ASN) program must pass the National Council Licensure Examination for Registered Nurses (NCLEX-RN) in order to gain licensure to practice as a registered nurse. Table 2.C.V gives pass rates and placement information.

TABLE 2.C.V: RATES FOR ASN DEGREES

Academic Year	Number of ASN Graduates	Graduates who took NCLEX-RN Pass Rate	ASN Graduate Placement
2008-2009	25	96%	collect
2007-2008	24	88%	100%
2006-2007	44	70%	98%
2005-2006	40	75%	98%
Average	33	82%	99%

Montana Tech also offers a 14/15 credit Certified Nurse Assistant (CNA) certificate. Because students may sit for the CNA Registry exam after successful completion of the Health (HLTH) 0110-Nursing Fundamentals course, no students have, to date, completed the entire 14/15 credit program. See the Montana Tech catalog (Exhibit G.I) for more details. Table 2.C.VI gives the Registry exam pass rate for Montana Tech students.

TABLE 2.C.VI: RATES FOR CNA REGISTRY EXAM

Academic Year	Number Passing HLTH 0110	Percent Taking Registry Exam	Registry Exam Pass Rate
2008-2009	36	100%	92%
2007-2008	34	91%	97%
2006-2007	38	100%	97%
Average	36	97%	95%

The Career Services Office at Montana Tech tracks job placement rate for graduates. Table 2.C.VII gives the placement rate for Spring 2008 graduates who obtained an Associate of Applied Science or a Certificate of Applied Science.

TABLE 2.C.VII: PLACEMENT RATE FOR AAS DEGREES SPRING 2008

Associate of Science	Graduates	Placement
Registered Nursing	22	100%
Associate of Applied Science		
Accounting Technology	16	88%
Automotive Technology	6	100%
Business Technology	4	100%
Civil Engineering Techology	3	100%
Construction Trade-Carpentry	2	100%
Drafting Technology	3	100%
GIS/GPS	1	100%
Health Care Informatics Technology	1	100%
Medical Assistant	6	67%
Metals Fabrication	9	90%
Network Technology	5	100%
Practical Nursing	2	100%
Radiologic Technology	20	90%
Certificate of Applied Science		
Automotive Technology	4	100%
Computer Assistant	1	100%

For a broader range of tables covering prior years, please see Exhibit 2.C.III.

Standard 2.D Graduate Program

A graduate program is a set of advanced academic experiences beyond the baccalaureate level which must be satisfactorily completed to warrant the award of a graduate degree such as a masters or doctorate. Graduate degree programs may generally be classified into two categories: those that prepare students mainly as scholars and researchers and those that prepare students for a profession. The objective of a research-oriented graduate degree program is to develop scholars that is, students with skills necessary to discover or acquire, organize, and disseminate new knowledge. The objective of the professional graduate degree is to develop in students their competence in interpreting, organizing, and communicating knowledge and to develop the analytical and performance skills needed for the conduct and advancement of professional practice.

2.D.1 **The level and nature of graduate-degree programs are consistent with the mission and goals of the institution.**

Montana Tech offers a Masters degree in the following programs:

- Electrical Engineering.
- General Engineering.
- Environmental Engineering.
- Geosciences.
- Industrial Hygiene.
- Metallurgical/Mineral Processing Enginerring.
- Mining Engineering.
- Petroleum Engineering.
- Project Engineering & Management.
- Technical Communication.

Montana Tech also offers an Interdisciplinary Master's of Science (IMS) and, through The University of Montana-Missoula, a Ph.D. in an Individualized Interdisciplinary Program (IIP). According to the Tech Catalog, the IMS "allows students to work with faculty in the design of a graduate curriculum tailored to their unique academic, creative and professional objectives." The IIP doctoral program allows a faculty member from Montana Tech to serve as chair of the student's graduate committee. See the Catalog for additional details.

All graduate degrees listed above are consistent with Montana Tech's mission, which states that the institution must supply knowledge and education "through a strong undergraduate curriculum augmented by research, graduate education, and service." Also, as stated in the Catalog, the aim of the graduate school 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." This clearly is in agreement with the mission of Montana Tech.

2.D.2 **Programs of study at the graduate level are guided by well-defined and appropriate educational objectives and differ from undergraduate programs in requiring greater depth of study and increased demands on student intellectual or creative capacities.**

To make sure that graduate courses have appropriate depth and breadth, the course must first be approved by the Graduate Council, next by the Curriculum Review Committee, then by the general faculty, and finally by the Montana Board of Regents. This careful approval process for graduate courses ensures that both workload and depth of material are maintained at a significantly greater degree than for undergraduate level courses.

Educational objectives for graduate programs at Montana Tech are currently being developed. A draft copy of these objectives may be viewed at Exhibit 2.D.I.

2.D.3 **When offering the doctoral degree, the institution ensures that the level of expectations, curricula, and resources made available are significantly greater than those provided for masters and baccalaureate level programs.**

Montana Tech does not currently offer its own doctoral degree. The IIP program is through The University of Montana-Missoula.

Standard 2.E Graduate Faculty and Related Resources

Essential to graduate education are the recruitment and retention of a faculty that excels in scholarship, teaching, and research. To provide an acceptable level of instruction for the graduate student, faculty whose responsibilities include a major commitment to graduate education are involved in keeping pace with, and advancing the frontiers of, knowledge.

2.E.1 **The institution provides evidence that it makes available for graduate programs the required resources for faculty, facilities, equipment, laboratories, library and information resources wherever the graduate programs are offered and however delivered.**

Montana Tech provides the appropriate resources for graduate students to be successful. Resources include both qualified faculty and overall assets necessary to deliver graduate offerings. This potential is demonstrated through surveys (Exhibits 2.B.VII, 2.B.VIII) and program reviews (Exhibit 2.A.I). Please see Standards four, five, and eight for other supporting documentation. Note that:

- All tenure-track faculty who have at least a Master's degree are qualified to serve on a student's Graduate Committee. As stated in Standard 4, approximately 70% of tenure track instructional faculty in B.S. programs hold what is a considered a terminal degree (i.e., Ph.D., Ed.D., J.D., or M.D.) in their field.
- A typical Graduate Committee will consist of two members from the student's major program, one from a minor program (if applicable), and additional members as selected by the chair and the student.
- The Graduate Committee is responsible for advising the student on all academic and research matters and will serve as the student's examining committee.

Montana Tech has the required physical resources for graduate programs. These include laboratories, library offerings, and information resources. Please see the relevant program reviews and Standards 5 and 8 for supporting evidence.

2.E.2 **The institution demonstrates a continuing commitment of resources to initiate graduate programs and to ensure that the graduate programs maintain pace with the expansion of knowledge and technology.**

The institution supports graduate education programs on campus in the following ways:

- Montana Tech provides a nominal 3 credit hour of release time per semester for those faculty engaged in research and in graduate student training. This release represents a 25% reduction (from 12 crhrs/semester to 9 crhrs/semester) for the average research-active faculty member who mentors graduate students. These course load reductions may be further enhanced by faculty buyouts funded by external grants.
- New faculty at Montana Tech are provided up to $5000 through the Seed Grant Program. These monies often help faculty and grad students enter new cutting-edge areas of research and graduate study which are later brought to fruition by writing research proposals.

- Research space is made available, but most research equipment is not provided by the institution. Rather, it is obtained thought grant writing efforts of the faculty which, in general, have been fairly successful. Over the last five years, grant funding sources have provided over $1,300,000 for research equipment used both by faculty and by graduate students.
- Support provided to the graduate programs also consists of direct support to the students. For example, in 2008 110 graduate students received $673,209 of total support, with the major portion coming from tuition waivers.
  Deans review tuition wavier allocations on an annual basis and reallocates them to impact the areas of greatest need. Figure 2.E.1 shows the distribution among sources of the support our students received.

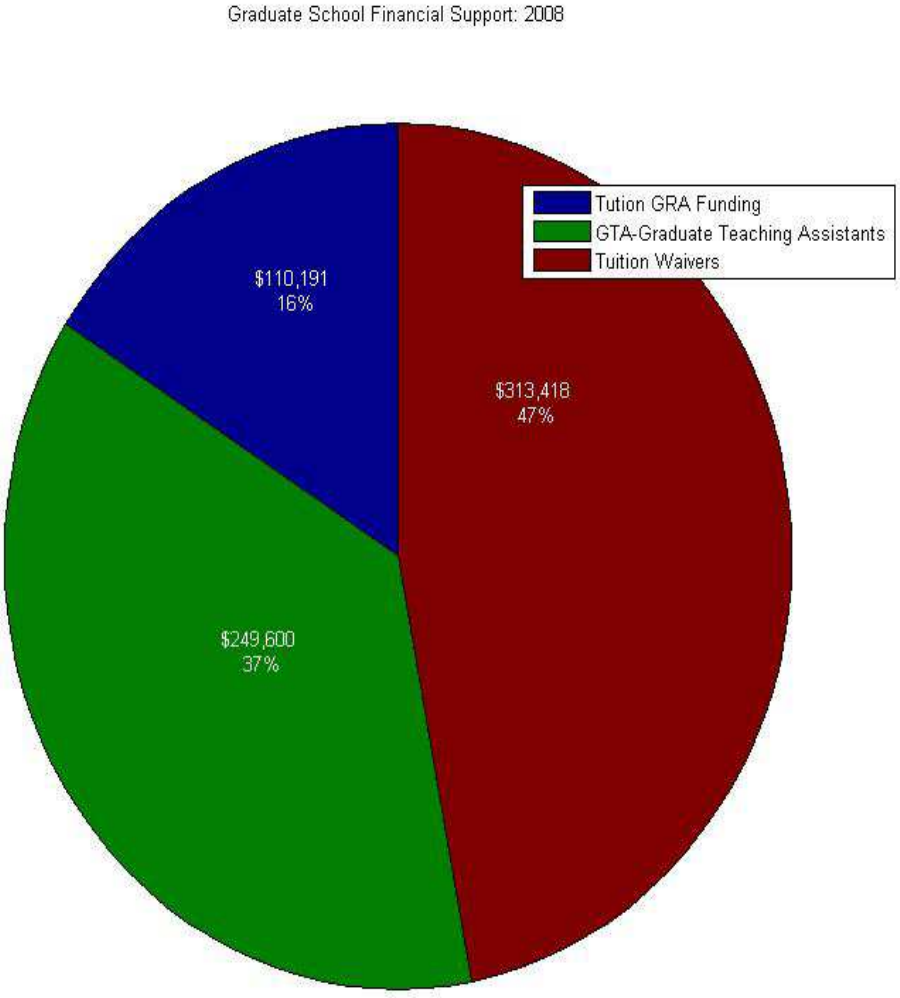

Figure 2.E.1: Graduate School Financial Support

The campus supported 46 students with Graduate Teaching Assistantships and supported 47 students with tuition waivers. Table 2.E.I shows GTA expenditures by department, and Table 2.E.II gives summary GTA information.

TABLE 2.E.I: GTA EXPENDITURES BY DEPARTMENT

	08-09		07-08		06-07		05-06		04-05	
Department	Amount	GTAs	Amount	GTAs	Amount	GTAs	Amount	GTAs	Amount	GTAs
Biology	$8,000	1	$8,000	1	$4,000	1	$4,000	1	$4,000	1
Electrical Eng	$20,000	4								
Environmental Eng	$18,000	4	$16,000	3	$17,000	3	$16,000	3	23,600	3
General Eng	$14,000	4	$44,000	7	$35,000	6	$36,000	7	$32,000	6
Geochemistry	$22,666	4	$24,000	3	$24,000	6	$21,920	5	$24,000	4
Geological Eng	$20,000	3	$16,000	3	$16,000	3	$16,000	4	$16,000	3
Geophysical Eng	$24,000	4	$24,000	4	$24,000	3	$26,000	5	$24,000	5
Industrial Hygiene	$23,603	8	$18,900	12	$16,000	13	$13,000	7	$17,750	10
Metallurgical/Mineral Proc Eng	$23,081	6	$21,100	6	$16,000	5	$18,000	4	$20,000	6
Mining Eng	$16,000	2	$16,000	3	$16,000	2	$16,000	2	$16,000	2
Petroleum Eng	$28,500	8	$28,000	6	$16,000	4	$10,000	3	$8,000	2
Technical Eng	$32,000	5	$26,000	4	$26,000	5	$24,000	5	$28,000	6
Sloan, Biomed Grad/Research			$7,600	1	$7,600	1	$16,680	4	$4,000	1

TABLE 2.E.II: GTA SUMMARY INFORMATION

Year	Amount	Number of GTAs	Graduate School Enrollment
08-09	$249,850	53	109
07-08	$249,600	53	104
06-07	$217,600	52	85
05-06	$217,600	50	93
04-05	$217,350	49	99

Over 85% of eligible students received some form of financial support. The amount of graduate student support provided by grants and contracts is also tracked. In the last year, these sources provided $110,191 in GRA support.

2.E.3 **Institutions offering graduate degrees have appropriate full-time faculty in areas appropriate to the degree offered and whose main activity lies with the institution. Such faculty are related by training and research to the disciplines in which they teach and supervise research.**

As described in section 2.E.1, all tenure-track faculty who have at least a Master's degree are considered graduate faculty. The majority of these faculty hold terminal degrees in areas acceptable to their department, which at Montana Tech would include Ph.D., Ed.D., and J.D. All of these faculty are eligible to serve on graduate thesis committees. A graduate committee may consist of faculty outside of Montana Tech; however, at least one committee member must be from the Montana Tech department which grants the Master's degree.

2.E.4 **Faculty are adequate in number and sufficiently diversified within disciplines so as to provide effective teaching, advising, scholarly and/or creative activity, as well as to participate appropriately in curriculum development, policy development, evaluation, institutional planning, and development. Small graduate programs ordinarily require the participation of several full-time faculty whose responsibilities include a major commitment to graduate education.**

The individuals providing graduate education at Montana Tech are qualified to engage in the multiple roles associated with this type of degree offering. Policy 303.3 of the Montana Board of Regents Policy and Procedures Manual (Exhibit G.II) requires every campus of the Montana University System to conduct an internal review of academic departments at least once every seven years. Please see http://mus.edu/asa/ProgramReviewSchedule.pdf for the current schedule of program reviews. Adequacy of faculty numbers and faculty diversity are assessed during this review. For example, the Electrical Engineering department offers a Masters of Science degree. As demonstrated in their department review (see

Exhibit 2.A.I), all the tenure-track faculty hold a Ph.D., are actively engaged in relevant research, advise graduate students, and serve on important university committees.

In addition to the formal program review, all graduate offerings are reviewed on a yearly basis both through departmental meetings and through yearly meetings of the Graduate Council.

2.E.5 **In the delivery of off-campus programs, full-time faculty whose responsibilities include a major commitment to graduate education provide physical presence and participation in the planning, delivery, and assessment of the programs.**

Montana Tech offers two Master's degrees online: one in Industrial Hygiene; and the other in Project Engineering & Management. Both of these are designed and managed by full-time faculty. The Industrial Hygiene degree is part of the Safety, Health and Industrial Hygiene department. The Project Engineering & Management degree is currently directed by the Environmental Engineering Department Head. Please see the departmental reviews (Exhibit 2.A.I) for further details.

2.E.6 **The institution that offers the doctoral degree has a core of full-time faculty active in graduate education at its main campus and at each off-campus location where doctoral programs are offered.**

Montana Tech does not offer a doctoral degree.

Standard 2.F Graduate Records and Academic Credit

Graduate admission and retention policies ensure that student qualifications and expectations are compatible with institutional mission and goals. Graduate program faculty are involved in specifying admission criteria, transfer or graduate credit, and graduation requirements.

2.F.1 **Graduate program admission policies and regulations are consistent with and supportive of the character of the graduate programs offered by the institution. These policies and regulations are published and made available to prospective and enrolled students.**

To ensure that the admission procedure is compatible with the goals of a department's graduate program, each graduate department's program head recommends admission status with the concurrence of the Dean of Graduate Studies. As stated in the Catalog, there are three types of admission to Graduate School:

- Regular Admission–granted to an applicant who
  (a) holds a baccalaureate or acceptable terminal degree in a field applicable to the graduate program;
  (b) has at least a 3.00 GPA;
  (c) has acceptable GRE scores (when applicable);
  (d) shows potential for graduate study.
- Provisional Admission–granted to an applicant who
  (a) is deficient in some undergraduate courses in his or her major field; or
  (b) student admitted has not satisfied all the requirements for regular admission.

  (Students admitted on a provisional status typically have two semesters to remove any stated provisions and must have at least a 2.7 GPA or at least a 3.0 GPA the last four semesters of their undergraduate career.)
- Provisional Probation Admission–granted to an applicant who
  (a) meets the criteria for Provisional Status but whose GPA is between 2.5 and 2.69. (Students admitted under this status are on academic probation and have one semester to achieve at least a 3.0 GPA.)

See the Catalog for additional details concerning admission policies and regulations.

2.F.2 **Submitted with the formal application such as undergraduate and graduate transcripts, official reports on nationally recognized tests, and evaluations by professionals in the field or other faculty-controlled evaluation procedures.**

Admission to graduate programs is based on information submitted by the applicant. This information includes transcripts, three references, GRE results when applicable, a personal/professional statement, and immunization records. Additionally, for international students, a statement of financial support and the TOEFL score (when the student's first language is not English) is required.

2.F.3 **Faculty teaching in graduate programs are involved in establishing both general admission criteria for graduate study as well as admission criteria to specific graduate programs.**

Faculty are involved in establishing admission criteria for a department's graduate program. For example, this occurs within departments at department meetings, through representation on the Graduate Council, and at general faculty meetings.

2.F.4 **Graduation requirements for advanced degrees offered by the institution are determined by the faculty teaching in the applicable graduate programs. At minimum, the policies governing these graduation requirements include:**

- **the specified time period in which the degree must be completed;**
- **the number of credit hours that must be completed at the degree-granting institution, normally at least two-thirds of those required for the degree;**
- **the minimum number of graduate-level credits, normally at least 50% of those required for the degree;**
- **for the masters degree, a minimum of one academic year of full-time study or its equivalent, with a minimum of 24 semester or 36 quarter hours;**
- **the number of graded credit hours that must be earned for the degree;**
- **the minimum standard of performance or acceptable grade point average, normally a B or its equivalent;**
- **the types of qualifying and exit examinations which the candidate must pass;**
- **the proficiency requirements the candidate must satisfy; and**
- **the thesis, dissertation, writing, or research requirement which the candidate must satisfy.**

Graduate faculty are responsible for establishing requirements for Master's degrees by means of the following: through participation in graduate departmental meetings, through representation on the Graduate Council, through representation on the Curriculum Review Committee, and at general faculty meetings. In addition, specific course work and thesis requirements for graduation are set by faculty on the individual student's Graduate Committee. General requirements that apply to all graduate students, regardless of the program of study, are published in the Catalog (Exhibit G.1). Also, department-specific requirements are found under each graduate department's listing in the Catalog.

2.F.5 **Transfer of graduate credit is evaluated by faculty based on policies established by faculty whose responsibilities include a major commitment to graduate education, or by a representative body of such faculty who are responsible for the degree program at the receiving institution. The amount of transfer credit granted may be limited by the age of the credit, the institution from which the transfer is made, and the appropriateness of the credit earned to the degree being sought.**

Students may apply up to 6 credits taken at other graduate schools to a Montana Tech graduate program. However, the credits must 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 as applicable to the student's program.

Once admitted to a Master's program, the student has six calendar years to complete all degree requirements. 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.

2.F.6 **Graduate credit may be granted for internships, field experiences, and clinical practices that are an integral part of the graduate degree program. Consistent with Policy 2.3 Credit for Prior Experiential Learning, credit may not be granted for experiential learning which occurred prior to the students matriculation into the graduate degree program. Unless the graduate students faculty advisor structures the current learning experience and monitors and assesses the learning and its outcomes, no graduate credit is granted for current learning experiences external to the students formal graduate program.**

A specific graduate program may grant credit for an internship only if both the student's Graduate Committee and the Dean of Graduate Studies approve. Moreover, Montana Tech does not give credit for prior experiential learning.

Standard 2.G Continuing Education and Special Learning Activities

The changing nature of the demands placed upon individuals in todays society requires many of them to engage in life-long education. Many higher education institutions have incorporated into their missions an extension and public service component to provide for life-long learning opportunities. These opportunities are referred to as continuing education, professional development, extension education, outreach, special programs, public and community service programs. Such programs may be for either undergraduate or graduate credit, or non-credit, may be offered on and off campus, and may be offered through a variety of instructional formats.

The provisions of this standard apply to:

- **Off-campus programs and courses for credit, including those at branch campuses, extension centers or satellite sites, external degree programs, and military base programs.**
- **Degree-completion programs.**
- **Distance learning courses and courses taught exclusively on or off campus by special delivery systems, such as computer-based instruction, correspondence, television, video or audio cassette, or through other electronically-accessed means.**
- **Practices providing credit for prior experiential learning.**
- **Travel/study and study abroad programs.**
- **Courses certified by the institution offered in secondary schools for college or university academic credit.**
- **Non-credit community service programs and courses, including those that offer Continuing Education Units (CEU).**
- **Relicensure courses, in-service, and credential programs.**
- **Testing, evaluation, and examination procedures for granting degree credit.**
- **Workshops, seminars, short courses, conferences, institutes, special evening and summer programs.**

Off-Campus and Other Special Programs Providing Academic Credit

Continuing education and special learning activities, programs, and courses offered for credit are consistent with the educational mission and goals of the institution. Such activities are integral parts of the institution and maintain the same academic standards as regularly offered programs and courses. The institution maintains direct and sole responsibility for the academic quality of all aspects of all programs and courses through the management and supervision by faculty and institutional administrators. Adequate resources to maintain high quality programs are ensured.

2.G.1 **The institution provides evidence that all off-campus, continuing education (credit and non-credit), and other special programs are compatible with the institutions mission and goals, and are designed, approved, administered, and periodically evaluated under established institutional procedures.**

All of Montana Tech's distance delivery courses follow the same rules and procedures for implementation, instruction, and evaluation as all other courses offered for academic credit. See Standards 2.A, 2.B, and 2.C for the details of these processes. Montana Tech provides adequate resources for distance education. Some recent (over the last five years) developments include:

- Creating and staffing the new position of Distance Learning Coordinator.

- Forming an eLearning Advisory Committee at.
- Purchasing Wimba, a collaboration tool, that includes Wimba Pronto
- Building new high tech computer labs.
- Giving every faculty member access to a Blackboard course shell.
- Giving every faculty member access to Wimba.
- Purchasing two new portable Tandberg units.
- Training faculty in Blackboard and Wimba use.

(See Standard 5-IT and Standard 8 for additional details concerning Blackboard, Wimba, and the high tech computer labs.)

The types of distance education available through Montana Tech include:

- Synchronous courses delivered online in real time through Wimba, Polycom, or Tandberg.
- Asynchronous courses delivered anytime, anywhere through the Internet and Blackboard.
- Blended courses, where distance students sit in on traditional courses via collaboration tools such as Wimba.
- Hybrid courses which combine face-to-face instruction with computer-mediated instruction.
- Live video conferencing through Wimba, Polycom, or Tandberg.

Over the last five years, 32%-34% of faculty have taught online courses at Montana Tech. As demonstrated in Table 2.G.I, the faculty teaching online courses have typically scored well on student course evaluations.

TABLE 2.G.I: SUMMARY OF COURSE EVALUATIONS FOR ONLINE COURSES

Statement	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	N
Freshman and Sophomore Courses						
The instructor has a concern for the quality of teaching and learning	34%	38%	20%	4%	4%	2104
The quality of teaching was very effective in contributing to my learning	32%	36%	18%	7%	6%	2078
The instructor is well prepared	36%	41%	14%	5%	4%	2071
Junior and Senior Courses						
The instructor has a concern for the quality of teaching and learning	37%	43%	14%	3%	4%	508
The quality of teaching was very effective in contributing to my learning	35%	41%	13%	4%	7%	511
The instructor is well prepared	38%	46%	10%	3%	3%	500
Graduate Courses						
The instructor has a concern for the quality of teaching and learning	40%	44%	14%	1%	0%	240
The quality of teaching was very effective in contributing to my learning	34%	42%	17%	5%	2%	238
The instructor is well prepared	38%	49%	8%	3%	1%	240

See Exhibit 2.B.I for further examples of student course evaluations.

2.G.2 **The institution is solely responsible for the academic and fiscal elements of all instructional programs it offers. The institution conforms to Policy A-6 Contractual Relationships with Organizations Not Regionally Accredited.**

Montana Tech is solely responsible for the academic and fiscal elements of all its programs. Montana Tech has no contractual relationships with organizations which are not regionally accredited.

2.G.3 **Full-time faculty representing the appropriate disciplines and fields of work are involved in the planning and evaluation of the institutions continuing education and special learning activities.**

All courses offered at Montana Tech are for academic credit, and thus follow all regulations of the regular academic curriculum. Montana Tech offers several courses for continuing education credit. These courses are transcripted accordingly, and full-time faculty are involved in the planning, evaluation (and often) the implementation of these academic offerings.

2.G.4 **The responsibility for the administration of continuing education and special learning activities is clearly defined and an integral organizational component of the institutions organization.**

Continuing education is administered through the office of Enrollment Services and is managed accordingly. Often, special learning activities occur through the Office of Technical Outreach. A description of the learning activities sponsored by Technical Outreach as well as how the Outreach program is organized can be found at
http://www.mtech.edu/about/outreach.htm

2.G.5 **Programs and courses offered through electronically-mediated or other distance delivery systems provide ready access to appropriate learning resources and provide sufficient time and opportunities (electronic or others) for students to interact with faculty.**

Montana Tech uses the following learning resources for its online distance education courses:

- Wimba (a collaboration tool),
- Camtasia (screen recorder and presentation software),
- Polycom (a high end video conferencing system),
- Tandberg (a high end video conferencing system), and
- PVX software on a laptop for Polycom.

Further descriptions of Tech's electronic delivery of courses can be found in Standard 2.G.1.

2.G.6 **There is an equitable fee structure and refund policy.**

Montana Tech's fee structure is equitable to students and approved by the Montana Board of Regents. The fee structure can be found in the Montana Tech Catalog (Exhibit G.I) and online
at http://www.mtech.edu/business/Tuition_and_Fee.htm

The fee structure for Continuing Education courses at Montana Tech is based on the notion of self-sufficiency. Generally, a $30 per credit transcript and processing fee is considered the base charge. Then the cost of the course is used to determine the total fee. Lab fees, instructor compensation, materials, travel and program sustainability are all considered when determining the full continuing education course fee. The unique funding needs of each course is considered when setting the fee.

2.G.7 **The granting of credit for continuing education courses and special learning activities is based upon institutional policy, consistent throughout the institution, and applied wherever located and however delivered. The standard of one quarter hour of credit for 30 hours or one semester hour of credit for 45 hours of student involvement is maintained for instructional programs and courses.**

Through the centralized management of Continuing Education in the Office of Enrollment Services, institutional policies are adhered to with consistency. Standards for student involvement hours, costs, and transcripting are applied to all continuing education opportunities. Additionally, when the Office of Technical Outreach 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). For more information regarding CEU credit, visit the IACET website, www.iacet.org.

2.G.8 **Continuing education and/or special learning activities, programs, or courses offered for academic credit are approved in advance by the appropriate institutional body and monitored through established procedures.**

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.

2.G.9 **Credit for prior experiential learning is offered only at the undergraduate level and in accordance with Policy 2.3 Credit for Prior Experiential Learning.**

Montana Tech does not award credit for prior experiential learning.

2.G.10 **An institution offering an external degree, degree-completion program, or special degree has clearly articulated policies and procedures concerning admission to the program, transfer of prior-earned credit, credit by examination (e.g., College Level Examination Program (CLEP) of the College Entrance Examination Board and the institutions own examinations), credit for prior experiential learning, credit by evaluation, and residency requirements.**

All degree programs at Montana Tech are are listed in the Montana Tech Catalog (See Exhibit G.I). Transfer of credit policies, as well as policies regarding credit by examination (AP or CLEP) are also explained in the Catalog.

2.G.11 **When credit is measured by outcomes alone or other nontraditional means, student learning and achievement are demonstrated to be at least comparable in breadth, depth, and quality to the results of traditional instructional practices.**

When students are awarded 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 outcomes model are also responsible for the traditional educational model.

2.G.12 **Travel/study courses meet the same academic standards, award similar credit, and are subject to the same institutional control as other courses and programs offered by the sponsoring or participating institution. Credit is not awarded for travel alone. The operation of these programs is consistent with Policy 2.4 Study Abroad Programs, and Policy A-6 Contractual Relationships with Organizations Not Regionally Accredited.**

Montana Tech has a learning agreement with Luleå University of Technology in Luleå, Sweden. The announcement sent to students describing this agreement is the following:

"Take advantage of the learning agreement between MT Tech and Luleå University of Technology in Luleå, Sweden, and open your mind and broaden your horizons. The learning agreement includes the exchange of both undergraduate and graduate students, faculty and scientific personnel, and the organization of conferences, seminars, and workshops. Luleå has a population of about 70,000 and is located in the northeastern part of the country. The city centre is on a peninsula, and water plays an important part in the lives of Lule inhabitants. The city has developed into a technological centre in the North of Sweden. The most important corner-stones of this development are metallurgy, education and research. Luleå University offers nearly 200 courses in English in departments such as Business Administration and Social Sciences, Chemical and Metallurgical Engineering, Civil and Mining Engineering, Computer Science and Electrical Engineering, and Languages and Literature (please see the admissions website below for a complete list). You need about $3000.00 to get you started with living expenses for approximately three months. In order to obtain an entry visa to Sweden, you must prove that you can finance your whole stay in the country. The Swedish academic year comprises two semesters similar to ours and runs from the mid of August to mid-January and mid-January to the first week of June (does not include orientation). Student staying for

Fall semester only, can do their exams before Christmas to be able to go home before Spring semester starts at home. Exchange students arriving in August are encouraged to join the annual orientation program planned for first year students. During this time, upper-level students present a complete program for all newcomers including orientation to student life and lots of parties. An intensive course in Swedish for beginners is offered free of charge to all exchange students during the orientation program. Application Deadlines- Fall term: April 15, 2009 Spring term: October 15, 2009."

The formal agreement between the two schools is found at Exhibit 2.G.I.

Montana Tech graduate students may participate in the International Exchange Program by applying to the Thesis Abroad Program. The academic standards that apply to this program are the same as the standards that apply to all graduate students at Montana Tech. As described in the Montana Tech graduate school catalog,

"The program provides one semester of financial support to Montana Tech graduate students participating in approved thesis research at collaborating foreign institutions. Students must be full time graduate students in good academic standing. Typically applicants will be expected to have completed their first year of graduate study at Montana Tech.

Students are required to participate in ongoing research projects at the host institution under the mentorship of an approved host faculty member. The students' Thesis Committee and the Department Head must approve the research topic and the collaborating foreign institution in advance."

Further details may be found at
http://www.mtech.edu/gradschl-auth/thesis_abroad_instructions.html

Standard 2.H Non-credit Programs and Courses

Non-credit programs and courses, including those that award Continuing Education Units (CEU), are consistent with the mission and goals of the institution. These offerings are characterized by high quality instruction with qualified instructors.

2.H.1 **1 Non-credit programs and courses are administered under appropriate institutional policies, regulations, and procedures. Faculty are involved, as appropriate, in planning and evaluating non-credit programs.**

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

2.H.2 **The institution maintains records for audit purposes which describe the nature, level, and quantity of service provided through non-credit instruction.**

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

2.H.3 **When offering courses that award Continuing Education Units (CEU), the institution follows national guidelines for awarding and recording such units which call for one CEU being equivalent to 10 hours of instruction and appropriate to the objectives of the course. (See Glossary, Continuing Education Unit, and Policy A-9 Non-credit, Extension, and Continuing Education Studies.)**

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, these courses are delivered through the Office of Technical Outreach, and the practice and policy followed is in accord with national guidelines as established by the International Association for Continuing Education and Training (IACET). For more information regarding CEU credit, visit the IACET website, www.iacet.org.

In conclusion, under Standard 2, we have identified the following strengths, opportunities for improvement, and ways to move forward.

Strengths

Montana Tech has achieved and maintains a high level of quality within academic programs. Evidence supporting this is given by the following:

- The high placement rate for Montana Tech graduates.
- The high overall average scores on licensing and assessment exams (e.g., the scores on the MAPP exam, discussed in 2.B.2).
- Faculty who are dedicated to quality advising and instruction.
- The quality and availability of research and internship opportunities for students.

Opportunities for Improvement

The challenges faced by Montana Tech include the following:

- Montana Tech administrators and faculty recognize the need to increase student retention.
- While staffing at Montana Tech is currently adequate overall, some departments teach classes with large enrollments. Large classes may, at times, impede an instructors ability to provide conditions favorable for optimal student learning.
- The current procedure for identifying courses that satisfy the objectives of the general education curriculum is not well defined. This has lead to a haphazard approach when considering a course for inclusion in the general education program.

Moving Forward

Montana Tech is moving forward by addressing the challenges listed above with the following methods:

- The Advising/Retention committee is charged with making recommendations to improve retention.
- The college Deans perform a yearly analysis to identify departments where staffing is insufficient. Then, subject to funding availability, the hiring of additional faculty within these departments is approved.
- The General Education committee is charged with developing a systemic procedure for identifying courses suitable for the general education program.

Policy 2.1 General Education/Related Instruction Requirements

General Education and related instruction requirements are addressed in Standard 2.C. Some highlights are reproduced below.

The general education core, as described in the catalog, consists of the following academic areas and respective credits:

- Communications (6 credits)
- Humanities (6 credits)
- Mathematical Sciences (6 credits)
- Physical & Life Sciences (6-7 credits, a lab course required)
- Social Sciences (6 credits).

The expected outcomes of the general education curriculum are the following (as published in the catalog):

- Ability to express oneself both in written form and orally.
- Proficient critical thinking skills.
- Global and multi-cultural awareness.
- Appreciation for diversity.
- Understanding of scientific methods.
- Ability to function adequately at an algebraic level.
- An appreciation for life-long learning.

As discussed in Standards 2.B.1 and 2.C.2, these outcomes are assessed by requiring all students seeking a baccalaureate degree to complete The Educational Testing Service Measure of Academic Proficiency and Progress (MAPP) exam.

Policy 2.2 Educational Assessment

Educational assessment at Montana Tech is discussed throughout the self-study. Specific examples of departmental assessment activities can be found in Standard 2.B, Table 2.B.I. Some additional information regarding the students attending Montana Tech, as well as some assessment results for some of the freshmen courses taught, are provided below.

Table 2.P.I provides information about students attending Montana Tech, while Table 2.P.II gives the retention rate for these students.

TABLE 2.P.I: MONTANA TECH STUDENTS

Year	N	Full Time	Part Time	Resident Fee	Non Resident Fee	Foreign Sts.	Transfer Sts.	Male	Female	Fresh.	Soph.	Jr.	Sr.	Post Baccalaureate	Grad Sts.
F04	2188	82%	18%	88%	12%	3%	6%	55%	45%	46%	18%	10%	18%	3%	5%
F05	2234	79%	21%	87%	13%	3%	7%	55%	45%	46%	21%	12%	15%	2%	4%
F06	2357	80%	20%	85%	13%	4%	7%	56%	44%	46%	19%	13%	16%	2%	4%
F07	2347	82%	18%	84%	16%	5%	8%	59%	41%	44%	21%	11%	17%	3%	4%
F08	2402	81%	19%	82%	17%	7%	7%	60%	40%	47%	19%	12%	15%	3%	5%
F09	2694	83%	17%	82%	18%	8%	9%	60%	40%	46%	20%	11%	15%	3%	5%

TABLE 2.P.II: MONTANA TECH RETENTION RATE

	Full Time Freshmen Retention Rate (IPEDS)		150% Normal Time Graduation Rate (IPEDS)	
Year	North Campus	South Campus	North Campus	South Campus
F04	60%	40%	40%	24%
F05	69%	37%	42%	21%
F06	67%	36%	38%	23%
F07	75%	37%	41%	15%
F08	69%	30%	38%	9%

- North Campus: Programs granting Bachelors or Masters degrees.
- South Campus: Programs granting only Associate degrees or Certificates.
- North Campus Freshmen Retention Rate: The percentage of first-time, degree-seeking, full-time freshmen from the previous fall who are again enrolled in the current fall.
- South Campus Freshmen Retention Rate: The percentage of first-time, degree/certificate-seeking, full-time freshmen from the previous fall who either enrolled again in the current fall or completed their program by the current fall.

Tables 2.P.III - 2.P.XV provide a comparison of grades and retention rates for students who satisfy a course prerequisite with those who don't. The following courses are examined:

- Tables 2.P.III and 2.P.IV

  (i) M.T. College Success. As described in the Montana Tech catalog, "This course is designed to teach students how to have a successful college experience both academically and personally."

TABLE 2.P.III: FRESHMEN AND THE
M.T. COLLEGE SUCCESS COURSE, SOUTH CAMPUS

				Enrolled in M.T. 1016				
		Enrolled in M.T. 1016		Grade		Retention for Students with Grade		Retention for Full Time
Year	N	Yes	No	$< C-$	$\geq C-$	$< C-$	$\geq C-$	Freshmen
F04	94	16%	84%	53%	47%	25%	43%	37%
F05	103	17%	83%	24%	76%	25%	69%	36%
F06	124	10%	90%	42%	58%	20%	29%	37%
F07	134	15%	85%	50%	50%	0%	40%	30%
F08	134	19%	81%	24%	76%	17%	21%	
F09	161	23%	77%	22%	78%			

∗ South Campus: Programs granting only Associate degrees or Certificates.

∗ Freshmen: First-time, degree/certificate-seeking, full-time freshmen

∗ $<$ C- includes D, F, W

∗ South Campus Freshmen Retention Rate: The percentage of first-time, degree/certificate-seeking, full-time freshmen from the current fall who either enrolled again next fall or completed their program.

TABLE 2.P.IV: FRESHMEN AND THE
M.T. COLLEGE SUCCESS COURSE, NORTH CAMPUS

				Enrolled in M.T. 1016				
		Enrolled in M.T. 1016		Grade		Retention for Students with Grade		Retention for Full Time
Year	N	Yes	No	< C-	≥ C-	< C-	≥ C-	Freshmen
F04	289	18%	82%	19%	81%	10%	65%	69%
F05	277	17%	83%	17%	83%	25%	82%	67%
F06	327	21%	79%	17%	83%	17%	64%	75%
F07	292	16%	84%	11%	89%	60%	67%	69%
F08	347	20%	80%	1%	99%	0%	71%	
F09	326	11%	89%	22%	78%			

* North Campus: Programs granting Bachelors or Masters degrees.
* Freshmen: First-time, degree-seeking, full-time freshmen
* < C- includes D, F, W
* North Campus Freshmen Retention Rate: The percentage of first-time, degree-seeking, full-time freshmen from the current fall who enrolled again next fall.

- Tables 2.P.V and 2.P.VI

  (i) M 90 Introductory Algebra. As described in the catalog, this course is a "Brief review of fractions and decimals."

TABLE 2.P.V: FRESHMEN AND M 90, SOUTH CAMPUS

					Students without Prereq				Students with Prereq				
			Satisfied Prerequisite		Grade		Retention for Students with Grade		Grade		Retention for Students with Grade		Retention For Full Time
Year	N	Yes	No	Unknown	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	Freshmen
F04	20	65%	35%	0%	57%	43%	0%	33%	38%	62%	20%	63%	37%
F05	38	39%	26%	34%	20%	80%	100%	50%	33%	67%	0%	60%	36%
F06	31	39%	16%	45%	0%	100%		60%	33%	67%	0%	50%	37%
F07	33	70%	30%	0%	40%	60%	50%	83%	43%	57%	20%	38%	30%
F08	44	86%	9%	5%	25%	75%	0%	100%	29%	71%	9%	52%	
F09	36	86%	11%	3%	25%	75%			42%	58%			

* South Campus: Programs granting only Associate degrees or Certificates.
* Freshmen: First-time, degree/certificate-seeking, full-time freshmen
* < C- includes D, F, W
* South Campus Freshmen Retention Rate: The percentage of first-time, degree/certificate-seeking, full-time freshmen from the current fall who either enrolled again next fall or completed their program.

TABLE 2.P.VI: FRESHMEN AND M 90, NORTH CAMPUS

Year	N	Satisfied Prerequisite			Students without Prereq				Students with Prereq				Retention For Full Time Freshmen
					Grade		Retention for Students with Grade		Grade		Retention for Students with Grade		
		Yes	No	Unknown	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	
F04	13	23%	62%	15%	38%	63%	0%	20%	33%	67%	0%	0%	69%
F05	12	17%	42%	42%	20%	80%	0%	50%	50%	50%	0%	0%	67%
F06	16	13%	44%	44%	57%	43%	25%	100%	50%	50%	0%	0%	75%
F07	10	80%	10%	10%	0%	100%		100%	38%	63%	33%	40%	69%
F08	20	95%	0%	5%					26%	74%	40%	57%	
F09	29	97%	3%	0%	0%	100%			21%	79%			

- North Campus: Programs granting Bachelors or Masters degrees.
- Freshmen: First-time, degree-seeking, full-time freshmen
- < C- includes D, F, W
- North Campus Freshmen Retention Rate: The percentage of first-time, degree-seeking, full-time freshmen from the current fall who enrolled again next fall.

- Tables 2.P.VII and 2.P.VIII

  (i) M 95 Intermediate Algebra. As described in the catalog, this course is an "Introduction to algebra; notations and definitions; addition and subtraction of signed numbers; simple equations;"

TABLE 2.P.VII: FRESHMEN AND M 95, SOUTH CAMPUS

Year	N	Satisfied Prerequisite			Students without Prereq				Students with Prereq				Retention For Full Time Freshmen
					Grade		Retention for Students with Grade		Grade		Retention for Students with Grade		
		Yes	No	Unknown	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	
F04	15	33%	53%	13%	38%	63%	67%	100%	20%	80%	0%	50%	37%
F05	12	50%	33%	17%	50%	50%	50%	0%	0%	100%		100%	36%
F06	31	42%	32%	26%	40%	60%	25%	83%	23%	77%	33%	20%	37%
F07	22	50%	41%	9%	11%	89%	0%	38%	18%	82%	0%	33%	30%
F08	19	79%	11%	11%	0%	100%		0%	33%	67%	20%	50%	
F09	25	76%	24%	0%	0%	100%			47%	53%			

- South Campus: Programs granting only Associate degrees or Certificates.
- Freshmen: First-time, degree/certificate-seeking, full-time freshmen
- < C- includes D, F, W
- South Campus Freshmen Retention Rate: The percentage of first-time, degree/certificate-seeking, full-time freshmen from the current fall who either enrolled again next fall or completed their program.

TABLE 2.P.VIII: FRESHMEN AND M 95, NORTH CAMPUS

Year	N	Satisfied Prerequisite			Students without Prereq				Students with Prereq				Retention For Full Time Freshmen
					Grade		Retention for Students with Grade		Grade		Retention for Students with Grade		
		Yes	No	Unknown	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	
F04	52	12%	88%	0%	30%	70%	29%	66%	33%	67%	50%	50%	69%
F05	52	10%	77%	13%	25%	75%	40%	70%	0%	100%		100%	67%
F06	48	23%	73%	4%	40%	60%	21%	76%	73%	27%	13%	0%	75%
F07	21	29%	71%	0%	33%	67%	40%	70%	33%	67%	50%	75%	69%
F08	45	84%	16%	0%	29%	71%	100%	100%	18%	82%	29%	68%	
F09	47	74%	26%	0%	17%	83%			11%	89%			

* North Campus: Programs granting Bachelors or Masters degrees.
* Freshmen: First-time, degree-seeking, full-time freshmen
* < C- includes D, F, W
* North Campus Freshmen Retention Rate: The percentage of first-time, degree-seeking, full-time freshmen from the current fall who enrolled again next fall.

- Tables 2.P.IX and 2.P.X

  (i) M 121 College Algebra. The catalog description states the course "Covers standard topics of college algebra including linear and quadratic functions,"

TABLE 2.P.IX: FRESHMEN AND M 121, SOUTH CAMPUS

Year	N	Satisfied Prerequisite			Students without Prereq				Students with Prereq				Retention For Full Time Freshmen
					Grade		Retention for Students with Grade		Grade		Retention for Students with Grade		
		Yes	No	Unknown	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	
F04	3	67%	33%	0%	0%	100%		100%	50%	50%	0%	100%	37%
F05	7	71%	29%	0%	50%	50%	0%	0%	0%	100%		60%	36%
F06	10	70%	20%	10%	0%	100%		50%	43%	57%	33%	100%	37%
F07	8	75%	25%	0%	50%	50%	0%	0%	67%	33%	50%	100%	30%
F08	8	100%	0%	0%					38%	63%	67%	40%	
F09	1	100%	0%	0%					100%	0%			

* South Campus: Programs granting only Associate degrees or Certificates.
* Freshmen: First-time, degree/certificate-seeking, full-time freshmen
* < C- includes D, F, W
* South Campus Freshmen Retention Rate: The percentage of first-time, degree/certificate-seeking, full-time freshmen from the current fall who either enrolled again next fall or completed their program.

TABLE 2.P.X: FRESHMEN AND M 121, NORTH CAMPUS

Year	N	Satisfied Prerequisite			Students without Prereq				Students with Prereq				Retention For Full Time Freshmen
					Grade		Retention for Students with Grade		Grade		Retention for Students with Grade		
		Yes	No	Unknown	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	
F04	56	48%	52%	0%	24%	76%	43%	68%	22%	78%	33%	62%	69%
F05	81	42%	51%	7%	46%	54%	53%	59%	32%	68%	36%	70%	67%
F06	88	50%	48%	2%	33%	67%	29%	89%	27%	73%	50%	81%	75%
F07	49	39%	59%	2%	34%	66%	20%	79%	11%	89%	50%	76%	69%
F08	45	87%	13%	0%	17%	83%	100%	100%	28%	72%	55%	75%	
F09	52	85%	13%	2%	29%	71%			27%	73%			

* North Campus: Programs granting Bachelors or Masters degrees.
* Freshmen: First-time, degree-seeking, full-time freshmen
* < C- includes D, F, W
* North Campus Freshmen Retention Rate: The percentage of first-time, degree-seeking, full-time freshmen from the current fall who enrolled again next fall.

- Tables 2.P.XI and 2.P.XII

  (i) M 151 Precalculus. The catalog description states the course "Includes the study of linear, polynomial, exponential, logarithmic and trigonometric functions and conic sections."

TABLE 2.P.XI: FRESHMEN AND M 151, SOUTH CAMPUS

Year	N	Satisfied Prerequisite			Students without Prereq				Students with Prereq				Retention For Full Time Freshmen
					Grade		Retention for Students with Grade		Grade		Retention for Students with Grade		
		Yes	No	Unknown	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	
F04													37%
F05													36%
F06													37%
F07	1	100%	0%	0%					100%	0%	0%		30%
F08	1	0%	100%	0%	0%	100%		0%					
F09	4	100%	0%	0%					25%	75%			

* South Campus: Programs granting only Associate degrees or Certificates.
* Freshmen: First-time, degree/certificate-seeking, full-time freshmen
* < C- includes D, F, W
* South Campus Freshmen Retention Rate: The percentage of first-time, degree/certificate-seeking, full-time freshmen from the current fall who either enrolled again next fall or completed their program.

TABLE 2.P.XII: FRESHMEN AND M 151, NORTH CAMPUS

Year	N	Satisfied Prerequisite			Students without Prereq				Students with Prereq				Retention For Full Time Freshmen
					Grade		Retention for Students with Grade		Grade		Retention for Students with Grade		
		Yes	No	Unknown	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	
F04													69%
F05													67%
F06													75%
F07	61	54%	41%	5%	36%	64%	56%	69%	30%	70%	10%	78%	69%
F08	92	89%	10%	1%	33%	67%	33%	100%	39%	61%	44%	84%	
F09	77	94%	6%	0%	0%	100%			26%	74%			

- North Campus: Programs granting Bachelors or Masters degrees.
- Freshmen: First-time, degree-seeking, full-time freshmen
- < C- includes D, F, W
- North Campus Freshmen Retention Rate: The percentage of first-time, degree-seeking, full-time freshmen from the current fall who enrolled again next fall.

- Table 2.P.XIII

  (i) M 171 Calculus I. The catalog description states the course "Includes the study of limits of functions, continuous functions, tangents and derivatives,".

TABLE 2.P.XIII: FRESHMEN AND M 171, NORTH CAMPUS

Year	N	Satisfied Prerequisite			Students without Prereq				Students with Prereq				Retention For Full Time Freshmen
					Grade		Retention for Students with Grade		Grade		Retention for Students with Grade		
		Yes	No	Unknown	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	
F04	52	83%	8%	10%	50%	50%	100%	50%	23%	77%	70%	85%	69%
F05	46	91%	7%	2%	33%	67%	100%	100%	12%	88%	40%	81%	67%
F06	59	76%	20%	3%	33%	67%	100%	88%	13%	87%	67%	92%	75%
F07	48	88%	13%	0%	17%	83%	100%	80%	29%	71%	75%	83%	69%
F08	95	88%	5%	6%	20%	80%	100%	75%	23%	77%	63%	80%	
F09	77	90%	8%	3%	17%	83%			23%	77%			

- North Campus: Programs granting Bachelors or Masters degrees.
- Freshmen: First-time, degree-seeking, full-time freshmen
- < C- includes D, F, W
- North Campus Freshmen Retention Rate: The percentage of first-time, degree-seeking, full-time freshmen from the current fall who enrolled again next fall.

- Tables 2.P.XIV and 2.P.XV

  (i) WRIT 101 College Writing I. The catalog description states the course "Introduces students to forms and processes of written communication appropriate to college-level audiences."

TABLE 2.P.XIV: FRESHMEN AND WRIT 101, SOUTH CAMPUS

					Students without Prereq				Students with Prereq				
		Satisfied Prerequisite			Grade		Retention for Students with Grade		Grade		Retention for Students with Grade		Retention For Full Time
Year	N	Yes	No	Unknown	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	Freshmen
F04	9	44%	0%	56%					25%	75%	0%	100%	37%
F05	20	65%	15%	20%	0%	100%		67%	15%	85%	50%	73%	36%
F06	22	77%	0%	23%					29%	71%	40%	50%	37%
F07	29	62%	14%	24%	25%	75%	0%	0%	28%	72%	20%	46%	30%
F08	29	69%	7%	24%	0%	100%		0%	30%	70%	17%	71%	
F09	35	69%	0%	31%					21%	79%			

* South Campus: Programs granting only Associate degrees or Certificates.
* Freshmen: First-time, degree/certificate-seeking, full-time freshmen
* < C- includes D, F, W
* South Campus Freshmen Retention Rate: The percentage of first-time, degree/certificate-seeking, full-time freshmen from the current fall who either enrolled again next fall or completed their program.

TABLE 2.P.XV: FRESHMEN AND WRIT 101, NORTH CAMPUS

					Students without Prereq				Students with Prereq				
		Satisfied Prerequisite			Grade		Retention for Students with Grade		Grade		Retention for Students with Grade		Retention For Full Time
Year	N	Yes	No	Unknown	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	< C-	≥ C-	Freshmen
F04	170	85%	8%	7%	14%	86%	0%	58%	10%	90%	27%	78%	69%
F05	177	76%	11%	13%	15%	85%	0%	59%	10%	90%	31%	77%	67%
F06	176	85%	9%	7%	20%	80%	0%	67%	9%	91%	7%	80%	75%
F07	166	92%	4%	5%	17%	83%	0%	40%	9%	91%	31%	78%	69%
F08	202	91%	4%	5%	13%	88%	100%	57%	11%	89%	24%	75%	
F09	175	91%	2%	7%	33%	67%			13%	88%			

* North Campus: Programs granting Bachelors or Masters degrees.
* Freshmen: First-time, degree-seeking, full-time freshmen
* < C- includes D, F, W
* North Campus Freshmen Retention Rate: The percentage of first-time, degree-seeking, full-time freshmen from the current fall who enrolled again next fall.

Policy 2.3 Credit for Prior Experiential Learning

Montana Tech does not offer credit for prior experiential learning.

Policy 2.4 Study Abroad Programs

The study abroad programs available to Montana Tech students are described in Standard 2.G.12. A highlight of the program available to both undergraduate and graduate students is reproduced below.

Why not spend a semester in SWEDEN? Take advantage of the learning agreement between MT Tech and Luleå University of Technology in Luleå, Sweden, and open your mind and broaden your horizons. The learning agreement includes the exchange of both undergraduate and graduate students, faculty and scientific personnel, and the organization of conferences, seminars, and workshops.

Luleå has a population of about 70,000 and is located in the north-eastern part of the country. The city centre is on a peninsula, and water plays an important part in the lives of Lule inhabitants. The city has developed into a technological centre in the North of Sweden. The most important corner-stones of this development are metallurgy, education and research.

Luleå University offers nearly 200 courses in English in departments such as Business Administration and Social Sciences, Chemical and Metallurgical Engineering, Civil and Mining Engineering, Computer Science and Electrical Engineering, and Languages and Literature (please see the admissions website below for a complete list). You need about $3000.00 to get you started with living expenses for approximately three months. In order to obtain an entry visa to Sweden, you must prove that you can finance your whole stay in the country.

The Swedish academic year comprises two semesters similar to ours and runs from the mid of August to mid-January and mid-January to the first week of June (does not include orientation). Student staying for Fall semester only, can do their exams before Christmas to be able to go home before Spring semester starts at home. Exchange students arriving in August are encouraged to join the annual orientation program planned for first year students. During this time, upper-level students present a complete program for all newcomers including orientation to student life and lots of parties. An intensive course in Swedish for beginners is offered free of charge to all exchange students during the orientation program.

Policy 2.5 Transfer and Award of Academic Credit

Montana Tech transfer and award of academic credit policies are described in Standard 2.C.4. Board of Regents policy 301.5, found in the Montana Tech Catalog, details the procedure followed by Montana Tech when awarding transfer credit. The policy states:

"A. All college level courses from regionally accredited institutions of higher education will be received and applied by all campuses of the Montana university system (MUS), and by the community colleges, towards the free elective requirements of the associate and baccalaureate degrees.
NOTE: College level courses shall be defined as those courses that are applicable toward an associate of arts, associate of science or baccalaureate degree at their respective institution. The receiving institution will determine in advance of a student's enrollment which courses within an associate of applied science degree program will be credited toward a given associates or baccalaureate degree. In all cases, such courses shall not include remedial or developmental courses.
B. In relation to the major, minor, general education, distribution requirements, and free electives of the associate and baccalaureate degrees, all campuses of the MUS, and the community colleges, are authorized to determine the applicability of credits earned at regionally accredited institutions of higher education."

Policy 2.6 Distance Delivery of Courses, Certificate, and Degree Programs

Distance delivery of courses at Montana Tech is described in Standard 2.G. As described in 2.G.1, a summary of distance delivery at Montana Tech is given by the following.

All of Montana Tech's distance delivery courses follow the same rules and procedures for implementation, instruction, and evaluation as all other courses offered for academic credit. See Standards 2.A, 2.B, and 2.C for the details of these processes. Montana Tech provides adequate resources for distance education. Some recent (over the last five years) developments include:

- Creating and staffing the new position of Distance Learning Coordinator.
- Forming an eLearning Advisory Committee at.
- Purchasing Wimba, a collaboration tool, that includes Wimba Pronto
- Building new high tech computer labs.
- Giving every faculty member access to a Blackboard course shell.
- Giving every faculty member access to Wimba.
- Purchasing two new portable Tandberg units.
- Training faculty in Blackboard and Wimba use.

(See Standard 5-IT and Standard 8 for additional details concerning Blackboard, Wimba, and the high tech computer labs.)

The types of distance education available through Montana Tech include:

- Synchronous courses delivered online in real time through Wimba, Polycom, or Tandberg.
- Asynchronous courses delivered anytime, anywhere through the Internet and Blackboard.
- Blended courses, where distance students sit in on traditional courses via collaboration tools such as Wimba.
- Hybrid courses which combine face-to-face instruction with computer-mediated instruction.
- Live video conferencing through Wimba, Polycom, or Tandberg.

Over the last five years, 32%-34% of faculty have taught online courses at Montana Tech. Table 2.P.XVI gives a summary of online courses taught summer 04 through spring 09.

TABLE 2.P.XVI: ONLINE COURSE SUMMARY (SUMMER 2004 THROUGH SPRING 2009)

Course	Title	Faculty	Adjunct	Average Semester Enrollment	Number of Semesters taught Online	First Semester taught Online	Semester Most Recently taught Online	Type of Delivery
BIOL 2016	ANATOMY & PHYSIOLOGY I	X		26	3	F06	F08	Internet
BIOL 2026	ANATOMY & PHYSIOLOGY II	X		21	3	S07	S09	Internet
BIOL 2706	BIOETHICS		X	20	1	S07	S07	Internet
BUS 0115	INTRO TO HUMAN RESOURCES	X		19	5	F04	F08	Internet
BUS 0956	BUSINESS ESSENTIALS	X		5	1	S09	S09	Internet
BUS 3446W	ENTREPRENEURSHIP & SMALL BUSINESS MANAGEMENT		X	17	1	F08	F08	Internet
BUS 4516	INTERNATIONAL BUSINESS		X	25	1	S09	S09	Internet
BUS 4936W	STRATEGIC MANAGEMENT	X		19	3	SU07	SU08	Internet
COMM 1046	ENGLISH COMPOSITION	X	X	26	15	SU04	S09	Internet
COMM 1216	PRINCIPLES OF SPEAKING	X		18	2	F07	F08	Internet
ENGR 3150	INTRO ENGINEERING COMPUTER APPLICATIONS	X		13	1	F07	F07	Internet
HCI 1016	INTRO HEALTH CARE INFORMATICS	X	X	8	4	F04	F08	Internet & iLinc
HCI 1106	THE LANGUAGE OF HEALTH CARE		X	32	2	SU04	F04	Internet
HCI 1206	MEDICAL DATA & TERMINOLOGIES	X		17	1	S06	S06	Internet
HCI 2156	HEALTH CARE FACILITY PROCEDURE	X	X	4	2	F06	F08	Internet & iLinc
HCI 2256	DATA, INFORMATION & KNOWLEDGE	X	X	7	3	F05	S09	Internet & iLinc
HCI 2306	OVERVIEW OF HCI SYSTEMS	X	X	8	3	S05	S07	Internet
HCI 3106	HEALTH CARE DELIVERY IN US I	X		5	1	F06	F06	Internet
HCI 3126	HEALTH CARE DELIVERY IN US II	X	X	9	2	S05	S06	Internet
HCI 3956	INDEPENDENT STUDY	X		1	1	S08	S08	Internet
HCI 4206	ISSUES IN HCI	X		3	2	F07	S08	Internet
HCI 4306	HCI PRACTICUM	X		6	2	S06	S09	Internet
HCS 3006	PROBLEMS OF SUBTANCE ABUSE & ADDICTION			8	12	F04	S09	Internet
HCS 3016	BIO/PSYCHO/SOCIAL FACTORS IN ADDICTION			6	10	F04	S09	Internet
HCS 3026	SUBSTANCE ABUSE PREVENTION			7	11	F04	S09	Internet
HCS 3400	PROGRAM EVAL IN PREVENTION			2	2	S07	S08	Internet
HCS 3530	SUBSTANCE ABUSE PREVENTION THEORY & PRAXIS			1	1	F08	F08	Internet
HCS 3540	ADDICTION TREATMENT I			5	9	F04	S09	Internet
HCS 3550	INDIVIDUAL & GROUP ADDICTION TREATMENT			4	7	F04	F08	Internet
HCS 3956	SPECIAL TOPIC: EXPLORING GAMBLING BEHAVIOR			2	2	F06	S07	Internet
HCS 4390	EXPLORATION OF GAMBLING BEHAVIOR			3	4	F07	S09	Internet
HCS 4400	TREATMENT OF COMPULSIVE GAMBLING			1	1	F08	F08	Internet
HCS 4540	ADDICTION TREATMENT II			3	9	F04	S09	Internet
HCS 4956	SPECIAL TOPIC IN ADDICTION			2	5	F05	F08	Internet
HLTH 0101	INTRO TO HEALTHCARE CAREERS		X	23	9	S05	S09	Internet
HLTH 0103	MEDICAL TERMINOLOGY	X	X	39	13	S05	S09	Internet
HLTH 0104	MEDICAL ETHICS		X	32	7	S06	S09	Internet
HLTH 0107	BASIC ANATOMY & PHYSIOLOGY	X	X	19	13	SU04	S09	Internet
HLTH 0110	NURSING FUNDAMENTALS	X	X	18	8	S06	S09	Internet
HLTH 0201	INTRO TO PHYSICAL & BIOLOGICAL SCIENCES		X	28	6	F06	S09	Internet
HUMN 2216	AMERICAN HISTORY		X	40	1	F07	F07	Internet
HUMN 3016W	PROFESSIONAL ETHICS	X	X	30	10	SU04	S09	Internet

- HCS courses offered through University of Nevada-Reno

TABLE 2.P.XVI CONTINUED: ONLINE COURSE SUMMARY (SUMMER 2004 THROUGH SPRING 2009)

Course	Title	Faculty	Adjunct	Average Semester Enrollment	Number of Semesters taught Online	First Semester taught Online	Semester Most Recently taught Online	Type of Delivery
I.H. 5076	STATISTICAL ANALYSIS		X	10	3	SU04	SU08	Internet
I.H. 5136	INDUSTRIAL HYGIENE MANAGEMENT	X		11	2	F05	SU07	Internet
I.H. 5156	NOISE	X		10	3	F04	F08	Internet & iLinc
I.H. 5276	ADV INDUSTRIAL TOXICOLOGY	X		10	3	S05	S08	Internet
I.H. 5286	SAMPLING & EVALUATION OF HEALTH HAZARDS	X		10	2	SU06	SU08	Internet
I.H. 5426	PRINCIPLES OF EPIDEMIOLOGY		X	14	2	S05	F06	Internet
I.H. 5476	STRATEGIES OF OCCUPATIONAL EXPOSURE ASSESSMENT	X		14	2	S07	S09	Internet
I.H. 5606	SYSTEMS SAFETY & PROCESS SAFETY MANAGEMENT	X		13	2	S06	S09	Internet
I.H. 5626	RADIOLOGICAL HEALTH & SAFETY	X		5	2	F05	SU07	Internet
I.H. 5676	INDUSTRIAL RESPIRATORY PROTECT	X		11	2	S05	S08	Internet
I.H. 5686	ADVANCED ERGONOMICS	X		14	3	F04	F08	Internet
I.H. 5966	INDUSTRIAL HYGIENE REPORT	X		2	8	F04	S09	Internet
I.H. 5976	SPECIAL PROBLEMS	X	X	7	3	SU04	F05	Internet
I.T. 0140	COMPUTER CONCEPTS	X		31	4	F04	S06	Internet
I.T. 0147	WORD		X	16	4	F04	S06	Internet
I.T. 0255	KEYBOARDING II	X		8	5	SU04	SU06	Internet
I.T. 3036	ADVANCED NOVELL ADMINISTRATION	X		23	1	S06	S06	Internet
MATH 0102	INTERMEDIATE ALGEBRA		X	24	4	F06	S08	Internet
MATH 1326	ELEMENTARY STATISTICS & PROBABILITY	X		14	3	F07	S09	Internet
MPEM 5010	ENTREPRENEURSHIP & ECONOMIC FEASIBILITY		X	11	2	SU05	SU07	Internet
MPEM 5020	PROJECT & ENGINEERING MANAGEMENT		X	11	3	SU04	SU08	Internet
MPEM 5030	LEGAL ISSUES RELATED TO MPEM	X	X	13	3	S05	S09	Internet
MPEM 5040	FINANCIAL MANAGEMENT FOR TECHNOLOGICAL ENTERPRISES	X		13	2	F05	F07	Internet
MPEM 5050	MANAGEMENT, ECONOMICS, & ACCOUNTING	X		10	2	F06	F08	Internet
MPEM 5060	ADVANCED MANAGEMENT SEMINAR	X		12	3	F04	S08	Internet
MPEM 5100	POLLUTION PREVENTION	X		8	2	F04	S08	Internet
MPEM 5120	APPLICATION & DESIGN FOR INDUSTRIAL EXPERIMENTS	X		6	3	F05	F08	Internet
MPEM 5130	HAZARDOUS WASTE ENGINEERING		X	7	3	SU04	F07	Internet
MPEM 5140	SYSTEMS SAFETY & MANAGEMENT	X		12	1	S07	S07	Internet
MPEM 5150	INFORMATION TECHNOLOGY FOR MANAGERS		X	8	2	SU05	SU07	Internet
MPEM 5900	SPECIAL PROJECT	X	X	5	6	S05	S09	Internet
NURS 1016	INTRODUCTION TO NURSING	X	X	31	14	SU04	S09	Internet
NURS 4406	NURSING INFORMATICS		X	5	2	S05	F05	Internet
OSH 2266	SAFETY ENGINEERING & TECHNOLOGY II ES	X		2	1	S05	S05	Internet
OSH 3226	HAZARDOUS MATERIALS MANAGEMENT ES	X		9	1	SU04	SU04	Internet
OSH 3236	FIRE PROTECTION - E.S.	X		4	1	F05	F05	Internet
OSH 3246	CONSTRUCTION SAFETY ES	X		3	1	SU05	SU05	Internet
OSH 3546	INDUSTRIAL TOXICOLOGY - E.S.	X		2	1	F06	F06	Internet
OSH 4066	SMALL PARTICLE TECHNOLOGY	X		4	2	F04	F07	Internet
OSH 4216	INDUSTRIAL HYGIENE FUNDAMENTAL	X		12	2	F05	F07	Internet
OSH 4226	INDUSTRIAL HYGIENE CONTROLS	X		7	3	S06	SU08	Internet
OSH 4546	ERGONOMICS	X		1	2	F04	F07	Internet
OSH 4896W	OCCUPTIONAL SAFETY & HEALTH SENIOR PROJECT	X		1	4	SU04	S08	Internet
OSH 4956	INDUSTRIAL HYGIENE CONTROLS	X		10	1	SU05	SU05	Internet

TABLE 2.P.XVI CONTINUED: ONLINE COURSE SUMMARY (SUMMER 2004 THROUGH SPRING 2009)

Course	Title	Faculty	Adjunct	Average Semester Enrollment	Number of Semesters taught Online	First Semester taught Online	Semester Most Recently taught Online	Type of Delivery
PSYC 1000	GENERAL PSYCHOLOGY		X	39	6	F06	S09	Internet
PSYC 2400	DEVELOPMENTAL PSYCHOLOGY		X	27	1	F04	F04	Internet
PSYC 3506W	SOCIAL PSYCHOLOGY		X	39	1	S05	S05	Internet
PTC 2506	WEBPAGE DESIGN	X		10	1	SU06	SU06	Internet
PTC 3896W	BUSINESS & PROFESSIONAL WRITING	X	X	19	10	SU04	F08	Internet
PTC 4426W	HISTORY, TECHNOLOGY, & COMMUNICATIONS	X		7	1	S07	S07	Internet
PTC 4956	SPECIAL TOPIC: PROFESSIONAL ETHICS FOR PROJECT ENGINEERING MANAGEMENT		X	1	1	S07	S07	Internet
RAD 0111	RADIOGRAPHIC PROCEDURES I	X	X	18	5	S05	S09	Internet
RAD 0121	RADIOGRAPHIC IMAGING PHYSICS	X	X	18	5	S05	S09	Internet
RAD 0122	RADIOGRAPHIC IMAGING II	X		15	4	F05	F08	Internet
RAD 0141	RADIATION PROTECTION	X		18	3	F06	F08	Internet
RAD 0211	RADIOGRAPHIC PROCEDURES II	X		15	4	F05	F08	Internet
RAD 0219	RADIOGRAPHIC IMAGING III	X		17	3	S07	S09	Internet
RAD 0245	RADIOGRAPHIC ANALYSIS	X		17	3	S07	S09	Internet
RAD 0312	SONOGRAPHIC PHYSCS & INSTRUMENTATION I		X	3	1	F06	F06	Internet
RAD 0313	SONOGRAPHIC INTERPRETATION I		X	3	1	F06	F06	Internet
RAD 0322	SONOGRAPHIC PHYSCS & INSTRUMENTATION II		X	2	1	S07	S07	Internet
RAD 0323	SONOGRAPHIC INTERPRETATION II		X	2	1	S07	S07	Internet
RAD 0333	SONOGRAPHIC INTERPRETATION III		X	2	1	SU07	SU07	Internet
SOCS 1746	INTRO TO SOCIOLOGY		X	27	9	SU04	S09	Internet
T.C. 5376	ETHICS PROSEMINAR		X	2	1	S09	S09	Internet