Montana State University-Great Falls

Montana State University-Great Falls College of Technology is a public post-secondary two-year educational institution affiliated with Montana State University-Bozeman. The College is committed to a dual mission: providing viable technical education to prepare individuals for work in a technologically driven global economy and providing learning opportunities to enhance educational access to the Montana University System.

Definition of Assessment of Student Learning

Maki (2004) defines assessment as, "…intellectual curiosity about what and how well our students learn. It is a systemic and systematic process of examining student work against our standards of judgment, it enables us to determine the fit between what we expect our students to be able to demonstrate or represent and what they actually do demonstrate or represent at points along their educational careers" (p. 2).

This requires us to:

- Unequivocally demonstrate and articulate expected outcomes to the public;
- Establish criteria and high expectations for learning;
- Methodically gather, analyze, and evaluate data to determine how well performance matches criteria and expectations; and
- Use the results to document, explain, and improve overall performance on an institutional level.

Assessment (often called outcomes assessment) is typically used to assess curriculum, strategize about ways to do things better, and analyze the effects of any modifications that might be implemented. Assessment helps to confirm the components of the curricula that are working well and also assists in the identification of things that may not be working. Frequently, assessment reveals precise alterations that might be helpful. It is a dynamic process that is constantly revisited in an effort to promote excellence in teaching, learning and overall effectiveness in academic departments, programs, services, and the institution as a whole.

MSU-Great Falls COT – Commitment to Assessment

MSU-Great Falls/Bozeman COT, a student-centered two-year college providing quality educational opportunities responsive to community needs, is committed to the evaluation of institutional effectiveness and the assessment of student learning outcomes. This commitment is reflected through an assortment of activities and processes that all begin with a patent expression of the College's mission, vision, values, goals, strategic plan, and the espousal of these principles by the academic departments, their programs and all co-curricular divisions and departments.

Montana State University-Great Falls
Eight Abilities

The faculty and staff of MSU-Great Falls/Bozeman COT have deemed the following abilities to be central to the personal and professional success of all students:

Communication: The ability to utilize oral, written and listening skills to effectively interact with others.

Quantitative Reasoning: The ability to understand and apply mathematical concepts and models.

Inquiry and Analysis: The ability to process and apply theoretical and ethical bases of the arts, humanities, natural and social science disciplines.

Aesthetic Engagement: The ability to develop insight into the long and rich record of human creativity through the arts to help individuals place themselves within the world in terms of culture, religion, and society.

Diversity: The ability to understand and articulate the importance and influence of diversity within and among cultures and societies.

Technical Literacy: The ability to use technology and understand its value and purpose in the workplace.

Critical Thinking: The ability to demonstrate critical evaluation of an argument's major assertions, its background assumptions, and the evidence used to support its assertions, and explanatory utility.

Effective Citizenship: The ability to commit to standards of personal and professional integrity, honesty and fairness.

EIGHT ABILITIES

The faculty and staff of MSU–Great Falls College of Technology have deemed the following abilities to be central to the personal and professional success of all graduates:

1. **Communication:** The ability to utilize oral, written and listening skills to effectively interact with others.
2. **Quantitative Reasoning:** The ability to understand and apply mathematical concepts and models.

3. **Inquiry and Analysis:** The ability to process and apply theoretical and ethical bases of the arts, humanities, natural and social science disciplines.

4. **Aesthetic Engagement:** The ability to develop insight into the long and rich record of human creativity through the arts to help individuals place themselves within the world in terms of culture, religion, and society.

5. **Diversity:** The ability to understand and articulate the importance and influence of diversity within and among cultures and societies.

6. **Technical Literacy:** The ability to use technology and understand its value and purpose in the workplace.

7. **Critical Thinking:** The ability to understand thinking that is responsive to and guided by intellectual standards such as relevance, accuracy, precision, clarity, depth, and breadth.

8. **Effective Citizenship:** The ability to commit to standards of personal and professional integrity, honesty and fairness.

OPERATIONAL DEFINITIONS – Assessment of Student Learning

- **Abilities** – Learning that is central to the personal and professional success of all MSU-Great Falls COT students, e.g. institutional outcomes for student learning.
- **Program Goal** – The general expectations of individual programs listed in the College Catalog (big-picture, vision statement, hopes). The program goal is linked to the college mission.
- **Program Outcomes** – The specific knowledge, skills, or developmental attributes listed in the College Catalog that students develop through their experience in a program. Program outcomes are linked to the College's abilities.
- **Course Objectives** – The specific measurable expectations that appear on course syllabi about what an individual in a course will achieve. Course objectives are linked to program outcomes.
- **Course Measures** –The instrument(s) developed by the faculty and used to gather information on student learning, development, or success in area (e.g., observations, quizzes, papers, presentations, portfolios, surveys, self-reflections, etc.).
- **Evidence** – Information about the results of the process. Evidence is gathered through analysis and study of course measures.

OPERATIONAL DEFINITIONS – Assessment of Departmental Effectiveness

- **Strategic Plan** – The integrative framework central to institutional effectiveness at MSU-Great Falls College of Technology. The strategic plan is linked to the college mission.
- **Departmental Goal(s)** – The general expectations of individual departments articulated in the strategic plan (big-picture, vision statement, hopes). The departmental goal(s) is linked to the strategic plan.
- **Departmental Outcomes** – The specific tasks to be accomplished, e.g. what the department will *do*. The departmental outcomes are linked to the departmental goal(s).
- **Program/Area Objectives** – The specific measurable expectations about what an individual(s) in an area will achieve. Departmental objectives are linked to program outcomes.
- **Measures** –The instrument(s)used to gather information on effectiveness, growth, or success.
- **Core Indicators** - a regularly produced measure that describes a specified condition or result that is central (or foundational) to the achievement of a college's mission and to meeting the needs and interests of key stakeholders" (Alfred, Shults, and Seybert, 2007, p. 12).
- **Evidence** – The information about the results of the process. Evidence is gathered through analysis and study of the measures.

OPERATIONAL DEFINITIONS – Assessment of Institutional Effectiveness

- **Strategic Plan** – The integrative framework central to institutional effectiveness at MSU-Great Falls College of Technology. The strategic plan is linked to the college mission.
- **Institutional Goal(s)** – The general expectations of the institution articulated in the strategic plan (big-picture, vision statement, hopes). The institutional goal(s) is linked to the college mission.
- **Institutional Outcomes** – The specific tasks to be accomplished, e.g. what the institution will *do*. The institutional outcomes are linked to the institutional goal(s).
- **Departmental Objectives** – The specific measurable expectations about what an individual department will achieve. The institutional objectives are linked to institutional outcomes.
- **Measures** –The instrument(s) used to gather information on effectiveness, growth, or success.
- **Core Indicators** - a regularly produced measure that describes a specified condition or result that is central (or foundational) to the achievement of a college's mission and to meeting the needs and interests of key stakeholders" (Alfred, Shults, and Seybert, 2007, p. 12).
- **Evidence** – The information about the results of the process. Evidence is gathered through analysis and study of the measures.

MSU-Great Falls College of Technology
Course Outcomes
Objectives Worksheet

As you start to develop your course syllabi and determine your learning objectives take into account the purpose of the course and how it relates to the future degree the MSU-Great Falls College of Technology graduate will hold.

How will your course objectives align with and promote that program outcome and ultimately the College's Abilities?

Learning Objective Outcomes

Course Name/#: _____ Semester taught: _____

Course Learning Objectives	Aligns with which program division, or/degree outcome	Type of Learning Objective: *Introductory/ Knowledge, Reinforce/Reasoning, Emphasize/Skill, &/or a Product Produced*	Method of Assessment used to determine if Learning Objective has been met or achieved	Disposition change of student because of meeting or achieving learning objective
(Example) *Describe the technique of ultrasonic instrumentation and air powered polishing*	*(Example)* (3) (6)	*(Example)* *Introductory/ Knowledge*	*(Example)* Quizzes/Exam Periodical Abstract	*(Example)* *None*

Kinds of Learning Objectives

- **Introductory/Knowledge**
  The facts and concepts we want students to know
  (Introductory/Knowledge Objectives: knows, lists, names, identifies & recalls)

- **Reinforce/Reasoning**
  Students use what they know to reason and solve problems
  (Reinforce/Reasoning Objectives: predicts, infers, classifies, hypothesizes, compares, concludes, summaries, analyzes, evaluates, & generalizes)

- **Emphasize/Skill**
  Students use their knowledge and reasoning to act skillfully
  (Emphasize/Skill Objectives: demonstrates, exhibits, displays, proves & shows)

- **Products**
  Students use their knowledge, reasoning, and skills to create a concrete product
  (Product Objectives: creates, graphs, displays, produces, generates, builds, designs & constructs)

- **Dispositions**
  Students' attitudes about school and learning (a byproduct of their educational experience) that are not traditionally assessed but an affective goal of education.
  (Disposition Objectives: chooses, likes, wants, enjoys, values, appreciates, & respects)

Deconstructing the ultimate Abilities a MSUCOT graduate must hold

Deconstruct it into its component learning objectives by asking these questions:

- What knowledge will students need to know to possess the MSUCOT Graduate Abilities and be successful in their chosen career/profession?

- What patterns of reasoning, if any, will students need to master to possess the MSUCOT Graduate Abilities and be successful in their chosen career/profession?

- What products, if any, will students need to practice creating to possess the MSUCOT Graduate Abilities and be successful in their chosen career/profession?

References:

Stiggins, R., Arter, J., Chappuis, J., & Chappuis, S. (2006*).* *Classroom assessment for student learning.* Oregon: Educational Testing Service.

Wehlburg, C. (2008). *Promoting integrating and transformative assessment.* San Francisco, CA : Jossey-Bass.

MSU-Great Falls - College of Technology
Align Program, Division, &/or Degree Outcomes to Abilities
Phase I- For Directors Use Only

As you review, revise, or develop your Division, Degree, &/or Program Outcomes keep in mind the necessity that they align with the Eight Institutional Abilities. Will your Division, Degree, &/or Program Outcomes lead the graduate to ultimately possess the College's Abilities?

Date:_____

Division, Degree, or Program: _____

ABILITIES	SKILLS	ALIGNMENT OF THE PROGRAM, DEGREE, OR DIVISION STUDENT LEARNING OUTCOMES	SKILL LEVEL I = Introduce, R = Reinforce, E = Emphasize *	ALIGNMENT WITH A COURSE AND SPECIFIC OBJECTIVE THAT ASSESSES THIS OUTCOME	SPECIFIC COURSE OBJECTIVE ASSESSMENT TOOL TO DETERMINE IF THIS OUTCOME AND THUS THIS ABILITY SKILL HAS BEEN MET
Communication	Speak		I		
			R		
			E		
	Listen		I		
			R		
			E		

	Write		I		
			R		
			E		
Quantitative Reasoning	Quantitative Information		I		
			R		
			E		
	Problem Solving		I		
			R		
			E		
Inquiry and Analysis	Ethics		I		
			R		
			E		

	Theory		I		
			R		
			E		
	Application		I		
			R		
			E		
Aesthetic Engagement	**Perceive/Observe**		I		
			R		
			E		
	Respond/Critique		I		
			R		
			E		

	Create/Perform		I		
			R		
			E		
Diversity	Diversity in the Classroom		I		
			R		
			E		
	Diversity in the Community		I		
			R		
			E		
Technical Literacy	Personal Computer Technology		I		
			R		
			E		

	Technical Literacy		I		
			R		
			E		
Critical Thinking	**Problems or Questions**		I		
			R		
			E		
	Supporting Data and Analysis		I		
			R		
			E		
	Patterns, Explanations, and Solutions		I		
			R		
			E		

	Conclusions, Implications, and Consequences		I		
			R		
			E		
Effective Citizenship	Personal Engagement		I		
			R		
			E		
	Personal Accountability		I		
			R		
			E		

*I = Introduce, R = Reinforce, and E = Emphasize. Refer to the criteria description for each of these levels in your program, degree, or division evidence of student learning notebook.

Division, Degree, &/or Program Outcomes should be reviewed and evaluated to ensure they are in alignment with the Eight Institutional Abilities. The institutional evaluation schedule for the abilities and their respective skills is:

- **2011-2012** COMMUNICATION (SPEAK, LISTEN, WRITE)

  QUANTITATIVE REASONING (QUANTITATIVE INFORMATION, PROBLEM SOLVING)

  EFFECTIVE CITIZENSHIP (PERSONAL ENGAGEMENT, PERSONAL ACCOUNTABILITY)

- **2013-2014** INQUIRY AND ANALYSIS (ETHICS, THEORY, APPLICATION)

  DIVERSITY (CLASSROOM, COMMUNITY)

  TECHNICAL LITERACY (PERSONAL COMPUTER TECHNOLOGY, TECHNICAL LITERACY)

- **2014-2015** AESTHETIC ENGAGEMENT (PERCEIVE, OBSERVE & RESPOND, CRITIQUE & CREATE, PERFORM)

  CRITICAL THINKING (PROBLEMS OR QUESTIONS; SUPPORTING DATA & ANALYSIS; PATTERNS, EXPLANATIONS, &

  SOLUTIONS;   CONCLUSIONS, IMPLICATIONS, & CONSEQUENCES)

Date:_____

Division, Degree, or Program: _____

Institutional Abilities/Skill	Division, Degree, &/or Program Student Learning Outcomes remain in alignment with the Eight Abilities	Type of Skill Level aligns with the Ability level desired: *Introduce, Reinforce, Emphasize*	Assessment tool used to determine if Division, Degree, &/or Program Student Outcomes provides evidence that Ability has been met or achieved	Evidence of Change that occurred due to the fulfillment of the course learning objective	Recommendations to continue or modify Student Learning Pathways to ensure the outcomes are aligning with the Abilities
/					
/					
/					
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Revized: Summer 2010

MSU-Great Falls College of Technology
Align Course Objectives to Program, Division, &/or Degree Outcomes
Phase III- For Faculty Use Only

As you start to develop, review, or revise your course syllabi to determine if the course objectives take into account the purpose of the course and how it relates to the future degree and Abilities the MSU-Great Falls College of Technology graduate will hold.

How will your course objectives align with and lead the graduate to hold the program, degree, or division's outcome and ultimately the College's Abilities?

Course Name/Number: _____ Semester taught: _____

Course Objective	Aligns with which program, division, or/degree outcome	Type of Course Objective: *Introduce, Reinforce, or Emphasize*	Assessment tool used to determine if Course Objective has been met or achieved

Revised Summer 2010

Kinds of Learning Objectives-Basic Definitions

- **Introduce**
  The facts and concepts we want students to know
  (Introductory Objective verbs: knows, lists, names, identifies & recalls)

- **Reinforce**
  Students use what they know to reason and solve problems
  (Types of Reinforce Objective verbs: predicts, infers, classifies, hypothesizes, compares, concludes, summaries, analyzes, evaluates, & generalizes)

- **Emphasize**
  Students use their knowledge and reasoning to act skillfully
  (*Emphasize Objective verbs: demonstrates, exhibits, displays, proves & shows)*

References:

Stiggins, R., Arter, J., Chappuis, J., & Chappuis, S. (2006*)*. *Classroom assessment for student learning.* Oregon: Educational Testing Service.

Wehlburg, C. (2008). *Promoting integrating and transformative assessment.* San Francisco, CA : Jossey-Bass.

Revised Summer 2010

MSU-Great Falls College of Technology
Assess Course Objectives
Phase IV- For Faculty Use Only

Course: _____   Term: _____

At the completion of the course it is important that instructors reflect back on the projected course objectives to determine if they were met by the majority of the students, aligned with the program/degree/division outcome and aligned with the type of learning hoped for. Did the developed assessments tools provide verification that the course objective was met? Was there anticipated change in the student due to the accomplishment of meeting the set course objectives?

Reviewing and gathering outcomes assessment data is not enough, it must come full circle.   Utilizing outcome results to increase the quality of student learning gives outcomes a process not an end product.

Course Objectives	Aligned with the program, degree, or division outcomes	Aligned with type of learning objective striving for: *Introduce, Reinforce, Emphasize*	Course Assessment Tool utilized to provide verification that objective was met	Evidence of Change that occurred due to fulfillment of the course objective	Recommendations to continue or modify Student Learning Pathway

Additional Course Challenges with Recommendations for future course utilizing student feedback:

Revised Summer 2010

INTRODUCTION AND OVERVIEW

In accordance with The Montana Board of Regents of Higher Education Policy 303.3 – Program Review, these procedures are provided for the internal review of Certificate of Applied Science, Associate of Applied Science, Associate of Arts, and Associate of Science degrees at Montana State University-Great Falls College of Technology (MSU-Great Falls).

The internal program review primary goals are to enhance the alignment of the College's academic programs and their quality with community and state needs. To achieve this purpose, these internal program review procedures encourage self-study and planning within programs and strengthen connections among the strategic plan and mission of MSU-Great Falls. In addition, the essential element of the internal program review is the identification and evaluation of student learning outcomes as a key indicator of program effectiveness. Further, internal program reviews provide information for curricular and budgetary planning decisions for the Division and the College.

Benberg (T. Benberg, December 7, 2003) says, "Outcomes-based academic program review is a thinking person's process." In essence, it requires faculty and co-curricular professionals to purposefully plan the delivery of the intended student learning as well as systematically evaluate the extent to which that learning has been met and to propose recommendations for improving delivery of the learning. "

The internal program review process at MSU-Great Falls is based on a cycle of self-inquiry, review, and improvement. The basic components of internal program review include the following:

- a self-study, recommendations, and preliminary implementation plan completed by the faculty associated with the program;

- review and recommendations by the College's Internal Program Review Committee;

- revision of the preliminary implementation plan in response to recommendations by the Internal Program Review Committee;

- final approval by the Internal Program Review Committee and Associate Dean all elements of the internal program review documents; and

- implementation of actions to improve program effectiveness and quality.

I.   ROLES AND RESPONSIBILITIES

The Associate Dean/Chief Academic Officer, on behalf of the Dean/CEO, manages the internal program review process and works closely with the College's Internal Program Review Committee, division directors, department chairs, and faculty senate to ensure that (a) a meaningful and thorough review is conducted for each degree program; (b) self-study reports, recommendations, and implementation plans are completed in a timely manner; (c) outcomes of the review are communicated to the campus community and the Board of Regents; and (d) outcomes of the review are linked to decision making processes for academic program development and strategic planning.

The College's Internal Program Review Committee is the faculty-led committee responsible for managing the internal program review process on an annual basis. It is chaired by a faculty member, who is generally charged with coordinating the review process, supporting faculty and staff involved in internal program review, and initially discussing and reviewing implementation plans. The Internal Program Review Committee advances a final implementation plan with recommendations through the Faculty Senate to the Associate Dean/CAO. Internal Program Review reports will also be shared with the Curriculum Committee in their late November meeting.

Each academic program has an identified program director and division director who are responsible for overseeing the academic program. It is expected that all full-time faculty participate in the preparation and review of the program's internal program review. Where possible and as appropriate to each program, it is desirable to involve adjunct faculty as well. Program directors are responsible for developing expected student learning outcomes for each of the programs listed and for employing methods annually to evaluate program effectiveness in achieving programmatic student learning outcomes. The assessment of these outcomes forms the core of the internal program review.

II.   TIMEFRAME FOR REVIEW

The Montana Board of Regents of Higher Education requires that each campus review all of its programs at least once every seven (7) years. At MSU-Great Falls, programs are internally reviewed on a five-year cycle. This schedule may be accelerated in individual cases either at the discretion of the Associate Dean/CAO, division director, or in compliance with recommendations from the Internal Program Review Committee. Programs accredited by a disciplinary accrediting agency are reviewed in accordance with the review cycle established by the agency, not to exceed seven years.

Requests for delaying a review are initiated by the program director to the division director, who determines whether to advance the recommendation to the Associate Dean/CAO. The decision to delay a review rests with the Associate Dean/CAO and normally is granted only in rare circumstances (e.g., normally to coordinate with a professional accreditation review process or to allow a new program sufficient time to conduct a review). Delays are granted normally for one year only.

III.   SELF-STUDY OVERVIEW

The internal program review process provides a comprehensive, candid, and reflective self-study that focuses on future planning to enhance student learning and program quality. Programs with multi-level credentials (e.g. CAS and AAS in Medical Transcription) provide either a separate or integrated review for each degree level, including comprehensive assessments of student learning and program functioning at both levels. Programs with an application process for admission should include both pre- and admitted students in data provided for the self-study.

The self-study is comprised of multiple parts. These include the appropriate cover pages, the self-study narrative, program data forms, and other materials as deemed appropriate by the program or division. The Internal Program Review Committee or Associate Dean/CAO may also request specific information or materials not explicitly identified in the self-study criteria section below. Such requests will be made well in advance of the self-study deadline as to not burden the faculty completing the document.

IV.   SELF-STUDY CRITERIA

For programs subject to professional, disciplinary, or specialized accreditation, internal program review is coordinated with the accreditation or re-accreditation review cycle. The self-study developed for professional or specialized accreditation reviews normally provides the essential requirements of internal program review; however, the MSU-Great Falls protocol must be used.

A. Introduction and Major Program Changes Since the Last Internal Program Review

Before beginning the narrative, the program director should complete the data sheet questions and email it to the Executive Director of Institional Research & Planning and the Registrar. They will provide much of the data needed on the Program Data Form. That process will aid in the compilation of the final report to the Committee. Provide an overall description of the program. This can be a copy of the appropriate MSU-Great Falls Catalog page with comments as appropriate. Where suitable, include program mission statements, application/admission processes and criteria, design of program, accreditation oversight, and other pertinent information. In addition, describe actions taken in response to the recommendations made in the previous internal program review. Briefly describe program and field changes over the past five years and how the curriculum was revised to address these changes.

B. Alignment with Community Needs *(Applied programs only)*

Using the program data form, provide the job placement statistics for all graduates. In addition, provide labor market statistics showing a need for workers in occupations related to this program. Also provide average wages of those occupations for either the community or state. Within the self-study narrative, describe the types and number of partnerships the program has with business and industry. Finally, provide a listing of the program's advisory board members and the minutes from advisory board meetings occurring since the last program review where the curriculum was discussed.

C. Student Participation and Success

On the program data form provide the program's enrollment trends, demographic data, retention and graduation rates, degree production rate, and if applicable, pass rates on licensure and certification exams.

D. Student Learning Outcomes

List the student learning outcomes/goals for the program. Other than grades, describe how achievement of each of these learning outcomes on a program and institutional level (the 8 Abilities) are evaluated and documented through both indirect and direct methods.   Summarize, with adequate evidence, the program's effectiveness with achievement of learning outcomes for students over the past five years.

E. Curriculum and Instruction

Provide the current curriculum for the program, including suggested program sequence, course numbers, titles, credits and descriptions. Describe the program's primary modes of instructional delivery (e.g., face-to-face, cohort, etc) and why that mode is the proper fit to facilitate student learning outcomes. Describe innovations in program delivery, such as; if the program is offered online or in mixed-mode format, has evening, weekend or compressed courses/schedules to accommodate student needs, uses web supported tools as resources, etc. Describe the number of dual credit, tech prep, or other early college opportunities exist in the program for high school students. Describe future curricular plans and their alignment with the College's mission and strategic plan.

F. Faculty

Provide a list of all faculty teaching in the program. Include title, credentials, certifications, and status. (e.g., Jane Doe, MA, RHIA, Program Director, Full-time.) Describe and evaluate faculty expertise for covering the breadth of the program's curriculum. Summarize and evaluate data regarding faculty and their development -- sufficiency of full and part-time faculty, release time, anticipated retirements, and other faculty issues important to the program. Describe how faculty members are engaged in college and community/civic activities. Describe program support for and involvement in faculty development, especially new and non-tenured faculty.

G. Fiscal and Physical Resources

In the narrative portion of the self-study, describe the adequacy of both fiscal and physical resources, highlighting those areas of the program well supported and explain any areas of resource needs. Using the program data form, provide the program's five-year average annual cost per student FTE, calculated from dividing the program's total annual budget by the average annual student FTE of the program. Also calculate the program's five-year average annual cost per graduate using the same calculation approach as cost per FTE.

V. OUTCOMES OF THE SELF-STUDY AND PROGRAM REVIEW

Internal Program Review Recommendations for Program Continuance/Discontinuance

Upon completion of all reviews, the Internal Program Review Committee recommends to the Associate Dean/CAO one of the following actions as a result of the internal program review:

1. Program approved for continuance with expectation for sustained performance;

2. Program approved for continuance with specified modifications recommended by the Committee, including progress reports and possible review in less than five years; or

3. Program recommended for discontinuance.

The Associate Dean/CAO, with delegated authority from the Dean/CEO, makes the final determination for program continuance.

Preliminary Implementation Plan

As a result of the self-study, the program director develops a preliminary implementation plan that reflects the view of the program faculty and addresses areas identified for quality improvement or innovation. This preliminary implementation plan is discussed with the Division Director and Associate Dean/CAO prior to submission and discussion with the Internal Program Review Committee during the internal program review meeting.

The implementation plan includes (but is not limited to) the following elements:

1. Key recommendations of the program faculty resulting from the self-study;

2. Anticipated student profile in terms of number and type of students over the next five years;

3. Action steps to be taken in order to achieve each of the recommendations and student enrollments over the next five years; and

4. Types of human, fiscal, and physical resources needed to implement recommendations.

Final Implementation Plan

The final implementation plan results from discussion and consultation among the program director, the program faculty, the Internal Program Review Committee, the Division Director, and the Associate Dean/CAO. The final implementation plan is to be submitted electronically to the Associate Dean/CAO no later than three weeks after that process.

VI.   PROCESS OVERVIEW AND CHRONOLOGY

The process follows the chronology and timeline established by the Internal Program Review Committee to ensure a meaningful review. The timeline also allows for feedback and timely submission of internal program review reports to the Associate Dean/CAO, then Faculty Senate, and the Dean's Cabinet. In general, that time line will be as follows with specific annual dates assigned as per the calendar of the review year – dependent on the Committee meeting schedule for the review year:

Subsequent Program Review Schedule	
Notification of Internal Program Review	*January (reminder mid-March)*
Program Review Drafts Submitted to Committee	*September*
Review Meetings for Programs in Review Process	*October-November*
Final Drafts of Program Recommendations to Associate Dean	*November*
Annual Summary Report Submitted to Board of Regents	*November Meeting*

Program directors submit a draft to the Committee and present that draft as per the schedule identified in their notification letter and outlined above. They then present their self-study in a 20 minute presentation to the full Internal Program Review Committee during a review meeting. The time-limit will be strictly enforced, so program directors should come prepared with an overview that will fit into 20 minute time allotment. Typically, the Division Director accompanies the Program Director to this meeting.

Following the presentation of the self-study, the Committee will have 20 minutes to ask questions and seek clarification. The review meeting will then be concluded and the committee will deliberate and formalize recommendations to be moved forward to the program director for inclusion in the final report. The Program Director will then return for a final meeting with the Committee for their recommendation.

Internal Program Review reports are always presented to the Board of Regents at the November meeting.

VII.   ACCREDITED PROGRAMS

For programs subject to professional, disciplinary, or specialized accreditation, internal program review is coordinated with the accreditation or re-accreditation review cycle. The self-study developed for professional or specialized accreditation reviews normally provides the essential requirements of internal program review; however, the MSU-Great Falls protocol must be used.

VIII.   EXTERNAL PROGRAM REVIEW FOR NON-ACCREDITED PROGRAMS (during the self-study phase)

For non-accredited programs, a program may request, or the Associate Dean/CAO may determine, that the program be subject to an external independent evaluation as part of the self-study phase of the internal program review. An external reviewer may be approved to review the self-study, conduct interviews, and employ other strategies to evaluate program effectiveness. The external reviewers' summary of findings and recommendations becomes part of the materials submitted to subsequent levels for review. Funds for the external review are provided by the Associate Dean/CAO.

VIIII. EXTERNAL PROGRAM REVIEW *(following completion of the internal program review)*

In addition to the normal internal program review procedures, programs may be subject to an independent evaluation by at least two external evaluators. External program review occurs only in those instances where a thorough review of a program's self-study has been completed and the division or Associate Dean/CAO indicates the efficacy of an external review.

MSU-Great Falls College of Techology
Academic Program Review Scoring Rubric
FOR COMMITTEE USE ONLY

3. STUDENT LEARNING OUTCOMES

	Criteria Definitions	5 points	4 points	3 points	2 points	1 points	0 points	Data Source	Score
a	Program has clearly defined and communicated student learning outcomes and goals.	Program outcomes articulate curricular student learning outcomes and can clearly demonstrate the use of those outcomes in making decisions for continuous improvement in program	Program outcomes articulate curricular student learning outcomes and a plan is in place to use outcomes in making decisions for continuous improvement in program	Program outcomes articulate curricular student learning outcomes but have not been used in making decisions for continuous improvement in program	Program outcomes are not up to date but are under review. Outcomes have not been used in making decisions for continuous improvement in program	Program outcomes are not up to date and are not measurable in terms of utility in making decisions for continuous improvement in program	Program Outcomes have not been articulated for program	Program Student Learning Outcomes as Articulated in College Catalog	
Comments:									

	Criteria Definitions	5 points	4 points	3 points	2 points	1 points	0 points	Data Source	Score
b	Program has sound methodology and procedures for assessing student achievement of the learning outcomes/goals	Program Director can clearly describe the methods used to evaluate specific student learning outcomes and has clearly detailed the criteria that will illustrate how the faculty and administrator know that the outcomes have been reached	Program Director can clearly describe where he or she is in the development of the methods used to evaluate specific student learning outcomes and can articulate how he or she will continue progress toward the articulation of how the faculty and administrator know that the outcomes have been reached	Program Director can clearly describe how he or she is investigating the development of the methods used to evaluate specific student learning outcomes and can articulate how he or she will work toward the articulation of how the faculty and administrator know that the outcomes have been reached	Program Director has specific student learning outcomes; however, has not clearly articulated a plan to begin a process that will move the program toward an identification of the development of methods used to evaluate specific student learning outcomes	Program Director does not have specific student learning outcomes that are up-to-date and has not clearly articulated a plan to begin a process that will move the program toward an identification of the development of methods used to evaluate specific student learning outcomes	There is no description of methods used to evaluate specific student learning outcomes	Program Student Learning Outcomes as Articulated in College Catalog	
Comments:									

		Program outcomes articulate curricular student learning outcomes and can clearly demonstrate the use of those outcomes in making decisions for continuous improvement in program	Program outcomes articulate curricular student learning outcomes and a plan is in place to use outcomes in making decisions for continuous improvement in program	Program outcomes articulate curricular student learning outcomes but have not been used in making decisions for continuous improvement in program	Program outcomes are not up to date but are under review. Outcomes have not been used in making decisions for continuous improvement in program	Program outcomes are not up to date and are not measurable in terms of utility in making decisions for continuous improvement in program	Program Outcomes have not been articulated for program	Program Student Learning Outcomes as Articulated in College Catalog	
C	Program has clearly defined and communicated student learning outcomes and goals.								
Comments:									

			Total	0

MSU-Great Falls College of Techology
Academic Program Review Scoring Rubric
FOR COMMITTEE USE ONLY

4. ACHIEVEMENT OF THE EIGHT ABILITIES

	Criteria Definitions	5 points	4 points	3 points	2 points	1 points	0 points	Data Source	Score
a	Program has clearly identified that the program outcomes are linked to each of the abilities and can articulate that the program has moved through that process.	Evidence Notebook up to date, submitted and on file with Outcomes Assessment Team (OAT). All Phases of process completed (as per OAT Phase II schedule)	Program Director participating in Abilities Committees, OAT training, and has documented progress toward implementation all abilities as per the Phase II schedule	Program Director participated in Abilities Committees during the academic year and has entered and can demonstrate can verify completion of Phase I.	Program Director participated in Abilities Committees during the academic year and has entered and can demonstrate progress in Phase I	Program Director participated in Abilities Committees during the academic year and can verify participation. But, Phase I not implemented	Process has not been attempted	OAT Evidence Notebook/Verification from OAT member of participation in 4-phase process	

Comments:

| | | | | | | | | **Total** | 0 |

MSU-Great Falls College of Techology
Academic Program Review Scoring Rubric
FOR COMMITTEE USE ONLY

Criteria	Score
1. ALIGNMENT WITH COMMUNITY NEEDS (applied programs only)	0
2. STUDENT PARTICIPATION AND SUCCESS	0
3. STUDENT LEARNING OUTCOMES	0
4. ACHIEVEMENT OF THE EIGHT ABILITIES	0
5. CURRICULUM AND INSTRUCTION	0
6. FACULTY	0
7. FISCAL AND PHYSICAL RESOURCES	0
Total	**0**

Other Comments:

Outcomes Assessment of Student Learning

Who: Faculty

What: A process intended to improve the student learning process. The process involves setting clear learning goals for students and assessing how well students achieve those learning goals.

Where: Outcomes Assessment Alignment table (formerly Phase III form) on syllabus; Phase IV form

Why: Gives faculty the opportunity to review student achievement and performance, providing a vehicle for improving teaching and learning. This process also provides a systematic and consistent approach to clearly documenting the student learning assessment that faculty have already been doing in their courses.

Term	*Operational Definition*	*What This Means*
Abilities (8 Abilities)	Learning that is central to the personal and professional success of all MSU-Great Falls COT students, e.g. institutional outcomes for student learning. The institutional abilities should align with the institutional mission statement.	**What:** Institutional student learning goals- what students should achieve upon completion of any degree or credential from the institution. **Where:** Listed in college catalog. • Column 5 on Outcomes Assessment Alignment table (formerly Phase III form) on syllabus. • Not listed on Phase IV form (Assessment of Course Objectives) **Other things to know:** Impact each course, each program, each degree, and the institution as a whole. • These are the skills that employers want to see in their employees, so our school has committed to developing these skills in our students. • Students need to be engaged with understanding and developing the 8 Abilities during their education. • At some point in the outcomes assessment process, we may need to revisit the 8 Abilities to ensure they are measurable and adequate for our institution's goals

Outcomes Assessment Interpretive Chart- Faculty
3/9/2012 MLW

Department/Program/Degree/ Division Outcomes	The specific knowledge, skills, or developmental attributes that will be listed in the catalog that students experience during a course taught within a specific department or division, or through their experience in a program. Department/division/program outcomes are linked to the College's abilities.	**What:** Student learning goals specific to the department/division/program level- what students should achieve upon completion of the program or degree. **Where:** Column 2 on Outcomes Assessment Alignment table (formerly Phase III form) on syllabus and Column 2 on Phase IV form **Other things to know:** This column's heading does not clearly translate for all courses- programs have specific outcomes tied to accreditation, but the courses taught in Developmental Education & Transfer (like math, writing, communication, etc.) are not tied to specific outcomes. For now, it is most important to show clearly what outcomes these courses' objectives are tied to. • For many courses in the Developmental Education & Transfer Division, information in this column may come from the MSUGF Core Outcomes, but depending on departmental decisions, could also come from the objectives created by the common course numbering FLOCs (Faculty Learning Outcomes Committees). Be sure to check with your department chair and/or Division Director to decide what is best for your course.
Course Objectives	The specific measurable expectations that appear on course syllabi as to what an individual in a course will achieve. Course objectives are linked to program, department, or division outcomes.	**What:** Student learning goals specific to the course- what the student should achieve upon completion of course. **Where:** List on syllabus under "objectives" • Column 1 on Outcomes Assessment Alignment table (formerly Phase III form) on syllabus • Column 1 on Phase IV form. **Other things to know:** Courses should have objectives that are specific and measurable. • You may choose to use the objectives created by the common course numbering process; if these objectives are too broad to measure, you might choose to write more specific course objectives that align with the common course number objectives.

Outcomes Assessment Interpretive Chart- Faculty
3/9/2012 MLW

		See note under **Department and Division Outcomes** (above).
Course Assessment Tools	The instrument(s) developed by the faculty and used to gather information on student learning, development, or success in area (e.g., observations, quizzes, papers, presentations, portfolios, surveys, self-reflections, etc.).The purpose of utilizing these tools is to measure the students' accomplishments of the course objectives.	**What**: The tools we use to assess student learning. **Where**: Column 4 on Outcomes Assessment Alignment table (formerly Phase III form) on syllabus • Column 4 on Phase IV form. **Other things to know**: Make sure that the tool truly and accurately measures the objective it is meant to assess. • To easily assess and compare outcomes, it is particularly useful to use a common assessment tool for all sections of the same course (i.e. a common final or common writing prompts). • *Objective learning goals* (i.e. identify information) can be assessed easily with tools like quizzes, etc. • *Subjective learning goals* (i.e. write an <u>effective</u> sentence) require more guidance for assessment. Rubrics are one way to provide that guidance and help students understand what an instructor's expectations are when terms like "effective" are used. Rubrics create objective assessments of subjective learning goals.
Benchmarks	A standard in measuring. Prior to measuring how well students are performing a course objective, faculty will not only need the assessment tool, but also a benchmark.	**What**: Defines acceptable level of performance of a course objective **Where:** On the Phase IV form, column 4 • List benchmarks indicating the acceptable level of performance for the assessment tool (i.e. 80% of students will achieve a "B" or better on specific portions of the exam). **Other things to know**: Work with your supervisor to determine appropriate benchmarks for your course. Benchmarks may already exist, or it may be up to you, or your department/division to set them. • Benchmarks will vary depending on the course. A course with no pre-requisites may not have high benchmarks as compared to an upper-level course in a specific program.
Evidence of Change (or	Evidence of change or student	**What**: This is where you show the results of your assessments for each

Student Learning)	learning is accomplished by analyzing the results of the course assessment tools. Evidence of change may include changes in knowledge, student behavior, attitudes, and their perception and engagement with their local and global environment. This evidence will be utilized to support continuing with the current steps of the Student Learning Pathway or to support making changes in the Student Learning Pathway.	objective. The Student Learning Pathway is the path in which students gain knowledge in their courses, as well as achieve the course, departmental, divisional, and institutional objectives, as well as the 8 Abilities. **Where:** Column 5 on Phase IV form **Other things to know:** It is helpful to fill this section of your Phase IV form out each time you complete an assessment, rather than waiting until the end of the semester. That way, the information is still "fresh" in your mind. • Consider: Did students meet or exceed the benchmark you set in column 4?
Recommendations to continue or modify Student Learning Pathway	Once a faculty member compares the student performance on the assessment to the benchmark, the faculty member will need to decide to maintain or modify his or her teaching methods.	**What**: This is where you decide how to proceed with the teaching and learning process for the next time you teach the course. • If students **met or exceeded** the benchmarks: Indicate that you will continue to teach the subject matter in the same way. • If students **did not meet** the benchmarks: Indicate what you will do to improve student learning in the future. o Some questions to consider: What will you do to ensure student learning for this course objective next time? What prevented students from meeting the benchmark? What change(s) will you make? Is the assessment tool or benchmark ineffective? Is the course objective too difficult to measure? **Where**: Column 6 on Phase IV form
Closing the Loop	Reviewing and gathering outcomes assessment data is not enough; it must come full circle. Utilizing outcome results to increase the quality of student	**What**: By using the information from the outcomes assessment process and Phase IV form, you will have "closed the loop," which means you have used assessment data to make changes or continue on the same path in your teaching. **Where**: In your actions and choices when you teach the course again. This

	learning gives outcomes a process, not an end product.	part of the outcomes assessment process is not documented specifically on paper, but is the result of the process as a whole.
		• This includes implementing the changes indicated in column 6 of the Phase IV form.
		Other things to know: "Closing the loop" is not the end. Outcomes assessment is a circular process, so we "close the loop" for every class we teach, making changes and improvements each time.

Kinds of Learning Objectives

Who: Faculty; eventually program/division directors will use this information to map the sequence of learning for the Student Learning Pathway for specific program or degree outcomes and the 8 Abilities.

What: Requires faculty to determine at what level students can achieve course objectives.

Where: Columns 3 & 5 on Outcomes Assessment Alignment table (formerly Phase III form) on syllabus; Column 3 on Phase IV form

Why: Shows a clear sequence of learning that differentiates between newly introduced material and material that students already know and can apply.

Term	*Operational Definition*	*What This Means*
Learning Objectives: Introduce	Students learn the facts and concepts necessary for an introductory skill. *(Introductory Objective verbs: know, list, name, identify & recall)*	This is new material for students.
Learning Objectives: Reinforce	Students use what they know to reason and solve problems. *(Reinforce Objective verbs: predict, infer, classify, hypothesize, compare, conclude, summarize, analyze, evaluate, & generalize)*	This is material that students have learned (perhaps recently) and that they are able to begin using in a more skillful manner beyond identification and recall.
Learning Objectives: Emphasize	Students use their knowledge and reasoning to act skillfully. *(Emphasize Objective verbs: demonstrate, exhibit, display, prove, & show)*	This is material that students are knowledgeable about and are able to apply in more sophisticated ways.

COLLEGE LEARNING OUTCOMES

All graduates will engage in learning activities that enhance their professional and personal lives, as well as their communities. During their academic careers at Great Falls College Montana State University, students will engage in learning activities that demonstrate:

Outcome	Definition	Assessment Criteria
Effective Communication	The active expression and exchange of ideas through listening, speaking, reading, writing or other modes of non-verbal or artistic expression.	A. Organize and present ideas and information appropriate to the audience and situation, whether through writing, speaking, signing, or another method appropriate to the situation. B. Demonstrate the ability to understand and respond to both verbal and non-verbal messages. C. Make use of conventions of communication and seek feedback for revision and effectiveness.
Technical Literacy	The ability to form strategies to locate, evaluate, and apply information, and know the ethical issues surrounding information and technology.	A. Use and apply contemporary technologies. B. Gather and analyze information using technology while executing ethical principles of computer technology and information acquisition. C. Distinguish between credible and non-credible sources of information, assess for validity and relevancy and document sources appropriately.
Critical Thinking and Quantitative Reasoning	The ability to analyze data, arguments, assumptions, and problems in order to draw conclusions.	A. Identify problems, formulate hypotheses, gather evidence, interpret and evaluate information appropriate to program-specific problems. B. Select and use theoretical models, quantitative techniques, information sources, and technology tools. C. Engage in reflection, creative thinking, and expression.
Workforce Readiness	The ability to exercise the skills, competencies and behaviors necessary	A. Show professional behavior based on current industry and organization standards.

	to succeed in the workplace or at a transfer institution.	B. Demonstrate the ability to work individually and as a productive member of a team--meeting deadlines, completing assigned tasks, solving problems, and interacting with diverse populations. C. Use campus and community resources to develop professional and academic skills.
Citizenship	The ability to apply the knowledge, skills and values individuals utilize to be effective, active citizens.	A. Analyze and interact with different races, ethnicities, and social and cultural perspectives. B. Engage in the campus and/or local community. C. Evaluate personal strengths, challenges, and responsibility for effecting positive social change to strengthen communities.