# ITEM 110-2851-R0301 ATTACHMENT 22-23, 2001

## March

## **PROPOSAL AND RATIONALE**

Medical transcriptionists produce vital medical documents used to develop and preserve information of medical, scientific, and/or legal value in health-related facilities. For many years, Montana State University--Great Falls College of Technology has offered a program in Medical Transcription, preparing students for this career through a two-year course of study that now culminates in an Associate of Applied Science degree.

The College's Medical Transcription program has an excellent reputation for quality and has placed, on the average, over 90% of its graduates in jobs as medical transcriptionists. In January 2001, the College became aware of an additional employment opportunity that could be provided by modifying this program. The opportunity is made possible by three current trends:

- 1. In Montana and throughout the nation, there is a shortage of qualified medical transcriptionists. Advances in computer technology have made it possible for many national companies to meet their demands by employing qualified transcriptionists to work from their homes.
- 2. Since 1997, MSU--Great Falls College of Technology has continually increased its distributed learning offerings. One of the programs involved in this effort from the outset has been the Medical Transcription program. Currently, approximately half of its courses are offered on-line.
- 3. In rural Montana, the agriculture industry faces serious challenges. Many of the residents in these areas are place-bound and do not have the resources or opportunity to obtain training for new or supplemental careers.

The College of Technology responds to these trends through this proposal, which would add a oneyear certificate program in Medical Transcription delivered on-line to provide training for place-bound students who may choose to use this credential to work as transcriptionists from their homes. The proposal reflects the College's mission to respond to demands for workforce preparation meeting industry and regional needs.

# PROCESS FOR THE DEVELOPMENT OF THIS PROPOSAL

This proposal was developed after a Regional Development Officer for Economic Development from Montana's Department of Commerce advised the College of the need for an on-line program preparing place-bound rural Montanans, particularly those in agricultural settings, for a high-demand career. That officer met with College officials in January 2001 to discuss this need and how it might be addressed by the College.

Because much of the Medical Transcription AAS program is already delivered on-line and because the work of medical transcriptionists is increasingly undertaken from the home, this program was identified as the best option for responding to the needs of Montana's place-bound student and potentially place-bound worker. However, some courses in the AAS-degree program, particularly the lab-intensive portion of the Anatomy and Physiology course sequence, do not lend themselves well to electronic delivery. After consulting with the Medical Transcription Program Director, the College decided to develop a certificate-level Medical Transcription program that would meet this identified need through a compressed curriculum that could be delivered entirely on the Internet. The Program Director, with the assistance of the Director of Outreach, the Business and Technology Department Chair, and the Associate Dean for Academic Affairs, developed the curriculum design and plan for program implementation.

Prior to the submission to the Montana Board of Regents for Higher Education, this program proposal was reviewed by:

- The College's Director of Outreach, who coordinates the development, delivery, and assessment of the College's distributed learning offerings;
- four professionals in the medical transcription/medical records field who serve on the Medical Transcriptionist Advisory Committee; and
- the College's Academic Council, comprised of elected representatives from each department, department chairs, and the Associate Dean for Academic Affairs and Student Services.

### **PROGRAM DESCRIPTION**

The proposed certificate program in Medical Transcription is a modification of the College's existing AAS-degree program. The certificate program provides a 35-credit course of study distributed as follows:

ENGL 121	Written Composition	3 credits
PSYCH 101	General Psychology	3 credits
MATH 101	Introduction to Algebra	4 credits
BIO 105-6 N	Fundamentals of Human Biology w/Lab	4 credits
AH 185	Medical Terminology	4 credits
CS 110	Introduction to Computers	3 credits
OO 266	Microsoft Word	3 credits
HI 156	Legal & Regulatory Aspects of Healthcare	2 credits
AH 201	Medical Science	3 credits
OO 255	Medical Transcription I	3 credits
OO 256	Medical Transcription II	3 credits

None of the courses are new to the College. For informational purposes, descriptions of these courses are attached as Appendix A.

#### Intellectual Basis for the Curriculum

Like the established AAS program, the proposed curriculum prepares medical transcriptionists for their duties through coursework developing the following competencies:

1	Written communication skills:	one course required*
2	Human relations competencies:	one course required*
3	Business mathematics skills:	one course required
4	Knowledge of biological science:	two courses required *
5	Knowledge of the healthcare field:	three courses required
6	Technological competencies:	two courses required
7	Medical office skills:	two courses required

Nine of these courses are offered as part of the established AAS degree program. Fundamentals of Human Biology w/Lab will replace the AAS-program sequence in Anatomy and Physiology with a college-level course in biological science already available on-line. Three of the courses in the proposed certificate curriculum are college-level courses included in the General Education Transfer Core. An additional two courses are transferable to one or more four-year institutions of higher education in Montana. Both the existing AAS program and the proposed certificate program require keyboarding skills prior to admission.

The major differences between the established AAS program and the proposed certificate program are:

• The proposed certificate program in its entirety would be available on-line to accommodate the place-bound student.

• Although the graduates of this certificate program will be able to perform the duties of a medical transcriptionist, they may not have the depth of general education background or the breadth of job-applicable skills that the College's AAS program is designed to develop.

# **Program Delivery**

The proposed 35-credit certificate program will be offered entirely over the Internet through Web CT so that place-bound students, particularly those in rural settings, can be prepared for a high-demand career in medical transcription. MSU--Great Falls College of Technology began offering distributed learning courses in Fall Semester 1997 and has steadily improved the number, array, and quality of its on-line offerings. All of the courses are currently available on-line and are taught by faculty in various disciplines the College.

Interaction among students is part of the instructional design of all the College's Internet offerings, through such instructional practices as on-line, asynchronous discussions and group projects. In the transcriptionist courses, students actually edit transcription reports for each other and "discuss" them on-line to develop collaborative and proofreading skills. Interaction between individual students and faculty is accomplished through on-line chats and advising sessions. Face-to-face contact with faculty in the program will be encouraged through advising sessions at the College, and face-to-face contact with the Medical Transcription Program Director will be made possible through videophone communication. Using a toll-free number, students will be able to contact program faculty, the Distance Learning Support Desk, and/or the Outreach Coordinator for day-to-day advice and technical assistance.

# **PROGRAM IMPACTS**

# Impacts on the College

Because Montana State University--Great Falls College of Technology already has a well-established AAS-degree Medical Transcription program, the addition of a certificate option in that field will have place minimal additional demands on the College's human, physical, and fiscal resources.

In most cases, faculty currently assigned to the AAS-degree courses will provide those courses to certificate-level students as well. All but one of the courses in the proposed curriculum are currently available on-line. The College has recently been awarded a grant to develop the remaining course and to convert the existing courses to Web CT. Therefore, no additional resources will be needed for on-line implementation. Current and past enrollment levels in the proposed courses for this certificate program do not suggest an initial need for additional sections to support this certificate proposal.

Library, computer, and support services already in place for the AAS-degree Medical Transcription program will support the certificate option without impact. No additional facilities will be required. For the proposed certificate program, as with the established AAS-degree programs, students need transcription machines and tapes. The College currently loans these machines to students during their transcription courses and provides the dictation tapes.

No negative impacts on other programs at the College are anticipated as the result of the addition of this certificate program; in fact, just the opposite effects are expected. First, the addition of this certificate program enhances the College's already extensive array of allied health programs. All but two of these programs are AAS-degree programs. Because the general education requirements, particularly in the sciences, are so rigorous in the College's AAS programs, attrition rates during the prerequisite phase of the degree programs are high. The addition of certificate-level programming, when justifiable on the basis of competencies expected in the field, provides an avenue for students interested in healthcare careers, but academically unprepared for the College's AAS-degree programs.

# **Impacts on Other Institutions**

The addition of this certificate program should have no impact on other institutions in Montana. Only one other college, the University of Montana—Missoula College of Technology, offers a Medical

Transcription program. Like the existing program in Great Falls, it is a two-year AAS-degree program. The fact that the proposed program is of shorter duration and culminates in a certificate, along with its on-line delivery, makes it unique to the state. The University of Montana—Missoula College of Technology supports this proposal. The Dean of Dull Knife Memorial College has expressed an interest in making it available to students.

# ASSURANCES OF QUALITY

The College is committed to providing high-quality education in all its programs. The proposed program reflects that commitment.

## Adequacy of Support for Distributed Learning

The College supports on-line delivery of its courses and programs through administration, organizational structure, professional development, and staffing. The College's organizational structure includes an Outreach Department, which coordinates, supervises, promotes, develops, and evaluates the College's distributed learning offerings. The Outreach Coordinator has established orientation sessions for all distance students; chairs the Distance Learning Committee, which develops and evaluates on-line courses and programs; and provides ongoing professional development for faculty engaged in on-line offerings. The Outreach Department also retains a full-time employee to assist students in on-line courses and to serve as liaison between distributed learning students, faculty, and the administration. The Outreach Coordinator and an elected member of the Distance Learning Committee serve on the College's Academic Council. Outcomes assessment has established that the quality of instruction and students' satisfaction with their learning experiences in the College's on-line offerings compare favorably with instructional quality and student satisfaction in the College's more traditionally delivered courses and programs.

### Adequacy of Program Faculty

The Medical Transcription Program Director has a master's degree and is certified as a Health Insurance Professional and Medical Assistant. She has extensive experience working with medical records and has work experience in the transcription field. In addition, she keeps current with advances and opportunities in the field through membership in the American Association of Medical Transcription. The other courses in the proposed curriculum are taught by full-time faculty at the College meeting the minimum qualifications for faculty in their disciplines established by the Montana Board of Regents. All have participated in specialized training for distributed learning instruction and have experience in this form of instructional delivery.

#### **Adequacy of Resources**

Because the College has already established faculty, facilities, equipment, and library holdings adequate to support its AAS-degree Medical Transcription program, as well as it distributive learning offerings, no initial additional resources are anticipated. As the one-year program develops, the College will use the additional resources their enrollment produces to purchase additional transcription machines as the need arises.

# Accreditation

No special accreditation is required for the program. The AAS-degree Medical Transcription program was part of the College's offerings when it was most recently accredited by Northwest Association of Schools and Colleges.

The American Association of Medical Transcription (AAMT) sets standards for transcription programs, and the existing AAS program satisfies all of these competencies. The proposed certificate program would satisfy all AAMT competencies, with the exception of the internship. The potential for internships within the student's community and/or with national companies does exist, however, and the College is currently discussing the potential for partnership with one such company, MedQuist. Given the shortage of qualified transcriptionists, other national companies may be interested in providing internship experiences as well.

# Assessment of Academic Performance and Program Relevancy

Like all the other College's programs, the proposed certificate program in Medical Transcription will be the subject of institutional assessment and program review. These processes are designed to provide formative and summative indicators of the quality of curriculum and instruction, responsiveness to industry demands, student-centered instruction and services, the adequacy of program support, student/alumni satisfaction, and employer satisfaction.

# Appendix A: COURSE DESCRIPTIONS MEDICAL TRANSCRIPTION – CERTIFICATE PROGRAM PROPOSAL

#### AH **BASIC MEDICAL TERMINOLOGY** 185

The goals of this course are to promote a knowledge of the elements of medical terminology for professional and personal development, the ability to spell and pronounce medical terms, an understanding of medical abbreviations, and an appreciation of the logical method found in medical terminology. This includes word analysis and word building. Knowledge of terms relating to body structures, positions, directions, divisions and planes will be required. An awareness of current health events is encouraged, as is knowledge of basic scientific and specialty areas in healthcare practice.

#### AH 201 MEDICAL SCIENCE

This course provides basic knowledge of the most common diseases, anomalies, treatments, and procedures needed to analyze healthcare documentation for various allied health support functions including abstracting, coding, transcription, auditing, and reimbursement. Drug classification, diagnostic tests, pathology, laboratory, radiology, nuclear medicine, and ultrasound procedures are also included.

#### BIO **105N FUNDAMENTALS OF HUMAN BIOLOGY** Credits: 3

This course introduces students to the structure and function of the human body. Topics such as the fundamental principles in organic and inorganic chemistry, cellular metabolism, cellular anatomy, cellular biology and histology will be covered and subsequently applied to the physiology of the body as a whole. Systems to be covered in this course include integumentary, digestive, circulatory, lymphatic, respiratory, urinary, nervous, sensory, musculoskeletal, endocrine, and reproductive. This course is designed for non-science majors. Completion of this preliminary course is highly recommended for students who have no science background or have been out of school for more than 5 years before enrolling in BIO 209/210 Anatomy and Physiology I.

#### BIOL 106N FUNDAMENTALS OF HUMAN BIOLOGY LAB Credits: 1

Laboratory experience for BIO 105 including experimentation, microscope work, observations, and dissection.

#### CS **INTRODUCTION TO COMPUTERS** 110 Credits: 3

This course introduces students to the concepts and terminology of computer systems and related technology and their impact on individuals and society through lecture and lab format. Hands-on overview using popular microcomputer software provides experience with computers.

#### ENGL **121W COMPOSITION I**

Composition I offers a clearly defined sequential approach to writing the short essay including these patterns of writing: exposition; narration; description; and argumentation. Research process and techniques of writing the research paper result in a document of at least 10 pages. Emphasis is placed on pre-writing skills, organization, and development of ideas. Competence in sentence and paragraph writing skills is assumed.

#### Credits: 3

4

Credits:

Credits:

3

#### HI 156 LEGAL AND REGULATORY ASPECTS OF HEALTHCARE Credits: 2

This course covers basic knowledge of the legal, regulatory, and ethical aspects of healthcare including: doctrines, principles, and processes of civil law; state licensure and national accreditation standards; and professional requirements for personal liability, confidentiality, and documentation in the delivery of healthcare to the patient.

#### MATH 101 **INTRODUCTORY ALGEBRA**

Introductory Algebra initiates development in students' ability to organize thought processes and systematically solve problems while preparing students for studies in other courses. Course emphasis includes manipulation of variables, exponential applications, scientific notation, polynomials, factoring trinomials, solving equations, systems of equations, and graphing guadratic equations. This course is intended for students who have not studied algebra but have a firm background in basic mathematics or who wish it as a review.

00 **MEDICAL TRANSCRIPTION** Credits: 3 255 Prerequisite: AH 185, CS 110, OO 108, or consent of faculty

Students are introduced to ethical considerations, rules, regulations, forms, and techniques in recording medical documents. Transcription of various medical reports is required with emphasis on competency in medical vocabulary, spelling, punctuation, and extensive usage of medical reference materials.

#### 00 256 **MEDICAL TRANSCRIPTION II** Credits: 3

This course is designed to increase speed and accuracy in transcribing medical data with exposure to advanced technical language on a case-by-case basis. Special attention is on speed, accuracy, production, style, and forms in medical use.

#### 00 266 MICROSOFT WORD

Word processing software is used to create documents used in academic, professional, and business environments. These functions include editing, selecting, find and replace, document assembly, graphics, printing, headers and footers, columns, file management styles, math features, fonts and other print features, tables, sort and select, merges, macros, and reference tools.

#### PSY 101S GENERAL PSYCHOLOGY

This course is an introduction to the nature and scope of the field of psychology as a scientific and human endeavor. Major topics include: historic development of the field; biological and developmental processes; consciousness and perceptions; learning, remembering, and thinking; motivation and emotion; personality and individuality; social behavior; normal stress and coping; and abnormal psychology and treatment methods.

Credits:

3

Credits: 4

Credits: 3