Appendix D

CURRICULUM COMMITTEE CHECKLIST

NAME OF PROGRAM: Medical Assisting  Date: April 3, 2012

Step 1  Reviewed change at division meeting.  YES  NO

Step 2  Presented as informational item at Division Chair meeting(s) and checked if it affects other departments. Like programs must meet with Division Chairs on all affected campuses (North Mankato and Faribault).

Division Chair’s signature  

Step 3  Instructional Dean reviewed and indicated need for Curriculum Committee approval.  YES  NO

Instructional Dean’s signature  

Step 4  Advisory Committee approval indicated in meeting minutes if necessary. Minutes provided to Curriculum Committee.

Step 5  Curriculum Committee made recommendations (changes, additional approvals, etc.). If no, skip to Step 7.

Step 6  Committee’s recommendations completed. (Skip if not applicable.)  YES  NO

Step 7  Curriculum Committee approved.

Curriculum Committee Chair’s signature  

Step 8  Minutes and necessary materials provided to VP of Academic Affairs.  YES  NO

Step 9  Vice President of Academic Affairs approved.  YES  NO

Vice President of Academic Affairs’ signature  

Step 10  New Course Maximum Enrollment to Shared Governance.

Step 11  President’s approval for all changes requiring MnSCU approval.

President’s signature  

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# Appendix B

## New Course or Course Change Proposal Form

<table>
<thead>
<tr>
<th>Date of Proposal:</th>
<th>April 4, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author:</td>
<td>Cristen Olinger</td>
</tr>
<tr>
<td>Proposal Type:</td>
<td>Modify Course</td>
</tr>
<tr>
<td>Contact for the Course:</td>
<td>Cristen Olinger</td>
</tr>
<tr>
<td>Course Designator, Number and Title (i.e.: ACCU 1800, Business Law):</td>
<td>MA 2010 Basic Skills for Medical Assistants</td>
</tr>
<tr>
<td>Number of Credits:</td>
<td>3</td>
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<tr>
<td>Prerequisites:</td>
<td>None</td>
</tr>
<tr>
<td>Course Description:</td>
<td>course designed to teach fundamentals of medical assisting in clinical office setting. Students learn aspects of standard precautions, lab safety, decontamination.</td>
</tr>
<tr>
<td>Grading Method:</td>
<td>Grade ✔ Pass/Fail</td>
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<tr>
<td>Scheduling:</td>
<td>Fall ✔ Spring ✔ Summer ✔ Alternate Years ✔ Variable ✔ On Demand ✔</td>
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<tr>
<td>Instructional Type:</td>
<td>Lecture ✔ Lab ✔ Lecture/Lab ✔ Internship ✔ Seminar ✔</td>
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</table>

*Class Maximum: (For New Courses Only) / All Unlimited faculty members of a program or discipline must sign.*

<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Cristen Olinger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty Signature</td>
<td>Cristen Olinger</td>
</tr>
<tr>
<td>Class Max</td>
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<tr>
<td>Date</td>
<td>4-4-2012</td>
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<table>
<thead>
<tr>
<th>Dean's Name</th>
<th>J. E. Sullivan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean's Signature</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>4-11-2012</td>
</tr>
</tbody>
</table>

If there is not enough space provided, please use the back of this form for additional signatures or click on a row with the right button of the mouse, select insert and then select insert rows below to add rows to the table.

Is this Course Proposed as a Liberal Arts Course: Yes ✗ No ✔

If Yes, Which MnTC Area/Areas Will it Fulfill (http://www.mntransfer.org)?

Is This Course a Requirement/Elective for a Specific Program or Programs? Yes ✔ No ✗

If Yes, Which Program(s)? Medical Assisting

Describe What is Changing/Being Added, and the Rationale: Changing course number to MA 2010, took prerequisites out to maintain sequence as the previous MOLT 1810 which was included in previous sequence.

What Impact Will This New Course or Change Have on Other Programs or Areas? No

> Attach Common Course Outline to this Form.
Laboratory Skills for Medical Assistants
Common Course Outline

Course Information
Organization: South Central College
Developers: Cristen Olinger
Development Date: 2/1/2012
Revised Date: 4/4/2012
Course Number: MA 2010
Potential Hours of Instruction: 64
Total Credits: 3

Description
This course is designed to teach laboratory fundamentals of medical assisting in a clinical office setting. Students will learn aspects of standard precautions, laboratory safety, venipuncture, collection of patient specimens, perform CLIA waived laboratory testing along with identification of infectious agents. No Prerequisites

Types of Instruction
<table>
<thead>
<tr>
<th>Instruction Type</th>
<th>Contact Hours</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab</td>
<td>32</td>
<td>1</td>
</tr>
<tr>
<td>Lecture</td>
<td>32</td>
<td>2</td>
</tr>
</tbody>
</table>

Prerequisites
None

Exit Learning Outcomes
Institutional Core Competencies
A. Analysis and inquiry
B. Critical and creative thinking
C. Written and oral communication

Competencies
1. Demonstrate methods of Standard Precautions

   Learning Objectives
   a. Describe personal protective equipment
   b. Identify safety techniques that can be used to prevent accidents and maintain a safe work environment
   c. Identify safety signs, symbols and labels
   d. Match types of uses of personal protective equipment (PPE)

2. Apply Laboratory Safety Practices

   Learning Objectives
a. Complete an incident report
b. Discuss requirements for responding to hazardous material disposal
c. Develop a personal (patient and employee) safety plan
d. Develop an environmental safety plan (equipment)
e. Perform hand washing
f. Maintain a current list of community resources for emergency preparedness

3. Explain Quality Control Procedures
   Learning Objectives
   a. List major types of infectious agents
   b. Compare different methods of controlling the growth of microorganisms
   c. Discuss infection control procedures

4. Demonstrate Blood Collection
   Learning Objectives
   a. Perform venipuncture
   b. Demonstrate empathy in communicating with patients, family and staff
   c. Document patient care/venipuncture
   d. Perform venipuncture with syringe and butterfly method
   e. Perform venipuncture on hand vein
   f. Perform capillary puncture

5. Perform Microscope Examination
   Learning Objectives
   a. Identify parts of a microscope
   b. Focus laboratory microscope
   c. Discuss proper care of a laboratory microscope

6. Perform CLIA Waived Urinalysis Testing
   Learning Objectives
   a. Discuss proper clean catch mid stream urine sample patient instructions
   b. Explain the importance of the proper collection of urine specimens
   c. Distinguish between normal and abnormal test results
   d. Describe how to prepare urine sediment for microscopic examination
   e. Identify normal and abnormal urine crystals

7. Perform CLIA Waived Microbiology Testing
   Learning Objectives
   a. Discuss quality control issues related to handling microbiological specimens
   b. Obtain specimen for microbiological testing
   c. Explain the rational for performance of a procedure to the patient

8. Perform CLIA Waived Hematology Testing
   Learning Objectives
   a. Distinguish between different White Blood Cells (WBCs)
   b. Screen test results
   c. Discuss collection process which could affect hematology lab results

9. Perform CLIA Waived Chemistry Testing
   Learning Objectives
   a. Discuss most common chemistry tests performed in a clinical laboratory
b. Explain what is included in a chemistry panel

c. Explain how colorimeters and spectrophotometers produce specimen laboratory results

10. **Explain the principle of CLIA Waived laboratory testing**

   **Learning Objectives**
   
a. Discuss the importance of the Clinical Laboratory Improvement Amendments of 1988 (CLIA) in regards to CLIA waived laboratory testing

   b. Identify disease processes which have indicators for CLIA waived tests

   c. Identify common CLIA waived tests which are used within a clinic laboratory

11. **Demonstrate the methods for blood smears**

   **Learning Objectives**
   
a. Demonstrate correct procedure in preparing a blood smear

   b. Identify common problems in preparing and staining a blood smear

   c. Discuss the relationship between staining and identification of formed elements in the blood

12. **Use Quality Assurance and Quality Control techniques within the laboratory setting**

   **Learning Objectives**
   
a. Explain the importance of daily record keeping in regards to accuracy of laboratory tests results

   b. Perform controls on CLIA waived laboratory equipment

   c. Chart controls on a daily/monthly quality control log

   d. Define standard deviation and how it relates to patient laboratory results
### Appendix B

**New Course or Course Change Proposal Form**

<table>
<thead>
<tr>
<th>Date of Proposal:</th>
<th>March 23, 2012</th>
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<tbody>
<tr>
<td>Author:</td>
<td>Cristen Olinger</td>
</tr>
<tr>
<td>Proposal Type:</td>
<td>*New Course</td>
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<tr>
<td>Contact for the Course:</td>
<td>Cristen Olinger</td>
</tr>
<tr>
<td>Course Designator, Number and Title (i.e.: ACCT 2000, Business Law):</td>
<td>MA 2030 Radiography Skills for Medical Assistants</td>
</tr>
<tr>
<td>Number of Credits:</td>
<td>3</td>
</tr>
<tr>
<td>Prerequisites:</td>
<td>HC 1000, Medical Terminology, HC 1914 Anatomy and Physiology</td>
</tr>
<tr>
<td>Course Description:</td>
<td>Comprehensive look at line skills and processes needed to obtain and a limited scope of practice certificate in radiography.</td>
</tr>
<tr>
<td>Grading Method:</td>
<td>Grade</td>
</tr>
<tr>
<td>Scheduling:</td>
<td>Fall</td>
</tr>
<tr>
<td>Instructional Type:</td>
<td>Lecture</td>
</tr>
<tr>
<td>*Class Maximum: (For New Courses Only) / All Unlimited faculty members of a program or discipline must sign.</td>
<td>Cristen Olinger</td>
</tr>
<tr>
<td>Faculty Name</td>
<td>Cristen Olinger</td>
</tr>
<tr>
<td>Faculty Signature</td>
<td>Cristen Olinger</td>
</tr>
<tr>
<td>Class Max</td>
<td>12 Credit hours</td>
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<td>Date</td>
<td>4-3-12</td>
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<tr>
<td>Dean's Name</td>
<td>vincent savick</td>
</tr>
<tr>
<td>Dean's Signature</td>
<td>vincent savick</td>
</tr>
<tr>
<td>Date</td>
<td>4/10/12</td>
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Is this Course Proposed as a Liberal Arts Course: Yes No

If Yes, Which MnTC Area/Areas Will it Fulfill (http://www.mntransfer.org)?

Is This Course a Requirement/Elective for a Specific Program or Programs: Yes No

If Yes, Which Program(s): Medical Assisting

Describe What is Changing/Being Added, and the Rationale:

HC 1928 will be taken out as required, coding is covered in HC 293 per accreditation competencies, replacing credits with MA 2030 Radiography Skills for Medical Assistants.

What Impact Will This New Course or Change Have on Other Programs or Areas?

> Attach Common Course Outline to this Form.
Radiography Skills for Medical Assistants
Common Course Outline

Course Information
Organization: South Central College
Developers: Cristen Olinger
Development Date: 3/29/2012
Course Number: MA 2030
Potential Hours of Instruction: 80
Total Credits: 3

Description
This course is a comprehensive look at the skills and process needed to obtain a limited scope of practice certificate in radiography. Students will learn information regarding; radiation protection, image production and evaluation, equipment operation and quality control, patient care and education, as well as radiographic procedures for each anatomical region. Prerequisites: HC 1000 Medical Terminology, HC 1914 Anatomy and Physiology Disease Conditions I

Types of Instruction

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<thead>
<tr>
<th>Instruction Type</th>
<th>Contact Hours</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Lab</td>
<td>64</td>
<td>2</td>
</tr>
</tbody>
</table>

Prerequisites
HC 1000 Medical Terminology
HC 1914 Anatomy and Physiology Disease Conditions I

Exit Learning Outcomes

Institutional Core Competencies
A. Analysis and inquiry
B. Critical and creative thinking
C. Written and oral communication

Competencies

1. Demonstrate knowledge on role of Limited x-ray Operator and radiographic equipment Learning Objectives
   a. Explain the role of LMXO (Limited X-Ray Operator) in the hospital and clinical setting
   b. Describe the typical work environment of a LMXO
   c. Describe the general duties of a LMXO
   d. Use correct terms when referring to x-ray equipment
   e. Explain essential features of a x-ray room

2. Demonstrate basic mathematics and physics used for x-ray production Learning Objectives
a. Demonstrate calculations involving simple algebraic equations
b. Describe and use standard measurement units and conversions
c. Describe and calculate milliampere-second (MAs) and changes made due to different circumstances
d. Explain the difference between x-rays and visible light
e. Describe electromagnetic induction
f. Explain step-up and step-down transformers

3. **Demonstrate knowledge of x-ray production and X-ray circuitry**
   
   **Learning Objectives**
   
a. Describe the basic composition of the x-ray tube
b. Explain the terms anode and cathode
c. Describe the terms characteristic and Bremsstrahlung radiation
d. Explain changes in milliampere (mA) and kilovolt (kVp)
e. List the principle parts of an x-ray circuitry
f. Describe components of an automatic exposure control system
g. List the different possible causes of x-ray tube failure

4. **Explain the principles of exposure and image quality**
   
   **Learning Objectives**
   
a. Explain the prime factors of exposure
b. Explain the formula for determining mAs
c. Identify changes in radiographic density
d. Define recorded detail
e. Explain how to minimize motion and blur on radiographs

5. **Discuss the difference between screen image receptor systems and digital systems**
   
   **Learning Objectives**
   
a. List components of a typical radiograph cassette and its purpose
b. Explain the purpose of intensifying screens
c. Demonstrate correct handling of radiographic films
d. Explain optimum conditions for storing film
e. Define digital imaging
f. Explain computed radiography (CR) and digital radiography (DR) systems
g. Explain what picture archival and communications systems (PACS) is and how it is used
h. List technical considerations for digital imaging systems

6. **Demonstrate knowledge of x-ray dark room and film processing**
   
   **Learning Objectives**
   
a. List essential equipment found in a x-ray dark room
b. Explain darkroom fog and how to prevent it
c. Explain steps used in the manual processing of films
d. List the steps used in automatic processing of films
e. Identify common radiographic artifacts and explain how to avoid them
f. List essentials of a quality control (QC) program

7. **Formulate x-ray techniques and explain scatter radiation**
   
   **Learning Objectives**
   
a. Explain problems caused by scatter radiation
8. **Demonstrate knowledge of radiography and radiation safety**
   **Learning Objectives**
   a. List units used to measure radiation intensity and dose
   b. Explain equivalent dose
   c. List different potential effects of radiation on cells
   d. Explain the ALARA (As Low As Reasonably Achievable) principle
   e. List methods for minimizing patient and technician dose
   f. Explain risks of radiation exposure in pregnancy
   g. Explain nonstochastic and stochastic effects of radiation

9. **Demonstrate basic radiographic positioning and pathology**
   **Learning Objectives**
   a. Explain basic anatomy terms
   b. Identify anatomical positions
   c. Define terms used to describe disease processes
   d. Use correct terminology when referring to x-ray projections
   e. Identify different fractures seen in imaging

10. **Perform upper extremity positioning and evaluate images**
    **Learning Objectives**
    a. List bones that compose the upper extremity
    b. Demonstrate correct positioning for routine exams of the upper extremity
    c. Evaluate radiographs of the upper extremity
    d. Recognize pathology commonly seen on images

11. **Perform lower extremity and pelvis positioning and evaluate images**
    **Learning Objectives**
    a. List bones that compose the lower extremity and pelvis area
    b. Demonstrate correct positioning for routine exams of the lower extremity and pelvis
    c. Evaluate radiographs of the lower extremity and pelvis
    d. Recognize pathology commonly seen on radiology images

12. **Perform spine imaging and evaluate images**
    **Learning Objectives**
    a. List regions of the spine and identify typical vertebrae
    b. Explain correct positioning of each routine spine view
    c. List palpable landmarks used in spine imaging
    d. Evaluate images of the spine
    e. Explain pathology commonly seen on spine images

13. **Perform chest and abdomen imaging and evaluate images**
    **Learning Objectives**
    a. List the bones that make up the boney thorax and find on a radiograph
b. Identify positioning landmarks for chest and abdomen imaging

c. Demonstrate correct positioning of routine exams

d. Evaluate images of the bony thorax

e. Recognize pathology commonly seen on images

14. **Perform skull imaging and evaluate images**

   **Learning Objectives**
   a. List the bones that make up the cranium and face
   b. List and locate the paranasal sinuses on radiographs
   c. Explain correct positioning of each routine skull view
   d. Evaluate images of the skull
   e. Recognize pathology commonly seen on skull and sinus imaging

15. **Explain considerations in professionalism and patient care**

   **Learning Objectives**
   a. Apply ethical concepts to everyday situations in radiography
   b. Demonstrate effective communication skills both with co-workers and patients
   c. Demonstrate knowledge of patient confidentiality and proper work process