

**Minnesota State University Moorhead
2006-2007 Assessment Plan Cover Sheet**

(An electronic version of this form can be accessed at <http://www.mnstate.edu/assess>)

Note: All programs will complete this form.

Degree Program: Computer Science

Department: CSIS

College: CBI

Date: 11/9/2006

Is this assessment plan your existing plan, a new assessment plan or a revision of an existing plan?

Existing New Revision

1. Name(s) of Department Assessment Coordinator and/or Assessment Committee Members

Andrew Chen

2. List of All Student Learning Outcomes. (List and number all outcomes, placing an asterisk (*) by the outcomes you are assessing this year.)

Students will be able to competently develop computer software. (*)

Students will be able to communicate, to technical and non-technical audiences, about computers and computation through writing and speech.

Students will possess competitive and comprehensive discipline-specific content knowledge. (*)

Students will be able to solve problems in their careers.

3. Explain how the student learning outcomes are appropriate to department or program goals, as identified in your most recent Quality Improvement Plan. Please note if the program is accredited by an external agency.

Our program is not accredited by an external agency, however, we are preparing for accreditation within the next few years. The most recent statement of program goals can be found in the 5-year report which was done 7 years ago, and many of them are further clarifications of what is found in that third student learning outcome. One of them maps directly to the first and fourth student learning outcome. One of them is more specialized than our second student learning outcome.

4. Signatures

Department Chair or Program Director

Dean or Director

Required Attachments:

1. Assessment Planning Forms
2. Records of department meetings when Assessment Plan was discussed and approved.

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Academic Program: Computer Science

1. Identify Student Learning Outcome in the box below and note its number (to correspond with the list on the cover sheet):

Students will be able to competently develop computer software. (1)

2. Which MSUM mission goals are addressed by this learning outcome? (check all that apply)

<input type="checkbox"/> Knowledge/content	<input type="checkbox"/> Information literacy
<input type="checkbox"/> Intellectual development	<input type="checkbox"/> Lifelong learning
<input checked="" type="checkbox"/> Talents	<input type="checkbox"/> Service
<input type="checkbox"/> Critical thinking	<input type="checkbox"/> Citizenship
<input type="checkbox"/> Oral communication	<input type="checkbox"/> Responsibility and ethics
<input type="checkbox"/> Written communication	<input type="checkbox"/> Global understanding
<input type="checkbox"/> Mathematics	<input type="checkbox"/> Other:
<input type="checkbox"/> Multiculturalism/diversity	<input type="checkbox"/> Other:

3. How is this learning outcome achieved through the program's curriculum? Identify the courses or extra-curricular opportunities that address this outcome.

In this major, many courses which involve the development of computer software are required. Those are the courses which address this outcome.

4. What methods of assessment will be used for this outcome? (Specify instrument and submit electronically with plan.)

Selected actual copies of work done on "show your work" or "write the code for" final exam questions. Also, selected project reports from the "Compilers" class. A rubric sheet should be found submitted with this document.

5. Who is assessed? When are they assessed?

A representative sample (to be determined by the the instructor) of such work will be collected from students in the "Compilers" class when those students take that course when it is taught.

6. Who is responsible in the department for collecting data? How and when will the results be discussed by members of the program?

Each individual faculty member is responsible for collecting data. The results will be discussed by the faculty members once a semester at a meeting that is designated for the discussion of those results.

7. What is level of student performance is expected for this outcome?

The first time this is done, faculty members will establish a baseline against which we can compare this. Future revisions to this assessment plan will be revised accordingly.

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Academic Program: Computer Science

1. Identify Student Learning Outcome in the box below and note its number (to correspond with the list on the cover sheet):

Students will be able to communicate, to technical and non-technical audiences, about computers and computation through writing and speech. (2)

2. Which MSUM mission goals are addressed by this learning outcome? (check all that apply)

<input type="checkbox"/> Knowledge/content	<input type="checkbox"/> Information literacy
<input type="checkbox"/> Intellectual development	<input type="checkbox"/> Lifelong learning
<input type="checkbox"/> Talents	<input type="checkbox"/> Service
<input type="checkbox"/> Critical thinking	<input type="checkbox"/> Citizenship
<input checked="" type="checkbox"/> Oral communication	<input type="checkbox"/> Responsibility and ethics
<input checked="" type="checkbox"/> Written communication	<input type="checkbox"/> Global understanding
<input type="checkbox"/> Mathematics	<input type="checkbox"/> Other:
<input type="checkbox"/> Multiculturalism/diversity	<input type="checkbox"/> Other:

3. How is this learning outcome achieved through the program's curriculum? Identify the courses or extra-curricular opportunities that address this outcome.

In various courses required for the major, papers, projects, and presentations involving written and oral communication are required. Additionally, relevant courses from other disciplines are required for purposes of ensuring that this outcome is properly addressed.

4. What methods of assessment will be used for this outcome? (Specify instrument and submit electronically with plan.)

Samples of written work will be collected. Faculty will observe and document the performance of presentations.

5. Who is assessed? When are they assessed?

Students in required courses involving written or oral communication are assessed. They are assessed when they take such courses.

6. Who is responsible in the department for collecting data? How and when will the results be discussed by members of the program?

The faculty teaching such courses are responsible for collecting the data. The results will be discussed by faculty members during a meeting especially set aside for purposes of discussing such things.

7. What is level of student performance is expected for this outcome?

The first time this is done, a baseline standard against which we can compare will be documented. After that, we will strive for improvement.

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Academic Program: Computer Science

1. Identify Student Learning Outcome in the box below and note its number (to correspond with the list on the cover sheet):

Students will possess competitive and comprehensive discipline-specific content knowledge. (3)

2. Which MSUM mission goals are addressed by this learning outcome? (check all that apply)

<input checked="" type="checkbox"/> Knowledge/content	<input type="checkbox"/> Information literacy
<input type="checkbox"/> Intellectual development	<input type="checkbox"/> Lifelong learning
<input type="checkbox"/> Talents	<input type="checkbox"/> Service
<input type="checkbox"/> Critical thinking	<input type="checkbox"/> Citizenship
<input type="checkbox"/> Oral communication	<input type="checkbox"/> Responsibility and ethics
<input type="checkbox"/> Written communication	<input type="checkbox"/> Global understanding
<input type="checkbox"/> Mathematics	<input type="checkbox"/> Other:
<input type="checkbox"/> Multiculturalism/diversity	<input type="checkbox"/> Other:

3. How is this learning outcome achieved through the program's curriculum? Identify the courses or extra-curricular opportunities that address this outcome.

The knowledge that students should possess is covered in the courses required for the program. All required courses participate in this.

4. What methods of assessment will be used for this outcome? (Specify instrument and submit electronically with plan.)

The ETS Major Field Test for Computer Science

5. Who is assessed? When are they assessed?

The students taking the senior seminar class are assessed. They are to take the ETS Major Field Test as part of that class and are to be required to do so. At present, it is not determined to what extent it will contribute to their grade. They will be assessed every year.

6. Who is responsible in the department for collecting data? How and when will the results be discussed by members of the program?

The instructor of the senior seminar will ensure the students take the test and proper procedures are followed for submitting the tests to the testing agency. The assessment coordinator will ensure the test results are obtained from the testing agency and will prepare a small report

summarizing them, and will bring this report to a department meeting which will be designated for purposes of discussing the results.

7. What is level of student performance is expected for this outcome?

The first year in which we do this will establish a baseline. Each year after that, we will expect improvement.

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Academic Program: Computer Science

1. Identify Student Learning Outcome in the box below and note its number (to correspond with the list on the cover sheet):

Students will be able to solve problems in their careers. (4)

2. Which MSUM mission goals are addressed by this learning outcome? (check all that apply)

<input type="checkbox"/> Knowledge/content	<input type="checkbox"/> Information literacy
<input type="checkbox"/> Intellectual development	<input checked="" type="checkbox"/> Lifelong learning
<input type="checkbox"/> Talents	<input type="checkbox"/> Service
<input checked="" type="checkbox"/> Critical thinking	<input type="checkbox"/> Citizenship
<input type="checkbox"/> Oral communication	<input type="checkbox"/> Responsibility and ethics
<input type="checkbox"/> Written communication	<input type="checkbox"/> Global understanding
<input type="checkbox"/> Mathematics	<input type="checkbox"/> Other:
<input type="checkbox"/> Multiculturalism/diversity	<input type="checkbox"/> Other:

3. How is this learning outcome achieved through the program's curriculum? Identify the courses or extra-curricular opportunities that address this outcome.

Students are required to take many courses in this program in which the solving of problems is expected. Those such courses are courses that address this outcome.

4. What methods of assessment will be used for this outcome? (Specify instrument and submit electronically with plan.)

An alumni survey. A draft of this survey should be found submitted with this document. Note that that is just a draft. Note that some questions on the survey are forms of direct assessment.

5. Who is assessed? When are they assessed?

Alumni are assessed when they take the survey and the results are returned.

6. Who is responsible in the department for collecting data? How and when will the results be discussed by members of the program?

Responsibility for the alumni survey has not been fully determined yet. Close coordination with the alumni affairs office is anticipated and the exact result of this will be dependent upon yet-to-be initiated talks with alumni affairs. The results will be discussed by the faculty at a meeting designated for the discussion of such data.

7. What is level of student performance is expected for this outcome?

The first time this is done, a baseline will be established. We will be able to use that to determine what is a reasonable level of student performance to expect, and we will strive for continual improvement in the future.

Please take a few minutes to help the CSIS Department from your alma mater by completing this short survey. The information you provide is very important for us in our plan for assessing student learning outcomes. While you may choose to remain anonymous, we would appreciate it if you would identify yourself so that success in your career can be compared to your performance while you were here getting your major from us. This includes exit testing starting in spring semester 2007. Your personal information will be used in no way other than in our assessing of student learning outcomes, and will not be published in any reports. For a more detailed description of how this information will be used, please see the endnote at the end of this survey.¹

Name (OPTIONAL)	
Company (OPTIONAL)	
Position (OPTIONAL)	
Gender (OPTIONAL)	

Please feel free to attach additional sheets as necessary.

Question 1: To what extent do you feel your time at MSUM helped you become more able to solve problems in your career?

Question 2: Please describe a time in your career in which you solved a problem.

Question 3: With regard to the above time which you described, please indicate how well you feel you solved that problem.

Question 4: Which parts of your education at MSUM do you feel helped you become more able to solve that problem?

Student:

Assignment:

Rubric	Number (0-100%)	Poor	Fair	Good
packaging				
documentation				
functionality				
modularity				
clarity of code				
efficiency of code				
algorithm selection				
adherence to specifications				
innovation, extra effort, added features, introduction/use of non- requisite tools				