

# **Diagnostic Medical Sonography Annual Assessment Report 2010-11**

## **I. Introduction**

The Diagnostic Medical Sonography Program (DMS) began in 1997 and is one of the five Medical Imaging programs offered on the Klamath Falls campus. The DMS program is selective and admits pre-Medical Imaging students into the professional courses at the sophomore level. Due to this selectivity, the program has good graduation retention rates. The spring 2010 graduation of 25 students yielded cohort retention of 100%. Enrollment trends from 2005-2010 show continued growth from 68 to 87 students. The 2010 OIT graduate survey indicated a median entry salary for DMS graduates at \$64,924, with twelve graduates reporting. However, the Bureau of Labor Statistics ([www.bls.gov](http://www.bls.gov)) identified Oregon as one of the top 5 paying states with an annual mean wage for Diagnostic Medical Sonographers of \$77,570 in May 2010.

## **II. Program Purpose, Objectives and Student Learning Outcomes**

The Diagnostic Medical Sonography faculty reviewed the program purpose, objectives, and learning outcomes during the fall faculty meeting in September 2010. The faculty reaffirmed the purpose and aligned the Programmatic Student Learning Outcomes assessments with Institutional Student Learning Outcomes.

### **Diagnostic Medical Sonography Program Purpose**

To provide the residents of Oregon, the Pacific Northwest and surrounding regions with graduates possessing knowledge and behaviors to earn Bachelor of Science degrees in Diagnostic Medical Sonography, the clinical skills necessary to become competent, ethical and caring imaging professionals, and the foundation for life-long learning.

### **Program Educational Objectives**

To prepare graduates to:

1. Employ diagnostic sonographic imaging techniques, critical thinking skills, effective communication skills, and professional judgment.
2. Effectively apply ergonomically correct scanning techniques.
3. Successfully complete nationally recognized credential examinations.
4. Develop a dedication to independent life-long learning and professional contribution.

### **Expected Program Learning Outcomes**

Graduates from this program will be able to demonstrate:

1. Effective oral, visual, and written communication skills.
2. The ability to work effectively in teams.
3. The ability to provide basic patient care and comfort while utilizing ethical, professionalism and HIPAA guidelines

4. Knowledge and understanding of human gross and sectional anatomy relative to normal and abnormal sonographic imaging.
5. Knowledge and understanding of human physiology, pathology and pathophysiology.
6. Knowledge and understanding of ultrasound physical principles and instrumentation.
7. Knowledge of sonographic biological effects, proper application of sonographic instrumentation relative to imaging and film quality.
8. Appropriate ergonomic scanning applications.
9. An understanding of diverse cultural and humanistic traditions in the global society.

### **Other Learning Opportunities**

1. Annual professional meetings and conferences for sonography students include:
  - Society of Diagnostic Medical Sonography (SDMS)
  - American Institute of Ultrasound in Medicine (AIUM)
  - American College of Educators in Radiologic Technology (ACERT)
  - Eugene Ultrasound Society (EUS)
  - Other smaller study groups located in San Francisco Bay Area
  - OIT DMS Sonography Advisory Council annual meeting and Continuing Medical Education opportunity (CME)

The location and financial responsibility remain a challenge for DMS students to attend national conferences. These meetings are held during regularly scheduled instructional terms. The national meetings are frequently held in locations greater than 1,000 miles from Klamath Falls. Students appreciate the networking and educational benefits of attending these meetings. The current sophomore class is actively engaged in fundraising in order to attend the National SDMS Conference for October 2010.

Competition opportunities are components of the national conferences of SDMS and ACERT. Presently, international trips are unavailable to DMS students.

2. On-line professional learning opportunities for sonography students include:
  - Monthly CME directed readings associated with student SDMS Memberships
  - SDMS Webinars are available to students with SDMS Membership

All DMS students hold student SDMS memberships and are eligible for these opportunities. The DMS faculty encourages students to participate in these offerings not only for educational benefits, but to develop and promote effective life-long learning behaviors.

### III. Three-Year Cycle for Assessment of Student Learning Outcomes

The following are the nine main outcomes which will be assessed at a rate of three per year on a three-year cycle, as listed below in Table 1.

<b>Student Learning Outcomes Assessment Schedule</b>		<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>
<b>1.</b>	The student will demonstrate effective oral, visual, and written communication skills	<b>X</b>		
<b>2.</b>	The student will demonstrate the ability to work effectively in teams			<b>X</b>
<b>3.</b>	A. The student will demonstrate an ability to provide basic patient care and comfort while utilizing ethical, professionalism and HIPAA guidelines			<b>X</b>
	B. Professionalism			<b>X</b>
<b>4.</b>	The student will demonstrate knowledge and understanding of human gross and sectional anatomy relative to normal and abnormal sonographic imaging.		<b>X</b>	
<b>5.</b>	The student will demonstrate knowledge and understanding of human physiology, pathology and pathophysiology	<b>X</b>		
<b>6.</b>	The student will demonstrate knowledge and understanding of ultrasound physical principles and instrumentation.		<b>X</b>	
<b>7.</b>	The student will demonstrate knowledge of sonographic biological effects, proper application of sonographic instrumentation relative to imaging and film quality		<b>X</b>	
<b>8.</b>	The student will demonstrate appropriate ergonomic scanning applications	<b>X</b>		
<b>9.</b>	The student will demonstrate an understanding of diverse cultural and humanistic traditions in the global society			<b>X</b>

Table 1. Diagnostic Medical Sonography Assessment Cycle

#### IV. Summary of 2010-11 Assessment Activities

The DMS faculty conducted formal assessment of three programmatic student learning outcomes (SLO), and two Institutional Student Learning Outcomes (ISLOs) during the 2010-11 academic year. One of the ISLOs are similar to program students learning outcomes—oral and written communication.

**Student Learning Outcome #1: The student will demonstrate effective oral, visual, and written communication skills** (assessed in conjunction with OIT’s ISLO 1 communication).

The DMS Faculty mapped this outcome to the DMS curriculum. A map of the identified courses is found in Appendix A, Student Learning Outcome-Course Matrices Table A1 and A2.

#### Direct Assessment #1

The faculty assessed the oral component of the SLO and ISLO 1 communication outcome in DMS 346 MSK Sonography in Fall 2010 using student presentation projects.

Presentations were assessed via OIT’s public speaking rubric criteria described in Table 2 below. There were 26 junior students involved in the assessment.

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Content	OIT public speaking Rubric	1-4 scale, % at 3 or 4	80 % at 3 or 4	86%
Organization	OIT public speaking Rubric	1-4 scale, % at 3 or 4	80 % at 3 or 4	82%
Style	OIT public speaking Rubric	1-4 scale, % at 3 or 4	80 % at 3 or 4	81%
Delivery	OIT public speaking Rubric	1-4 scale, % at 3 or 4	80 % at 3 or 4	89%
Visuals	OIT public speaking Rubric	1-4 scale, % at 3 or 4	80 % at 3 or 4	90%

Table 2. Direct Assessment Results for SLO#1 and ISLO #1 in DMS 346, Fall 2010

The raw data indicates that the target DMS students assessed were proficient in public speaking skills. The goal of this assessment was to determine how well the students would perform as a public speaker. The students were scored utilizing the OIT Public Speaking Rubric. Most of the students comprehended a very thorough understanding of the material. Most students delivered an effective and sufficient amount of information while speaking. DMS 346 was selected as a course because students needed to practice their speaking skills as if they were presenting a case to a radiologist. This setting allowed the instructor to evaluate the student’s skills under pressure and in an environment that was under subjectivity of the intended audience. The results are summarized in the table seen above. The results concluded that DMS students are exceeding public speaking expectations.

**Direct Assessment #2**

The faculty assessed the written component of the SLO and ISLO 1 communication outcome in DMS 430 Externship in Fall 2010 using a written assignment. The written assignment was assessed via OIT’s essay rubric criteria described in Table 3 below. There were 29 senior students involved in the assessment.

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Propose	OIT essay rubric	1-4 scale, % at 3 or 4	80 % at 3 or 4	90%
Organization	OIT essay rubric	1-4 scale, % at 3 or 4	80 % at 3 or 4	85%
Support	OIT essay rubric	1-4 scale, % at 3 or 4	80 % at 3 or 4	85%
Style	OIT essay rubric	1-4 scale, % at 3 or 4	80 % at 3 or 4	80%
Conventions	OIT essay rubric	1-4 scale, % at 3 or 4	80 % at 3 or 4	90%
Documentations	OIT essay rubric	1-4 scale, % at 3 or 4	80 % at 3 or 4	95%

Table 3. Direct Assessment Results for SLO #1 and ISLO #1 in DMS 430, Fall 2010

The goal for this assessment was to achieve a minimum acceptable performance of 80%. This goal was met. The faculty rated the students by utilizing OIT’s essay rubric. The scores revealed positive results and deemed the DMS students writing abilities as meeting expectations.

**Direct Assessment #3**

The faculty assessed this outcome in DMS 430, senior externship, by means of a case report. The faculty rated the proficiency of the students using the performance criteria described in Table 4.

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Identifies and explains case	Case study rubric	1-4 scale, % at 3 or 4	80% with 3 or 4	100%
Evaluates assumptions	Case study rubric	1-4 scale, % at 3 or 4	80% with 3 or 4	100%
Evaluates evidence	Case study rubric	1-4 scale, % at 3 or 4	80% with 3 or 4	100%
Differential diagnosis	Case study rubric	1-4 scale, % at 3 or 4	80% with 3 or 4	90%

Table 4. Combined Results for SLO #1 in DMS 430, Spring Term 2011

The 29 DMS juniors performed above expectations for all criteria for this learning outcome. Didactic preparation is the first step in student application for the externship experience. Students were able to describe presenting symptoms and implication on exam; how to accommodate patient regarding symptoms physically and sonographically. They were able to recognize stakeholders and contexts. The graded case reports discussed the importance of exam for the patient and physician. The overall written presentations were professional in appearance, grammar, references; proper annotation and use of JDMS guidelines. The case studies followed HIPAA guidelines regarding confidentiality. The area that lacked slightly were potential differential diagnoses, why examination was ordered, options for other imaging modalities for this clinical history or presenting symptom, methods of patient care and opportunities by which to improve patient care. At this time no further action is needed

**Indirect Assessment #1**

To accompany the assessment above, the faculty indirectly assessed this outcome in DMS 430 spring 2011 exit survey, by asking the 29 senior students to rate their level of competency. There were 29 students who completed the assessment. These results are summarized, shown in Table 5 below.

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Ability to communicate effectively in oral, written, and visual forms.	Student survey	1-4 scale, % at 3 or 4	80 % at 3 or 4	95%

Table 5. Indirect Assessment Results for SLO #1 in DMS 430, Spring 2011

The primary assessment method was composite average of a Clinical Site Program Evaluation. A survey was administered at the conclusion of the DMS class of 2011. It was the desire that students scored at least with an 80% or better. The survey summary results revealed adequate results with students scoring above the benchmark of 80%. No follow up recommendations are suggested at this time.

**Student Learning Outcome #5: The student will demonstrate knowledge and understanding of human physiology, pathology and pathophysiology.**

The DMS Faculty mapped this outcome to the curriculum. A map of the identified courses is found the Appendix A, Student Learning Outcome-Course Matrices Table A3.

**Direct Assessment #1**

The faculty assessed this outcome in DMS 430 Externship, spring term 2011 using five test questions to evaluate human anatomy knowledge. Students who scored 80% correct have met our expectations for proficiency. There were 25 extern students involved in the assessment. Results are detailed in table 6 below.

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Understanding human anatomy	Test Questions	80% of the questions correct	80% of the students with 80% correct	85%
Understanding human pathology	Test Questions	80% of the questions correct	80% of the students with 80% correct	80%
Understanding pathophysiology	Test Questions	80% of the questions correct	80% of the students with 80% correct	80%

Table 6. Combined Results for SLO #5 in DMS 430, Spring Term 2011

Data collection was achieved by means of test question evaluation that pertained to the performance criteria. There were 25 DMS students that participated in this activity. Results for the students demonstrating proficiency is concluded in the Results Column. The DMS faculty found these results to be acceptable overall. As expected, most DMS students were able to understand human anatomy, pathology, and pathophysiology. There were no specific weaknesses that needed corrective action; however it has been approved to move forward with an additional term of OB pathology that will be a degree requirement. This decision was made based on students achieving the minimum acceptable performance range. Faculty wants these percentages to increase next year.

### Indirect Assessment #1

To accompany the assessment above, the faculty indirectly assessed this outcome in DMS 430 spring 2011 exit survey, by asking the 29 senior students to rate their level of competency. There were 29 students who completed the assessment. These results are summarized, shown in Table 7 below.

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Student demonstrated knowledge and understanding of human pathology.	Student survey	1-4 scale, % at 3 or 4	80 % at 3 or 4	85%

Table 7. Indirect Assessment Results for SLO #5 in DMS 430, Spring 2011

The primary assessment method was composite average of a Clinical Site Program Evaluation. A survey was administered at the conclusion of the DMS class of 2011. It was the desire that students scored at least with an 80% or better. The survey summary results revealed adequate results with students scoring above the benchmark of 80%. No follow up recommendations are suggested at this time.

**Student Learning Outcome #8: The student will demonstrate appropriate ergonomic scanning applications.**

The DMS Faculty mapped this outcome to the curriculum. A map of the identified courses is found the Appendix A, Student Learning Outcome-Course Matrices Table A4.

**Direct Assessment #1**

The faculty assessed this outcome in DMS 354, Junior Diagnostic Medical Sonography Lab, spring 2011 by means of an ergonomic practical. The DMS juniors were given 3 criteria to focus on; correct posture, holding the transducer properly, and proper body mechanics. This assignment in conjunction with a graded practical was use to gather results. Students earned a grade for this assignment. The faculty rated student proficiency with ergonomic provisions using a graded rubric. The students were rated on a scale from 1-10; ten being the highest score possible. 25 junior students participated in this assessment. The faculty rated the proficiency of the students using the performance criteria described in Table 8 below.

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Student obtained correct posture	Practical examination scored with a rubric	1-10	80% with 8 or better	95%
Student held transducer correctly	Practical examination scored with a rubric	1-10	80% with 8 or better	100%
Student utilized proper body mechanics	Practical examination scored with a rubric	1-10	80% with 8 or better	95%

Table 8. Practical Examination Results for SLO #8 in DMS 354, Spring 2011

Effective and proper ergonomic skills are essential to a working sonographer. These students were able to demonstrate effective techniques during a live practical assessment. The goal was that 80% of these students earn at least an 8 out of 10 points possible for each performance criteria. The outcome demonstrated that the students had proper body mechanics and demonstrated overall excellent ergonomic skills.

**Indirect Assessment #1**

To accompany the assessment above, the faculty indirectly assessed this outcome in DMS 430 spring 2011 exit survey, by asking the 29 senior students to rate their level of competency. There were 29 students who completed the assessment. These results are summarized, shown in Table 9 below.

Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results
Student demonstrated appropriated ergonomic scanning applications.	Student survey	1-4 scale, % at 3 or 4	80 % at 3 or 4	90%

Table 9. Results for ISLO DMS 354, Spring 2011

The primary assessment method was composite average of a Clinical Site Program Evaluation. A survey was administered at the conclusion of the DMS class of 2011. It was the desire that students scored at least with an 80% or better. The survey summary results revealed adequate results with students scoring above the benchmark of 80%. No follow up recommendations are suggested at this time.

The DMS juniors exceeded all performance criteria for understanding ergonomic provisions in all three provision areas. The entire population for this assessment displayed acceptable level of proficiency and most exhibited high proficiency.

## V. Summary of Student Learning

In a spring faculty meeting, the DMS faculty reviewed the assessment results and reached the following overall conclusions.

### **Student Learning Outcome #1: The student will demonstrate effective oral, visual, and written communication skills**

Strengths: The outcome indicates that the students are competent in effective oral, visual, and written communication skills.

Weakness: Faculty will continue to recommend creativity. Many students incorporated visuals created from the World Wide Web. Student's creativity will come with educational experience and practice.

Actions: It is suggested the DMS needs to keep oral/written assignments as course requirements. Faculty reviewed the findings to determine if improvements were necessary. At this time no further action is needed.

### **Student Learning Outcome #5: The student will demonstrate knowledge and understanding of human physiology, pathology and pathophysiology**

Strengths: All the results met the minimum acceptable performance levels.

Weakness: Students score at the minimum acceptable range.

Actions: The curriculum map has changed to include an additional term of OB/GYN that emphasis OB pathology and embryonic development. This additional course should

improve student's base knowledge of human physiology, pathology, and pathophysiology.

**Student Learning Outcome #8: The student will demonstrate appropriate ergonomic scanning applications**

Strengths: Junior DMS students demonstrated outstanding performance in various ergonomic scanning categories. The performance criteria was stringent. Collected data this year suggests that students can perform the outcome and no further action is required at this time. However, course instructors are strongly encouraged to place additional emphasis on ergonomic topics in course offerings as a handful of post grads are dealing with back injuries.

Weaknesses: None at this time.

Actions: No further action required at this time.

## Appendix A1

### Student Learning Outcome-Course Matrices

**Student Learning Outcome #1a:** The student will demonstrate effective oral, and visual communication skills.

I=Introduce R=Reinforce E=Emphasize

DMS Course	Summer	Fall	Winter	Spring
<b>Sophomore</b>				
DMS 223 Abdominal I		I		
DMS 252 Sophomore Lab I				
DMS 224 Abdominal II			R	
DMS 253 Sophomore Lab II				
DMS 225 Abdominal III				E
DMS 254 Sophomore Lab III				
DMS 234 Pelvic Sonography				
<b>Junior</b>				
DMS 315 Sonographic Superficial Structures				
DMS 335 Patient Care				
DMS 352 Junior Lab I				
DMS 316 Survey of VT				
DMS 371 OB Sonography I				
DMS 353 Junior Lab II				
DMS343 Fetal Echo & Neonatal Sono				
DMS 372 OB Sonography II				
DMS 354 Junior Lab III				
DMS 365 Sonographic Pathology				E
DMS 388 Extern Prep				
DMS 373 OB Pathology				
<b>Senior</b>				
DMS 430 I, II, III, IV Externship				

**Table A1. Student Learning Outcome #1 -Course Matrix**

Identified courses indicate that the SLO above is taught in the course, students demonstrate skills or knowledge in the SLO, and students receive feedback on their performance on the SLO.

I = Introduced R = Reinforced E = Emphasized

## Appendix A2

### Student Learning Outcome-Course Matrices

**Student Learning Outcome #1b:** The student will demonstrate effective written communication skills

I=Introduce R=Reinforce E=Emphasize

DMS Course	Summer	Fall	Winter	Spring
<b>Sophomore</b>				
DMS 223 Abdominal I		I		
DMS 252 Sophomore Lab I				
DMS 224 Abdominal II			R	
DMS 253 Sophomore Lab II				
DMS 225 Abdominal III				E
DMS 254 Sophomore Lab III				
DMS 234 Pelvic Sonography				
<b>Junior</b>				
DMS 315 Sonographic Superficial Structures				
DMS 335 Patient Care				
DMS 352 Junior Lab I				
DMS 316 Survey of VT				
DMS 371 OB Sonography I				
DMS 353 Junior Lab II				
DMS343 Fetal Echo & Neonatal Sono				
DMS 372 OB Sonography II				
DMS 354 Junior Lab III				
DMS 365 Sonographic Pathology				E
DMS 388 Extern Prep				
DMS 373 OB Pathology				
<b>Senior</b>				
DMS 430 I, II, III, IV Externship				

**Table A2. Student Learning Outcome #1 -Course Matrix**

Identified courses indicate that the SLO above is taught in the course, students demonstrate skills or knowledge in the SLO, and students receive feedback on their performance on the SLO.

I = Introduced R = Reinforced E = Emphasized

## Appendix A3

**Student Learning Outcome #5:** The student will demonstrate knowledge and understanding of human physiology, pathology and pathophysiology

DMS Course	Summer	Fall	Winter	Spring
<b>Sophomore</b>				
DMS 223 Abdominal I		I		
DMS 252 Sophomore Lab I		R		
DMS 224 Abdominal II			E	
DMS 253 Sophomore Lab II			R	
DMS 225 Abdominal III				E
DMS 254 Sophomore Lab III				R
DMS 234 Pelvic Sonography		I		
<b>Junior</b>				
DMS 315 Sonographic Superficial Structures		I		
DMS 335 Patient Care				
DMS 352 Junior Lab I		R		
DMS 316 Survey of VT			E	
DMS 371 OB Sonography I		I		
DMS 353 Junior Lab II			R	
DMS343 Fetal Echo & Neonatal Sono				E
DMS 372 OB Sonography II			R	
DMS 354 Junior Lab III			R	
DMS 365 Sonographic Pathology		E		
DMS 388 Extern Prep				
DMS 373 OB Pathology				E
<b>Senior</b>				
DMS 430 I, II, III, IV Externship		R		

**Table A2. Student Learning Outcome # 5 -Course Matrix**

Identified courses indicate that the SLO above is taught in the course, students demonstrate skills or knowledge in the SLO, and students receive feedback on their performance on the SLO.

I = Introduced R = Reinforced E = Emphasized

## Appendix A4

**Student Learning Outcome #8:** The student will demonstrate appropriate ergonomic scanning applications

DMS Course	Summer	Fall	Winter	Spring
<b>Sophomore</b>				
DMS 223 Abdominal I				
DMS 252 Sophomore Lab I		I		
DMS 224 Abdominal II				
DMS 253 Sophomore Lab II			R	
DMS 225 Abdominal III				
DMS 254 Sophomore Lab III				E
DMS 234 Pelvic Sonography				
<b>Junior</b>				
DMS 315 Sonographic Superficial Structures				
DMS 335 Patient Care				
DMS 352 Junior Lab I		R		
DMS 316 Survey of VT				
DMS 371 OB Sonography I				
DMS 353 Junior Lab II			R	
DMS343 Fetal Echo & Neonatal Sono				
DMS 372 OB Sonography II				
DMS 354 Junior Lab III				E
DMS 365 Sonographic Pathology				
DMS 388 Extern Prep				
DMS 373 OB Pathology				
<b>Senior</b>				
DMS 430 I, II, III, IV Externship				

**Table A3. Student Learning Outcome # 8 -Course Matrix**

Identified courses indicate that the SLO above is taught in the course, students demonstrate skills or knowledge in the SLO, and students receive feedback on their performance on the SLO.

I = Introduced   R = Reinforced   E = Emphasized

## Appendix B1

**Assessment time map combining Institutional Student Learning Outcomes and Programmatic Student Learning Outcomes is found in Table B1.**

ISLO with PSLO Coordinating Assessment Cycle

Institutional Student Learning Outcomes	Programmatic Student Learning Outcomes	2008-2009	2009-2010	2010-2011
1. Communication (oral, written, visual)	1. The student will demonstrate effective oral, visual, and written communication skills			X
2. Team and group work	2. The student will demonstrate the ability to work effectively in teams		X	
3. Professionalism and ethical practice	3a. The student will demonstrate an ability to provide basic patient care and comfort while utilizing ethical, professionalism and HIPAA guidelines.		X	
	3b. Professionalism		X	
	4. The student will demonstrate knowledge and understanding of human gross and sectional anatomy relative to normal and abnormal sonographic imaging.	X		
4. Critical Thinking and Problem Solving	5. The student will demonstrate knowledge and understanding of human physiology, pathology and pathophysiology (Extern Case Study)			X
5. Lifelong and independent learning)	8. The student will demonstrate appropriate ergonomic scanning applications			X
6. Mathematical Knowledge, skills and application: NA to DMS in 2008-09 assessment period	6. The student will demonstrate knowledge and understanding of ultrasound physical principles and instrumentation.	X		
	6. <u>Reassessment</u> of specific ultrasound physics principles related to intensity reflection co-efficiency.	X		
7. Scientific knowledge and skills in scientific reasoning: NA to DMS in 2008-09 assessment period	7. The student will demonstrate knowledge of sonographic biological effects, proper application of sonographic instrumentation relative to imaging and film quality	X		
8. Global perspectives and Cultural diversity	9. The student will demonstrate an understanding of diverse cultural and humanistic traditions in the global society.		X	

**Table B1, three year assessment cycle for DMS SLOs and PSLOs**