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Utah Valley University

Emergency Services Department Annual Assessment Report

Report on Student / Program Learning Outcomes (SLOs)

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Time Frame: 2015-2016 Academic Year (July 1, 2015 to June 30, 2016)

Department Mission Statement

The Emergency Services Department at Utah Valley University prepares practicing and future emergency service professionals through a program that balances technical skills, critical and ethical thinking, leadership, and effective communication. The department's programs address multiple emergency service educational needs, from professional certifications to degrees.

Executive Summary

This document reports student / program learning outcomes (SLOs) for Fall 2015 and Spring 2016 for the Department of Emergency Services within the College of Aviation and Public Services. Areas identified for improvement in the Bachelor of Emergency Services Administration program are: Existing Knowledge, Research, and/or Views; Analysis; Embracing contradictions; Innovative thinking; Connecting, synthesizing, transforming; and Control of syntax and mechanics. Recent Utah State changes in EMT testing require students take the National Registry Exams. While 100% of students are passing the practical exam, many students are postponing taking of the written exam. Students in the Paramedic Program are also required to take the National Registry Exams. Over 75% of students have passed the exam, while others are still in the process of taking the exam. All 100% of students completing the Recruit Candidate Academy have passed state exams for Firefighter I and II, Hazardous Materials Awareness, and Hazardous Materials Operations.

The Emergency Services Department has 613 majors in its programs (IRI, Fall 2015). Retention rates are high with 60% of our students graduating on time. This compares to a university figure of 15% graduating on time (IRI, 2012). In 2015-2016, 204 students graduated from its programs. Degree programs and individual courses are designed to meet both state and national professional requirements, including those established by the Utah Fire Services Certification Council, the Utah Labor Commission, the United States Occupational Safety and Health Administration (OSHA), the National Fire Protection Association (NFPA), the United States Department of Homeland Security (DHS), the Federal Emergency Management Association (FEMA), the National Fire Academy (NFA), and the National Wildfire Coordinating Group (NWCG).

Bachelor degrees are offered in Emergency Management and Emergency Medical Services. In addition, as part of their programs students can certify as Paramedics, Emergency Medical Technicians, Firefighters (in the Recruit Candidate Academy), Wildland Firefighters, and Aviation Fire Officers.

Observations:

The 2014-2015 Assessment Report used pass rates as the primary means of measuring Program / Student Learning Outcome success. In the 2015-2016 Assessment Report, improved measures were used for assessing Student Learning Outcomes. The report focuses more specifically on certain SLOs and uses more comprehensive means to measure the success of these SLOs. National and state exams were used to measure SLOs for the EMT, Paramedic, and RCA programs. In the Bachelor of Science in Emergency Services Administration degree, a rubric was used to measure success in the four key SLOs. Using the rubric, two faculty analyzed the final project of the capstone course (ESMG4650). The results from these measures are described in more detail in the following sections.

Emergency Medical Technician, Paramedic, and Recruit Candidate Academy

This is the first year that graduates from our Emergency Medical Technician program have been required to take the National Registry Exam to certify within the State of Utah. Previously, they took a state exam. Because of this change, EMT assessment could not be fully done. Despite the change program learning outcomes were met.

In the EMT program the majority of students did not take the exam immediately after completing the course. (Students have 24 months following the end of the class to pass the National Registry Exams.)

- In the EMT basic course of the Fall 2015 enrolments of 112 students, 98 were recommended for the written exam and 20 of 22 (91%) who took the exam by the end of spring semester passed. 98 took the practical exam and passed.
- In the EMT basic course of the Spring 2016 enrolments of 108 students, 96 were recommended for the written exam; Six students took the exam immediately and four passed. All 96 took the practical exam and passed.
- In the Advanced EMT course seven of 24 students took the exam and passed in the Fall 2015 semester; six of 16 students took the exam in Spring 2016 and passed.
- This was not the first year that Paramedic students took the National Registry Exam. Of 58 students who took the course, 44 took the National Registry written exam and passed; only two failed (a 95% pass rate).
- In 2015-2016, 44 students (100%) completing the Recruit Candidate Academy program passed all state exams.

Department faculty are exploring ways to increase the number of students taking the exam immediately after completing the course. One alternative being explored is to require students pass the National Registry exams in order to pass the courses.

AAS Emergency Care

SLO #1	State or National Exams
Outcome	Students will demonstrate knowledge, skills and procedures to perform satisfactorily in their area of study.
Means of Assessment	Upon successful completion of the programs of study, students will take the state or national exams (where offered).
Criteria for Success	Students will pass the state or national exams with a score of 80% or better.

Summary/Analysis of Results	By the end of Spring semester 2016, only 20 (20.4%) of Fall 2015 students and four (4.2%) of Spring 2016 students had taken and passed the Basic EMT National Registry exam. Advanced EMT results were seven students (29.2%) for Fall 2015 and six students (37.5%) for Spring 2016.
Use of Results	This is the first year students have taken the EMT National Registry exams. Many students delay taking the exam, thinking that they need more time to prepare. Faculty are exploring ways to get students to take the exams immediately following completion of the courses. This should increase the success rate.
Connection to ELOs	1, 4

Advanced EMT	Fall 2015	Spring 2016
Enrolled	28	20
Recommended (completed all class requirements)	24	16
National Registry Exam - Tested and passed	7	6
% completing course who passed written exam	29.2%	37.5%
National Registry Practical Exam	24	16
% completing course who passed practical exam	100%	100%
EMT	Fall 2015	Spring 2016
Enrolled	112	108
Recommended (completed all class requirements)	98	96
National Registry Written Exam – Tested & Passed	20 of 22	4 of 6
% completing course who passed written exam	20.4%	4.2%
National Registry Practical Exam – Passed	98	96
% completing course who passed practical exam	100%	100%

(Note: Students have 24 months following the end of the class to pass the National Registry Exams.)

Certificate of Completion – Paramedics

SLO#1	National Registry Exam
Outcome	Students will demonstrate knowledge, skills and procedures to perform satisfactorily in their area of study.
Means of Assessment	Upon successful completion of the paramedic’s program, students will be recommended to take both the written and practical National Registry Exam.
Criteria for Success	80% of Students will pass both the written and practical exam with a score of 80% or better.
Summary/Analysis of Results	75% of students successfully passed the written National Registry exam. Twelve students had not taken the exam by the end of the Spring 2016 semester. Two students had failed the exam.
Use of Results	Paramedic faculty will explore ways of getting students to take the National Registry exam immediately following the course completion. Many students don’t take the National Registry exams, because they aren’t a requirement for entry into graduate school.
Connection to ELOs	1, 2, 3, 4, 5, 6

Certificate of Completion – Paramedics

Paramedics	Fall 2015/Spring 2016
Completed course	58
National Registry Exam – Passed	44
% of total passed exam	75.8%
National Registry Exam – In process (failed at least once)	12
% of total attempted exam at least once	20.8%
National Registry Exam – Failed all attempts	2
% of total failed exam	3.4%

(Note: Students can take the exam five times before 40 hr update of training required.)
 44 Paramedics passed so far with 12 still in process (failed at least once); 2 failed all attempts allowed before 40hr required training updated. None have failed all 5 attempts as of yet for the time period.

Certificate of Completion – Recruit Candidate Academy (RCA)

SLO#1	State Firefighter Exam
Outcome	Students will demonstrate knowledge, skills and procedures to perform satisfactorily in their area of study.
Means of Assessment	Upon successful completion of the RCA program, students will take the state firefighter exams.
Criteria for Success	80% of Students will pass the state firefighter exams with a score of 80% or better. (The state requirement is 70% to pass the exams.)
Summary/Analysis of Results	All 28 students in Fall 2015 and all 16 students in Spring 2016 successfully passed state exams at 80% or better.
Use of Results	Faculty teaching in the Recruit Candidate Academy will continue to prepare students to successfully pass the four state exams.
Connection to ELOs	1, 2, 3, 4, 5, 6

Certificate of Completion – Recruit Candidate Academy (RCA)

Recruit Candidate Academy (RCA)	Fall 2015	Spring 2016
Number of students completed RCA program	28	16
Passed Utah State Firefighter I Exam	28	16
Passed Utah State Firefighter II Exam	28	16
Passed Utah State Hazardous Materials Awareness Exam	28	16
Passed Utah State Hazardous Materials Operations Exam	28	16

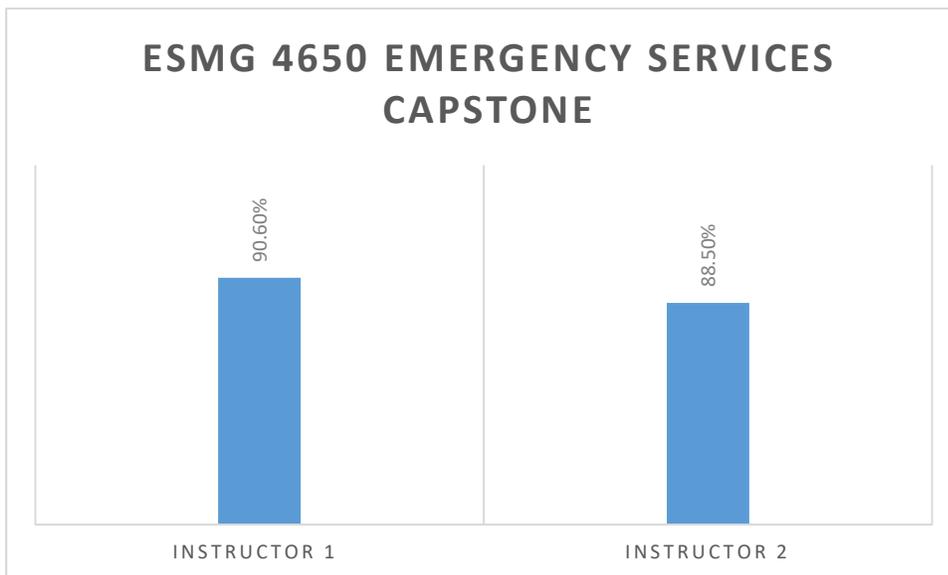
100% of students completing RCA program passed all exams.

B.S. Emergency Services Administration Report of Student Learning Outcomes (SLOs)

Four student learning outcomes have been identified to measure student success in the Bachelor of Science in Emergency Services Administration. Two instructors analyzed the final project of the capstone course (ESMG 4650), using a rubric, which measured success for 30 students in the following four student learning outcomes:

- Theory and content of emergency administration
- Critical thinking
- Written communication
- Global awareness

Student scores in 13 areas were averaged. The two faculty came up with overall results of 90.6% and 88.5%.



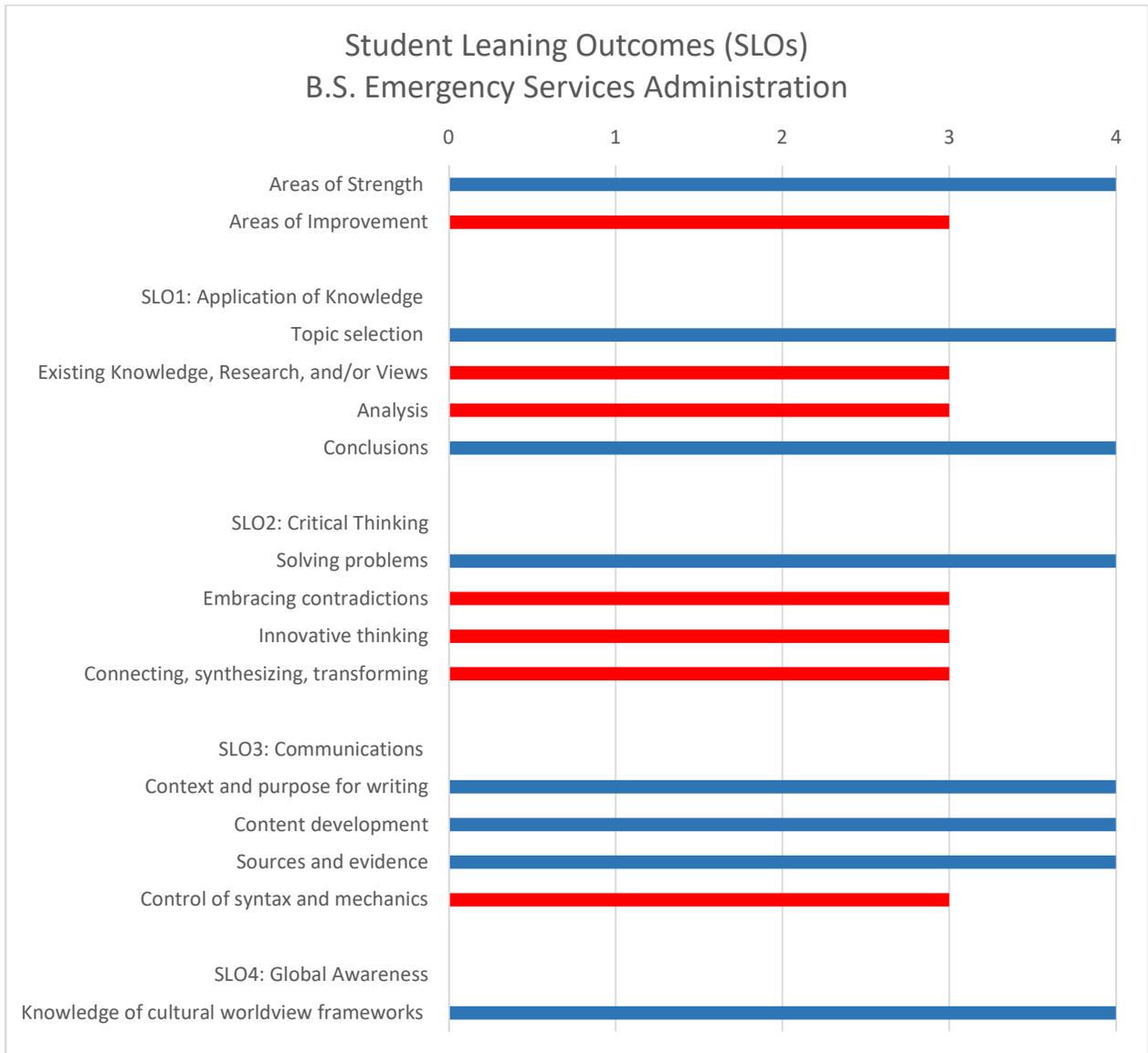
Areas identified as strengths (Score 4 of 4)

- Topic selection
- Conclusions
- Solving problems
- Context and purpose for writing
- Content development
- Sources and evidence
- Knowledge of cultural worldview frameworks

Areas requiring improvement (Score 3 of 4)

- Existing Knowledge, Research, and/or Views
- Analysis
- Embracing contradictions

- Innovative thinking
- Connecting, synthesizing, transforming
- Control of syntax and mechanics



Over a four year period, while each area will be assessed, faculty teaching in the bachelor’s program will work with students in each class to improve results in each of the four SLOs. In Year 1 the focus will be on SLO 1: Theory and content of emergency administration; in Year 2 the focus will be on critical thinking; in Year 3 written communication; and in Year 4 global awareness.

Appendix A: Student/Program Learning Outcomes

BS-Emergency Services Administration

SLO #1	Theory and content of emergency administration
Outcome	Students will demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in emergency administration.
Means of Assessment	Rubric was used to measure (a) topic selection, (b) existing knowledge, research, and/ or views, (c) analysis, and (d) conclusions in the final capstone project (ESMG 4650).
Criteria for Success	90% of Students will receive scores of 3 or better on the areas measured by the rubric.
Summary/Analysis of Results	90% of students received 4 of 4 scores on a) topic selection and d) conclusions. Areas of needing improvement (where the scores were 3 of 4) are (b) existing knowledge, research and views and in (c) analysis.
Use of Results	In Year 1 (2016-2017) faculty will be trained in applying research and analysis in pedagogy. They will continue to emphasize the other two areas where standards were high (4 of 4), topic selection and conclusions.
Connection to ELOs	1, 4

SLO #2	Critical thinking skills
Outcome	Students use critical and creative thinking, skeptical inquiry, and problem solving in making ethical and good decisions.
Means of Assessment	Rubric will be used to measure (a) solving problems, (b) embracing contradictions, (c) innovative thinking, and (d) connecting, synthesizing, and transforming in the final project of the capstone course (ESMG 4650).
Criteria for Success	90% of students will receive scores of 3 or better on the areas measured by the rubric.
Summary/Analysis of Results	90% of students scored 4 of 4 in (a) solving problems and scored 3 of 4 in the areas of (b) embracing contradictions, (c) innovative thinking, and (d) connecting, synthesizing, and transforming
Use of Results	During Year 2, while problem solving will continue to be emphasized, faculty will focus more on areas needing improvement: embracing contradictions, innovative thinking, and connecting, synthesizing, and transforming.
Connection to ELOs	2,3

SLO #3	Communication skills
Outcome	Students will be able to communicate effectively in writing.
Means of Assessment	Rubric will be used to measure (a) context of and purpose for writing, (b) content development, (c) sources and evidence, and (d) control of syntax and mechanics in the final project of the capstone course (ESMG 4650).
Criteria for Success	90% of students will receive scores of 3 or better on the areas measured by the rubric.
Summary/Analysis of Results	90% of students scored 4 of 4 in areas of (a) context of and purpose for writing, (b) content development, and (c) sources and evidence. The weakest area was control of syntax and mechanics where students scored 3 of 4.
Use of Results	During Year 3, more emphasis will be placed on control of syntax and mechanics.
Connection to ELOs	2

SLO #4	Global Awareness
Outcome	Students will recognize, understand, and respect the complexity of socio-cultural and international diversity.
Means of Assessment	Rubric will be used to measure knowledge of cultural worldview frameworks in the final project of the capstone course (ESMG 4650).
Criteria for Success	90% of Students will receive scores of 3 or better on the areas measured by the rubric.
Summary/Analysis of Results	90% of students scored 4 of 4 in the area of knowledge of cultural worldview frameworks.
Use of Results	While students excelled in this area, during Year 4 faculty will work to improve student global awareness.
Connection to ELOs	5, 6

Appendix B: Essential Learning Outcomes (ELOs)

1. A student will engage in **discipline-appropriate experiences** with the academic and broader community through integrated and applied learning.
2. A student will acquire a foundation of **intellectual and practical skills** including communication, quantitative reasoning, qualitative reasoning (critical, analytical, and creative thinking), and technical and information literacies.
3. A student will become personally and socially responsible by acquiring, developing, and demonstrating skills in **ethical reasoning and understanding**.
4. A student will demonstrate **professional competence** by meeting the established standards of the discipline, working as a valued member of a team, effectively formulating and solving problems, and actively seeking and honing lifelong learning skills.
5. A student will demonstrate **stewardship of local, national and global communities** by cultivating awareness of: interdependence among those communities; issues within those communities; and organizations and skills that address such issues.
6. A student will demonstrate **knowledge of human cultures and the physical and natural world** in the following areas of essential study: arts, history, humanities, languages, science and mathematics, social sciences. Knowledge Foundation refers to GE Distribution courses and other courses and experiences within the major.

Appendix C: Rubric used to measure results in the capstone course (ESMG 4650) – B.S. Emergency Services Administration.

SLO 1: Application of Knowledge - Theory and content of emergency administration

Capstone 4	Milestone 3	Milestone 2	Benchmark 1
Topic selection			
Identifies a creative, focused, and manageable topic that addresses potentially significant yet previously less-explored aspects of the topic.	Identifies a focused and manageable/doable topic that appropriately addresses relevant aspects of the topic.	Identifies a topic that while manageable/doable, is too narrowly focused and leaves out relevant aspects of the topic.	Identifies a topic that is far too general and wide-ranging as to be manageable and doable.
Existing Knowledge, Research, and/or Views			
Synthesizes in-depth information from relevant sources representing various points of view/approaches.	Presents in-depth information from relevant sources representing various points of view/approaches.	Presents information from relevant sources representing limited points of view/approaches.	Presents information from irrelevant sources representing limited points of view/approaches.
Analysis			
Organizes and synthesizes evidence to reveal insightful patterns, differences, or similarities related to focus.	Organizes evidence to reveal important patterns, differences, or similarities related to focus.	Organizes evidence, but the organization is not effective in revealing important patterns, differences, or similarities.	Lists evidence, but it is not organized and/or is unrelated to focus.
Conclusions			
States a conclusion that is a logical extrapolation from the inquiry findings.	States a conclusion focused solely on the inquiry findings. The conclusion arises specifically from and responds specifically to the inquiry findings.	States a general conclusion that, because it is so general, also applies beyond the scope of the inquiry findings.	States an ambiguous, illogical, or unsupported conclusion from inquiry and findings.

SLO 2: Critical Thinking - Students use critical and creative thinking, skeptical inquiry, and problem solving in making ethical and good decisions.

Capstone 4	Milestone 3	Milestone 2	Benchmark 1
Solving Problems			

Not only develops a logical, consistent plan to solve problem, but recognizes consequences of solution and can articulate reason for choosing solution.	Having selected from among alternatives, develops a logical, consistent plan to solve the problem.	Considers and rejects less acceptable approaches to solving problem.	Only a single approach is considered and is used to solve the problem.
Embracing Contradictions			
Integrates alternate, divergent, or contradictory perspectives or ideas fully.	Incorporates alternate, divergent, or contradictory perspectives or ideas in a exploratory way.	Includes (recognizes the value of) alternate, divergent, or contradictory perspectives or ideas in a small way.	Acknowledges (mentions in passing) alternate, divergent, or contradictory perspectives or ideas.
Innovative Thinking			
Novelty or uniqueness (of idea, claim, question, form, etc.)			
Extends a novel or unique idea, question, format, or product to create new knowledge or knowledge that crosses boundaries.	Creates a novel or unique idea, question, format, or product.	Experiments with creating a novel or unique idea, question, format, or product.	Reformulates a collection of available ideas.
Connecting, Synthesizing, Transforming			
Transforms ideas or solutions into entirely new forms.	Synthesizes ideas or solutions into a coherent whole.	Connects ideas or solutions in novel ways.	Recognizes existing connections among ideas or solutions.

SLO 3: Communications - Students will be able to communicate effectively in writing.

Capstone 4	Milestone 3	Milestone 2	Benchmark 1
Context of and Purpose for Writing			
Includes considerations of audience, purpose, and the circumstances surrounding the writing task(s).			
Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).	Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience).

Content Development			
Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.	Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.	Uses appropriate and relevant content to develop and explore ideas through most of the work.	Uses appropriate and relevant content to develop simple ideas in some parts of the work.
Sources and Evidence			
Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing	Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.	Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing.	Demonstrates an attempt to use sources to support ideas in the writing.
Control of Syntax and Mechanics			
Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.	Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses language that sometimes impedes meaning because of errors in usage.

SLO 4: Global Awareness - Students will recognize, understand, and respect the complexity of socio-cultural and international diversity.

Capstone 4	Milestone 3	Milestone 2	Benchmark 1
Knowledge of cultural worldview frameworks			
Demonstrates sophisticated understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates adequate understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates partial understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates surface understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs