

Bachelors of Science Degree in Dental Hygiene Assessment Report 2020-2021



Bachelor of Science Degree in Dental Hygiene Assessment Report 2020-2021

Table of Contents

Section 1 – Program Mission and Educational Objectives	3
Section 2 – Program Description and History	3
Program Enrollment and Graduation Rates: AASDH, La Grande	4
Program Enrollment and Graduation Rates: BSDH, Klamath Falls and Salem	4
Board and Licensure Exam Results	5
Industry Relationships	6
Oregon Tech Dental Hygiene Advisory Board Meeting, Klamath Falls	6
Oregon Tech Dental Hygiene Advisory Board, Salem	6
Showcase Learning Experiences	7
Success Stories	7
New Faculty	7
Curriculum Changes	7
Section 3 – Program Student Learning Outcomes	7
Section 4 – Curriculum Map	13
Dental Hygiene Student Learning Outcomes Table	13
Section 5 – Assessment Cycle	14
Section 6 – Assessment Activity	15
Section 7 – Date-Driven Action Plans: Changes Resulting from Assessment	20
Improvements in Assessment Process	20
Appendex	24
Exhibit A	24
Exhibit B	25
Exhibit C	27
Exhibit D	29
Exhibit E	31



Bachelor of Science Degree in Dental Hygiene Assessment Report 2020-2021

Section 1 – Program Mission and Educational Objectives

The Oregon Institute of Technology Dental Hygiene Program provides an educational environment that fosters respect and encourages critical thinking. Its mission is to educate students to become primary healthcare providers who are well prepared to serve the public in multiple roles and who are empowered to become life-long learners.

• Mission Alignment

- The Oregon Institute of Technology Dental Hygiene Program offers extensive and innovative, professionally focused hands-on dental clinic experience with opportunities for off-campus rotations to practice their dental hygiene skills while working alongside licensed practitioners and dentists.
- Additionally, the students design, plan, implement, and manage community oral health for under-served communities. This community project gives our students real-world experiences far beyond what most dental hygiene programs offer.
- Further in their education in the program, our students have an opportunity to travel abroad for two weeks in what we refer to as International Externship Program or IEP. Our seniors provide oral hygiene care in countries such as Romania, Ukraine, Moldova, Costa Rica, Honduras, Peru, Guatemala, Nicaragua, Jamaica, and Granada.
- o In the meantime, our dental hygiene students earn enough clinical hours to be licensed with an Expanded Practice Permit when they graduate and pass national and state exams, which is a highly sought-after requirement in our field of work.

Section 2 – Program Description and History

- The Oregon Tech Dental Hygiene program began in 1970 as an Associate of Applied Science (AAS) program. Beginning in 1985, students had the option of completing a Bachelor of Science (BS) degree, and in 2003 the program began awarding the BS degree only.
- In 2005, Oregon Tech entered a partnership with ODS to provide a Dental Hygiene AAS program in La Grande. The partnership ended in 2017. In total 200 students graduated from the program.
- In 2009, Oregon Tech entered an agreement with Chemeketa Community College to offer the OT DHBS program in Salem. A committee of the Commission on Dental Accreditation conducted a special focused site evaluation on November 4, 2011. The accreditation status of the program at the time of the site visit was "approval without reporting requirements." The program accepted its first cohort of students fall term 2011. The program accepts 20 students annually.

• All students must complete prerequisite courses to be eligible for application to the program. Acceptance to the program is selective. Applicants are accepted each spring and begin course work fall term. Seating is limited to 22 students at Klamath Falls and 20 at Salem.

Program Enrollment and Graduation Rates: AASDH, La Grande

ENROLLMENT									
Fall 2009	Fall 2010	Fall 2011	Fall 2012	Fall 2013	5 Year Difference				
25	26	21 23 26		21 23 26		Maximum = 26 Minimum = 21			
GRADUAT	ES								
2011	20012	2013	2014	2015	Average				
21 (84%)	24 (92.31%)	18 (85.71%)	23 (100%)	21 (80.77%)	88.43%				

Program Enrollment and Graduation Rates: BSDH, Klamath Falls and Salem

ENROLLMENT									
Fall 2011	Fall 2012	Fall 2013	Fall 2014 Fall 2015		SUB TOTAL				
KF = 24	KF = 24	KF = 23	KF = 18	KF = 20	109				
SLM = 20	SLM = 20	SLM = 20	SLM = 20	SLM = 20	102				
Total = 44	Total = 45	Total = 44	Total = 38	Total = 40	211				
ENROLLME	NT								
Fall 2016	Fall 2017	Fall 2018	Fall 2019	Fall 2020	TOTAL				
KF = 20	KF = 22	KF = 20	KF = 22	KF = 22	84/95%				
SLM = 20	SLM = 20	SLM = 20	SLM = 20	SLM = 20	80/100%				
Total = 40	Total = 42	Total = 40	Total = 42	Total = 42	98%				
GRADUATE	S								
2014	2015	2016	2017	2018	TOTAL/AVE				
KF = 22	KF = 16	KF = 18	KF = 14	KF = 20	97/89%				
SLM = 20	SLM = 19	SLM = 20	SLM = 18	SLM = 19	96/94%				
95.5%	82%	97.7%	67%	97.5%	88%				
GRADUATE	S								
2019	2020	2021			TOTAL/AVE				
KF = 17	KF = 22	KF = 19			58/88%				
SLM = 20	SLM = 20	SLM = 20			60/100%				
88%	100%	100%			94%				

Board and Licensure Exam Results

National Board	National Board Dental Hygiene Examination								
Class, 2014	Class, 2015	Class, 2016	Class, 2017	Class, 2018					
KF = 100%	KF = 100%	KF = 100%	KF = 93%	KF = 100%					
SLM = 100%	SLM = 100%	SLM = 100%	SLM = 100%	SLM = 100%					
National Board Dental Hygiene Examination									
Class, 2019	Class, 2020	Class, 2021							
KF = 100%	KF = 100%	KF = 100%							
SLM = 95%	SLM = 100%	SLM = 100%							
WREB Anestho	esia								
Class, 2014	Class, 2015	Class, 2016	Class, 2017	Class, 2018					
KF = 100%	KF = 95%	KF = 96%	KF = 100%	KF = 100%					
SLM = 100%	SLM = 100%	SLM = 100%	SLM = 100%	SLM = 100%					
DH Anesthesia									
Class, 2019	Class 2020	Class 2021							
KF = 100%	KF = 100%	KF = 100%							
SLM = 95%	SLM = 100%	SLM = 100%							
WREB DH Clin	nical Examination	n							
Class, 2014	Class, 2015	Class, 2016	Class, 2017	Class, 2018					
KF = 91%	KF = 100%	KF = 96%	KF = 93%	KF = 100%					
SLM = 100%	SLM = 100%	SLM = 100%	SLM = 100%	SLM = 100%					
DH Clinical Ex	amination								
Class, 2019	Class 2020	Class 2021							
KF = 100%	KF = 100%	KF = 100%							
SLM = 100%	SLM = 100%	SLM = 100%							
DH Restorative	;								
Class, 2014	Class, 2015	Class, 2016	Class, 2017	Class, 2018					
$KF = \frac{\%}{2}$	KF = 50%	KF = 85.7%	KF = 60%	KF = 75%					
SLM = %	SLM =52.6%	SLM = 95%	SLM =72.2%	SLM =100%					
DH Restorative	<u> </u>								
Class, 2019	Class 2020	Class 2021							
KF = 100%	KF = 100%	KF = 100%							
SLM = 100%	SLM = 100%	SLM = 100%							

(Oregon Tech Dental Hygiene Graduate Outcomes 2017-2019 (3 years combined))

Employed	Continuing	Looking for	Not	Median	Success
	Education	Work	Seeking	Salary	Rate
86%	7%	7%	1%	\$66,500	93%

Industry Relationships						
Klamath Health Partnership	Northwest Family Services					
Boys & Girls Club	 Compassion Connect 					
Salem Free Clinic	OHSU School of Nursing					
	Cascade Health Alliance					
	Klamath Basin Oral Health Coalition					
Dentsply Sirona Preventative	Colgate					
Hu-Friedy	Q-Optics					
Phillips Sonicare	• A-Dec					
Crest Oral-B	OralDNA					
• Church & Dwight (Water Pik)	• GlaxoSmithKline (GSK)					

Oregon Tech Dental Hygiene Adv	visory Board Meeting, Klamath Falls
Date: 2020/21	V 3/
Committee Members	Ex Officio Members
 Debra Bishop, RDH 	 Paula Russell, BSDH-EP, M.Ed
 Susie Daniels, RDH 	 Jeannie Bopp, RDH, BSDH, MS
 Traonna Larson, RDH 	 Krista Beaty, RDH, BSDH, MS
 Brenna Chavarin, BS, EPDH 	 Darlene Swigart, EPDH, MS
 Daniel Gailis, DMD 	 Elizabeth Wells, RDH, BSDH, MS
 Jeff Pardy, MBA, RRT 	 Andrew (Drew) Bernhard, DDS
Amanda Blodgett, MBA	 Heather Schudel, RDH, M.Ed
 John L. Baumann (Jack), DVM 	
Patricia Card (Patty)	
	iene Advisory Board, Salem
Date: 2020/21	
Committee Members	Non-Voting Member
Dana Nolan	 Paula Hendrix, EPDH, M.Ed
 Sean Reisig, DDS 	
Jill Lomax, DA	
 Meagan Newton, EPDH 	
 Erik Rojas, EPDH 	
 Natasha Lunt, RDH 	
Jessica Dusek	

Showcase Learning Experiences

- Senior capstone presentations: senior dental hygiene students choose a patient, provided clinical care and recommendations as well as worked collaboratively with the patient's primary care providers to research and share considerations for a systemic disease or condition.
- Medical Emergency continuing education course, presentation and video
- Off campus experience
 - o Compassion Connect, Best Care, Transitions, Merrill Health Fair
 - o Salem: Boys & Girls Club, Salem Free Clinics

International Externship Program (IEP):

Not able to participate because of COVID-19.

Success Stories

- Paula Russell, promoted to Professor May 2021
- Jessica Luebbers, RDH, EPDH, Ed.D. successfully defended her dissertation
- Jeannie Bopp, Elizabeth Wells obtained Master of Science Allied Health degrees
- Annual dental career fair

Paula Hendrix, Med, EPDH published in *Dentistry iQ*: New Dental Hygiene Graduates, this One's for You https://www.dentistryiq.com/dental-hygiene-graduates

• Krista Beaty, Charisse Botsch, Suzanne Hopper, Darlene Swigert, Elizabeth Wells all received nominations for the Oregon Tech Foundation and the commission on College Teaching Excellence in Teaching award

New Faculty

• Abigail Rollins DDS

Curriculum Changes

- Writing 122 pre-requisite replaced Writing 227
- Wri. 121, 122, & 227 = 4 credits, SP 11 = 4 credits
- Option of Math 111 or Math 243
- Option of CHE 360 pharmacology or DH 307 Pharmacology for Dental Hygiene
- Addition of Fall humanities courses HUM 235, PHIL 342, 205, LIT 325

Section 3 – Program Student Learning Outcomes

PSLO	Definition
CODA Standard	Definition

The American Dental Hygienist Association (ADHA) addresses six competencies dental hygienists should demonstrate. ADHA Standards for Clinical Dental Hygiene Dental hygiene faculty met on September 17, 2020, to review the program student learning outcomes, which are based on the Commission on Dental Accreditation (CODA) Standard 3, Dental Hygiene Educational Program. The seventh competency is from the American Dental Educators Association (ADEA) that ensures the health and safety of the patient and oral health professional in the delivery of care. The following is a list and definitions of the outcomes, and explanation of changes made during the meeting.

1 – Communicate Standard 2-15

Graduates must be competent in interprofessional communication, collaboration and interaction with other members of the health care team to support comprehensive patient care.

Intent:

Students should understand the roles of members of the health-care team and have interprofessional educational experiences that involve working with other health-care professional students and practitioners. The ability to communicate verbally and in written form is basic to the safe and effective provision of oral health services for diverse populations. Dental Hygienists should recognize the cultural influences impacting the delivery of health services to individuals and communities (i.e. health status, health services and health beliefs)

Examples of evidence to demonstrate compliance may include:

- student experiences demonstrating the ability to communicate and collaborate effectively with a variety of individuals, groups and health care providers.
- examples of individual and community-based oral health projects implemented by students during the previous academic year
- evaluation mechanisms designed to assess knowledge and performance of interdisciplinary communication and collaboration

2 – Critical Thinking *Standard* 2-23

Graduates must be competent in problem solving strategies related to comprehensive patient care and management of patients.

Intent:

Critical thinking and decision-making skills are necessary to provide effective and efficient dental hygiene services. Throughout the curriculum, the educational program should use teaching and learning methods that support the development of critical thinking and problem-solving skills.

Examples of evidence to demonstrate compliance may include:

 evaluation mechanisms designed to monitor knowledge and performance;

outcomes assessment mechanisms demonstrating application of critical thinking skills; activities or projects that demonstrate student experiences with analysis of problems related to comprehensive patient care; demonstration of the use of active learning methods that promote critical appraisal of scientific evidence in combination with clinical application and patient factors. 3 – Professionalism, 2-19 Graduates must be competent in the application of the **Ethical Practice** principles of ethical reasoning, ethical decision-making and Standard 2-19 and 2-20 professional responsibility as they pertain to the academic environment, research, patient care and practice management. **Intent:** Dental hygienists should understand and practice ethical behavior consistent with the professional code of ethics throughout their educational experiences. Examples of evidence to demonstrate compliance may include: documents which articulate expected behavior of students such as policy manuals, college catalog, etc. evaluation of student experiences which promotes ethics, ethical reasoning and professionalism evaluation strategies to monitor knowledge and performance of ethical behavior 2-20 Graduates must be competent in applying legal and regulatory concepts to the provision and/or support of oral health care services. **Intent:** Dental hygienists should understand the laws which govern the practice of the dental profession. Graduates should know how to access licensure requirements, rules and regulations, and state practice acts for guidance in judgment and action. **Examples of evidence to demonstrate compliance may include:** evaluation mechanisms designed to monitor knowledge and performance concerning legal and regulatory concepts • outcomes assessment mechanisms 4 – Lifelong Learning Graduates must be competent in the application of self-Standard 2-21 assessment skills to prepare them for life-long learning. **Intent:** Dental hygienists should possess self-assessment skills as a foundation for maintaining competency and quality assurance. **Examples of evidence to demonstrate compliance may include:**

•	written course documentation of content in self-assessment
	skills

- evaluation mechanisms designed to monitor knowledge and performance
- outcomes assessment mechanisms

5 – Provision of Oral Health Care

Standard 2-12, 2-13 and 2-14

2-12 Graduates must be competent in providing dental hygiene care for all patient populations including:

- 1) child
- 2) adolescent
- 3) adult
- 4) geriatric
- 5) special needs

Intent:

An appropriate patient pool should be available to provide a wide scope of patient experiences that include patients whose medical, physical, psychological, developmental, intellectual or social conditions may make it necessary to modify procedures in order to provide dental hygiene treatment for that individual. Student experiences should be evaluated for competency and monitored to ensure equal opportunities for each enrolled student.

Clinical instruction and experiences should include the dental hygiene process of care compatible with each of these patient populations.

Examples of evidence to demonstrate compliance may include:

- program definition for each patient population category
- program clinical and radiographic experiences, direct and nondirect patient contact assignments, and off-site enrichments experiences
- patient tracking data for enrolled and past students
- policies regarding selection of patients and assignment of procedures
- student clinical evaluation mechanism demonstrating student competence in clinical skills, communication and practice management.

2-13 Graduates must be competent in providing the dental hygiene process of care which includes:

- a) comprehensive collection of patient data to identify the physical and oral health status;
- b) analysis of assessment findings and use of critical thinking in order to address the patient's dental hygiene treatment needs:

- c) establishment of a dental hygiene care plan that reflects the realistic goals and treatment strategies to facilitate optimal oral health;
- d) provision of patient-centered treatment and evidence-based care in a manner minimizing risk and optimizing oral health;
- e) measurement of the extent to which goals identified in the dental hygiene care plan are achieved;
- f) complete and accurate recording of all documentation relevant to patient care.

Intent:

The dental hygienist functions as a member of the dental team and plays a significant role in the delivery of comprehensive patient health care. The dental hygiene process of care is an integral component of total patient care and preventive strategies. The dental hygiene process of care is recognized as part of the overall treatment plan developed by the dentist for complete dental care.

Examples of evidence to demonstrate compliance may include:

- Program clinical and radiographic experiences
- Patient tracking data for enrolled and past students
- Policies regarding selection of patients and assignment of procedures
- Monitoring or tracking system protocols
- Clinical evaluation system policy and procedures demonstrating student competencies
- Assessment instruments
- Evidence-based treatment strategies
- Appropriate documentation
- Use of risk assessment systems and/or forms to develop a dental hygiene care plan

2-14 Graduates must be competent in providing dental hygiene care for all types of classifications of periodontal diseases including patients who exhibit moderate to severe periodontal disease.

Intent:

The total number and type of patients for whom each student provides dental hygiene care should be sufficient to ensure competency in all components of dental hygiene practice. A patient pool should be available to provide patient experiences in all classifications of periodontal patients, including both maintenance and those newly diagnosed. These experiences should be monitored to ensure equal opportunity for each enrolled student.

6 – Community Health Standard 2-16	 Examples of evidence to demonstrate compliance may include: program clinical and radiographic experiences patient tracking data for enrolled and past students policies regarding selection of patients and assignment of procedures monitoring or tracking system protocols clinical evaluation mechanism demonstrating student competence Graduates must demonstrate competence in: assessing the oral health needs of community-based programs planning an oral health program to include health promotion and disease prevention activities implementing the planned program, and, evaluating the effectiveness of the implemented program. Intent:
	Intent: Population based activities will allow students to apply community dental health principles to prevent disease and promote health. Examples of evidence to demonstrate compliance may include: • student projects demonstrating assessing, planning, implementing and evaluating community-based oral health programs • examples of community-based oral health programs implemented by students during the previous academic year
7 – Disease Prevention	evaluation mechanisms designed to monitor knowledge and performance Evaluate factors that can be used to promote patient adherence to
ADEA HP.5	Intent: Utilize methods that ensure the health and safety of the patient and the oral health professional in the delivery of care.

Section 4 – Curriculum Map

Dental Hygiene Student Learning Outcomes Table

F-Foundation

P – Practice

C – Capstone

C = Capstone										
COURSE	ESLO 1 PSLO 1	ESLO 2 PSLO 2	ESLO 3 PSLO 3	PSLO 4	PLSO 5	PSLO 6	PSLO 7	ELSO 4	ELSO 5	ESLO 6
DH-221, 222, 240, 241, 242, 244, 380	F									
DH-223, 267, 321, 322,										
323, 340, 341, 381, 421,	P									
422										
DH-423	C									
DH-223, 340		F								
DH-267, 321, 341, 351,		P								
352, 421, 475		Г								
DH-422, 423, 462, 476		C								
DH-223, 380, 351			F							
DH-267, 321, 351, 352,			P							
381, 382			r							
DH-383, 421, 422, 423			C							
DH-221				F						
DH-340, 421, 462				P						
DH-422, 423, 463				C						
DH-223, 240, 241, 242,					F					
267, 340					Г					
DH-321, 341					P					
DH-421, 422, 423					C					
DH-380						F				
DH-381, 382						P				
DH-383						C				
DH-240, 241, 242							F			
DH-340							P			
DH-341							C			
SPE 321								F		
DH-380								P		
DH-267, 381, 382, 383								C		
MATH 243									F	
DH-475									P	
DH-476									C	
DH-421										F
DH-422										P
DH-423										C

 $Section \ 5-Assessment \ Cycle$

Outcome	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
PSLO 1 Communicate	DH-423 Capstone (direct) Grad Survey (indirect)			DH-323 ??? assignment (direct) Exit Survey (indirect)	
PSLO 2 Critical Thinking		DH-476 (direct) Exit Survey (indirect)			•
PSLO 3 Ethics			DH-423 Capstone (direct) Exit Survey (indirect)		
PSLO 4 Lifelong Learning			DH-323 Professionalism Portion of Capstone, & Research Portion (direct) Attend ODHA (indirect)		
PSLO 5 Provision of Oral Healthcare	DH-423 Capstone (direct) Grad Survey (indirect)			DH-423 Capstone &Tal eval Make Pie Chart (direct) Exit Survey (indirect)	
PSLO 6 Community Health		DH-383 Portfolio (direct) Exit Survey (indirect)			•
PSLO 7 Disease Prevention			DH-323 CaMBRA (direct) Reflection (indirect)		

ESLO 1 Communicate			DH 423 (direct) DH-323 (direct) Exit Survey (indirect)		
ESLO 2 Inquire/ Analysis		DH-476 Rubric (direct) Exit Survey (indirect)			•
ESLO 3 Ethics			DH-383 Portfolio (direct) DH-423 Capstone (direct) Exit Survey (indirect)		
ESLO 4 Teamwork	DH-383 Faculty Eval (direct) Peer Survey (indirect)		DH-382 Teamwork Eval Rubric (direct) Exit Survey (indirect)		
ESLO 5 Quant. Reason.		Gen Ed Course (direct) Exit Survey (indirect)			•
ESLO 6 Diversity				DH-423 Capstone & Clinic Tracking Cultural Competency Presentation (direct) DH-322/3 Direct Case presentation (direct) Exit Survey (indirect)	

$Section \ 6-Assessment \ Activity$

ESLO #2 Inquiry and Analysis; PSLO #2 Critical Thinking - BSDH, DH 476, 202002, Suzanne Hopper

Assignment title: Module Four - Critical Analysis of Research II

Module Objectives:

Upon completion of this module, you should be able to:

- 1. Conduct computerized searches to find research studies to answer clinical questions using the best and most recent evidence.
- 2. Critically analyze research studies for validity, reliability, statistical significance, and bias.
- 3. Determine if results in research studies have practical and clinical significance.
- 4. Determine if research studies and analysis answered the clinical question with a high degree of confidence.
- 5. Submit conclusions in reports following guidelines in this Module Lecture

Assessment activity - direct measure: 27-point report in a table format: This assignment is a scaffolded assessment. The previous week student teams completed this same assignment, but with a different patient scenario and clinical problem. The assignment directions list the following steps:

Step One: Create a clinic scenario from your patient pool. You could address a treatment you currently provide, a type of diagnostic equipment your office uses, product recommendations, etc.

Step Two: Develop a PICO question for your clinical scenario:

Remember to write your PICO question using the following format: *In a patient with....* (P) *will...* (I) *as compared to...* (C) *increase/decrease/etc.....* (O)?

Step Three: Use phrases from your PICO question to search and find three, full-text, *relevant* research articles. Notes:

- Remember you may enlist the aid of an OIT Librarian to help
- ♣ If you have difficulty finding three, full-text articles, you may use one Abstract OR one CAT for your third resource.

Examples: 1) Three full-text articles, OR 2) Two full-text articles and one Abstract or CAT

Step Four: Complete the following Table. All your analysis will be in one Table. (The module lecture includes a Table with added notes from me in red to help further define the criteria in the rubric.)

Students work in teams of 3-4 students. The Klamath Falls seniors and Salem seniors each have their own Canvas course shell. Students are allowed to select their own teams. Because this assignment is repeated two weeks in a row, students can apply instructor feedback from the previous week's assignment. The faculty agreed a reasonable performance level would be 100% of students achieving "High Proficiency" or "Proficient" for each criterion in the rubric.

Rubric: The ESLO rubric includes five criteria with detailed descriptions for the levels of High Proficiency, Proficient, Some Proficiency, and Novice. The PSLO rubric include nine criteria with detailed descriptions for the levels of Proficient, Competent, and Novice. (See complete rubrics in the Appendix under Exhibit A1 and A2).

Sample: n=11 teams (5 teams from one campus; 6 teams from the other campus)

Performance Target using ESLO rubric: 100% of students scoring at the High Proficiency or Proficient level. The faculty agreed this was a reasonable expectation since this was the second week in a row that students completed this assessment.

Performance Level using PSLO rubric: 10/11 teams earned 27/27 points on the assessment; One team earned 26/27 points.

Assessment activity – indirect measure: Student Exit Survey; Students were asked to "rate their proficiency in the following area":

PSLO #2 – Critical Thinking

Results (n = 27):
96% High Proficiency (26/27 students)
4% Proficient (1/27 students)
0% Some Proficiency or Limited Proficiency

PSLO #2 Critical Thinking – DH 423 Capstone (Direct Assessment); Exit Survey (Indirect Assessment) Jeannie Bopp, Tonja Willey

Assignment Title: Senior Capstone Presentation

The Capstone for senior dental hygiene students at Oregon Institute of Technology is a culmination of knowledge on comprehensive patient care. Students are expected to demonstrate essential study learning objectives, to the level expected at the completion of the bachelor's degree program. The capstone gives students the opportunity to combine technical skills and critical thinking to address unscripted and authentic problems experienced during patient care. Through application of didactic course work and clinical experiences, students are expected to meet criteria and highlight their own critical thinking competency with minimal to no modeling or demonstration from faculty.

Capstone Objectives:

Upon completion of this capstone you should be able to:

- Demonstrate competence in ability to communicate and collaborate with other health professionals to support comprehensive patient care
- Critically think and problem solve for comprehensive patient care and case management
- Apply ethical, legal, and regulatory concepts in provision of care
- Demonstrate knowledge and self-assessment skills necessary for life-long learning
- Apply competent assessment, treatment planning, implementation and evaluation to patient care
- Promote patient adherence to disease prevention and/or health maintenance strategies

Assessment activity – (Direct measure): 300-point oral presentation given at the end of senior year to demonstrate critical thinking skills with management of a unique clinical patient case. This capstone project demonstrates application of knowledge learned over the dental hygiene program to individualized patient care. The identified patient needs to have a condition outside the typical medical or behavioral conditions seen during daily clinical sessions. During fall term, the student submits a written report on their progress with research and plans for patient management. The final presentation is the complete case study of the patient graded by clinical instructors by rubric.

Rubric scoring criteria includes:

- Introduction and definition of the capstone project
- Application of knowledge
- Analysis and critique of research
- Knowledge of patient management
- Interprofessional collaboration
- Diverse Perspective
- Ethical Decision Making
- Results
- Summary/conclusion
- Reflections

(See complete Rubric in the Appendix under Exhibit C)

Sample: n=19

Performance Target: 100% of students scoring at the competent or Proficient level of ≥75% (225/300 or greater)

Performance Level: The class of 2019 scored 97.13%. The class of 2020 100% of students scored 75% or greater and the class of 2021 had 39/40 students scoring 75% or greater. This student brought the wrong presentation power point due to family issues and was not able to give her best performance.

Assessment activity – indirect measure: Student Exit Survey; Students were asked to "rate their proficiency in the following area:"

PLSO #2 – Critical Thinking	Results $(n = 28)$
	96% High Proficiency (26/27 students)
	4% Proficient (1/27 students)
	0% some Proficiency or Limited Proficiency

PSLO #6 Community Health – DH 383 Portfolio (Direct Assessment) Exit Survey (Indirect Assessment) Elizabeth Wells, Jessica Leubbers

Assignment Title: Community Health

Module Objectives:

- Applying results of formative and summative evaluation for program improvement
- Fully documenting their community oral health program
- Communicating program goals, objectives, implementation strategies, and evaluation to various stakeholders and persons of interest

Assessment activity (Direct Measure): This assignment is the foundational term of Community Dental Health identifying a target population. As a formed group for that target population each group amongst themselves:

- Identify team roles
- Outlines a team covenant including communication, participation, conflict resolution, and group norms.
- Groups asses the target population utilizing secondary and primary data, create surveys, interviews, and indices forms to collect data regarding needs of the population
- Interpret needs assessment results and create a GOAL and several measurable long-term Objectives for this population.
- Once goals and objectives are created the group creates a program plan including lesson plans, implementation plans, and funding considerations.
- Each group schedules and implements per their population's needs and their approved program plan objectives.
- Teamwork is assessed twice per term by two different faculty members. Once at Mid-term and once at finals week from DH 380- DH 383.
- At the end of DH 383 the following portfolio is created and submitted by members of the group for their specific group:

Rubric: The rubric includes Writing and Introduction, Needs assessment, Needs analysis, Program Plan, Program Implementation and Program evaluation. (See complete rubric in the Appendix under Exhibit D). Sample: n = 28

Performance Target: 100% of students scoring at the competent or Proficient level of \geq 75% or greater **Performance Level:** The class of 2020 scored 100% of students in both Klamath Falls and Salem scoring \geq 75%. Averages

Assessment activity – Indirect measure: Student Exit Survey; Students were asked to "rate their proficiency in the following area":

PSLO #6 Community Health	Results (n = 28) 96.43% High Proficiency (27/28 students) 3.57% Proficient (1/28 students) 0% Some Proficiency or Limited Proficiency
	0% Some Proficiency or Limited Proficiency

PSLO #2 Critical Thinking – DH 423 Senior Capstone History of Results

Prior to 2019, the senior Capstone was called a Periodontal Project that had each student find and treat a patient with moderate to severe periodontitis. Because the project had very specific criteria, it seemed like students gave the same presentation with slightly different information. It was not a good critical thinking assessment due to the ridged outlined criteria. Although enlightening to see the improvements they made in their patient's health, it was not a reflection of their overall learning. The former Periodontal Project was worth 50 points; the new Capstone Project is worth 300 points and draws in an assortment of patients with different conditions for the students to work collaboratively with a healthcare provider and the patient. Students must now research, reach out for interprofessional collaboration on any aspect of the patient condition they need additional knowledge about, consider ethical and diverse perspective issues, and present a summary of their project and self-reflection of overall learning.

The two senior clinic leads discussed, by phone conversation. on March 11, 2021, the pros and cons of the Capstone. It was decided that the new Capstone is much more rewarding for the students, and the listeners, to have different types of conditions instead of all students having only one type of patient with the criteria of moderate to severe periodontitis. This capstone gives a better overall assessment of learning over the entire program curriculum and the competency level of the student. The results were provided to the full-time faculty at the end of the term and then more formally during Convocation on Wednesday, September 16, 2020.

The information would have been related to the advisory committee in the spring, but because of COVID-19, there was not an advisory meeting. The next meeting is scheduled in January 2021.

Interpretation

Overall, the assessment went very well with the exception of confidentiality, HIPAA, violations and students' interpretation of their own self-assessment of how well they did in their treatment of their Capstone Project patient. The students seemed to have interpreted the self-assessment piece as the overall how things went instead of using a critical eye to view themselves for self-improvement. This was the consensus of the faculty for both campuses and the two clinic leads. There were four faculty in Klamath Falls and four faculty in Salem interpreting the results. One of the interpreters in Salem was very generous in their grading which skewed the scale a bit. This will need to be addressed more aggressively in future grading.

Section 7 – Date-Driven Action Plans: Changes Resulting from Assessment

Action Drivers

The initial launch of the new senior capstone in 2019-2020 was a success. Students had difficulty grasping the need to do their own critical thinking rather than having a detailed outline of what to present in their project. They struggled with interprofessional collaboration due to

lack of experience with interprofessional education. Once they began to put the capstone together, they were able to see how their knowledge was applicable to individualizing patient care. COVID-10 had an effect on the capstone in 2020-2021. Collaboration with other health professionals was difficult due to shutdowns and healthcare back-ups, however the students did a great job of using the OIT faculty in the Health, Arts, and Science (HAS) departments to receive excellent feedback and advice. The collaboration piece actually became more robust for Klamath Falls students.

Action Specifics

During the DH 421, 422, and 423 course, the instructors will need to reinforce the Capstone Project rubric, which includes keeping all patient information confidential and HIPAA compliant. Students must understand the research portion of the assignment, as well as the health care collaboration, are not negotiable. The other portion of this same class will need more fortification of self-reflection or self-judgment on how they would improve themselves.

Reassessment will be done during mid-March 2022 with the Capstone Project presentations at both campuses with Jeannie Bopp and the new senior clinic lead, Emily Gustafson Plummer, in Salem leading the reassessment. For accountability, this will take place during the planning and the course effectiveness discussion between the two clinic leads.

Improvements in Assessment Process

- Inform instructors in a timely manner of information needed for assessment from their courses
- Keep track of deadlines to assure all information needed is accessible and on time
- Instruct faculty that certain criteria need to be assessed from both university and department rubrics
- Exit survey needs more participation. Senior leads could have senior students do exit survey last day of class in the program.
- Ethics continue successful written assignment to demonstrate ADHA Core Values

Planning and Budgeting

Each of the senior clinic leads, along with all the other clinic leads in the dental hygiene department, are given only two (2) workload units for each of their clinics which are scheduled for four (4) hours. This four-hour time frame does not include any of the set up for Covid-19 screening, setting doors with props to keep them open so that people do not touch the doors for cross contamination prevention, temperature taking, Covid-19 questioning all students and faculty each morning, getting out all the forms and paperwork, unlocking the clinic doors, drawers, clinic gown closet, storage, chart room, as well as planning, scheduling, rescheduling students and locations that happen on a daily basis for the department to run this program. It would be very helpful to have the workloads count for the actual time used to run each of the clinics.

Section 8 – Closing the Loop: Evidence of Improvements in Student Learning

The PSLO #1 Communication and PSLO #5 Oral Care had been stagnant in the department for several years. At the end of spring of 2019 during the department wide retreat, the department chair recommended a major overhaul on the senior Capstone to include

collaboration with healthcare professionals. This is to meet the Commission on Dental Accreditation (CODA) requirement 2-15 "Graduates must be competent in communicating and collaborating with othermembers of the health care team to support comprehensive patient care.

Intent: The ability to communicate verbally and in written form is basic to the safe and effective provision of oral health services for diverse populations. Dental Hygienists should recognize the influences affecting the delivery of health services to individuals and communities (i.e.health status, health services and health beliefs). Students should understand the roles of members of the health-care team and have educational experiences that involve working with other health-care professional students and practitioners. Examples of evidence to demonstrate compliance may include:

- student experiences demonstrating the ability to communicate and collaborate effectively with a variety of individuals, groups and health care provider
- examples of individual and community-based oral health projects implemented bystudents during the previous academic year
- evaluation mechanisms designed to assess knowledge and performance of interdisciplinary communication and collaboration"

The changes in the Senior Capstone meet the requirements of CODA by adding the element of healthcare collaboration to the project. Most students were successful in their collaboration effort with their Capstone Patient's healthcare provider. Some students were not able to collaborate with that particular patient's healthcare provider, but were able to communicate and work with another healthcare provider. Very few of the students did not have contact with any other health care professionals. This was a great improvement from what we had seen in past years. The change to the Senior Capstone to include the healthcare provider collaboration along with the student to find a client who has a medical condition that they work with and research has been a great improvement and learning experience for every student and more accurate assessement.

COVID-19 restrictions required our program to re-evaluate how to continue with community health and capstone project requirements. The senior class was able to continue with patient care using new COVID-19 protocol allowing for identification of a patient with a special consideration. Interprofessional collaboration was successful with the inclusion of more HAS department interactions and interviews. The use of virtual and OIT HAS department collaborations allowed for a new learning experience for students and the importance of technology to work with other health professionals. Points are heavier on the capstone rubric for interprofessional collaboration, ethical decision making and diverse perspective categories.

ESLO #5 Quantitative Reasoning

This ESLO is not taught in our program. It is taught in the general education courses as part of the prerequisite of our students.

PSLO #6 Community Health Dental Hygiene 380-383, four term community health program planning assignment.

Students in the foundational term of Community Dental Health identify a target population. As a formed group for that target population each group amongst themselves:

- Identify team roles
- Outlines a team covenant including communication, participation, conflict resolution, and group norms.
- Groups asses the target population utilizing secondary and primary data, create surveys, interviews, and indices forms to collect data regarding needs of the population
- Interpret needs assessment results and create a GOAL and several measurable long-term Objectives for this population.
- Once goals and objectives are created the group creates a program plan including lesson plans, implementation plans, and funding considerations.
- Each group schedules and implements per their population's needs and their approved program plan objectives.
- Teamwork is assessed twice per term by two different faculty members. Once at Midterm and once at finals week from DH 380- DH 383.
- At the end of DH 383 the following portfolio is created and submitted by members of the group for their specific group:

Direct assessment activity:

Assignment used for #2 PSLO Critical Thinking and #6 PSLO Community Health:

Objectives

- Utilize diagnostic tools and interpret the findings
- Analyze subjective and objective information by determining an appropriate dental hygiene diagnosis, treatment plan, and prognosis
- Provide a sound rationale for an analysis
- Incorporate systemic or environmental conditions of patient as it relates to their oral health
- Collaboration with allied health professionals on patient health conditions
- Learn to locate, educate, and incorporate resources for patient knowledge and inclusion in health conditions

Section 8 – Closing the Loop: Evidence of Improvements in Student Learning

The PSLO #2 Critical Thinking and PSLO #6 Community Health had been stagnant in the department for several years. At the end of spring of 2019 during the department wide retreat, the department chair recommended a major overhaul on the senior Capstone to include collaboration with healthcare professionals. This is to meet the Commission on Dental Accreditation (CODA) requirement *Standard 2-23* "Graduates must be competent in problem solving strategies related to comprehensive patient care and management of patients.

Indirect assessment #2 Critical Thinking PSLO activity:

Exit Survey

PSLO #2 Critical Thinking: Graduates must be competent in problem solving strategies related to comprehensive patient care and management of patients.

Question from the exit	survey concernin	g PSLO #2:		
Question	Very much	Quite a bit	Some	Very Little
The dental hygiene	96.30%	3.70%	%	%
graduate will be				
competent in critical				
thinking and problem				
solving related to				
comprehensive care				
and management of				
patients.				
Indirect assessment #6	Community H	ealth PSLO activ	vity:	
Exit Survey				
PSLO #6 Community F				
for the child, adolescen			s patient popula	tions.
Question from the exit	•			
Question	Very much	Quite a bit	Some	Very Little
Assess the oral health	92.86%%	7.14%	0%	0%
care needs of a				
community and				
develop a strategic				
plan that addresses				
identified needs.				
Indirect assessment #2	2 Inquiry & Ana	alysis ESLO activ	vity:	
Exit Survey				
Question from the exit		g ESLO #2:		
ESLO #2 Inquiry & An				
Question	Very much	Quite a bit	Some	Very Little
Thinking critically	72.18%	27.10%	0.72%	0%
and analytically				
Indirect assessment #5	Quantitative R	Reasoning ESLO	activity:	
Exit Survey				
Question from the exit				
Question	Very much	Quite a bit	Some	Very Little
Using	58.85%	37.80%	3.35%	0%
quantitative/numerical				
information to solve				
problems, evaluate				
claims, and support				
decisions				

Appendix

Exhibit A1 - Rubric used for #2 Inquiry & Analysis ESLO

Essential Student Learning Outcome Rubric - Inquiry & Analysis

ESLO 2 Inquiry & Analysis:

Oregon Tech students will engage in a process of inquiry and analysis.

Definition

Inquiry and analysis consists of posing meaningful questions about situations and systems, gathering and evaluating relevant evidence, and articulating how that evidence justifies decisions and contributes to students' understanding of how the world works.

now the work				
PERFORMANCE CRITERIA	High Proficiency (4) The work <i>meets listed</i> requirements for this criterion; little to no development needed.	Proficiency (3) The work <i>meets most requirements</i> ; minor development would improve the work.	Some Proficiency (2) The work needs moderate development in <i>multiple</i> requirements.	Limited Proficiency (1) The work does not meet this criterion: it needs substantial development in most requirements.
IDENTIFY	Identifies a creative, focused, and manageable topic that addresses potentially significant yet previously less-explored aspects of the subject.	Identifies a focused and manageable topic that appropriately addresses relevant aspects of the subject.	Identifies a topic that, while manageable, is too narrowly focused and leaves out relevant aspects of the subject.	Identifies a topic that is too general and wide-ranging to be manageable.
INVESTIGATE	Clearly states, comprehensively describes, and synthesizes indepth information from relevant high-quality sources representing various approaches and points of view.	States, comprehensively describes, and presents indepth information from relevant high quality sources representing various approaches and points of view.	Presents information from relevant sources representing a limited set of approaches or points of view, but descriptions leave some terms undefined or ambiguities unexplored.	Presents information from irrelevant sources representing a limited set of approaches or points of view, or states information without clarification or description.
SUPPORT	All elements of the methodology or theoretical framework are skillfully developed. (Appropriate methodology or theoretical frameworks may be synthesized from across disciplines.)	Critical elements of the methodology of theoretical framework are appropriately developed. However, more subtle elements are ignored.	Critical elements of the methodology of theoretical framework are missing, incorrectly developed, or unfocused.	Inquiry design demonstrates a misunderstanding of the methodology or theoretical framework.
EVALUATE	Organizes and synthesizes evidence to reveal insightful patterns, differences, or similarities related to subject focus.	Organizes evidence to reveal important patterns, differences, or similarities related to subject focus.	Organizes evidence, but the organization is not effective in revealing important patterns, differences, or similarities.	Lists evidence, the evidence presented is not organized or it is unrelated to the subject focus.
CONCLUDE	States an eloquently supported conclusion that is a logical extrapolation of the inquiry, reflecting the student's informed evaluation and ability to place substantial evidence and perspectives in priority order.	States a conclusion focused solely on the inquiry findings, arising specifically from and responding specifically to the inquiry findings.	States a general conclusion beyond the scope of the inquiry, the support for which is inadequate, or information was chosen to fit the conclusion.	States an ambiguous, illogical, or fallacious conclusion that is inconsistently tied to the inquiry findings.

Grading Rubric: (27 points)

Criteria:	Proficient 3 points	Competent 2 points	Novice 0-1 point
Writing Mechanics: no	No writing errors, written	A couple of minor	Several writing errors OR
writing errors, written	for the professional	writing errors OR used	used layman language
for professional reader	reader	some layman language	
Clinical question and	Clearly described a	Did not include a clinical	Missing more than one
PICO	clinical scenario and	scenario OR patient	element or was not
	patient problem;	problem OR PICO	accurate in writing a
	Accurate PICO question	question; or was not	PICO question
	and correctly identified a	accurate or detailed	
4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	P, I, C, and O	enough	
Articles and Peer	Listed and numbered	Listed and numbered	Did not listed title of one
Review: 3 full-text OR	titles of articles and Abstract or CAT if	titles of articles and Abstract or CAT if	of the articles OR 2 or
2 full-text plus 1 Abstract or CAT	applicable; Identified	applicable; 1 error in	more errors in listing "type" or "level of
Abstract of CAT	"type" of research;	listing "type" or not	evidence" with one or
	Accurately stated and	enough explanation of	more of the articles or did
	explained "level of	"level of evidence" with	not state if peer-reviewed
	evidence"; identified if	one of the articles; or did	Free states
	peer-reviewed	not state if peer-reviewed	
Statistics	For each study (if	For each study: Not clear	For each study:
	applicable): Correctly	in explanation of p-value	Explanations on p-value,
	stated p-value and	in relation to study	SD, double-blind, and the
	described relation to	results or not clear in	completion rates in
	study results; Correctly	explanation of SD in	relationship to studies
	stated standard deviation	relation to study results	results too brief or not
	and described relation to	OR did not discuss if	clear enough
	study results; Discussed if studies were double-	studies were double-blind	
	blind and also completion	and the completion rates	
	rates		
Validity and Reliability	Clearly described issues	Not clear in describing	Not clear in describing
	of validity and reliability	issues of validity and	issues of validity and
	for each research article;	reliability for one of the	reliability for two or
	backed up statements by	articles OR needed more	more of the articles OR
	referring to information	detail in backing up	needed more detail in
	in articles and learned in	statements in one of the	backing up statements in
	this course	articles	one or more of the
Detentiol 1.1.	For each collection	Engage Control (* 1	articles
Potential bias – minimum of three for	For each article:	For one or more articles:	Mentioned very little
each article	Identified potential bias and for each type	Identified potential bias but could have found	potential bias and/or explanations weak for
cacii ai ticic	explained in 1-2	more types and/or did not	one or more articles
	sentences why potential	clearly explain the why	one of more arricles
	for bias existed	of each type of bias	
Results	For each article: Clearly	Needed more clear and	Needed more clear and
	described results using	detailed descriptions of	detailed descriptions of
	several well-developed	results for one of the	results for two or all three
	sentences	articles	articles
Clinical and Practical	In detail described	Described clinical or	Explanations too brief
Significance	clinical and/or practical	practical significance for	and/or not clear for one
	significance of each	each article but needed	or more of the articles
	study; used information	more detail or did not	



	learned in course to back up statements; one well- developed paragraph for each study; answers how effective was the treatment and how much change does treatment cause AND/OR subjects representative of PICO question and feasibility of study	clearly back up statements	
Conclusion	Concluded report by combining the information gleaned from critically analyzing all articles; shared opinion on how well the evidence answers the clinical question; discussed if this information will change how you practice dental hygiene	Did not clearly combine information summarized from all of the articles OR did not clearly state how well the evidence answers the clinical question OR did not discuss how information will change how you practice dental hygiene	Did not clearly combine information summarized from all the articles AND/OR did not clearly state how well the evidence answers the clinical question AND/OR did not discuss how information will change how you practice dental hygiene. OR did not "summarize the conclusions" and instead discussed conclusions separately for each article.

Exhibit B - Rubric used for #5 Quantitative Literacy ESLO

Developed by the ESLO Inquiry & Analysis Committee, Approved by the Assessment Executive Committee, January 2017.

Essential Student Learning Outcome Rubric – Quantitative Literacy

ESLO 5 Quantitative Literacy:

Students will demonstrate quantitative literacy.

Definition

Quantitative literacy comprises the ability to appropriately extract, interpret, evaluate, construct, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in students' everyday professional, civic, and personal lives.

Performance	Foundational (instructions given in detail)	Practicing	Capstone
Criteria		(general instructions given)	(little to no instruction)

26

Calculate	Perform fair short single computations with tools provided.	Perform longer and more complicated computations, or solve problems involving sequences of linked computations selecting from a list of possible tools.	Perform challenging computations and sequences of computations, knowing the tools needed.
Interpret	When prompted, identify specific parts of equations or expressions, interpret specific data points on graphs, interpret results of computations literally.	In response to broad instructor prompting, interpret equations or expressions in a general sense, interpret overall patterns and trends in graphical information. When appropriate, interpret differences in computational results.	Give holistic interpretations of methods, tools used, and results, with little to no instructor prompting or guidance.
Construct Representations	Construct graphical models of statistical information in response to specific instructor prompting.	Construct analytical (equation) or graphical models of mathematical relationships in response to broad instructor prompting.	Construct appropriate, complex, and clearly labeled analytical and/or graphical models with little to no instructor prompting or guidance.
Apply in Context	Solve problems using given formulas or frameworks.	Choose correct formulas, set up correct equations (or systems of equations), and/or choose correct frameworks to solve problems in response to broad instructor prompting. Acknowledge assumptions used in solving problem(s).	Solve relevant complex, multifaceted problems, with little to no instructor prompting, or guidance. Acknowledge and justify assumptions used in solving problem(s).
Communicate	Accurately integrate quantitative evidence into basic arguments in response to specific prompts. Quantitative evidence is conveyed and explained in such a way that a competent non-expert reader can follow along.	Accurately integrate quantitative evidence into an extended argument in response to a broad prompt. While instructor provides guidance, student uses quantitative evidence to identify, explain, and/or solve a problem. Quantitative evidence is conveyed and explained in such a way that a competent non-expert reader can follow along.	Accurately integrate quantitative evidence into complex arguments with little to no prompting or guidance. Quantitative evidence is conveyed and explained in such a way that a competent non-expert reader can follow along.

Developed by the ESLO Quantitative Literacy Committee, May 2017. Page 1

Exhibit C - Rubric used for #2 PSLO Critical Thinking

Capstone Project Assessment Rubric

Student Name: Evaluator Name: Date:							
Criteria	Not Presented	Some Competency	Score	Competent	Score	Superior Competency	Score
Definition of Project/Introduction	0 points	Introduction does not clearly explain the nature and structure of the capstone, its rationale and relevance to discipline.	/15	Introduction clearly presents the capstone, its nature, relevance and structure.	/17	Introduction makes strong case for the value the capstone provides to the discipline, as well as presenting excellent detail of capstone foundation.	/20

Application of Knowledge	0 points	Does not make a logical connection between dental hygiene patient management and the patient issue or problem.	/7	Makes a logical connection between the knowledge of dental hygiene patient management and the patient issue or problem.	/9	Logically articulates how knowledge in dental hygiene patient management can provide solutions for a health issue or problem.	/10
Analysis and Critique of Research	0 points	Either does not use or misuses educational studies, or uses unreliable or invalid research as major support for patient management decisions.	/15	Uses reliable and valid resources and applied knowledge appropriately to support decisions. Audience may need to infer connections.	/17	Clearly articulates how the patient management decisions are based upon reliable and valid research and applied knowledge.	/20
Knowledge of Patient Management	0 points	Does not indicate familiarity with capstone project condition. Has large gaps and shows little critical thinking of the capstone in the presentation. No substantive engagement.	/15	Displays familiarity with reasonably full range of critical thinking; demonstrates an appropriate knowledge and engagement with the project.	/17	Displays excellent familiarity with full range of critical thinking; engages with it substantively and productively. Exceptional understanding of the project content.	/20
Interprofessional Collaboration	0 points	Minimal or no collaboration with other health professional to support patient care and management. No learning demonstrated by student on developing learning or support from other health professional.	/38	Interprofessional collaboration presented but not fully developed to demonstrate good understanding or use of information obtained or how applied to patient case. Support healthcare provider had limited input or connection with patient care or management.	/42	Presented excellent collaboration with a healthcare provider outlining strong learning, goals, teamwork, and support throughout patient care. Student showed exceptional professional collaboration to maximize management of case.	/50
Diverse Perspective	0 points	Student shows bias with own perspective/preconceived judgements of patient or their condition. Was not open-minded to patient attitudes, supporting evidence, or best practice for patient care.	/38	Shows awareness of patient's perspective. Could have used better motivational interviewing or educational techniques to achieve patient engagement or better outcome of care. Presented knowledge of differences in perspectives with only average success in removing bias or barriers.	/42	No bias demonstrated by clinician. Shows awareness of patient's perspective. Shows exceptional learning outcomes through working with differing perspectives and how keeping an open-mind allowed for best outcomes in patient care and engagement.	/50

Ethical Decision Making	0 points	Student had some HIPPA violations. Student did not use or had limited use of evidence based research to support decisions and judgements made for patient care. All treatment options presented to patient were not present or not clear.	/38	Followed HIPPA guidelines. Used research relating to patient case with competent demonstration of knowledge gained or how it affected patient care and outcomes. Followed ethical scope of practice. Presented risks and benefits of treatment options for consent.	/42	Followed HIPPA guidelines. Presented thorough explanation of research and how incorporated into a case presentation, giving patient all risks and benefits of treatment. Student displayed exceptional ethical judgement with patient engagement and interaction with the case.	/50
Results	0 points	Outcomes minimally address project problem statement. Presentation minimally addresses research or patient management. Lack of organization, detail, understanding and/or accuracy.	/15	Outcomes address project problem statement. Presentation of evidence and persuasive reasoning makes connections with project condition and students management using critical thinking skills.	/17	Outcomes thoroughly address project problem statement. Presentation of evidence conveys a mastery of critical thinking skills and patient management. Structure provides a coherent and clear focus of new understanding.	/20
Summary/Conclusion	0 points	Capstone summary is minimally supported by results and/or findings; exhibits a lack of original ideas, personal interpretation of findings; and/or an inability to draw an inventive summary of patient management protocol.	/22	Summary sufficiently supported by results and/or findings while adequately and accurately summarizing the capstone.	/25	Summary presents carefully analyzed information to present inventive and originally developed decisions and/or conclusions supported by results and/or findings.	/30
Reflections	0 points	Student not able to accurately self-assess strengths and weaknesses; goals of capstone not addressed; has not created goals for improved outcomes. Does not demonstrate knowledge of capstone purpose or has weak reflection on critical thinking/problem solving.	/22	Student able to self- assess strengths and weaknesses. Lacks details in self- assessment/reflection in regards to learning and what could have improved outcomes. Average critical thinking and problem- solving skills demonstrated as well as understanding of project presented.	/25	Student is able to accurately assess the capstone project and self- assess strengths and weaknesses; fully describes capstone goals and considerations for improved outcomes. Demonstrates exceptional critical thinking skills and judgement with problem solving.	/30
Overall Comments:							
						Total Score:	/300

Exhibit D - Rubric used for PSLO #5

Community Health

	Community Health Program Planning Portfolio Rubric (60 points possible)					
	Novice 0-6 pts.	Beginner 7 pts.	Competent 8 pts.	Proficient 9-10 pts.		
Writing & Introduction	Several spelling and/or grammatical errors. Writing is inconsistent for the intended audience. The project documentation is confusing to the reader. Portfolio does not follow the organizational guide.	Some minor spelling or grammatical errors. Writing is mostly appropriate for intended audience. There may be some lack of clarity. Portfolio follows the organizational guide.	Some minor spelling or grammatical errors. Writing is appropriate for the intended audience. Writing is mostly clear—there may be minor questions about content. Portfolio follows the organizational guide.	No spelling or grammatical errors. Writing is clear, accurate and appropriate for intended audience (DH professionals). Portfolio is organized according to the organizational guide. Cover page and spine; tabbed dividers are present.		
Needs Assessment	Baseline data does not reveal the current status of the population. Population profile not complete. Oral health status not identified.	Some baseline data missing due to inappropriate choice of data collection instrument. Oral health status and population profile are included. All secondary data sources are not cited.	Baseline data reveals the current status of the population to include community issues of: prevention; access; resources; quality; manpower. Oral health status and population profile are included. All secondary data sources are not cited. Samples of data collection instruments are included.	Baseline data reveals the current status of the population to include community issues of: prevention; access; resources; quality; manpower. Oral health status and population profile are included. All secondary data sources are cited. Samples of data collection instruments are included.		
Needs Analysis	The needs analysis does not reflect the needs assessment data.	Program strategies, rather than the primary problems of the population are determined. The population's self assessment is not adequately considered.	Primary problems and contributing factors or constraints are identified and reflect the needs assessment data. The population's self assessment is not clear.	Primary problems and contributing factors or constraints are identified and reflect the needs assessment data. The population's self assessment of need is included in the analysis.		
Program Plan	Goals and objectives are inaccurate in respect to SMART. Strategies and activities do not reflect program goals and are not effective. The funding plan/budget is inaccurate. An outline of formative and summative program evaluation is missing.	Goals and objectives may be inaccurate in some respect to SMART. Strategies and activities may not entirely reflect goals and objectives. The funding plan/budget is somewhat confusing. An outline of formative and summative program evaluation is included.	Goals and objectives may be inaccurate in some respect to SMART. Effective strategies and activities that include a timeline and reflect program goals and objectives are planned. A funding plan/budget is included and an outline of formative and summative program evaluation is included.	Goals and objectives are (SMART) specific, measurable, attainable, realistic, and timely. Effective strategies and activities that include a timeline and reflect program goals and objectives are planned. A funding plan/budget is included and an outline of formative and summative program evaluation is included.		

Program	The implementation	The implementation	The implementation	The implementation
Implementation	process is inadequately documented. Someone taking on this project would have many question about project operation. Several aspects of documentation are missing: Contact persons Sample forms and checklists used Written correspondence List of materials, videos, power points, lesson plans used Policies and procedures that were developed	process is adequately documented. Some documentation is missing. Documentation includes: Contact persons Sample forms and checklists used Written correspondence List of materials, videos, power points, lesson plans used Policies and procedures that were developed	process is documented. Anyone taking on this project may have some questions about how the project operates. Documentation includes: Contact persons Sample forms and checklists used; Meeting minutes & progress reports Written correspondence List of materials, videos, power points, lesson plans used Policies and procedures that were developed	process is well documented. Anyone taking on this project could easily see how the project operates. Documentation includes: Contact persons Sample forms and checklists used; Meeting minutes & progress reports Written correspondence List of materials, videos, power points, lesson plans used Policies and procedures that were developed. Brochures, photos, supplemental material is included.
Program Evaluation	Activities are not assessed. Formative evaluation is not documented. Goals and objectives are not evaluated. Recommendations for future program improvement do not reflect actual evaluation.	Some activities are not adequately assessed or documented. Goals and objectives are evaluated. Recommendations for future program improvement do not reflect actual evaluation.	All activities are assessed and documented. Some formative evaluation from meeting minutes is missing. Goals and objectives are evaluated. Recommendations for future program improvement are stated.	All activities are assessed and formative evaluation is documented from meeting minutes and post activity assessment. Goals and objectives are evaluated. Recommendations for future program improvement are stated.
Total Team Grade:				

Exhibit E - PSLO #2 Senior Capstone Critical Thinking Data



