Oregon Tech Dental Hygiene Bachelor of Science at Klamath Falls 2013-2014 Assessment Report

I. Introduction

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.

All students must complete prerequisite courses to be eligible for application to the program. Acceptance to the program is selective and limited to no more than 27 students at Klamath Falls. Students enter the program each year in fall term.

The five-year retention and graduation rate is presented in the Table 1 below.

TABLE 1: 5-YEAR GRADUATION RATE						
Class 2010	Class 2011	Class 2012	Class 2013	Class of 2014		
25/27 (93%)	26/26 (100%)	21/25 (87.5%)	21/27 (77.78%)	22/24 (87.5%)		

II. Program Purpose, Objectives, and Student Learning Outcomes

The dental hygiene faculty reviewed the program's purpose, objectives, and learning outcomes during a department meeting on September 18, 2013. The faculty affirmed the statements below:

Dental Hygiene Program Purpose

The purpose of the Bachelor of Science in Dental Hygiene program is to prepare students for entry into the dental hygiene profession and additional careers such as public health, administration, education, research, and marketing. The graduate will be prepared to enter master degree programs in dental hygiene and related programs.

Program Educational Objectives

- 1. Provide the dental hygiene student the opportunity to gain the necessary knowledge, skills, and values to enter the registered practice of dental hygiene
- 2. Prepare the student to sit for the National Board Dental Hygiene Examination
- 3. Prepare the student to take the WREB examination in dental hygiene, anesthesia, and restorative.

Expected Student Learning Outcomes

- 1. The dental hygiene graduate will be competent in applying ethical, legal and regulatory concepts in the provision and/or support of oral health care services
- 2. The dental hygiene graduate will be competent in critical thinking and problem solving related to comprehensive care and management of patients.
- 3. The dental hygiene graduate will be competent in interpersonal and communication skills to effectively interact with diverse population groups
- 4. The dental hygiene graduate will be competent in assessing, planning, implementing and evaluating community-based oral health programs including health promotion and disease prevention activities
- 5. The dental hygiene graduate will be competent in providing oral health care to individuals at all stages of life and for all periodontal classifications
- 6. The dental hygiene graduate will demonstrate competent knowledge and self-assessment skills necessary for life-long learning.

The program also offers students experiential learning opportunities including:

• Membership in the Student American Dental Hygienists' Association (SADHA) and representation at state and national levels

- Professional meetings: Oregon Dental Conference, Oregon Dental Hygienists' House of Delegates Meeting, and American Dental Hygienists' Association Annual Meeting.
- Assessment, planning, implementation, and evaluation of community health projects
- International trips to provide dental hygiene care to persons living in third world countries
- Off campus experience: school-based screenings and presentations, health fairs, and dental clinics/offices.

III. Six-Year Cycle for Assessment and Student Learning Outcomes

The assessment schedule for Oregon Tech institutional student learning outcomes (ISLO) and dental hygiene program student learning outcomes (PSLO) are summarized in Table 2 below. ISLOs are assessed every six years and PSLOs are assessed every three years.

TABLE 2A: Oregon Tech Institutional Learning Outcomes Cycle of Assessment								
SLO	Description	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017
ISLO	Communication (oral, written, visual)	Х						Х
ISLO	Team, group work			Х				
ISLO PSLO	Professionalism, ethical practice			X∙			•	
ISLO PSLO	Critical thinking, problem solving				X∙			•
ISLO PSLO	Lifelong, independent, learning	X∙			•			X∙
ISLO	Mathematical knowledge, skills		Х					
ISLO	Scientific knowledge, reasoning					Х		
ISLO PSLO	Cultural awareness						X∙	
PSLO	Community health		•			•		
PSLO	Patient care competency				•			•

Table 2B: Assessment cycle, ISLO (X) PSLO (•)

Program Student Learning Outcomes

- The dental hygiene graduate will be competent in applying ethical, legal, and regulatory concepts in the provision and/or support of oral health care services
- The dental hygiene graduate will be competent in critical thinking and problem solving related to comprehensive care and management of patients
- The dental hygiene graduate will demonstrate competent knowledge and self-assessment skills necessary for life-long learning
- The dental hygiene graduate will be competent in interpersonal and communication skills to effectively interact with diverse population groups
- The dental hygiene graduate will be competent in interpersonal and communication skills to effectively interact with divers population groups
- The dental hygiene graduate eill be competent in assissing, planning, implementing and evaluating community based oral health programs including health promotion and disease prevention activities
- The dental hygiene graduate will be competent in providing oral health care to all stages of life and for all periodontal classifications.

IV. Summary of 2013-20124 Assessment Activities

The dental hygiene faculty conducted formal assessment of one institutional learning outcome and three program student learning outcomes during the 2013-2014 academic year. The following table (Table 3) provides an overview of 2013-2014 assessment activities.

The program also addressed closing the loop, ISLO Team, Group Work from 2012-2013 assessment.

TABLE 3: Overview of 2013-2014 Assessment Activities							
Student Learning Outcome	Criteria	Assessment Method					
ISLO/PSLO	Identification	Direct Assessment					
Critical Thinking	Clarification	Observation					
	Evaluation	Indirect Assessment					
		Graduate survey					
Assessment Points: DH 422; graduate survey							
PSLO	• Total number of patients	Direct Assessment					
Patient care competency	• Total number type of patients	 Tracking data 					
	o Age	Indirect Assessment					
	• Disease classification	• Graduate survey					
Assessment Points: DH 423; gr	raduate survey						
PSLO	OIT Lifelong Learning Rubric	Direct Assessment					
Lifelong learning	Lifelong learning	Writing assignment					
	 Professional development 	Indirect Assessment					
	• Short- and long-term career plans	Graduate survey					
Assessment Points: DH 423; gr	Assessment Points: DH 423: graduate survey						

Table 3: 2013-2014 Assessment Activities

ISLO: Critical Thinking and Problem Solving

PSLO: The dental hygiene graduate will be competent in critical thinking and problem solving related to comprehensive care and management of patients.

Direct Assessment: Observation

Dental hygiene students' ability to think critically and solve problems was assessed in DH 423 Dental Hygiene Clinical Practice and Seminar IX winter term 2014. Twenty-two students were assessed by observation in the clinical setting. Clinical and full-time faculty rated students in their final term in the program based on their observations of students' ability to think critically and solve problems related to patient care using a measurement scale of 1 to 4. Each student was evaluated by 9-10 instructors and the score was determined by the mode. The following table (Table 4) summarizes the results of the assessment

TABLE 4: C	TABLE 4: Critical Thinking and Problem Solving					
Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Overall Results		
Identification						
• Uses patient assessment data, diagnostic technologies, and scientific evidence to determine dental hygiene diagnosis	Observation	1-4 proficiency scale	80% at 3 or 4	100%		
Clarification						
Prioritizes data	Observation	1-4 proficiency scale	80% at 3 or 4	100%		

	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Overall Results
• Makes sense of data	Observation	1-4 proficiency scale	80% at 3 or 4	100%
Evaluation				
• Self-assessment	Observation	1-4 proficiency scale	80% at 3 or 4	95.65%
• Commitment to improvement	Observation	1-4 proficiency scale	80% at P or C	100%

Table 4: Assessment results for critical thinking and problem solving in DH 423 Dental Hygiene Clinical Practice and Seminar IX winter term 2014.

Strengths; Based on this assessment, students' performance exceeds minimum acceptable performance in all criteria.

Weaknesses: This assessment did not reveal any weaknesses.

Plan for Improvement: Continue effective teaching strategies.

Indirect Assessment: Survey

Critical thinking and problem solving was also assessed using a survey. During week nine of winter term, 2014, a survey was administered to dental hygiene students in their last term of the program. Students rated the following statements using a 4-point Likert scale (strongly agree, agree, disagree, and strongly disagree).

S1: The Oregon Tech dental hygiene program helped me increase my problem solving skills

S2: The Oregon Tech dental hygiene program prepared me to be able to utilize critical thinking, scientific theory, and evidence in decision making regarding patient care and the promotion of health and wellness to individuals and communities.

S3: The Oregon Tech dental hygiene program prepared me to be able to use critical decision making skills to reach conclusions about the patient's dental hygiene needs based on all available assessment data

S4: The Oregon Tech dental hygiene program prepared me to be able to possess transferable skills, e.g., communication, problem solving and critical thinking, to take advantage of opportunities that may increase individuals' and communities' access to dental hygiene care, influence the profession, and/or change the healthcare environment.

S5: The Oregon Tech dental hygiene program prepared me to be competent in problem solving strategies related to comprehensive care and management of patients.

	TABLE 5: Critical Thinking and Problem Solving						
	Assessment	Measurement	Minimum				
	Method	Scale	Acceptable Performance	Results			
S 1	Survey	1-4	80% at Strongly agree or agree	95.83%			
S2	Survey	1-4	80% at Strongly agree or agree	100%			
S 3	Survey	1-4	80% at Strongly agree or agree	100%			
S4	Survey	1-4	80% at Strongly agree or agree	100%			
S5	Survey	1-4	80% at Strongly agree or agree	100%			

The following table (Table 5) summarizes the results of the survey.

Table 5: Assessment results for critical thinking and problem solving based on students' self-reporting by survey, winter term 2014.

Strengths: Based on this assessment, students' performance exceeded minimal acceptable performance in all survey questions related to critical thinking and problem solving.

Weaknesses: This assessment did not reveal any weakness.

Plan for Improvement: Continue effective teaching strategies.

PSLO: The dental hygiene graduate will be competent in providing oral health care to individuals at all stages of life and for all periodontal classifications

DIRECT ASSESSMENT: TRACKING RECORDS

This outcome was assessed at the completion of winter 2014 term using computer generated provider reports. During the course of the program, students enter patient experience data into a software program. End of program reports were generated for twenty-two students who graduated winter term 2014. The assessment results are summarized in the following tables (Table 6 and Table 7).

TABLE 6: Provision of oral health care to individuals at all stages of life							
Student ID	Child	Adolescent	Adult	Independent Older Adult	Dependent/Fail Older Adult	Special Needs	
918189791	10	7	75	47	7	5	
918177630	25	28	49	34	3	7	
918191147	15	4	76	30	11	16	
918184222	9	4	62	48	13	7	
918179807	18	8	57	17	6	8	
918188740	16	8	86	57	3	13	
918185849	12	14	46	18	3	4	
918181995	18	7	38	28	9	3	
918179406	7	3	51	20	6	13	
918188764	11	7	88	39	3	14	
918190274	8	6	57	43	3	18	
918189358	19	7	87	37	7	7	
918153133	12	16	67	68	2	31	
918181136	5	3	92	53	1	8	
918195498	16	16	82	57	2	9	
918173124	22	4	53	34	17	8	
918187188	18	6	53	33	6	7	
918192716	10	13	115	33	11	5	
918185139	13	5	85	23	4	9	
918191777	15	3	73	30	5	4	
918180890	5	0	82	30	0	9	
918178669	9	9	90	39	6	5	
AVERAGE	13.3	8.1	70.3	37.2	5.8	9.5	
MAXIMUM	25	28	115	68	17	31	
MINIMUM	5	0	34	17	0	3	

Table 6: Cumulative patient tracking data, fall 2011 through winter 2014. Highlighted rows indicate students who were also enrolled in DH 462 and 463 fall 2013 and winter 2014.

TABLE 7: Provision of oral health care for all periodontal classifications								
Student ID	Healthy	Gingivitis	ADA II	ADA III	ADA IV			
918189791	11	48	32	27	19			
918177630	16	41	23	34	12			
918191147	3	30	33	53	30			
918184222	24	54	26	47	26			
918179807	3	45	24	31	28			
918188740	2	51	45	3	21			
918185849	12	24	13	12	5			
918181995	7	48	19	17	11			
918179406	2	27	9	24	14			
918188764	5	54	39	34	8			
918190274	3	46	16	27	28			
918189358	3	58	29	72	14			
918153133	5	64	25	41	29			
918181136	7	36	41	42	27			
918195498	5	63	42	38	18			
918173124	18	34	26	41	8			
918187188	12	55	29	29	18			
918192716	12	52	22	35	27			
918185139	1	49	36	39	14			
918191777	3	34	27	47	27			
918180890	2	52	22	30	12			
918178669	10	63	39	35	22			
AVERAGE	7.5	46.7	28	34.5	19			
MAXIMUM	24	64	45	72	30			
MINIMUM	1	24	9	3	5			

Table 7: Cumulative patient tracking data; fall 2011 through winter 2014

Strengths: Almost all students have patient experiences with a variety of ages and stages with all types of classifications of periodontal disease.

Weaknesses: There is concern that patient experiences are not accurately recorded and it appears there is under reporting.

Plan for Improvement: The program will investigate more reliable reporting mechanisms.

NOTE: It is optional for students to enroll in DH 462-463 Restorative Dentistry II and III. In these courses, students provide restorative care in the clinical setting. When reviewing the patient data, the faculty noticed that the patients seen in restorative dentistry were included in the tracking data. Generally restorative students had more patient experiences than those who were not in the courses.

INDIRECT ASSESSMENT: GRADUATE SURVEY

The outcome was also assessed winter term 2014 using a survey. Twenty-two students participated in the assessment. Students were asked to rate how the program prepared them to be competent in provision of care using a 4-point Likert scale (4-strongly agree; 3-agree; 2-disagree; 1-strongly disagree). The following table (Table 8) summarizes their responses.

TABLE 8: Dental Hygiene Patient Care Competencies						
Q: The OIT Dental Hygiene	Assessment	Measurement Scale	Minimum Acceptable	Results		
program prepared me to be	Method		Performance			
competent in:						
Providing dental hygiene care	Sumou	1 point Libert coole	80% strongly agree or			
for the child patient	Survey	4-point Likert scale	agree	100%		
Providing dental hygiene care	Cumular	A maint Libert agala	80% strongly agree or			
for the adolescent patient	Survey	4-point Likert scale	agree	100%		
Providing dental hygiene care	Commence	A maint I ileast apple	80% strongly agree or			
for the adult patient	Survey	4-point Likert scale	agree	100%		
Providing dental hygiene care	Commence	A maint I ileast apple	80% strongly agree or			
for the geriatric patient	Survey	4-point Likert scale	agree	100%		
Assessing treatment needs of	Comments	A maint I ileant agala	80% strongly agree or			
patients with special needs	Survey	4-point Likert scale	agree	N/A		
Providing dental hygiene care	Cumular	A maint Librart agala	80% strongly agree or			
for gingivitis	Survey	4-point Likert scale	agree	100%		
Providing dental hygiene care	Sumou	1 point Libert coole	80% strongly agree or			
for slight chronic periodontitis	Survey	4-point Likert scale	agree	96%		
Providing dental hygiene care						
for moderate chronic	Survey	4-point Likert scale	80% strongly agree or	96%		
periodontitis			agree	7070		
Providing dental hygiene care						
for advanced chronic	Survey	4-point Likert scale	80% strongly agree or	96%		
periodontitis			agree	2070		

Table 8: Results of graduate survey, class of 2014.

Strengths: Based on this assessment, students self-reported competence in providing patient care that exceeded minimum acceptable performance.

Weaknesses: This assessment revealed no weaknesses.

Plan for Improvement: Continue successful teaching and learning strategies.

NOTE: Question regarding "assessing treatment needs of patients with special needs" was inadvertently omitted from the survey.

PSLO The dental hygiene graduate will demonstrate knowledge and self-assessment skills for life-long learning.

DIRECT ASSESSMENT: WRITING ASSIGNMENT

This outcome was assessed using a writing assignment during fall term 2013. Students enrolled in DH 422 Dental Hygiene Clinical Practice and Seminar VIII were required to write a paper that addressed the following three main topics:

- 1. Lifelong learning
- 2. Professional societies and organizations
- 3. Short- and long-term career plans

The instructor evaluated the paper as proficient (4), competent (3) beginner (2), or novice (1) using a rubric created by the OIT Communication Department and approved by the OIT Assessment Commission.

Twenty-two students were assessed. The following table (Table 9) summarizes the results of the assessment.

TABLE 9: Lifelong Learning					
Performance Criteria	Assessment Method	Measurement Scale	Minimum Acceptable Performance	Results	
Lifelong learning	Rubric-scored written paper	1-4 proficiency scale according to rubric	80% achieve proficiency of 3 or 4	95.5%	
Professional development	Rubric-scored written paper	1-4 proficiency scale according to rubric	80% achieve proficiency of 3 or 4	100%	
Short- and long-term career plans	Rubric-scored written paper	1-4 proficiency scale according to rubric	80% achieve proficiency of 3 or 4	100%	

Table 9: Lifelong learning assessment results fall term 2013.

Strengths: Based on this assessment, student learning exceeded minimum acceptable performance in all criteria.

Weaknesses: This assessment revealed no weaknesses.

Plan for Improvement: Continue successful teaching and learning strategies.

INDIRECT ASSESSMENT: GRADUATE SURVEY

The outcome was also assessed using a survey. Dental hygiene students expected to graduate winter term 2014 were asked to rate the level that the program prepared them to be competent in self-assessment skills in preparation for lifelong learning using a 4-point Likert scale (4-strongly agree; 3- agree; 2- disagree; 1- strongly disagree).. The survey was administered in week 8 of winter term. Twenty-two students participated in the assessment. The following table (Table 10) summarizes their responses.

TABLE 10: Lifelong Learning				
Q: The OIT Dental Hygiene	Assessment	Measurement Scale	Minimum Acceptable	Results
program prepared me be able	Method		Performance	
to:				
Continuously perform self-				
assessment for lifelong learning	Survey	4-point Likert scale	80% strongly agree or	100%
and personal growth		_	agree	10070
Q: The OIT Dental Hygiene				
program prepared me to be				
competent in:				
Self-assessment skills in	Charles	1 maint Lileart coole	80% strongly agree or	
preparation for lifelong learning	Survey	4-point Likert scale	agree	100%

Strengths: Based on this assessment, student learning exceeded minimum acceptable performance/

Weaknesses: This assessment did not reveal any weaknesses.

Plan for Improvement: Continue successful teaching and learning strategies.

V. Evidence of Student Learning

During the 2013-2014 academic year, the Oregon Tech Dental Hygiene program at Klamath Falls assessed the following student learning outcomes:

- ISLO/PLSO: Critical Thinking and Problem Solving
- PSLO: Patient Care Competency
- PSLO: Life-long Learning

The dental hygiene faculty met on April 18, 2014 to discuss the results of the assessment and to determine plans for improvement. The faculty is satisfied with the level of student performance in critical thinking and problem solving, including in critical thinking and problem solving related to comprehensive care and management of patients, and in lifelong learning.

VI. Changes Resulting from Assessment

During the 2012-2013 assessment cycle, ISLO 2, Team and Group Work was assessed. Dental hygiene students' ability to work in teams was assessed in DH 381-383 Community Dental Health II-IV. Twenty-one students working in five teams were assessed by direct observations as they worked in teams to complete all phases of a community health project. The projects beginning fall term 2011 were carried out over a 3-term period ending in students' junior year spring term 2012.

Assessment results revealed that minimum acceptable performance was not met in the criterion, share appropriately. While the majority of teams did meet or exceed the minimum acceptable performance in this criterion, dental hygiene faculty recognized an opportunity for improvement. During the spring assessment meeting on May 17, 2013, dental hygiene faculty planned an improvement strategy to increase the student-to-faculty ratio in the course. By so doing, it was assumed that student teams could be more closely monitored and intervention, when needed, could occur sooner and with more effective results.

The criterion was reassessed during the 2013-204 assessment cycle to determine the effectiveness of the change. Nineteen students were assessed as in 2013-2013 (see above). The following table (Table 11) summarizes the results of the change and compares the results to 2012-2013.

TABLE 11: Team & Group Work						
		N = 5 teams	, 2012-2013			
	Group HS	Group S	Group KC	Group LR	Group M	
	n = 3	n = 5	n =5	n = 5	n = 4	
Share appropriately	100% at 3 or 4	100% at 3 or 4	83% at 3 or 4	40% at 3 or 4	50% at 3 or 4	
				Overa	ll average: 60%	
		N = 5 teams	5, 2013-2014			
	Group TP	Group EL	Group KY	Group LR	Group M	
	n=4	N=4	N=3	N=4	N=4	
Share appropriately	75% at 3 or 4	50% at 3 or 4	100% at 3 o4	75% at 3 or 4	75% at 3 or 4	
				Overall	average: 73.3%	

Table 11: Comparison 2012-2013 and 2013-2014 assessment results

Strengths: Based on this assessment one group exceeded the minimum acceptable performance of 80% at 3 or 4.

Weaknesses: Based on this assessment four groups did not meet the minimum acceptable performance of 80% at 3 or 4.

Plan for Improvement:

Students will be provided the rubric for team and group work after forming work teams, but prior to writing a team covenant. The class will work in small groups using a guided-decision making process prior to beginning work on their own community health projects. The class will plan, implement, and evaluate a community health event prior to planning their team projects; team work will be discussed as part of that process. Student feedback in regard to placing SPE 321 in the curriculum map during the same quarter as DH 380 will be considered. The project implementation rubric that is included for

grading in DH 381, 382, and 383 includes evaluation of team and group work. Team progress will be formally discussed with teams at mid-term and end-of-term.

VII. References

VIII. Appendices

- Curriculum maps
- Rubrics

$\mathbf{Curriculum}\;\mathbf{Maps}^{\underline{1}}$

Critical Thinking & Problem Solving

Courses that are bold below indicate that the SLO above is taught in the course, students demonstrate skills or knowledge in the SLO, and/or students receive feedback on their performance on the SLO.

CRITIC	CRITICAL THINKING AND PROBLEM SOLVINING Fall Winter Spring		Spring	Summer		
SOPHON	MORE		-	-		
DH	221	DH Clin Prac & Seminar I				
DH	225	H&N Anatomy, Histology, Embryology				
DH	240	Prevention I				
CHE	360	Clin Pharm for Health Professions				
SPE	321	Small Group & Team Com				
DH	222	Clin Prac & Seminar II		Ι		
DH	241	Prevention II		Ι		
DH	244	General & Oral Pathology				
DH	252	Oral Radiology I				
DH	275	Dental Ethics				
DH	366	Dental Anatomy				
DH	223	DH Clin Prac & Seminar III			Ι	
DH	242	Prevention III			R	
DH	253	Oral Radiology II				
DH	254	Introduction to Periodontology				
DH	267	Emergency Procedures				
DH	380	Community Dental Health I			Ι	
PSY		Psychology Elective				
		JUNIOR				
BUS	317	Health Care Management				
DH	321	DH Clin Prac & Seminar IV	R			
DH	340	Prevention IV				
DH	354	Periodontology	R			
DH	381	Community Dental Health II	Е			
PSY		Psychology Elective				
DH	322	DH Clin Prac & Seminar V		R		
DH	341	Prevention V				
DH	351	Pain Management I		R		
DH	382	Community Dental Health III		R		
WRI	227	Technical Report Writing				
		Humanities Elective				_
DH	323	DH Clin Prac & Seminar VI		_	E	
DH	344	Advanced General & Oral Pathology		_		
DH	352	Pain Management II		_	R	
DH	363	Dental Materials		_	R	
DH	370	International Externship (opt)		_	R	
DH	383	Community Dental Health IV			E	
		SENIOR			1	
BUS	331	Personal Finance				
DH	371	International Externship (opt)				R
DH	421	DH Clin Prac & Seminar VII				R
DH	461	Restorative Dentistry I				R
DH	475	DH Research Methods I				E
MATH	243	Introductory Statistics				

¹ KEY: I = introduced, R = reinforced, E = emphasized

CRITIC	FillWinterSpringSpringSpring		Spring	Summer		
AHED	450	Instructional Methods				
DH	372	International Externship (opt)				
DH	422	DH Clin Prac & Seminar VIII	Е			
DH	462	Restorative Dentistry II (opt)	R			
DH	476	DH Research Methods II				
		Communication Elective				
		Humanities Elective				
DH	423	DH Clin Prac & Seminar IX		E		
DH	454	Dental Practice Management		R		
DH	463	Restorative Dentistry III		R		
DH	477	DH Research Methods III				
		Humanities Elective				
		Psychology Elective				

<u>Patient Care Competencies</u> Courses that are bolded below indicate that the SLO above is taught in the course, students demonstrate skills or knowledge in the SLO, and/or students receive feedback on their performance on the SLO.

PATIE	NT CARE	ARE COMPETNECIES Fall Winter Spring		Spring	Summer	
SOPHO	MORE					
DH	221	DH Clin Prac & Seminar I				
DH	225	H&N Anatomy, Histology, Embryology				
DH	240	Prevention I				
CHE	360	Clin Pharm for Health Professions				
SPE	321	Small Group & Team Com				
DH	222	Clin Prac & Seminar II				
DH	241	Prevention II		Ι		
DH	244	General & Oral Pathology				
DH	252	Oral Radiology I				
DH	275	Dental Ethics				
DH	366	Dental Anatomy				
DH	223	DH Clin Prac & Seminar III			Ι	
DH	242	Prevention III			R	
DH	253	Oral Radiology II				
DH	254	Introduction to Periodontology			Ι	
DH	267	Emergency Procedures				
DH	380	Community Dental Health I				
PSY		Psychology Elective				
		JUNIOR				
BUS	317	Health Care Management				
DH	321	DH Clin Prac & Seminar IV	R			
DH	340	Prevention IV	R			
DH	354	Periodontology	R			
DH	381	Community Dental Health II				
PSY		Psychology Elective				
DH	322	DH Clin Prac & Seminar V		R		
DH	341	Prevention V		R		
DH	351	Pain Management I		Ι		
DH	382	Community Dental Health III		R		
WRI	227	Technical Report Writing				
		Humanities Elective				
DH	323	DH Clin Prac & Seminar VI			Е	

PATIEN	T CARE	COMPETNECIES	Fall Winter Spring S		Summer	
DH	344	Advanced General & Oral Pathology				
DH	352	Pain Management II				
DH	363	Dental Materials			R	
DH	370	International Externship (opt)			R	
DH	383	Community Dental Health IV				
		SENIOR				
BUS	331	Personal Finance				
DH	371	International Externship (opt)				
DH	421	DH Clin Prac & Seminar VII				R
DH	461	Restorative Dentistry I				R
DH	475	DH Research Methods I				
MATH	243	Introductory Statistics				
AHED	450	Instructional Methods				
DH	372	International Externship (opt)				
DH	422	DH Clin Prac & Seminar VIII	Ε			
DH	462	Restorative Dentistry II (opt)	R			
DH	476	DH Research Methods II				
		Communication Elective				
		Humanities Elective				
DH	423	DH Clin Prac & Seminar IX		R		
DH	454	Dental Practice Management				
DH	463	Restorative Dentistry III		R		
DH	477	DH Research Methods III				
		Humanities Elective				
		Psychology Elective				

<u>Life-Long Learning</u> Courses that are bold below indicate that the SLO above is taught in the course, students demonstrate skills or knowledge in the SLO, and/or students receive feedback on their performance on the SLO.

LIFE-L	ONG LEA	ARNING	Fall	Winter	Spring	Summer
SOPHOMORE						
DH	221	DH Clin Prac & Seminar I				
DH	225	Head & Neck Anatomy. Histology,				
		Embryology				
DH	240	Prevention I				
CHE	360	Clinical Pharmacology for the Health				
		Professions				
SPE	321	Small Group & Team Com				
DH	222	Clin Prac & Seminar II				
DH	241	Prevention II		Ι		
DH	244	General & Oral Pathology				
DH	252	Oral Radiology I				
DH	275	Dental Ethics				
DH	366	Dental Anatomy				
DH	223	DH Clin Prac & Seminar III			I	
DH	242	Prevention III			R	
DH	253	Oral Radiology II				
DH	254	Introduction to Periodontology			Ι	
DH	267	Emergency Procedures				
DH	380	Community Dental Health I				
PSY		Psychology Elective				

LIFE-LO	ONG LEA	ARNING	Fall	Winter	Spring	Summer
JUNIOR						
BUS	317	Health Care Management				
DH	321	DH Clin Prac & Seminar IV	R			
DH	340	Prevention IV	R			
DH	354	Periodontology	R			
DH	381	Community Dental Health II				
PSY		Psychology Elective				
DH	322	DH Clin Prac & Seminar V		R		
DH	341	Prevention V		R		
DH	351	Pain Management I		I		
DH	382	Community Dental Health III		R		
WRI	227	Technical Report Writing				
		Humanities Elective				
DH	323	DH Clin Prac & Seminar VI			R	
DH	344	Advanced General & Oral Pathology				
DH	352	Pain Management II			R	
DH	363	Dental Materials			R	
DH	370	International Externship (opt)			R	
DH	383	Community Dental Health IV				
		SENIOR	·			
DH	371	International Externship (opt)				
DH	421	DH Clin Prac & Seminar VII				R
DH	461	Restorative Dentistry I				R
DH	475	DH Research Methods I				
MATH	243	Introductory Statistics				
AHED	450	Instructional Methods				
DH	372	International Externship (opt)				
DH	422	DH Clin Prac & Seminar VIII	E			
DH	462	Restorative Dentistry II (opt)	R			
DH	476	DH Research Methods II				
		Communication Elective				
		Humanities Elective				
DH	423	DH Clin Prac & Seminar IX		R		
DH	454	Dental Practice Management				
DH	463	Restorative Dentistry III		R		
DH	477	DH Research Methods III				
		Humanities Elective				
		Psychology Elective				

CRITICAL THINKING AND PROBLEM SOLVING DENTAL HYIGENE DEPARTMENT

Criteria	Limited or No Proficiency (1)	Developing Proficiency (2)	Proficiency (3)	High Proficiency (4)	Score
Identification	 Confused by the clinical situation; assessment is not organized and important data is missed, and/or assessment errors are made Focuses on one thing at a time; misses opportunities to refine the assessment Is ineffective in seeking information; has difficulty interacting with the patient/family to obtain subjective data 	 Attempts to collect subjective and objective data but is overwhelmed by the array of data; misses some important information Identifies obvious findings; misses important information; unsure how to continue assessment Makes limited efforts to seek additional information from the patient/family; often seems unsure what information to seek and/or pursues unrelated information 	 Regularly collects both subjective and objective data; most useful information is noticed, may miss subtle signs/symptoms Recognizes most obvious findings and uses these to further assess Actively seeks subjective information from the patient/family to support treatment planning and interventions; occasionally does not pursue important clues 	 Assessment is focused and appropriate; regularly obtains a wide variety of subjective and objective data to uncover useful information Recognizes subtle findings and uses these to further assess Assertively seeks information to determine treatment plan; carefully collects useful subjective data from patient/family 	
Clarification	 Has difficulty focusing; appears to not know what data are most important to the diagnosis; attempts to attend to all available data Has difficulty interpreting or making sense of the data, even in simple or common situations; has trouble distinguishing among competing explanations and appropriate interventions, requires assistant both in making a diagnosis and in developing a treatment plan 	 Makes an effort to prioritize data and focus on the most important data and seeks to obtain additional relevant information, but also may try to attend to less pertinent data Is able to interpret data and develop a treatment plan for simple or common situations; however has difficulty with even moderately complex cases that are within the expectations for students; inappropriately requires assistance 	 Generally focuses on the most important data and seeks additional relevant information, but may also attend to less pertinent data Usually interprets data and compares with known patterns to develop a treatment plan and rationale; exceptions are rare or with complicated cases where it is appropriate to seek guidance 	 Focuses on the most relevant and important data useful for making a dental hygiene diagnosis Even when facing complex cases is able to analyze data to develop treatment plans that can be justified in terms of scientific evidence and likelihood of success 	
Evaluation	 Even when prompted evaluations are brief and not used to improve performance; justifies personal decisions without evaluating them Appears uninterested in improving performance; is uncritical or overly critical of him/herself; is unable to see flaws or need for improvement 	 Even when prompted, briefly verbalizes the most obvious evaluations; has difficulty imagining alternative choices; is self-protective in evaluating personal choices Demonstrates awareness of the need for ongoing improvement and makes some effort to learn from experience and improve performance but tends to state the obvious and needs external evaluation 	 Evaluates/analyzes personal clinical performance with minimal prompting, primarily major events/deceptions; key decisions points are identified and alternatives are considered Demonstrates desire to improve dental hygiene performance; reflects on and evaluates experiences; identifies strengths/weaknesses; could be more systematic in evaluating weaknesses 	 Independently evaluates/analyzes personal clinical performance, noting decision points, elaborating alternatives and accurately evaluating choices against alternatives Demonstrates commitment to ongoing improvement; reflects on and critically evaluates dental hygiene experiences; accurately identifies strengths/weaknesses and develops specific plans to eliminate weaknesses 	

Criteria	Limited or No Proficiency (1)	Developing Proficiency (2)	Proficiency (3)	High Proficiency (4)	Score
Lifelong learning	Fails to identify the need for lifelong learning and/or omits discussion of their own learning and relevant examples.	Misses important elements in discussion lifelong learning applying concepts to their own learning or providing a relevant example.	Defines the concept of lifelong learning. Demonstrates self-awareness by accurately identifying strengths/weaknesses in their own ability to learn independently. Gives a relevant example.	Defines the concept of lifelong learning and its importance. Demonstrates self- awareness by accurately discussing strengths/weaknesses in their own ability to learn independently. Gives relevant example(s).	
Professional development	Fails to identify professional development opportunities.	Discusses professional development opportunities that are either inappropriate or irrelevant.	Identifies appropriate professional development opportunities.	Identifies and thoroughly discusses appropriate professional development opportunities.	
Short- and long- term career plans	Vaguely describes career goals and or does not include a plan to meet them	Career goals after graduation do not include both long and short term plans and/or the plan is unrealistic	Describes shore and long term career goals after graduation. Includes a realistic plan to meet these goals.	Describes short and long term career goals after graduation. Includes a realistic, thorough, and thoughtful plan to meet these goals.	

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