

Bachelor of Science Degree in Dental Hygiene Assessment Report 2023-2024

<u>Section 1 – Program Mission and Educational Objectives</u>

Dental Hygiene Program Mission:

The Oregon Institute of Technology Dental Hygiene Program provides a humanistic learning environment that fosters student and graduate success through respect and professionalism, and by encouraging innovation and critical thinking. Its mission is to prepare students to become healthcare professionals who serve diverse populations in multiple roles including leadership, clinical and public health, research, education, and entrepreneurship. Oregon Tech Dental Hygiene graduates gain experience with project-based learning, community service, applied research emphasizing evidence-based practices; and are empowered to become life-long learners.

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's degree programs in dental hygiene and related programs.

Educational Goals:

- Provide the dental hygiene student the opportunity to gain the necessary knowledge, skills, and values to enter the registered practice of dental hygiene.
- Prepare the student to sit for the National Board Dental Hygiene Examination.
- Prepare the student to take clinical board examinations in dental hygiene, anesthesia, and restorative functions.

To support the Program Mission of the Bachelor of Science in Dental Hygiene program at Oregon Tech, curriculum provides for students to graduate with an Expanded Practice Dental Hygiene Permit and endorsements for local anesthesia, nitrous oxide, and restorative functions. This permit with licensure, and the endorsement opportunities, allow graduates to serve diverse populations through entrepreneurship and population health needs outside of traditional clinical settings.

Graduates from the dental hygiene program are in demand and secure employment immediately upon licensure. The curriculum prepares students for expanded practice opportunities with program-approved electives in management, education, public health, and clinical fields connecting oral health with primary health. Within 5-10 years from graduation, graduates have gained enough experience in the profession to determine a more independent path such as entrepreneurship or master's and doctoral degrees.

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 populations. This community project assesses community needs and gives our students real-world experiences far beyond what most dental hygiene programs offer.

- During their education in the program, our students have an opportunity to travel abroad for two weeks in what we refer to as the International Externship Program or IEP. Our senior students provide oral hygiene care in countries such as Romania, Ukraine, Moldova, Costa Rica, Honduras, Peru, Guatemala, Nicaragua, Jamaica, and Granada.
- Meanwhile, our dental hygiene students earn enough clinical hours for licensure 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.

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 in the fall term. Seating is limited to 22-24 students at Klamath Falls and 20 at Salem.

Section 2 - Program Student Learning Outcomes

PSLOs:

PSLO CODA Standard	Definition
I – Interprofessional Collaboration/Communication CODA Standard 2-15	The dental hygiene graduate will be competent in communicating, collaborating, and interacting with other members of the health care team to support comprehensive patient care.
2 – Critical Thinking CODA Standard 2-23	The dental hygiene graduate will be competent in critical thinking and problem solving related to comprehensive care and management of patients.
3 – Professionalism, Ethical Practice CODA Standard 2-19, 2-20	The dental hygiene graduate will be competent in the application of ethical reasoning, legal, and regulatory concepts in the provision of care, and evidence-based support of oral health care services.
4 – Lifelong Learning CODA Standard 2-21	The dental hygiene graduate will demonstrate competent knowledge and self-assessment skills necessary for life-long learning.
5 – Provision of Oral Health Care, CODA Standard 2-12- 2-14	The dental hygiene graduate will be competent in providing the dental hygiene process of care for a wide range of patient profiles and all classifications of periodontal diseases.
6 – Community Health CODA Standard 2-16	The dental hygiene graduate will be competent in assessing; planning, implementing, and evaluating community based oral health programs

CODA Standard 2-13	The dental hygiene graduate will evaluate factors that can be used to promote patient adherence to disease prevention or health maintenance strategies.
8-Evaluating Research	The dental hygiene graduate will be competent in evaluating current scientific literature to incorporate evidence-based decisions into dental hygiene practice.

PSLO 1: The dental hygiene graduate will be competent in communicating, collaborating, and interacting with other members of the health care team to support comprehensive patient care.

Course: DH 422/423 – "Dental Hygiene Clinical Practice and Seminar VIII - IX"

DH 323 - "Dental Hygiene Clinical Practice and Seminar VI

Direct Assessment: Senior Capstone-DH 422/23

Junior Interprofessional Collaboration Portfolio (IPC)- DH 323

Indirect Assessment: Graduate Exit Survey Assessment Cycle: 2024-25; 2027-28

PSLO 2: The dental hygiene graduate will be competent in critical thinking and problem solving related to comprehensive care and management of patients.

Course: DH 422/423 – "Dental Hygiene Clinical Practice and Seminar VIII - IX"

DH 475 – "Evidence Based Decision Making in Healthcare"

Direct Assessment: Senior Capstone- DH 422-23

Putting It All Together Assignment- DH 475

Indirect Assessment: Graduate Exit Survey Assessment Cycle: 2023-24; 2026-27

PSLO 3: The dental hygiene graduate will be competent in the application of ethical reasoning, legal, and regulatory concepts in the provision of care, and evidence-based support of oral health care services.

Course: DH 422/23 - Dental Hygiene Clinical Practice and Seminar VIII – IX

DH 382 - Community Dental Health III

Direct Assessment: Senior Capstone- DH 422-23

Portfolio- DH 382

Indirect Assessment: Graduate Exit Survey Assessment Cycle: 2024-25; 2027-28

PSLO 4: The dental hygiene graduate will demonstrate competent knowledge and self-assessment skills necessary for life-long learning.

Course: DH 422-23 - Dental Hygiene Clinical Practice and Seminar VIII – IX

DH 475 - Evidence Based Decision Making in Healthcare DH 323 - Dental Hygiene Clinical Practice and Seminar VI

Direct Assessment: Senior Capstone- DH 422-23

Putting It All Together Assignment- DH 475

Professionalism Research – Junior Portfolio- DH 323

Indirect Assessment: Self Reflections- DH 423 & DH 475

Attendance at ODHA/ODC conferences- DH 323

Assessment Cycle: 2024-25; 2027-28

PSLO 5 - The dental hygiene graduate will be competent in providing the dental hygiene process of care for a wide range of patient profiles and all classifications of periodontal discusses.

diseases.

Course: DH 423 – Dental Hygiene Clinical Practice and Seminar IX

Direct Assessment: Senior Capstone and patient clinic tracker

Indirect assessment: Graduate Exit Survey Assessment Cycle: 2022-23; 2025-26

PSLO 6 - The dental hygiene graduate will be competent in assessing; planning, implementing, and

evaluating community based oral health programs

Course: DH 383 Community Dental Health IV

Direct Assessment: Portfolio

Indirect Assessment: Graduate Exit Survey Assessment Cycle: 2024-25; 2027-28

PSLO 7 - The dental hygiene graduate will evaluate factors that can be used to promote patient

adherence to disease prevention or health maintenance.

Course: DH 323 - Dental Hygiene Clinical Practice and Seminar VI

Direct Assessment: CaMBRA (Caries Management by Risk Assessment)

Indirect Assessment: Reflection

Assessment Cycle: 2022-23; 2026-27

PSLO 8 - The dental hygiene graduate will be competent in evaluating current scientific literature to

incorporate evidence-based decisions into dental hygiene practice.

Course: DH 475 - Evidence Based Decision Making in Healthcare

Direct Assessment: Putting It All Together Assignment

Indirect Assessment: Reflection

Assessment Cycle: 2022-23; 2026-27

Section 3 – Curriculum Map

Dent F – Foundation P – Practice C – Capstone	al Hygie	ne Stud	ent Lea	rning C	Outcon	nes Ta	ble			
COURSE	ISLO 1 PSLO 1	ISLO 2 PSLO 2	ISLO 3	PSLO 4	PLSO 5	PSLO 6	PSLO 7	ISLO 4	S O ISIO	9 OTSI
DH-222, 223, 240, 244, 252, 275, 266, 380	F									
DH-241, 242, 253, 267, 321, 322, 323, 340, 341, 363, 381, 421, 463	P									
DH-422, 423	С									
DH-222, 223, 240, 241, 242, 252, 275, 254, 340, 351	Р	F								

Dental Hygiene Student Learning Outcomes Table

F – Foundation

P - Practice

C - Capstone

•	1									
COURSE	ISLO 1 PSLO 1	ISLO 2 PSLO 2	ISLO 3 PSLO 3	PSLO 4	PLSO 5	PSLO 6	PSLO 7	ISLO 4	ISLO 5	9 OTSI
DH-253, 267, 321, 322,										
323, 340, 341, 354, 352,	Р	P								
363, 421, 462										
DH-422, 423		С								
DH-221, 222, 223, 225,			-							
275, 352, 363, 475			F							
DH- 321, 322, 323, 381,			Р							
382, 421, 462, 476			<u> </u>							
DH-383, 422, 423, 454			P							
DH-223, 241,275,				F						
DH-381,363, 461				Р						
DH-382, 422, 423, 463				C						
DH-223					F					
DH-267, 321, 322, 323,					Р					
354, 421, 462					–					
DH- 422, 423, 450					С					
DH-475						F				
DH-476						Р				
DH-454						Р				
DH-240, 254,							F			
DH- 241, 242, 321, 322,							Р			
323, 340,341										
							С			
DH 244, 344, 352								F		
DH-253, 340, 341								Р		
								С		
DH 222, 225, 253									F	
DH-241, 267, 340, 341,									Р	
421										
DH-476. 422, 423									С	
DH-242, 275, 421										F
DH-321, 322, 323, 422,										Р
454										
DH-423										С

<u>Section 4 – Assessment Cycle</u>

Outcome	Course	Direct	Indirect	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28

PSLO 1 Communicate	DH 422/423	Capstone	Grad Survey						^^
	DH 323	IPC Portfolio				\otimes			**
PSLO 2 Critical Thinkin	DH 422/423	Capstone	Grad Survey						
	DH 475	Putting it Toget	Discussion Post		₩			\approx	
PSLO 3 Ethics	DH 422/423	Capstone	Grad Survey			₿			₩
	DH-382	Portfolio	'						
PSLO 4 Lifelong Learnin	DH 422/423	Capstone				\$\$			\$\$
	DH 475	Putting it Toget	Self Reflection	'					
	DH 323	Professionalism Research Portfo							
PSLO 5 Provision of Ora Healthcare	DH 423	Capstone & Pt Clinic tracker	Grad Survey	*			₿		
PSLO 6 Community Hea	DH 383	Portfolio	Grad Survey			₩			₿
PSLO 7 Disease Preventi	DH 323	CaMBRA	Reflection	*			₩		
PSLO 8 Evaluate Resear	DH 475	Putting it Toget	Reflection		₩			₩	
ISLO 1 Communicate	DH 423	Capstone	Grad Survey						
	DH 323	Portfolio presentation							
	AHED 450	4Mat Lesson Pl (writing)							
ISLO 2 Inquire/ Analysi	DH 475	Putting it Toget	Discussion Po Grad Survey		₿			₿	
ISLO 3 Ethics	DH 423 DH 383	Capstone Portfolio	Grad Survey			₩			₿
ISLO 4 Teamwork	DH 382	Teamwork Eval Rubric	Grad Survey			₿			₩

ISLO 5 Quant. Literacy	DH 454	Production/Sala Analysis	Grad Survey		₩			₩	
ISLO 6 Diversity	DH 423	Capstone Presentation	Grad Survey	*			\approx		
	DH 322/323	Jr. Portfolio Case presentation				'			
	DH 242	Cultural Awareness Research Presentation							
	DH 372		IEP Program Reflection						

Section 5 – Assessment Data Collection Process

The following courses were used to assess PSLO #2, PSLO #8, ISLO #2 DH 422-423 – Dental Hygiene Clinical Practice and Seminar VII-IX DH 475 - Evidence Based Decision Making (EBDM) in healthcare

Activity: (Critical Thinking - PSLO #2)

Performance target:

DH 422 –423 – Dental Hygiene Clinical Practice and Seminar VIII/IX (direct) 80% of students scoring 75% or higher for all assessments in PSLOs and ISLOs. The senior capstone presentation assessed communication, critical thinking, and ethical reasoning for the dental hygiene program. A 300-point rubric assesses an 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 the application of knowledge learned over the dental hygiene program to individualize 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. The 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
- Reflection/self-assessment

Sample:

Reliability:

The capstone presentations were scored, in both Salem and Klamath Falls cohorts, using the same 300-point rubric. At each location, the same instructors scored all presentations given at their location to be as calibrated and fair as possible.

Rubric:

Students must earn $\geq 75\%$ to pass the capstone project. Each section of the rubric has points awarded from poor at 0 points, competent at 225 points and Superior at 300 points. Each section awards points with interprofessional collaboration, diverse perspectives, and ethical decision weighted the heaviest. See (**Appendix A**)

<u>The following course was used to assess:</u>
PSLO #2 Critical Thinking, PSLO #8 Evaluating Research
ISLO #2 Inquiry and Analysis

Activity: PSLO # 2 & 8, ISLO #2

Performance target:

DH 475 – Evidence Based Decision Making (EBDM) in healthcare (direct) 80% of students scoring 75% or higher for all assessments in PSLOs and ISLOs. The purpose of the "Putting it together" assessment is to provide a critical appraisal of a new topic of the student's choice expressed as a focused PICOT question using the theory and processes that have been presented in the research course. This is to broaden the students understanding of EBP, and further their skills in creating focused PICOT questions, and critically appraising peer-reviewed journal articles. The assignment is completed by students individually and submitted online. The final product students submit is a written report demonstrating their ability to critically appraise evidence-based research

Sample:

n = 15 online students from Klamath Falls, Salem

Reliability:

A Rubric for final grading called "Putting it Together" was used by the course instructor to grade students. The rubric has a 24-point scale with eight categories.

Rubric:

Students must earn \geq 75% to pass this assignment. Each section of the rubric has points awarded for Proficient at 3 points, Competent at 2 points, or Novice at 0-1 point. Points are awarded for:

- Title of CAS/Table format
- Summary of major findings
- PICO question format
- Study design
- Evidence summary
- Comments relevance to clinical practice
- Resources used
- Writing mechanics

See (Appendix B)

Activity: (Quantitative Literacy - ISLO #5)

Performance target:

DH 454 – Dental Practice Management - (direct)

80% of students scoring 75% or higher for all assessments in PSLOs and ISLOs

A 10-point rubric is used to assess the <u>Production/Salary Analysis</u> assignment that's purpose is to show students what kind of production is needed to justify their salary with the 39% rule. There is an initial lecture followed by a written assignment. The written assignment consists of determination of a fair salary, number of days in the work week, and production goals needed to meet at least three times the requested salary. A weekly schedule must be developed, using average service fees, to visualize the work week and patient load needed to meet production goals. **See** (**Appendix C**)

Sample:

Klamath Falls/Salem sample n = 10

Reliability:

The assessment was scored by the instructor of the course for all students using the same 10-point rubric. The course was given online only.

Rubric:

Students must earn $\geq 75\%$ to pass the assessment. The rubric is worth 10 points with points awarded for excellent, good, needs improvement, and poor based on:

- Grammar/spelling errors
- Professional appearance of report
- Fair salary for location
- Correct daily salary for goals
- Realistic schedule plan

Section 6 – Assessment Data

Performance	Assessment	Performance	Results	Met? Yes/No
Criteria	Methods	Target		
PSLO 2	Senior	80% of students	Performance	
Critical	Capstone	performing at \geq	Level achieved	YES
Thinking	Rubric	<u>75%</u>	averaged.	
			95%	
PSLO 2	Putting it	80% of students	Performance	
Critical	Together	performing at \geq	Level achieved	YES
Thinking		<u>75%</u>	averaged.	
			94%	
PSLO 8	Putting it	80% of students	Performance	
Evaluating	Together	performing at \geq	Level achieved	YES
Research		<u>75%</u>	averaged 94 %	

ISLO 2 Inquiry & Analysis	Putting it Together	80% of students performing at ≥ 75%	Performance Level achieved averaged, 94%	YES
ISLO 5 Quantitative Literacy	Production/Salary Analysis	80% of students performing at ≥ 75%	Performance Level achieved averaged,100%	YES

Program Locations:

Klamath Falls program is located at Oregon Institute of Technology campus. Salem program is located at Chemeketa Community College campus.

Program Enrollment: 2020-2024

	Fall 2020	Fall 2021	Fall 2022	Fall 2023	Fall 2024	Total
Klamath Falls	22	22	22	22	20	100%
Chemeketa	20	20	20	20	20	100%

^{*}The number of students for Klamath Falls was reduced from 22 to 20 in fall of 2024 due to Faculty shortage and CODA requirements of student/instructor ratio.

Program Graduates: 2020-2024

	2020	2021	2022	2023	2024	Total
Klamath Falls	22	19	20	22	22	97%
Chemeketa	20	20	18	20	20	97%

Comparison Data:

Performance	Previous Action Plan	Previous	Current Data	Interpretation
Criteria		Data (2020)		
PSLO 2 ISLO 2	None indicated	100%	100%	Success
PSLO 8-ISLO 5	Incorporate into DH curriculum	No data	100%	Success
Graduation Rate	None indicated	100%	100%	Success
Retention	None indicated	100%	97%	Success
Certification	None indicated/ licensure granted	100%	100%	Success
DFWI	Equity Gap	0%	0%	Success

See Appendix E – DFWI

How data is being used:

The dental hygiene program has no equity gap and 100% graduation rate. The Direct methods used to assess outcomes for ISLOs and PSLOs are showing success. Indirect methods, Exit Surveys from graduates, indicate positive outcomes at the completion of the dental hygiene program and entering the workforce. Exit survey questions have been updated and modified to

clarify intent of the question and have more accurate data. The dental hygiene program has 100% pass rate of all required board exams for licensure. Retention of students in the BDH program is strong at 97%. The retention rate reduction is due to one student withdrawal in fall 2023, for personal reasons and three students in 2024 for failure to meet competency requirements for graduation. These were one sophomore at Salem campus, one junior at Salem campus, and one junior at Klamath Falls campus.

Exit Survey Results 2023-2024

ISLO/PSLO	High Proficiency	Proficiency	Some	Limited	Total
			Proficiency	Proficiency	Responses
PSLO #2-	77.78%	16.67%	5.56%	0%	18
Critical Think					
ISLO #2-	66.67%	27.78%	5.56%	0%	18
Inquire/Analy					
ISLO #5	38.89%	38.89%	16.67%	5.56%	18
Quant Reason					

DH National Board Exam Pass Rate

2020	2021	2022	2023	2024
KF = 100%	<u>KF = 100%</u>	KF = 100%	KF = 100%	KF = 100%
SLM = 100%	SLM = 100%	SLM = 100%	SLM = 100%	SLM = 100%

DH Clinical Board Exam Pass Rate

	2020	2021	2022	2023	2024	Total
Klamath Falls	100%	100%	100%	100%	100%	KF = 100%
Chemeketa	100%	100%	100%	100%	100%	SLM = 100%

Section 7 - Data-driven Action Plans:

The dental hygiene program has maintained a high success rate over the past 5 years. No changes have been indicated through formal assessment, but the department strives for continuous improvements. The following were identified as future needs.

Reevaluation of Program Goals

Based on feedback from the CODA site visit, the dental hygiene program plans to reevaluate and revise program goals to align with its PSLOs and Objectives. This change will help program data reflect if goals are being met or if any gaps exist that need to be addressed.

Budget and Equipment

Purchases Made for improved delivery of student learning:

Item	Quantity	Unit Cost	Total Cost
Vacuum Forming Machines	2	\$ 306.69	\$ 613.20

Amalgamator	4	\$ 94.99	\$ 379.95
Typodont mounts	24	\$ 197.00	\$ 4,735.75
Portable Piezo units	4	\$2,612.00	\$10,448.00
CPR/BLS training manikins	2	\$ 478.95	\$ 957.90
Calibration typodonts	2	\$ 407.36	\$ 814.72
Front office computers	3	\$1,605.00	\$ 4,815.00
Clinic computers	37	\$1,133.55	\$41,941.00
Low speed handpieces	11	\$ 517.00	\$ 5,587.00
Low speed motors	11	\$ 625.00	\$ 6,875.00
High speed handpieces	5	\$1,331.14	\$ 6,655.70
High speed couplers	5	\$ 203.00	\$ 1,015.00
Electric handpieces	1	\$1,564.28	\$ 1,564,28
Electric adaptor	1	\$2,695.79	\$ 2,695.79
Nitrous oxide carts	3	\$6,407.00	\$19,221.00

The nitrous oxide carts and accessories were funded by an equipment grant through the provost's office.

Future Budget and Equipment needs:

The dental hygiene clinic in Klamath Falls Semon Hall is dated and needs upgrading. The last upgrade to major equipment was in ~2005. Needs for upgrading include flooring, 24 dental unit/chairs, 24 new integrated ultrasonic scalers, and ~16 new clinician stools. Opportunities for expanding enrollment for the program exist due to the high need for dental professionals in Oregon, however only with additional clinical and lab space, and supporting equipment can this be feasible. With an additional lab space on the Klamath Falls campus we could expand enrollment substantially, but it would have to be proportionate to the number of faculty due to accreditation requirements.

Planned improvement for curriculum to align with industry needs over the next year include:

- Consider dental therapy in ongoing facility and curriculum plans
- Development of a clinical rubric to objectively evaluate student performance, learning and application for radiographic images.
- Development of a clinical board review course as an elective for seniors preparing to take the NBDHE.

<u>Data needed to be collected over the next year to support improvements in the dental hygiene program:</u>

- Continue to gather data from Canvas Outcomes for all courses to help with reporting on alignment of PSLO/ISLO/CSLOs with course assessments
- Continue to report on OIT Outcomes Dashboard data to assure no equity gaps are occurring in our curriculum outcomes.
- Use outcome data to help inform curriculum for the NBDHE review course along with NBDHE annual reports.

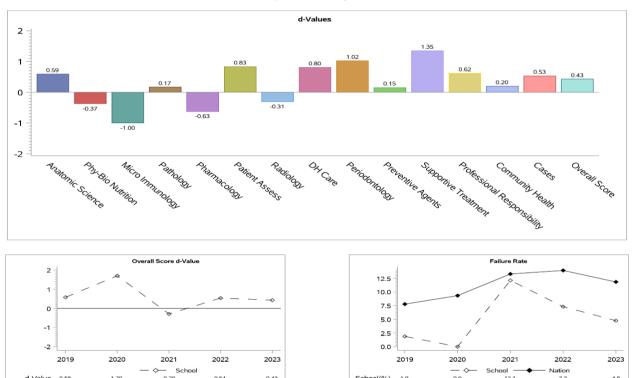
The clinical licensing board exam has transitioned from a patient-based exam to a typodont practical exam and Objective Structured Clinical Examination (OSCE) written exam. A mock

board is given to senior students during winter term to prepare them for the clinical board exam. This has helped students know the process and paperwork used in the exam. We have had a 100% pass rate to date.

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Reporting Period: January 1, 2023 through December 31, 2023 Report Date: February 2024

Report Date: February 2024



Section 8 – Closing the Loop

2022-2023 Action Plan:

During convocation 2023, the dental hygiene department met with both Klamath Falls and Chemeketa faculty together. The Academic Master Plan was discussed, and the department felt many areas are already in place such as community outreach and collaborations with community partners for free dental services, access to care for migrant workers, and community health projects. More focus is beginning to be placed on research to align with the university mission. Ideas were shared on how students can be more involved in research and publication as a starting point.

Curriculum and program evaluation were discussed, and a new syllabus template was developed. This included updated department policy to align with CODA policies in the syllabi and collaboration among faculty to assure course content is calibrated. A new Canvas course has

been developed and can be used for new adjunct and faculty onboarding. Student surveys will be taken winter term using Qualtrics to prevent peer bias and obtain more accurate feedback. A patient satisfaction survey will continue to be used to measure the humanistic approach as well as the exit survey.

The new mission statement for the dental hygiene program, that aligns more with the university mission, was presented and implemented over the 2023-2024 year. A review of the course mapping spreadsheet was performed to align major assessments with PSLOs and ISLOs. Websites were updated for admissions and curriculum changes. The student handbook was also reviewed, and quiz questions added to assure compliance with knowing its content.

The national board scores are still reflecting learning gaps nationally due to the COVID pandemic. The dental hygiene program continues to look at ways to help students prepare for licensing board exams through curriculum evaluation in subjects where scores are lower.

From the previous year report, curriculum changes made were:

- DH 360/CHE 360 Pharmacology options
- DH 360/CHE 360 To lighten the course load for sophomores in spring term, students are given the option to take the university Pharmacology course, CHE 360, or take DH 360, the dental hygiene Pharmacology course offered online summer term.

Actions that have been implemented to address identified learning gaps from NBDHE scores are:

- Offering a dental hygiene Pharmacology course in summer
- Offering an online Pharmacology review course for seniors prior to national boards
- Incorporating Biochemistry segment into Prevention courses
- Discussion on development of a board review course or module for students to access

On December 13, 2023, a department meeting was held with faculty from both Klamath Falls and Chemeketa. Discussion topics included curriculum change ideas to reach the 180 credits. New teaching assignments were announced due to shortage of faculty. Clinic requirements and policies were discussed and calibrated on. Preparation for the upcoming self-study for accreditation and site visit dates were discussed.

March 20, 2024, the department met to discuss the budget and upcoming equipment and supply needs. APE and FOP changes were clarified, and student/faculty accomplishments were recognized for the department DAPE. Changes in the curriculum for spring and summer were discussed and changes were made to the competency timeline for the upcoming 2024-25 academic year.

June 11, 2024, the department met, and discussion included the faculty searches being conducted. Also, CODA assignments and deadlines were given to assure the self-study was completed on time. Curriculum discussion included how to bring national board scores up in several subjects and reviewing clinic and program policies. Any changes to be made were solidified prior to summer term and the 2024-2025 academic year.

See Appendix D for Curriculum Coordination and Alignment Plan and Schedule.

Actions Taken to "Close the Loop" From 2022-2023

In review for this year's report, the dental hygiene program has shown success in meeting outcomes shown in the essential learning outcomes data. All assessments showed students competency at 94% or higher with retention and graduation rates at 97%. Changes made in 2023-2024 were curriculum and course adjustments to reduce credit hours from 183-credit hours and obtaining the 180-credit hour goal. Adjusting the curriculum to allow for more flexibility in taking required courses has helped students manage their course workload and maintain full-time status each term.

Due to continued high needs for dental hygiene professionals in the workforce, curriculum is discussed quarterly, and courses are updated to meet industry demands. Data collection has also been upgraded with the revision of exit survey questions to give more relevant program and university data, use of Canvas Outcomes, and continued use of the university Equity Gap Dashboards. Canvas Outcomes were implemented; however, aggregate data has not been consistently available to date.

Our program has been successful in closing the loop on previous years identified gaps including reduction of credit hours, revision of our mission statement to align with the university, updating the exit survey, and continued calibration on course content to meet needs reflected on national board examination scores. We are confident our accreditation self-study and site visit will be successful and look forward to feedback given for our program. Our program continues to be forward thinking and look for changes that will provide the best outcomes for our graduates' success.

Executive Summary

Top 3 continuous improvements our program has made in the last year and the evidence/data used to make these changes are:

• Curriculum revisions and textbook access – offering sophomore students the option of taking the dental hygiene focused pharmacology course during summer term to lighten course workload spring term. Evidence for the need to make the revision was student feedback and declining student grades overall due to heavy course requirements with projects and patient care clinics beginning spring term. Students may still take the CHE 360 course in spring term from Natural Sciences faculty if they wish to follow the curriculum map, but the additional summer section has given them flexibility to decide what is best for each individual. The curriculum is continually evaluated by the program at the end of each year to assure student retention goals and best educational standards are met. Provision of eBooks and hard copy textbooks through the OIT library were also offered to help students dealing with financial burdens.

Revisions were made in program policy for student competency assessments. Grading was changed to a pass/fail system with a minimum passing score established instead of a points-based system, allowing students to mark the requirement as complete if they earn at or above established competency level. This represents a true reflection of the

competency-based programming, reduces competition between students, and motivates students to ensure readiness prior to testing.

More enrollment options were provided for online courses by eliminating restricted sections by campus cohort. This increased enrollment each term by combining cohorts and online degree completion students in the same course and has allowed course offerings more terms throughout the year to fit student's individual scheduling needs. It has also allowed for more faculty to have the option to teach online, which necessitated the need for course review and alignment between instructors to ensure consistency in the course curriculum.

- Improving outcome data revision of the dental hygiene mission statement, exit survey questions, and implementation of Canvas Outcomes were proposed to help the dental hygiene program align closer with the university's mission and to obtain more accurate and usable data for the program going forward. Evidence for the need to make revisions was university data not completely aligned with data needed for the dental hygiene program. Aligning the dental hygiene mission statement with the revised university mission statement has connected the diversity and humanistic goals each expect of Oregon Tech graduates to meet present and future workforce needs. Proposed revision of exit survey questions and use of Canvas Outcomes are intended to give the dental hygiene program data more appropriate to program review, assessment outcomes, and CODA requirements.
- Budget/facilities/instruction maintaining a sustainable budget while providing current technology and clinical standards are continually assessed. Evidence for the need to make revisions is the reality of an aging facility at Klamath Falls campus and everchanging technology. Data from exit surveys and student feedback surveys have consistently included comments about aging equipment and facilities. A new or remodeled facility is under discussion for Oregon Tech, however, until that is a reality, the dental hygiene program must continue to prioritize equipment, technology, and replacement costs to support the classrooms and clinic. Technology is updated and planned for in fiscal budgets and grants such as computers, dental equipment, and clinic updates. A shortage of faculty was also addressed with fewer applicants admitted into the program to ensure adequate instructor/student ratios and to assure students are getting the individual instruction and best education possible. Enrollment will return to previous levels once faculty positions are filled with current searches underway. Dental hygiene faculty have been role models by presenting research at national dental hygiene conventions and state conferences. A clinical research project is being conducted in the student patient care clinics for children with autism, normalizing dental care for the children and giving students the opportunity to work with special needs patients. An instructor prepares and accompanies students on a global externship to deliver dental care in non-traditional settings and among new cultures. Students then present the experience and reflect on their learning to students, faculty, parents, sponsors, and university foundation and board members.

3 examples of student achievement over the past year include:

• 100% pass rate on national and clinical board examinations. The dental hygiene graduates also are highly sought after for employment upon graduation and have a

- 100% hiring rate with excellent pay and benefits. Our graduates have a bachelor's degree with expanded practice endorsement which is the only public program in Oregon offering the EPDH.
- International Externship Program represented Oregon Tech in Jamaica with students providing free dental hygiene services to underserved populations in rural communities. The students are included in teams of dental professionals and delivered care to over 1,000 people who otherwise have no access to care. This experience not only provides students with a chance to perfect their patient care skills but more importantly, provides them with cultural experiences and recognition of how a team of strangers with a common goal can achieve great outcomes. These types of experiences cannot be taught in a classroom.
- Free dental days Klamath Falls/Salem Campus Proclamation for Children's Dental Health Month. The Klamath Falls dental hygiene students teamed with Medical Teams International to provide free dental services in our rural communities. This is an ongoing project by the dental hygiene department for community outreach along with their community health projects throughout the year. The Salem campus dental hygiene students provide care at the Salem Free Clinic and Boys and Girls Club. They were recognized for their work, during Children's Dental Health month, for their services within their community by the mayor of Salem.

3 examples of student success stories over the past year include:

- The dental hygiene program works to accommodate student athletes during their education at Oregon Tech. We are proud of all student athletes including one of our dental hygiene students who was awarded Cascade Conference Player of the Year, First Team All American, and Academic All-American of the Year. Three current student athletes were honored as NAIA Scholar-Athletes for basketball in March 2024.
- The Dennis Muir Award of Excellence was awarded to a student from the Chemeketa campus and from the Klamath Falls campus. This award evaluates scholarship, leadership, compassion, ethical standards, community service, and communication skills.
- Professional advancement: Chemeketa campus has a student taking prerequisites
 for dental school and Klamath Falls campus has a 2024 graduate who has applied
 for dental school. Several senior level students are registering for courses in the
 Oregon Tech Allied Health master's program. A 2016 graduate from Chemeketa
 campus completed the Dental Therapy pilot project and is currently in practice.
 She received Oregon Dental Hygienists Association's "Lynn Ironside Access to
 Care Award" in the fall of 2023.

Efforts in closing equity gaps, have any gaps been identified, what data shows, and actions taken to help students achieve their potential include:

• As a cohort, sequential program, we generally do not have any equity gaps. In the past year, the only student with DFWI was a white female, non-Pell grant, traditional student who has since been retained via program remediation and retention plans. Our program is inclusive

when interviewing applicants and has a strong mentoring and advising protocol. Students mentor students and faculty mentor and advise students to assure no student is left behind or not receiving remediation when necessary. We accept a variety of age groups, ethnicities, genders, and backgrounds. Our application process has a step-by-step outline on the dental hygiene website and multiple levels of consideration along with zoom interviews to make acceptance as fair and unbiased as possible. To help students reach their potential, our program sets aside time for remediation and provides opportunity for community outreach, international externships, workplace shadowing, and interprofessional collaboration with other programs to expose them to different work settings they may excel in as expanded practice hygienists. Our clinic is working with behavioral health professionals providing care for children with autism giving students the opportunity to work with special needs patients. Our restorative course has students shadow dentists in traditional work settings for a realistic view of daily practice. Our externship program provides a unique cultural experience working in non-traditional settings in populations with limited dental education or care. Our community health course teaches doing needs assessments for our community and identifying populations most in need to work with over the year; this includes screenings, education, and dental hygiene services. The success of our program and graduates is evident in their achievements in the program and as licensed professionals.

Appendix A – Senior Capstone Rubric

Capstone Project Assessment Rubric

Criteria	Poor	Competent	Score	Superior	Score
Definition of project/introduction	0 points	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	Makes a logical connection between the knowledge of dental hygiene patient management and the patient issue or problem	8	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	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	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	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	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 openmind allowed for best outcomes in patient care and engagement.	50

Ethical Decision Making	0 points	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 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	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 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 problemsolving 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:				J	

Appendix B – Putting it Together Final Assignment: Grading Rubric: (24 pts)

Criteria:	Proficient 3 points	Competent 2 points	Novice 0 to 1 point
Title of CAS; Table format; 1-2 pages	Created a title for CAS; Table format; One page	Did not include Title; OR not in Table	Missing two or more required elements
		format; OR more than one page	
Bottom line	Clearly addressed major findings by summarizing information from the two articles; Answers the PICO question	Did not clearly address the major findings of the articles; OR discussed the findings for each article separately; OR did not clearly address the PICO question	Missing two or more required elements
Clinical question	Wrote clinical question in proper PICO format	Missing an element or was not clear with one of the PICO phrases	Missing two or more required elements
Study design	Discussed summary from articles of pertinent information regarding the study designs	Needed more details or clearer explanation of study design and how it was pertinent	Did not clearly address pertinent information of study design
Evidence summary	Summarized the major findings from all articles	Needed clearer explanation in summarizing the major findings	Did not clearly address the major findings for one or both articles
Comments	Addressed if findings are relevant to clinical practice and explained why or why not	Addressed if findings are relevant to clinical practice but needed more detail	Did not clearly explain if findings are relevant to clinical practice
Resources – list with one type of formatting (APA)	Used three full-text articles. Consistent formatting of articles	Missing one element	Missing two or more elements
Writing mechanics	No writing errors	One writing error	Two or more writing errors

Appendix C – Practice/Salary Analysis Rubric

DH 454 Salary Forecast/Production Analysis Rubric

Criteria	Ratings				Points
General Grading Criteria	0 Poor	7 Needs Improvement	8 Good	10 Excellent	
	Assignment instructions are not followed. Several errors in spelling and/or grammar. Submission lacks name, assignment title, date, spacing. 0-6 points	Some assignment instructions are not followed. Some missing information. General errors in spelling and/or grammar. Errors in professional appearance.	All assignment instructions are followed. Minor error in spelling or grammar. Minor error in professional appearance. 8-9 points	All assignment instructions were followed. No spelling or grammar errors. Professional appearance-assignment title, name, date, 1.15 spacing. Salary is fair for location and is reasonably determined. Daily salary is correct based on monthly, weekly, and daily production goals. Schedule is set up as a 3-day schedule; includes procedures and fees; is realistic and includes cancellations and total production.	

Appendix D – Curriculum Management Plan

Oregon Tech Dental Hygiene Curriculum Management Plan

	CURRICULUM COORDINATION AND ALIGNMENT						
Activity	Description	Interval	When/ Where				
Course alignment	Companion course instructors from all locations will work cooperatively to keep courses aligned. Courses must align between campuses for: sequence, outcomes, content, specific instructional objectives, major assessments and assessment tools, and grading procedures. Any changes to course structure or content must be agreed upon by both instructors and submitted to the Department Curriculum Team for review.	Quarterly	F, W, S, Su				
Syllabus Template & Checklist	Faculty will use a common template for consistency in each course. This will help students locate information in syllabi more effectively and ensure that university and departmental policies are aligned. Syllabus writing resources and templates for department policies are located on Teams> Program Files-Curriculum Management and the Z: Dental Hygiene Faculty	Quarterly	F, W, S				

	Canvas under Course Alignment Checklist. Syllabi are updated and stored on TEAMS each term.		
Curriculum Discussions	Faculty will present and discuss curriculum change topics for individual courses at weekly meetings or as needed to inform the department. Discussions from weekly/quarterly campus meetings are documented and presented at quarterly department meetings as needed. Curriculum issues are discussed and documented in meeting minutes. The people responsible for action items are noted in the meeting minutes. Revisions may be piloted in summer term with full implementation planned for Fall term	Quarterly	Weekly/qua rterly department meetings
Faculty Calibration	Clinical faculty meetings are held 2-3 times per year to coordinate didactic and clinical instruction, provide program updates, deliver teaching methodology training, and provide calibration activities. All faculty and clinic instructors are required to participate in initial training in the areas of HIPAA; and annually in FERPA, HAZ-COM, OSHA/BBP, and teaching best practice/methodology. The faculty Canvas course is used by clinical instructors across both campuses to access training and resources. Verification forms for required trainings are submitted to the program Site Coordinator for documentation.	Quarterly	Each
Clinic Faculty Briefings	Clinic lead instructors meet and/or deliver information to clinical faculty as needed during the pre-clinical prep time to provide calibration updates, instruction, or discuss clinical issues and are documented and saved for verification.	As needed	Prior to clinic session
	STUDENT INVOLVEMENT		
Student Program Feedback	Students will be surveyed for program feedback based on the following schedule: All students will complete survey during winter term Recommendations from surveys will be shared at individual campus faculty meetings for consideration and brought to the department meeting as necessary	Annually for each class	Winter term
	CURRICULUM REVIEW	I	
IDEA Student Numerical Evaluations	Student assessment of individual didactic instructors to assess quality of teaching as specified by university policy. Annual Performance Evaluations are conducted annually and reviewed by faculty and Dept Chair identifying areas of strength or need for improvement.	Quarterly Annually	Spring term
Program, Institutional Outcomes Evaluation & Assessment	Individual instructors will review IDEA instructional evaluations; course strength and weaknesses; student progress related to course/program/institutional outcomes; and develop proposals for improvement as indicated in the TechWeb Course Outcomes Dashboards in accordance with university assessment guidelines by primary faculty. Institutional and Program data is collected and reported annually and reviewed by the University Assessment Committee. Individual course data is collected each term and compiled annually in shared documents; Formal course review is conducted on a three-year rotational calendar to look for patterns. Minor course changes and improvements are discussed at faculty meetings to ensure continuity and communication among full-time faculty. Changes are	Quarterly	

	documented in the "Curriculum Discussions" document by the		
	campus site coordinator.		
Programmatic	Program Curriculum review is evaluated by primary faculty for	Annually	Full Review
Curriculum	each course in each term via Canvas Outcomes and reported in		in Summer
Review	TechWeb Course Outcomes Dashboards. Results are recorded		
	on the CODA Standards and Program Outcome Planning		
	Matrix for review at the spring department meeting. Changes		
	may be piloted in summer term with full implementation and		
	policy updates in fall. Formal changes are routed through the		
	university process as indicated and to CODA when required.		
Review of	Curriculum Coordinators will review and update CODA	Annually	Ongoing
CODA	standards to the CODA Standards and Program Outcome		Updates,
Standards	Planning Matrix and send out communications to faculty of any		Review in
	changes made. Review of new standards and implementation		Fall
	plan is completed with all faculty annually at Convocation.		
Review of	Faculty will review recent NBDHE scores and categories to	Annually	Spring
NBDHE &	determine if there are areas of the curriculum that need to be		(June)
Clinical Board	strengthened. Discussion of changes happen in spring with		
Results	review of changes and implementation in fall term.		
DH Student	Program directors evaluate the DH Student Handbook for	Annually	Summer
Handbook	revisions in summer to update policies. Changes are delivered		
	to faculty/students at the beginning of fall term and posted to		
	the individual campus Teams folders for all students/faculty to		
	access. Senior students begin their year in summer term and		
	may be provided a written addendum until the full handbook is		
	released in fall.		
Humanistic	The program's mission statement addresses our commitment to	PSLO/	
Cultural	a humanistic culture and learning environment. It is taught and	DH 242	
Environment	evaluated in the first year of the program in DH 242. It is again		
(CODA 2-1)	re-evaluated in fall term of both junior and senior years during		
	the annual CODA Survey to identify student perceptions.	Annual	Collected in
	Clinic patients are also surveyed with the Patient Satisfaction	CODA	Fall and
	Survey to assess their perceptions of the Cultural Environment.	Surveys	Winter/repo
	Program and university policies support this philosophy and are		rted in
	identified in the DH Student Handbook, OIT Student		Spring
	Handbook, OIT Faculty Handbook, and the DH Essential		
	Functions policy. Results are discussed at the December		Survey
	department meeting and a plan for changes is developed.		completed
	Changes are summarized in the annual curriculum report.		Fall

