

# Dental Hygiene Bachelor Degree Completion Program Assessment Report 2020-21

#### Section 1 – Program Mission and Goals

The mission of the Bachelor of Science in Dental Hygiene *degree-completion* program is to provide an opportunity for licensed dental hygienists at any stage in their career to complete a bachelor's degree for professional growth, current and future employment options, and/or entry into a graduate program.

The mission, goals, objectives, and student learning outcomes for the program are reviewed annually by the program faculty at the fall meeting during convocation.

The goals were designed to help our diverse population of working professional students achieve our Program Mission.

#### **Our Commitment to our Students:**

- Provide a quality bachelor-degree completion program that recognizes the achievement of passing the dental hygiene national board exam and state or regional clinical exams.
- Recognize the growth in career opportunities and provide core courses to expose students to business management, education, public health, and evidence-based decision making.
- Build positive relationships between core dental hygiene faculty and students to mentor and help students achieve degree goals.
- Help students plan a course schedule that ensures academic success by factoring in professional goals and personal commitments.
- Allow students to explore further areas of interest by offering elective choices.
- Prepare students for graduate-level courses.

#### Section 2 - Program Description and History

Oregon Tech (OT) has offered a dental hygiene degree at the Klamath Falls campus since 1970. Although the program started as an Associate of Applied Science (AAS) degree, beginning in 1985 students had the option of completing a Bachelor of Science (BS) degree by extending their studies one more year. In 2003 the program transitioned to a BS degree only. In 2011 Oregon Tech began a second BS dental hygiene program at Chemeketa Community College in Salem, Oregon.

The licensing requirements are the same whether students graduate with an AAS or BS degree in dental hygiene. In the United States (US), all dental hygienists with an AAS degree have at least three years of undergraduate courses. During the freshman year, pre-dental hygiene students complete required prerequisites and then apply for acceptance into an accredited dental hygiene program. Once admitted, students continue for two more years. In the United States there are approximately 230 AAS and 60 BS accredited dental hygiene programs. (dentalcareersedu.org)

In 1996, OT was one of the first colleges in the US to offer dental hygienists with AAS degrees an opportunity to complete their BS degree through 'distance education'. The student's prerequisite courses (one academic year) are reviewed for credit transfer. The student's dental hygiene courses (two academic years) are transferred as 'block credits' through documentation of passing the Dental Hygiene National Board Exam.

Oregon Tech's Bachelor of Dental Hygiene Outreach (BDHO) was designed to allow dental hygienists the flexibility to plan their course schedules to meet the demands of their professional and personal lives. Depending on credits

transferred to our institutions, students' course plans can all look different. All students must complete a minimum of 45 credits from OT to complete their bachelor's degree. All courses are offered 100% online. Students may begin any term and choose whether to take one or several courses a term.

Students are exposed to a variety of career opportunities, including business, management, education, and public health. Besides options for general education requirements, students also have dental hygiene elective choices to further explore and learn skills in their area of interest. The BDHO program includes:

- Six required dental hygiene core courses
- Three dental hygiene elective choices from a list approved by the department
- OT general education and elective requirements needed for a bachelor's degree

In the US we now have approximately 50 BS dental hygiene completion programs (<u>ADEA degree completion programs</u>). Even with the increased competition, OT has managed to keep a steady enrollment. Because students begin any term and plan the pace of their course schedule, students might graduate after completing four terms or take several years to complete the program. The BDHO has students graduating at the end of every term.

Actively enro	olled Spring term:	<b>Graduate totals from Su-F-W-Sp Terms:</b>					
2021		2021					
2020	57	2020	17				
2019	54	2019	19				
2018	51	2018	10				
2017	50	2017	27				
2016	68	2016	22				
2015	59	2015	25				

Employment rates and salaries are not quantifiable for our BDHO students. Before students enter our bachelor degree completion program they are already licensed, working dental hygienists. Work settings include clinical dental hygiene, education, public health, management, corporate sales, and/or entrepreneur. Graduates might continue in their place of employment, branch out into a new field, begin a graduate program, or a combination of the various options. Currently OT employs several BDHO graduates who teach in clinics, labs, and/or didactic in our Klamath Falls and Salem dental hygiene programs.

Best Online Colleges ranking, SR Education Group researched and analyzed accredited online schools across the nation, taking into consideration academic strength factors as well as annual tuition rates. "Inclusion on this list shows high academic standards and a commitment to affordability, two key factors important to prospective students." Oregon Tech ranked #1 for online bachelor's degrees in Dental Hygiene. (In 2019 we were ranked #1 and in 2018 we were ranked #9.) The promotional badge we received from SR Education Group is posted on our website:



SR Education - Best DH Online Programs

#### Section 3A – Program Student Learning Outcomes

The American Dental Hygienist Association (ADHA) addresses six competencies dental hygienists should demonstrate, but our BDHO students achieve those standards in their AAS programs. ADHA Standards for Clinical Dental Hygiene

The ADHA has identified professional roles for dental hygienists that correlate with our Program Mission and PSLOs:

"Overview: The dental hygienist plays an integral role in assisting individuals and groups in achieving and maintaining optimal oral health. Dental hygienists provide educational, clinical, and consultative services to individuals and populations of all ages in a variety of settings and capacities. The professional roles of the dental hygienist include the following: Clinician, Corporate, Public Health, Researcher, Educator, Administrator, and Entrepreneur." ADHA Professional Roles of the Dental Hygienist

The American Dental Educators Association (ADEA) also recognizes the expanding roles of dental hygienists, which align with our BDHO Program Mission and PSLOs:

"For those with a passion for dental hygiene who do not wish to practice clinically, there are many career paths outside of the operatory available in education, research, administration, public health and corporate business."

ADEA Career Options

BDHO students take a minimum of 15 courses with Oregon Tech, but only six are required core courses that dental hygiene faculty teach. Core courses address the PSLOs listed below with each course aligned with one PSLO and assessment. Even with the assessment limitation of six courses, the PSLOs address the professional roles and career options identified by the ADHA and ADEA. Other required and elective courses in the BDHO program also address the PSLOs, including minor degree options. An updated business minor was approved in 2019, which was implement beginning catalog year 2019-20.

**See Appendix** – Professional Courses (Exhibit A), Recommended Electives (Exhibit B), and Business Minor for Dental Hygiene (Exhibit C).

Program Student Learning Outcomes (PSLOs) were reviewed by faculty at the annual program meeting during convocation. No changes were implemented.

Upon graduating from the BDHO program at Oregon Tech, students will:

- 1. Analyze the strengths and limitations of different research designs and their impact on the dental hygiene profession. (Assessed in **DH 475** *Evidence Based Decision Making in Healthcare I*)
- 2. Apply evidence-based decision making to evaluate and incorporate emerging treatment modalities into dental hygiene practice. (Assessed in **DH 476** *Evidence Based Decision Making in Healthcare II*)
- 3. Analyze your dental hygiene department to identify problems and areas where there is needed improvement; clarify the problem; and propose viable solutions. (Assessed in **DH 454** *Dental Practice Management*)
- 4. Identify current and emerging issues in the profession of dental hygiene. (Assessed in **DH 401** *Overview of Advanced Dental Hygiene*)
- 5. Assess the oral health care needs of a community and develop a strategic plan that addresses identified needs. (Assessed in **DH 470** *Community Assessment and Program Planning I*)
- 6. Design instruction that includes teaching strategies and assessments to meet a variety of learning style needs. (Assessed in **AHED 450** *Instructional Methods*)

#### Section 3B – Essential Student Learning Outcomes

Oregon Tech's Essential Student Learning Outcomes (ESLOs) support Oregon Tech's institutional mission and core themes. The assessment structure is to have three pathways (foundation, essential practice, and capstone) for each of the six ESLOs.

The uniqueness of the BDHO program is not conducive to following the exact, same assessment pathways as students who achieve most, if not all, of their credits through OT courses.

The reasons BDHO students cannot be assessed in the same manner as BS dental hygiene students is because:

- BDHO students are required to take a minimum of 15 OT courses; BS students (depending on where they took their prerequisite courses) are required to take 51-64 OT courses
- Although BDHO students are required to take general education and elective courses to earn a bachelor's degree, students' course plans are all unique depending on previous courses transferred from other colleges
- Of the 15 required OT courses for BDHO students, only six courses are taught by dental hygiene faculty in the BDHO program

All BDHO students graduated from an AAS dental hygiene program accredited by the Commission on Dental Accreditation (CODA). The accreditation process is rigorous, and programs must address specific standards related to "...student evaluation methods that measure all defined program competencies..." and "...the evaluation methods used in the dental hygiene program should include process and end-product assessments of student performance, as well as a variety of objective testing measures." CODA Accreditation Standards - 2.6 Curriculum

#### **ESLO 1: Communication**

- Assessed in AAS program CODA Standard 2-8a: General education content must include oral and written communications, psychology, and sociology; CODA Standard 2-15: Graduates must be competent in communicating and collaborating with other members of the health care team to support comprehensive patient care.
- Assessed in students' communication courses transferred from previous colleges and/or through OT courses as needed
- The six required BDHO dental hygiene courses do not have an 'oral' communication component, so cannot be assessed
- 'Written' communication is assessed in the BDHO program

#### **ESLO 2: Inquiry and Analysis**

- Assessed in AAS program CODA Standards on Critical Thinking 2-22: Graduates must be competent in the
  evaluation of current scientific literature; and 2-23: Graduates must be competent in problem solving strategies
  related to comprehensive patient care and management of patients.
- Assessed in students' courses transferred from previous colleges and/or through OT courses as needed
- Inquiry and Analysis is assessed in the BDHO program

#### **ESLO 3: Ethical Reasoning**

- Assessed in AAS program CODA Standard 2-19: Graduates must be competent in the application of the
  principles of ethical reasoning, ethical decision making and professional responsibility as they pertain to the
  academic environment, research, patient care and practice management.
- Assessed in students' required course equivalency for OT's DH 275 Ethics
- No assessment activity to address from the six required BDHO dental hygiene courses

#### **ESLO 4: Teamwork**

- Assessed in AAS program CODA Standard 2-15: Graduates must be competent in communicating and collaborating with other members of the health care team to support comprehensive patient care.
- Assessed in students' SPE 221 Small Group and Team Communication course transferred from previous college and/or taken through OT
- No assessment activity to address from the six required BDHO dental hygiene courses

#### **ESLO 5: Quantitative Literacy and Reasoning**

- Assessed in AAS programs through anesthesia course (i.e. proper dosage calculations) and clinical experiences (i.e. use of indices); also addressed in the Western Regional Examining Board written portion of the anesthesia board exam needed for licensure
- The Qualitative Literacy (QL) committee with collect direct measures of student performance in OL-tagged courses. Because they are general education courses, they'll capture a wide slice of OIT student performance on a single task. That data will be collected by the end of Winter term and analyzed in Spring term.

#### **ESLO 6: Diverse Perspectives including Cultural Sensitivity and Global Awareness**

- Assessed in AAS program CODA Standard 2-15: Graduates must be competent in communicating and
  collaborating with other members of the health care team to support comprehensive patient care. One of the
  'intents' listed under this Standard is: 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).
- No assessment activity to address from the six required BDHO dental hygiene courses

Graduates are contacted to complete an Exit Survey that does ask proficiency levels for the six ESLOs.

**See Appendix** – Six Required DH Courses in BDHO with PSLO and ESLO Assessment Plan (Exhibit D); Exit Survey Results for ESLO proficiency levels (Exhibit E)

#### Section 4 – Curriculum Map

Not included for BDHO because students only have six required Dental Hygiene (DH) courses and the remaining nine (approximate) courses vary depending on students' transfer credits and program plan.

#### Section 5 – Assessment Cycle

Two years ago, the faculty determined a six-year PSLO cycle met the assessment needs of the program since no major changes have been implemented in the curriculum and PSLOs, as well as students consistently scoring proficient or high proficient in the direct and indirect assessments. Beginning Fall 2020, the program had to switch back to a three-year cycle per policy by OT administration. The following Table reflects the updated assessment plan.

Assessment Cycle							
PSLOs and ESLOs – Three-year cycle	2017- 18	2018- 19	2019- 20	2020- 21	2021- 22	2022- 23	2023- 24
1. Analyze the strengths and limitations of different research designs and their impact on the dental hygiene profession (DH 475 – Evidence-Based Decision Making in Healthcare I)	PSLO			PSLO			PSLO
2. Use evidence-based decision making to evaluate and incorporate emerging treatment modalities into dental hygiene practice (DH 476 – Evidence-Based Decision Making in Healthcare II)	PSLO ESLO			PSLO ESLO			PSLO
ESLO – Inquiry and Analysis							

3. Analyze your dental hygiene department to identify problems and areas where there is needed improvement; clarify the problem; and propose viable solutions.  (DH 454 – Dental Practice Management)	PSLO			PSLO	
4. Identify current and emerging issues in the profession of dental hygiene (DH 401 – Overview of Advanced Dental Hygiene)			PSLO		
5. Assess the oral health care needs of a community and develop a strategic plan that addresses identified needs. (DH 470 – Community Program Planning I)		PSLO		PSLO	
6. Design instruction that includes teaching strategies and assessments to meet a variety of learning style needs.  (AHED 450 – Instructional Methods)  ESLO – Written Communication			PSLO ESLO		

See Appendix – Six Required DH Courses in BDHO with PSLO and ESLO Assessment Plan (Exhibit D)

#### Section 6 – Assessment Activity

Because of the limitation of only six courses in BDHO that faculty can use to conduct assessments, only one direct and one indirect measure are used for each PSLO and the ESLO.

#### PSLO 1: BDHO Online, DH 475, 202001, Suzanne Hopper

**PSLO 1:** Analyze the strengths and limitations of different research designs and their impact on the dental hygiene profession

**Assignment title:** Module Six – *Levels of Evidence* 

#### **Module Objectives:**

Upon completion of this module you should be able to:

- 1. List in order the levels of research evidence by referring to the evidence pyramid found in your reading assignment and in this module lecture
- 2. Differentiate between various study designs systematic reviews, randomized control trials, cohort studies, case-controlled studies, case series, and editorials/expert opinions
- 3. Identify the type of study most appropriate to answer questions related to therapy/prevention, diagnosis, harm/etiology/causation, and prognosis
- 4. Explain how each research design contributes to a continuum of knowledge

**Assessment – direct measure – 20-point quiz:** Questions cover material in the module lecture, reading assignments, and some key concepts learned so far in the DH 475 course.

For the PSLO assessment the course instructor and another instructor independently assessed the alignment of the PSLO with the module objectives and use of a quiz for the assessment. The faculty agreed a reasonable performance level would be 100% of students scoring 82% or higher. (This correlates to students achieving a 'B' or higher score.)

**Assessment Activity – direct measure:** 20-point quiz that addressed PSLO #1 and the module objectives listed above. Quiz questions included true/false, multiple choice, matching, and short-answer.

**Sample:** n=11 (this was total number of students in course)

Reliability: Quiz questions were reviewed by instructor and another faculty member in the BDHO program.

Performance Target: 100% of students scoring 82% (level needed to earn a 'B') or higher.

**Performance Level:** 9/11 students earned 100%; 2/11 students earned 95%.

**Faculty Discussion and Interpretation:** Instructor and faculty member who reviewed that assessment ahead of time discussed results via email 2-4-2020. Faculty agreed the students demonstrated high proficiency in achieving the PSLO.

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

Analyze the strengths and limitations of different research designs and their impact on the dental hygiene profession

ESLO Results: (was not separated out from Institution data; exit survey showed n=419)

PSLO Results (n = 6):

100% High Proficiency (6/6 students)

0% Proficient

0% Some Proficiency or Limited Proficiency

See Appendix - Module Six Assessment Quiz (Exhibit E); BDHO PSLO Survey data (Exhibit F)

#### Inquiry and Analysis ESLO; PSLO 2: BDHO Online, DH 476, 202002, Suzanne Hopper

ESLO Inquiry and Analysis: Oregon Tech students will engage in a process of inquiry and analysis.

**PSLO 2:** Use evidence-based decision making to evaluate and incorporate emerging treatment modalities into dental hygiene practice

**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 students 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.)

For the PSLO assessment the course instructor and another instructor independently assessed the alignment of the PSLO with the module objectives, assignment instructions, and assessment rubric. 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 "Competent" or "Proficient" for each criterion in the rubric.

**Rubric:** The rubric includes nine criteria with detailed descriptions for the levels of Proficient, Competent, and Novice. (See complete rubric in the Appendix under Exhibit G.)

Sample: n=18 (this was total number of students in course)

**Performance Target:** 100% of students scoring at the Competent 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: 17/18 students earned 27/27 points on the assessment; One student earned 26/27 points.

**Faculty Discussion and Interpretation:** The instructor and a faculty member discussed results via email 2-4-2020. Faculty agreed the students demonstrated proficiency in achieving the PSLO.

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

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

PSLO: Use evidence-based decision making to evaluate and incorporate emerging treatment modalities into dental hygiene practice

ESLO Results ESLO Results: (was not separated out from Institution data; exit survey showed n=419)
PSLO Results (n = 6):

100% High Proficiency (6/6 students)

0% Proficient

0% Some Proficiency or Limited Proficiency

See Appendix - Module Four Assessment Rubric (Exhibit G); BDHO PSLO Survey data (Exhibit F)

#### 7. Data-Driven Action Plans; Changes Resulting from Assessment

The DH 475 and 476 course are taught by the same instructor. The assessments targeted for PSLO #1 and #2 and ESLO Inquiry and Analysis were the same ones used during assessment cycle 2017-18. Students consistently do well on the assessments in both courses, so there is not a need for any changes. When faculty met to discuss results, it was noted the scaffolded assignments, as well as past student exemplary assignment examples help students achieve a high proficiency in meeting the PSLOs. Students verify in the Exit Surveys that they achieved "high proficiency" for these PSLOs.

### **Appendix**

#### Exhibit A – Professional Courses Required for BDHO

Course	Description	Credits
AHED 450	450 Instructional Methods	
BUS 317	Healthcare Management	3
DH 401	Overview of Advanced Dental Hygiene	3
DH 454	Dental Practice Management	3
DH 475	Evidence Based Decision Making in Healthcare I	3
DH 476	476 Evidence Based Decision Making in Healthcare II	
DH 470 Community Assessment and Program Planning I		3
Humanities electives (two)		6
MATH 243 or 111	Introductory Statistics or College Algebra	4
SPE 321	Small Group and Team Communication	3
	Communication elective (from General Education list)	
	Dental Hygiene electives (three; approved by advisor)	
	Total Professional Course Credits	46

#### **Exhibit B – Recommended Electives**

<b>Electives approved by De</b>	Electives approved by Dental Hygiene Department								
Clinical Practice	Management	Education	Public Health						
COM 205, Intercultural Communication	BUS 223, Marketing I <b>OR</b> BUS 337, Principles of Health Care Marketing	AHED 451, Instructional Experience	BUS 313, Health Care Systems & Policy						
BIO 336, Essentials of Pathophysiology	BUS 308, Principles of International Business	AHED 460, Fundamentals of Distance Ed	WRI 410, Grant Writing						
PSY 347, Organizational Behavior	BUS 226, Business Law	SOC 225, Medical Sociology	COM 205, Intercultural Communication						
SOC 225, Medical Sociology	BUS 313, Health Care Systems & Policy	PSY 347, Organizational Behavior	PSY 347, Organizational Behavior						
BUS 313, Health Care Systems & Policy	BUS 313, Health Care PHIL 342, Business Ethics		SOC 225, Medical Sociology						
PSY 336, Health Psychology	, 0	Master of Science in Allied Health	SOC 325, Global Population Health						

PSY 337, Health Psychology II	BUS 345, Fraud Examination	ALH 515, Scientific Writing & Medical Literature	SOC 335, Health Inequality & Cultural Competency				
RCP 326, Disaster Preparedness	BUS 349, Human Resource Management	2 other MSAH courses may be taken for DH electives or to meet residency	DH 471, Community Program Planning II				
*PSY 301, Basic Counseling Techniques	BUS 441, Leadership	requirement					
COM 205, Intercultural Communication	ACC 201/203, Principles of Accounting						
CSH, Clinical Sleep Health courses	DH 465, Dental Hygiene Entrepreneurship						

### Exhibit C – Dental Hygiene Business Minor

DH Business Minor						
ACC 201	Principles of Accounting	4				
BUS 226	3					
BUS 317	3					
BUS 337	3					
PSY 347	3					
An elective choice from following options: DH 465, BUS 356, BUS 313, BUS 349, SOC 305, or SOC 335.						
Total Credit	S	19				

### Exhibit D – Six Required DH Courses in BDHO with PSLO and ESLO Assessment Plan

PSLO 1	Analyze the strengths and limitations of different research designs and their
	impact on the dental hygiene profession.
ESLO	n/a
Course	DH 475 –Evidence Based Decision Making in Healthcare I
Direct Assessment	Module Six – Levels of Evidence
Indirect Assessment	Student Exit Survey
Assessment Cycle	2017-18; 2020-21; 2023-24
PSLO 2	Apply evidence-based decision making to evaluate and incorporate emerging
	treatment modalities into dental hygiene practice.
ESLO	Inquiry and Analysis
Course	DH 476 –Evidence Based Decision Making in Healthcare II
Direct Assessment	Module Four – Critical Analysis of Research II
Indirect Assessment	Student Exit Survey
Assessment Cycle	2017-18; 2020-21; 2023-24

PSLO 3	Analyze your dental hygiene department to identify problems and areas
	where there is needed improvement; clarify the problem; and propose
	viable solutions.
ESLO	n/a
Course	DH 454 – Dental Practice Management
Direct Assessment	Practice Application Project
Indirect Assessment	Student Exit Survey
Assessment Cycle	2018-19; 2022-23; 2025-26
PSLO 4	Identify current and emerging issues in the profession of dental hygiene.
ESLO	n/a
Course	DH 401 – Overview of Advanced Dental Hygiene
Direct Assessment	Module Ten – Workforce Models: Compare and Contrast
Indirect Assessment	Student Exit Survey
Assessment Cycle	2016-17; 2021-22; 2024-25
PSLO 5	Assess the oral health care needs of a community and develop a strategic
	plan that addresses identified needs.
ESLO	n/a
Course	DH 470 – Community Assessment and Program Planning I
Direct Assessment	Community Oral Health Strategic Plan
Indirect Assessment	Student Exit Survey
Assessment Cycle	2019-20; 2022-23; 2025-26
PSLO 6	Design instruction that includes teaching strategies and assessments to meet
	a variety of learning style needs.
ESLO	Written Communication
Course	AHED 450 – Instructional Methods
Course	
Direct Assessment	Module Ten – Final 4 MAT Lesson Plan Project

### Exhibit E – PSLO Assessment Quiz

Questions cover material in Module Six, the reading assignment (Levels of Evidence), and some key concepts learned so far in this course.
1. The higher you go up the evidence pyramid, the level of evidence usually will be stronger as well as less biased.  True  False
2. Match the following characteristics with the type of question. Group of answer choices: Therapy/prevention Diagnosis Etiology/harm
3. What type of question is: "For dental patients with plaque, will unwaxed dental floss as compared to waxed dental floss remove plaque more effectively?"  C  Therapy/Prevention
Diagnosis C
Etiology, Causation, or Harm  O  Prognosis
4. For the PICO question listed above for question #3, what would be the highest level of evidence?  Cohort study
Systematic review of RCT
Systematic review of cohort studies  C  Single randomized controlled trial
5. All the following are true regarding Cohort Studies <i>except</i> one. Which one is the <i>exception?</i>
Observational type of study
Experimental type of study  Can be a retrospective study
Can be a prospective study  Can be a prospective study

6. Systematic reviews provide the strongest type of evidence, as the authors attempt to find all research on a topic, published and unpublished.  Group of answer choices  True  False
7. A Randomized Controlled Trial (RCT) has a higher level of evidence and less bias than a Cohort Study.  True  False
8. A Randomized Controlled Trial (RCT) has a higher level of evidence and less bias than a Systematic Review.  C True C False
9. A Case Control Study has a higher level of evidence and less bias than a Case Report.  Group of answer choices  True  False
10. As you progress up the levels of evidence, the amount of available literature also increases.  Group of answer choices  True  False
11. What is the correct response to the following statement? Explain your answer in several well-developed sentences.
A Randomized Control Trial will ALWAYS be a higher level of evidence to answer a PICO question than a Cohort Study.
12. When might a case study be important to the "continuum of knowledge in research" when it's classified as such a low level of evidence?
Please respond with a well-developed paragraph (a minimum of 4-5 sentences) to support your answer. (2 points)
13. Describe the three most important concepts you have learned so far in this course about EBDM. Each concept should be addressed with a well-developed paragraph (a minimum of 4-5 sentences for each paragraph) supporting your reasons. (6 points total; 2 points for each concept you describe)

### Exhibit F – BDHO Exit Survey – PSLOs

#	Question	High proficiency		Proficiency		Some proficiency		Limited proficiency		Total
1	<ol> <li>Analyze the strengths and limitations of different research designs and their impact on the dental hygiene profession.</li> </ol>	100.00%	6	0.00%	0	0.00%	0	0.00%	0	6
2	2. Use evidence-based decision making to evaluate and incorporate emerging treatment modalities into dental hygiene practice.	100.00%	6	0.00%	0	0.00%	0	0.00%	0	6
3	<ol> <li>Analyze your dental hygiene department to identify problems and areas where there is needed improvement; clarify the problem; and propose viable solutions.</li> </ol>	100.00%	6	0.00%	0	0.00%	0	0.00%	0	6
4	4. Identify current and emerging issues in the profession of dental hygiene.	83.33%	5	16.67%	1	0.00%	0	0.00%	0	6
5	5. Assess the oral health care needs of a community and develop a strategic plan that addresses identified needs	83.33%	5	16.67%	1	0.00%	0	0.00%	0	6
6	6. Design instruction that includes teaching strategies and assessments to meet a variety of learning style needs.	83.33%	5	16.67%	1	0.00%	0	0.00%	0	6

### Exhibit G – Inquiry and Analysis ESLO and PSLO #2 Assessment Rubric

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

	change does treatment cause AND/OR subjects representative of PICO question and feasibility of study		
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 H – Student comments from Exit Survey

Q BDHO 6 - Reflecting on your time as a student in the Dental Hygiene Bachelor Degree Completion program, what are the strongest aspects about the degree? Could be experiences, courses, professors, general characteristics, or features of the program:

Reflecting on your time as a student in the Dental Hygiene Bachelor Degree Completion program, what are the strongest aspects about the degree? Could be experiences, courses, professors, general characteristics, or features of the program.

I have learned so much in this program and wish I had done this long ago! I have met so many awesome professors throughout this program and they have all taught me something I needed to know about dental hygiene, business, and being prepared.

The flexibility of scheduling courses, great professors.

Being out of school for over 20 years, it was intimidating to go back but the professors at OIT made transitioning back into school so much easier! The instructions were very well delivered and professors are always available to help.

Professor Suzanne Hopper is exceptional with students and with providing feedback in a constructive manner. The online format of the program is convenient and well designed. The pool of courses is diverse and the staff are easy to communicate with, from instructors, to financial aid, to admissions, and even administration. Thank you!

It is hard to narrow down the strongest aspects, but I will say the courses AND the professors would be the strongest. I agree with all of the necessary classes in the programs and I also enjoyed being allowed to take some electives of my choice. My favorite elective, by far, was Fraud Examination.

## Q BDHO 7 - What are the weakest aspects about the major? Could be experiences, courses, professors, general characteristics, or features of the program:

What are the weakest aspects about the major? Could be experiences, courses, professors, general characteristics, or features of the program.

The weakest aspects about the major? I can't think of anything that was weak about the program. I just didn't like the Statistics course!!

#### None

The weakest aspects were not program related, it was more of trying to juggle work, parenting and getting assignments completed.

Number of in residence courses for graduation is high for transfer students. More options for and requirements for technology courses related to majors. For example: courses on virtual medical visits, or presentation courses for designing online conferences in radiology, dental, engineering, etc.

The worst course was an elective, Pathophysiology. I took it because of my interest in diabetes and oral health. But the professor used an old video (I don't think it was even from Oregon Tech) and I could NOT hear her well. She turned away from the camera the majority of the time and the background noise was excruciating. The course exams were beyond difficult and I had no idea what to study. There was no discussion for students and no online guidelines. Just

listen and take three exams and one final. I am a VERY good student and this course was awful and I got a D. Granted, this was an elective of my choice, but it soured me for returning to school and I took a quarter off to re evaluate my decision to return to school. After talking to my advisors, I realized it was an elective of my choice, and I could take something else. I feel it was a waste of my money and my time. I am sure, in person, she is an excellent professor, but for the money and time, her online course was nothing more than listening to an outdated phone video of someone talking in the front of the room. Not a true online course. Online courses by professors are different and should be treated differently. PS I would not consider this the "weakest aspect" of the major, just a weak aspect of an online course offered at OIT.