

Course Outcomes Assessment

Course/Program Title: DHY 221 Dental Hygiene Clinical IV **Date:** 5/10/17

Course/Program Team: Marlaina Lantzy RDH, MS (lead instructor); Jennifer Suminski RDH, MS; Rhonda Hull RDH, BS; Raychene Michaels RDH, BS; Lucinda Oberholzer RDH, MS; Michelle Shaw RDH, BS; Nancy Stannert RDH, BS; Lisa Stewart RDH, BS, Kelanie Yordy RDH, MS; Paul Kane DDS; Dr. Paul McAllister DDS; John Stull, DDS

Expected Learning Outcomes:

1. Design comprehensive dental hygiene care strategies that incorporate non-surgical periodontal therapies, proactive disease prevention education, considerate and confidential patient management.
2. Demonstrate competency in total patient assessment, dental hygiene treatment planning, implementation of patient care services, and self-evaluation of clinical skills.
3. Apply critical thinking and problem solving skills in a variety of clinical procedures and clinical practice settings.

Assessment: (How do or will students demonstrate achievement of each outcome? Please attach a copy of your assessment electronically.)

Students are evaluated on all areas of clinical performance by meeting the minimum course requirements for number and type of patient, skills evaluations, radiography performance, clinical engagement and attendance. Patient care is assessed using the software program TalEval and all other portions of the total course grade are evaluated using Moodle.

	<u>Minimum Points</u>	<u>Weighted Total</u>
DHPCE- Clinical Patient Care Score- patients	26 patients	80%
Radiography & Critique	743	5%
Skill Evaluations (16 @ various points each + 3 P/F)	380	10%
CA Rotations/Clinic Engagement	275	3%
Attendance	275	2%
Total	1673	100%

We have customized TalEval to fit our clinical procedures and evaluate each student on 117 aspects of patient care for each patient encounter. TalEval is a comprehensive, objective grading format that gathers data about the student's performance on specific procedures and items over a span of time on a variety of patients of various levels of difficulty. Student's skill performance is compared to all the times they performed the skill on all patients treated. TalEval measures all

the items of patient care over each half of the semester and generates a grade based on the mean and the standard deviation.

Validation: (What methods have you used or will you use to validate your assessment?)

1. TalEval software program is used by many dental hygiene programs across the country and meets several CODA accreditation standards including: 1-1 outcomes assessments, 2-15 through 2-17 process of care; 3-9 instructor calibration; and 6-2 quality assurance.

We will continue to collect grade data and analyze student and faculty performance.

(100% of students achieve an average of 75% or higher on the Dental Hygiene Process of Care

100% of students achieve an average of 80% or higher on Skills Evaluations

100% of students achieve an average of 75% or higher on Radiography skills)

2. Commission on Dental Competency Assessments (CDCA) ADEX Patient Care Exam and Computer Simulated Clinical Exam (CSCE): this is a regional third party clinical exam required for dental hygiene licensure. Exam results will help the program refine and improve clinical courses.

Results: (What do your assessment data show? If you have not yet assessed student achievement of your learning outcomes, when is assessment planned?)

1. Spring 2017 Class of 2017 DHY-221 Grade Data

Spring 2017 Final Course Grades	N=19	Course Grade Component (weight)	Class Average	Validation Outcomes
A	2	DHPOC (80%)	83.7%	19/19 <75%
B	17	Skills Evals (10%)	98.1%	19/19 <80%
C	0	Radiology (5%)	96.3%	19/19 <90%
I	0	Engagement (3%)	98.6%	19/19 <90%
Overall Average	86.5%	Attendance (2%)	99.0%	19/19 <90%

2. CDCA Results

Class of 2016 (n=17)	ADEX Patient Care	CDCA Computer Simulated Exam
Pass on 1 st attempt	16/17 (94%)	17/17 (100%)
Pass on 2 nd attempt	1/1 (100%)	N/A
Class of 2017 (n=19)	ADEX Patient Care	CDCA Computer Simulated Exam*
Pass on 1 st attempt	19/19 (100%)	5/5 (100%)
Pass on 2 nd attempt	n/a	

* Students test May-June 2017, at the time of this document only a portion of the Class of 2017 cohort had taken the exam. Complete results will be reported in subsequent SLOA documents.

Follow-up: (How have you used or how will you use the data to improve student learning?) This is the second time this course has been conducted and the faculty have addressed design and implementation weaknesses from DHY 202 Fall 2016. Additional design and implementation challenges were identified this semester, but were relatively minor compared to the previous year. The course requirements for patient number was on-target for this year; students were challenged, but able to meet all requirements. The faculty will be revising course procedures and expectations in course syllabi, the program handbook and teaching materials used to prepare students for Clinic IV.

TalEval will continue to be utilized to evaluate student's clinical performance. The recommended default median performance level of 80 was not adjusted this semester. It may be adjusted up next year, based on the rigor of the course and the trend in grade distribution of mostly B's.

The radiography evaluation instruments will be revised, based on the changes in DHY 104 Radiography, to reduce grade inflation and have the grading schema more accurately reflect performance. Two adjunct faculty are currently responsible for grading all radiographs for all clinics, they are the same faculty who teach DHY 104 Radiology Lab. This creates consistent expectations and evaluation for students and will continue for the 2017-2018 academic year.

Skills Evaluations are revised annually, based on revisions to DHY 102 Clinic I. The faculty will make minor changes in Fall 2018. Due dates and consequences for missed deadlines were amended to encourage on-time student completion and a greater emphasis on mandatory remediation for weak areas. Improvements in on-time completion were seen between Fall 2016 Clinic III and Spring 2017 Clinic IV.

The overall class average on Skills Evaluations was 98.1%, this suggests that something is not aligned within the grading system because that average is too high. The evaluation criteria need to be reviewed for changes and the way that faculty evaluate students need to be addressed. Are clinical faculty consistently giving Unsatisfactory marks when students make technique errors? Frankly, are they grading the students too easy? The dental hygiene program has 2 full time faculty and 11 adjuncts who meet at least twice a year to calibrate. The current system needs improvement. Marlaina Lantzy needs to dedicate time with clinical faculty to create a more uniform process for evaluating students so that their scores truly reflect their clinical skills.

As lead instructor for Clinics III and IV, Marlaina Lantzy continues to work on consistent communication of expectations, changes and course information with students and faculty. This has improved since last year and last semester, but could be better. She is working on designing schedules of monthly tasks and creating processes that help the program run more smoothly. Clear expectations, communication and processes are key to running the clinical portion of the program with fewer complications.

Overall Grade Distribution: Changes to course grading rules were implemented for the Spring 2017 Clinic II and IV courses which resulted in no incomplete course grades for Clinic II or IV. The current grading system makes it extremely difficult to earn an A in clinic and there is a mismatch between Skills Evaluation Scores (98.1% average), Patient Care grades (83.7%), overall course grade and students actual ability level. The evaluation processes for each grade category for clinical courses should be evaluated for validity and reliability as a measure of student performance.

Program Grade Scale: The weight of assignments and exams is reviewed each year to ensure points awarded are distributed appropriately and accurately measure student learning. The program grade scale is currently 75%-79% =C, 80%-89%=B and 90%-100%=A. This is not an even distribution and is artificially inflating grades into the A and B range. The program grading scale should be evaluated and adjusted for a more even scale which would in turn create a more accurate grade distribution in a Bell Curve with A's, B's and C's.

Budget Justification: (What resources are necessary to improve student learning?)

Continued funding of the following resources:

TalEval has been funded through May 2018; the subscription was renewed in May 2017 for one year at a cost of \$XXX.

Dentrix: Dentrix's Customer Service Plan is billed annually in June for July renewal date. Last year, HCC paid \$1,463 for the plan.

Apsida- encrypted email service for HIPAA compliance \$10/month \$120 annually

ADA Compliance Binders?

OSAP membership?

Chesapeake Medical- service maintenance contract for x-ray equipment, annual preventive maintenance. \$XX Current contract expires...

State of Maryland Department of Environment- annual registration fee for 4 x-ray tubes \$80 per tube, \$320 annually

Commented [MJL1]: Kathleen, is the inclusion of specific costs appropriate for this section? If it is, I need to find the actual costs of these items and add them.