#### **Course Outcomes Assessment**

Course/Program Title: DHY 202 Dental Hygiene Clinical III Date: 12/15/16

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; Lisa Stewart RDH, BS, Kelanie Yordy RDH, MS; Paul Kane DDS; John Stull, DDS

# **Expected Learning Outcomes:**

- 1. Apply comprehensive dental hygiene process of care strategies that incorporate assessment, planning, implementation and self-evaluation for the child, adolescent, adult, geriatric, special needs and medically compromised patients.
- 2. Demonstrate competence in assessing periodontal diseases and implementing non-surgical periodontal therapy treatment and disease prevention strategies.
- 3. Apply critical thinking and problem solving skills in a variety of clinical situations.

# 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.

Minimum Points	Weighted Total
20 patients	80%
714	5%
357	10%
225	5%
1521	100%
1021	10070
	714 357 225

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.

(90% of students achieve an average of 75% or higher on the Dental Hygiene Process of Care

90% of students achieve an average of 80% or higher on Skills Evaluations

90% of students achieve an average of 75% or higher on Radiography skills

90% of students achieve an average of 85% or higher for Engagement Points)

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. Fall 2016 Class of 2017 DHY-202 Grade Data

Fall 2016 Final	N=20		Course Grade	Class	Validation
Course Grades			Component (weight)	Average	Outcomes
A	0	-	DHPOC (80%)	85.7%	20/20 < 75%
В	10	Ī	Skills Evals (10%)	92.3%	18/20 < 80%
С	3	Ī	Radiology (5%)	94.7%	20/20 <90%
I	7		Engagement (3%)	98.0%	20/20 <85%
Overall Average	82.8%		Attendance (2%)	98.8%	20/20 <85%

# Fall 2017 Class of 2018 DHY-202 Grade Data

Fall 2017 Final	N=19	Course Grade Class Validati	ion				
Course Grades		Component (weight) Average Outcom	nes				
A	1	DHPOC (80%) 83.53% 18/19 <	75%				
В	16	Skills Evals (10%) 93.53% 18/19 <	80%				
С	1	Radiology (5%) 90.66% 18/19 <	75%				
F	1	Engagement (3%) 93.68% 18/19 <	85%				
Overall Average	85.39%						

### 2. CDCA Results

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

**Follow-up:** (How have you used or how will you use the data to improve student learning?) Based on last year, many changes to course design and grading were made before offering this course for the third year.

TalEval will continue to be utilized to evaluate student's clinical performance. The recommended default median performance level of 80 was used again this semester with the same pattern of a narrow grade distribution. As changes are made to clinical course policies and the program curriculum at the end of the 2017-18 academic year, the median performance level may need to be adjusted up between 81 and 83 to create a more balanced grade distribution. Based on data trend in the rigor and grade distribution, the current level of 80 is preventing very strong students from earning A's.

The radiography evaluation instruments were all revised before the start of the year in order to more accurately assess student performance and learning and curb grade inflation. The changes have been successful with the average radiography grade falling from 94.7% to 90.66%. Student now lose more points for retakes and per the syllabus, must attend mandatory tutoring when they have 2 consecutive image series below 85%. Fewer retakes are being exposed on patients and student grades are more accurately reflecting performance. The new radiography grading forms will continue to be used for the spring semester.

Skills Evaluations are revised annually based on revisions to DHY 101 Clinic I. About one third of the skills evaluations were recorded electronically in Moodle. This switch to grading skills evaluations in Moodle has been part of a 2 year process to move towards using less paper in the clinic. There were no major changes to the content of skills evaluations for Fall 2017; however, the grading procedures for skills evaluations were changed to encourage on-time student completion and a greater emphasis on mandatory remediation for weak areas. The changes will be implemented in DHY-221 Clinic IV and the results will be evaluated at the end of the school year.

Changes to course grading rules were implemented for the Spring 2017 Clinic II and IV courses and added to the Fall 2017 Clinic III syllabus in order to reduce the number of incompletes and improve student outcomes. This year we had zero incomplete grades due to unmet course requirements; this was a decrease from the 7 incompletes last year. The changes implemented in grading procedures since last year have been effective.

Overall grade distribution: There was one A, sixteen B's, one C a one F. The grade distribution could be improved with changes to the median performance level in TalEval and by changing the program grading scale to an equal distribution between A, B and C within the 100%-75% range.

As the Clinic III and IV coordinator, I have worked to make changes in the way I interact with my students and faculty in order to be a more level, objective and clear instructor and leader. I had planned to present student expectations and grading requirements in a more clear, objective manner with an emphasis on actions and consequences this semester. I believe that I was moderately successful this semester, and plan to continue working to improve myself. Changes to program policies need to be explored over the summer in order to reduce ambiguity in course syllabi and create a more stringent set of student expectations.

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

Funding for an additional Cavitron power scaler and equipment repairs will need to continue to be requested during the Unit Budget Planning Process. Replacement internet cables will need to be budgeted for, as 2 of the 18 original cables have failed due to wear and tear this semester.

The cables were 4 years old and easily replaced by Marlaina Lantzy and IT personnel. TalEval has been funded through academic year 2018; the subscription was renewed in 2016 for two years as a discounted rate. The renewal fee will need to be requested in next year's Unit Budget Planning.