

Great Falls College MSU

Annual Program Assessment Report

Department/Program: Dental Hygiene

Academic Year Assessed: 2020-2021

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1. Course Reports

Courses scheduled to be reported	Course reports received	Courses scheduled to be reported	Course reports received
DENT 105	Yes	DENT 281	Yes
DENT 102	No	DENT 205	No
DENT 110	No	DENT 280	No
DENT 118	Yes	DENT 151	No
DENT 122	Yes	DENT 232	No
HTH 140	Yes	DENT 220 (Su)	Yes
DENT 260 (Su)	No	DENT 251 (Su)	No
DENT 223 (Su)	No	DENT 165	Received, not scheduled
DENT 120/121	Received, not scheduled	DENT 235	Received, not scheduled
DENT 252	Received, not scheduled	DENT 263	Received, not scheduled

a) Percentage of scheduled course reports received

6/15, 40%

2. Program Outcomes Assessed

Competencies 1, 5, 9, 11, 12, 14,15

3. Course Data and Faculty Perceptions

a) What went well?

- All students were able to complete requirements by end of semester and pass the course.
- Students have a decent understanding of the theory of radiology.
- Students did well on creative final assignment; however, efforts were not as great as the previous year. A more detailed rubric may be needed.
- Students were able to develop enhanced critical thinking skills and demonstrated an ability to address ethical dilemmas using a six-step decision making model learned in class.
- Students were also able to demonstrate comprehensive understanding of Informed consent and HIPAA laws and practices.
- I used a flipped classroom format for this course. This course is intense with a lot of subject matter to cover. By using the flipped classroom all of the necessary subjects were covered,

recorded lectures viewed prior to class allowed students to view at their pace, yet the course work continued on schedule.

- This year my students received the most A's ever in my class
- Students did well/met 75% benchmark on two class assignments that measured comprehensive understanding of material and course objectives: Favorite Lesion and Clinic Lesion Case Stud.
- Additional clinic session due to possibility of CoVid related clinic shut-down helped students stay on track for patient requirements since we did end up closing down clinic for one week.
- Students did well on essay assignments. They were given feedback on one rough draft before submitting a final draft. The opportunity to receive feedback reduced student anxiety about instructor expectations. Students were able to correct or adjust their answer to the essay questions with low-stakes formative assessment. The resulting summative assessment on the final essay reflected the benefits of receiving feedback on the rough draft because all students met benchmark.
- Student feedback was positive. Students felt like they learned a lot and were happy with the design of the course.
- Case study assignments showed marked improvement from the first to the last, demonstrating growth in understanding of task and material (e.g. grade average for Case Study #1 was 90%; Case Study #4 (final case study) grade average was 95.6%).
- Students met benchmark on one-on-one verbal final exam (100% of the class passed at 75% or greater; average grade was 94%).
- Quiz scores improved dramatically. Last year, 44% of students met benchmark (75%) on quizzes. This year, 73% of students met benchmark on quizzes.

b) What might have gone better?

- Three out of 18 students were dependent on patients showing up at last clinic session in order to complete requirements- this was nerve-wracking for both student and instructors.
- There is a disconnect between the lecture and the labs. Students were not able to take what they learned from lecture and apply it to the labs. They lacked knowledge and experience taking radiographs- especially panos.
- Some students still struggle with self-led learning. A more detailed rubric for assignments may be warranted for objectives assignment.
- 62% of students met benchmark (75%) on cumulative final in 2018; just 50% of students met benchmark in 2019. This is not a trend I like to see. I will need to re-assess my teaching and review of key topics/objectives in this course, moving forward.
- Quiz three measured the following objective: Explain the connection between informed consent, disclosure, rights, and duties. Only 10 out of 18 students met benchmark (75% or better) for this quiz. The students did well answering their objectives in the text book for this chapter, using personal examples and demonstrating critical thinking skills. This was the only material I did not assign an additional essay assignment for. I will re-think this next year.
- Active learning in class could have gone better. Since the subject was first covered by a recorded powerpoint lecture prior to class, in class activities were meant to further the learning and delve

deeper. Some days and subjects worked well, other days and subjects needed more refinement to further the learning.

- Student Choice Assignment was difficult to assess, did not have a rubric, and did not measure course objective understanding clearly. Also, the Choice Assignment was weighted too heavily compared to quizzes and other assignments, potentially giving students a false sense of how well they were doing in class and understanding the material.
- Even though we added clinic sessions, six students still ended the semester with an incomplete status (mostly because they were unable to finish a medically compromised requirement, again, due to CoVid).

4. Student Learning

a) Areas of strength demonstrated in student learning

- Very few no-patient days were recorded this semester compared to previous DENT 281 semesters, even during a pandemic! Students worked very hard to always have a patient in their chair.
- Students understand by DENT 125 how to properly mount images, solve simple issue with computer software, how to correctly set up unit to expose including RINN holder.
- Students did well answering objectives; however, at times it was obvious they were just re-phrasing what they read in the text and not really understanding the material. A different assignment, or instructor-generated objectives may be needed.
- Students became better critical thinkers by the end of the semester. They also demonstrated a better understanding of writing essays using APA formatting for backing up their work/ideas with outside resources.
- Students were allowed quiz corrections after lecture on the weekly quizzes. The corrections were formatted in such a way that the student had to list wrong answer and why it was wrong then where they located the correct answer. 1/2 point was returned to score for corrected answer. This really helped the students learn the subject correctly.
- I was more transparent with expectations for the Clinic Lesion Case Study assignment than the previous year. I also updated my rubric to include clearer language. I think this helped students feel better prepared because their presentations were phenomenal. Class avg on Case Study in 2019: 93.56% (94% of the students made benchmark). Class avg on Case Study in 2020: 96.6% (100% of the students made benchmark).
- The essays, when tied to learning objectives, seemed to increase understanding of material because corresponding quiz scores were high (Essay #1 shared learning objectives with Quiz 1, Quiz 1 average was: 84.61% with one student failing. Essay #2 shared learning objectives with Quiz 2, Quiz 2 average was: 90.32% with 100% of the class meeting benchmark (none failed)).
- Students showed growth in communication abilities with their case study assignments. With feedback from the instructor and peer discussion about examples shared in class, students were able to make adjustments to initial case studies, demonstrating marked improvement in assessment by the final case study project.

- Students are asked to answer Q&A questions from their text. They must provide the question, answer, and rationale in their own words. Students struggled with this assignment somewhat in the beginning because about 50% did not understand what I was asking of them, or they lacked ability to critically think. I gave detailed feedback for first three submissions. After that, they were on their own. Their ability to critically think and answer questions thoroughly improved markedly as the semester progressed.

b) Opportunities to improve student learning

- Re-evaluate assessment tools. Students are assessed many ways, which can be time-consuming for instructors and reduce opportunities for individual instruction/attention with students
- Students cannot correct errors, also very uncomfortable with taking a pano on a patient because have no experiences.
- Students are always asked to compete assignments using critical thinking skills and answering prompts in their own words. Students met benchmark with objectives assignments; however, this learning did not translate well to test scores. It may be necessary to research different types of assignments for assessing learning in future classes.
- The second segment of the course deeply reviews dental anatomy. The test scores were lower on this section, the department informed me this is a typical result. I need to make lectures more clear in this area next year.
- Need to reinforce procedure for retakes better.
- As the instructor, I can show examples of previous case study assignments (from previous semesters) on day one, giving students a clearer idea of what is expected. I can also update my rubric on the assignment and check for understanding on day one when we go over it together as a class.

d) Planned changes and measures of success

Course	Planned Change	Reason for Change	Success Measure
DENT 105	I may consider adding one more essay, covering material on Informed Consent.	This might help students better understand the following objective: Explain the connection between informed consent, disclosure, rights, and duties.	Students will meet benchmark, 75% or better, on their essay and on their quiz #3.
DENT 118	more closely review resource material test banks for accuracy	test bank questions used for quizzes were at times inaccurate or vague	less debate about correct answer in future
	refine Rubrics for projects	rubrics used were not specific enough, students in class and course evaluations comments	grading projects with better Rubrics will be easier to grade, and student push back will diminish

	Post Rubric at assigned project time	I had to create the course content this year as well as the rubrics, not all rubrics were ready at assignment time, student feedback included frustration in this area	
	Final group presentations I will lecture on as well, have the group presentation be the learning review	initially the group presentation has the students "lecture" on one of the last 3 topics, student comment and feedback indicated they only learned the topic they were assigned and only the part of their topic they had to present.	better test and quiz scores within these last 3 topics.
	Projects time management review, I plan on giving an expected amount of time to spend on each of the projects.	feed back on projects was way too much time spent on way too little learning. Some students put 10+ hours on something that really only should have been about 2 hours of work.	Discussions on time actually spent on projects will be more realistic.
DENT 120/121	Students can take a pano on a patient, recognize error and correct it. Maybe have students make a resource to help with errors on panos	Student/graduate feedback and employer feedback	Have students write a reflection on experience in Ortho office taking panos that also evaluates errors and corrections
	In DENT 125 focus knowledge on specific points need to know, relate to practice and try to reduce amount of topics each week.	Students seemed overwhelmed, uninterested in course, unable to improve errors.	Higher average scores on quizzes
	Have students take FMX on each other end of DENT 121 and focus on error correction in DENT 122. Maybe add one more community patient in the spring??	Students unable to correct errors and understand concepts to correct errors.	Error and Retake assignment-Spring Higher FMX grade in the Fall
DENT 165	More detailed rubrics for assignments.	Some students are still struggling with assignment directions.	Measure benchmark and add a box in rubric regarding assignment

			directions, forcing students to double check what is expected of them.
	Create additional assignments with questions generated by instructor that better address course objectives stated in syllabus.	Some students would just answer objectives by paraphrasing. High scores on objectives assignments did not translate to high exam scores.	Benchmark will be met for exam scores.
DENT 220	Update case study rubric	Case study #1 grade average lower than case study #4 grade average. Extra time was needed for explaining expectations in class.	Case study #1 will have higher class average (92% benchmark) than last year's average.
	Show example of case study on day one	Case study #1 grade average lower than case study #4 grade average. Extra time was needed for explaining expectations in class.	Case study #1 will have higher class average (92% benchmark) than last year's average.
	Better align quiz questions with specific course objectives- make objectives more transparent.	Quiz grades fell below benchmark	Check new quiz grades against same benchmark as last year's benchmark
DENT 235	Add another Essay assignment with learning objectives that correspond to Quiz #3	Improve Quiz 3 scores and meet benchmark.	100% of the students will pass Quiz 3 at 75% or better.
DENT 252	Re-evaluate assessment tools/methods. For example, evaluate OSCE as a possibility for assessment, instead of multiple clinic skill assessments	Students are assessed many ways, which can be time-consuming for instructors and reduce opportunities for individual instruction/attention with students.	Student wait time for instructor check-off will be reduced, resulting in fewer incompletes at end of semester. Benchmark: 100% of students will complete clinic requirements by end of semester- at minimum NO incompletes will be due to "not enough time" to finish.
DENT 263	Update or eliminate Choice Assignment	Does not measure course learning objectives	If assignment is kept, it will be better aligned with course objectives and meet it's true purpose: helping students better

			prepare for quizzes and exams. Measurement will be benchmark of 75% for 100% of class on quizzes and exams.
DENT 281	Re-evaluate assessment tools/methods. For example, evaluate OSCE as a possibility for assessment, instead of multiple clinic skill assessments	Students are assessed many ways, which can be time-consuming for instructors and reduce opportunities for individual instruction/attention with students.	Student wait time for instructor check-off will be reduced, resulting in fewer last-minute requirement completions at end of semester. Benchmark: 100% of students will complete clinic requirements two weeks before end of semester- at minimum NO incompletes will be due to "not enough time" to finish.
HTH 140	More detailed rubrics for assignments.	Some students are still struggling with assignment directions.	Measure benchmark and add a box in rubric regarding assignment directions, forcing students to double check what is expected of them.

e) Results of previous planned changes

Course	Planned Change	Success Measure	Results
HTH 140	I wanted to highlight quiz questions better that addressed outcomes not met in previous classes better.	benchmark 75%, 100% of class must meet	100% of the class did not meet the quiz score 75% benchmark; however the scores are moving in a positive direction (44% of class met benchmark last year; 73% met benchmark this year).
	Increased transparency in assignment rubric.	Reduced time spent outside of class answering clarifying questions on assignment.	I spent more time explaining expectations and gave examples of assignments completed by former students on day one. This year (2019), students stopped asking clarifying

			<p>questions by week two as they seemed to grasp assignment directions well. In 2018, clarifying questions were continuous throughout the first three to four weeks of the semester.</p>
DENT 122	<p>Re-write specific course objectives, cut down on lab times</p>		<p>Did not re-write the specific course objectives, just reduce the number they write so focus on important part of material. Students did very well on final. Only one person failed the final but she did really well on her quizzes so I am not sure what happened there. Did have students work at own pace with labs, seemed to work ok this year. COVID really made this section of the curriculum challenging to begin with.</p>
DENT 165	<p>Enhance transparency for objectives assignment rubric to encourage more critical thinking.</p>	<p>Benchmark for objectives assignment will be met and/or average grade improved from last semester.</p>	<p>Benchmark met (100% of class met benchmark of 75% or better). Average grade increased: 2020 avg: 98.5% 2021 avg: 99.02%. Exam scores also improved. Midterm exam avg in 2020: 82%; Midterm exam avg in 2021: 90.33%. I will include verbiage in my syllabus for next term regarding consequences of Turnitin Similarity scores above 50% because I still had</p>

			students not using their own words to answer objectives that I needed to address this semester.
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5. College Learning Outcomes Assessed

a) CLOs assessed and tools used

CLOs	Course	Assessment Tools	Rating	Avg Rating
Communication				
Critical Thinking				
Professionalism	DENT 105	Essay #1 and Essay #2	4	

Average assessment of student CLO attainment:

- 4) Exceeded expectations 3) Met expectations
 2) Approaching expectations 1) Did not meet expectations

b) Areas of strength demonstrated in student CLO attainment

Communication

N/A

Critical Thinking

N/A

Professionalism

Ability to demonstrate understanding of objective through clear and comprehensive writing using appropriate APA citations.

c) Opportunities to improve CLO attainment

Communication

N/A

Critical Thinking

N/A

Professionalism

Meet benchmark for quizzes by adding an additional essay.

d) Planned changes to CLO assessment and measures of success

Communication

N/A

Critical Thinking

N/A

Professionalism

N/A

6. Effective Teaching Practices

Practice	Impact on Student Success	Planned Changes

7. Recommendations

Let's talk about an alternative way to report assessment data that better fits with your accreditation requirements. Sounds good. I am still trying to get back into the swing of things prior to COVID-19. We do our assessment review at the end of the semester.

8. Department/Program Reflection and Response

**This section is to be completed by the program/department.*

a) Assessment planning

The curriculum map (alignment of courses to program outcomes & CLOs)

X will be updated this year- already sent to you. I reviewed it and it looks right.

__ will not be updated this year

b) Response to assessment

1. What departmental or program-level changes within the past two years have led to student learning improvements? What was the result of these changes? Please summarize.

- Re-wrote program competencies- measurements more clear and more accurate. We also reduced the number of competencies. These are measured throughout the program when students are ready. Students are aware of importance because emphasized in syllabus. Prompted need to review clinic course outcomes. We are actually going to submit an update for program competencies because we determined two were almost the same and the other one does not fit into our program's scope.
- Split DENT 235 into two separate courses to provide students with ethics at the beginning of the program and the end. Students are more prepared to write papers using their own words. Also

see an ability to critically think earlier in the program. Students are given clear guidelines on HIPPA violations. Are not seeing as many issues concerning ethical decisions in clinic.

2. If other indirect assessment tools are used to recommend departmental or program changes (such as exit surveys, student self-evaluation, employer satisfaction surveys, etc.) please explain how the responses are driving department or program decisions.

We survey graduates. This helps us to determine what services and aids should be in our program. We also make changes to our curriculum based on feedback from students. For example, graduates suggested more time with digital patient management systems. This helped us to determine it was time to go completely paperless in our practice.

3. Based on the information in this report, what has the program/department learned from this assessment period?

We have learned that graduates are using the same equipment as our clinic. We have also learned that students should be encouraged to complete patients faster which is something we are trying to strive for in our clinic.

4. What action(s) will the program/department take to address areas of concern regarding student learning? This might include curricular changes, assessment tool changes, etc.

We are currently working on explicit rubrics for program competencies throughout the program. We also consolidated our clinic syllabi and put the majority of that information in the handbook, so it is the same for each clinic course regardless of instructor. Students can also see how the whole program works regarding grading and expectations. We are also reviewing and re-writing all of the clinic course outcomes to align better with the program outcomes.

5. When will the change(s) be implemented, and how will you know if they are successful?

We plan on submitting the clinic course outcomes this October. We will measure this change by successful pass rates on program outcomes. Also, hopefully less confusion regarding what is expected. We will most likely do an exit interview with senior students.

6. Does your program/department have a forum to discuss student learning data and identify and follow up on action items? Please describe what you currently do or plan to do.

(An example would be a targeted department meeting where you discuss student learning data, decide on an action to improve student learning, then follow up as scheduled, keeping minutes for documentation).

We have department meetings with minutes as well as a log to track what we are doing.

7. What issues regarding student learning assessment should be addressed at the institutional level?

For us this is a hard question because we work so much on our own. I think it would be interesting to compare how students are assessed regarding microbiology and A&P in terms of summative assessment throughout the MUS system. Is that even possible?

c) Support Requests

Nothing, we literally have a brand-new dental clinic.

**Does your department/program need support or resources in any of the following?
Mark any that apply.**

Aligning course outcomes to program outcomes

Aligning courses/programs to College Learning Outcomes

Developing unit level objectives in courses

Assignment redesign

Aligning assignments with program outcomes or College Learning Outcomes

Other (please explain)

I think we are okay right now.