ABSTRACT: I will present an overview of the current state of physics for life science majors at the University of Nebraska at Kearney. We have made no major changes to the class itself yet. We are rather at the assessment stage and are attempting to identify the best path forward. The state of the health science program in general will be described, as will how physics fits into that picture. I will also describe remediation methods that are being utilized. Our current class structure is very traditional, other than the inclusion of peer instruction time. There is also a testing focus that targets both traditional open-ended problems, as well as answering multiple choice questions mixed with explaining their reasoning on conceptual problems.

INTRODUCTION: The health science and biology majors at UNK are both large health programs. A new $19 million health science education complex is under construction. From 2004 to 2012 an average of 19.6% of UNK incoming freshman, which total an average of 1067 students, have been biology or health science majors. Servicing this population HAS to be an important focus for the Physics Department at UNK.

Class Statistics:
Phys 205 (first semester trig-based):
Two lecture sections and three labs are typically offered in the fall semester, with space for 72 students. One lecture and two labs are taught in the spring semester, with space for 48. This is also offered in the summer with one lecture and one lab, allowing for to 24 students. That allows a total enrollment of 144 students per year. Around 80% of these students are pre-health or biology majors.

Phys 206:
•Two lecture sections and three labs are typically offered in the spring semester, with space for 72 students. This is also offered in the summer with one lecture and one lab, allowing for to 24 students. That allows a total enrollment of 96 students per year. The vast majority of these students are pre-health or biology majors.

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CURRENT STATE: At the present time these classes are taught by available staff, with successful teaching of this demographic just one among several factors considered in staffing decisions. As a result this class is taught mostly with traditional lecture. Some faculty place at least some emphasis on integrating MCAT questions from old exams in some fashion. I personally make it a rule to do so, with the additional requirement that the students be able to explain their reasoning on the multiple choice questions.

The lab is also very traditional. I would like to see that change but there are some complications that arise from class enrollment conflicts. We have occasional students that take the calc-based lab while enrolled in the trig-based class, and vice versa, so that they can make the labs fit their schedule. So far we have not found a solution to that problem.

ASSESSMENT: Our main assessment of these classes has come in the form of the annual Health Professional Program Assessment. They track annual acceptance rates into health programs, as well as admissions test data. Much of that tells us only how the overall student has done. For example, that tells us that an average of around 70% of pre-health students that applied for programs in the health field have been accepted into a program.

Since the data do contain performance on admissions exams by subject in at least some of the cases (the MCAT and OAT has that data while the DAT does not), we can use those data to assess our program relative to other departments.

In 1996 physics was clearly the weakest section for our premed majors. There is a large gap in the data, but starting in 2004 and continuing to 2012 the physics scores have been rising. We still lag behind that national average overall, but students accepted to medical school exceeded that average. The Dental Admissions Test suggests that our students are weak in quantitative reasoning, which is a possible symptom of why students are struggling on the physics test. Scores on the OAT were aggregated including results going back to 1997. Physics was again a weak point, but it is less clear how they have done recently due to small number statistics.

CONCLUSIONS AND FUTURE WORK:
We take the results described above as a evidence that we both have work left to do but also that we are making progress. The UNK Physics Department is committed to serving this demographic to the best of our abilities. To that end we hope to incorporate new approaches that we will learn about at this conference. I personally think that may mean more clearly meshing the content of the class with what the students need to know for their careers in the life sciences.