

Assessment Report for Biology and Health Sciences Department (HEALTH SCIENCE MAJOR) 2021-2022 Academic Year

The Biology and Health Sciences faculty held an Assessment Meeting via Teams on May 10, 2022:

- Department faculty who attended the meeting:
 - Adam Schneider
 - Andrea Duina
 - Andrew Schurko
 - J.D. Gantz
 - Jenn Dearlf
 - Matt Moran
 - Maureen McClung

- Department faculty who did not attend the meeting:
 - Laura McDonald (on maternity leave)

The goal of the meeting was to assess the success of the program in meeting the Student Learning Outcome (SLO) 4 from our Assessment Plan – this SLO is:

- *Discuss the ways in which health science professions interface with other disciplines in the liberal arts and various aspects of our society including ethics and governance.”*

To help us assess this, we used the following assessment tools:

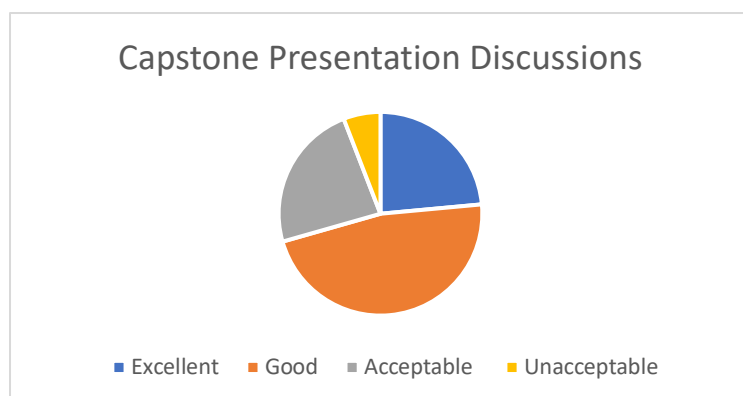
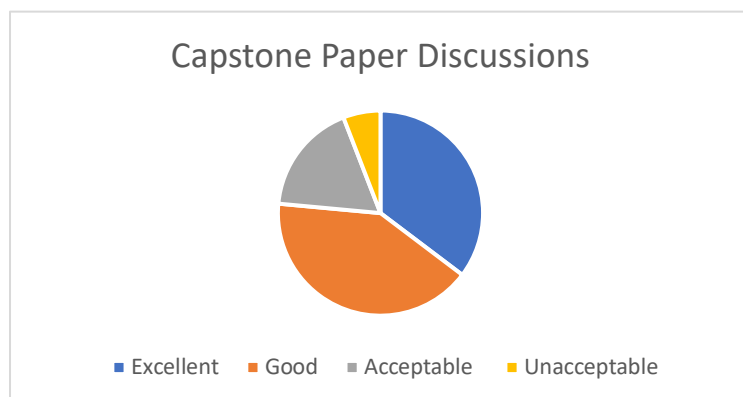
- Direct Assessment Tool:
 - ***Grades on Discussions from Capstone Papers and Presentations that are part of the Health Science Senior Seminar***

- Indirect Assessment Tool:
 - ***Health Science Exit Survey (this is provided to you as a separate attached document)***

Below, are the data on the *Direct Assessment* Tool:

Grades on Discussions from Capstone Papers and Presentations that are part of the Health Science Senior Seminar

For this assessment tool, students are evaluated on the discussion sections from the capstone papers and presentations they develop as part of the HESC senior seminar in which they reflect on how health science professions interface with other aspects of human endeavors. The outcomes are shown in the charts below.



Below, are the data on the *Indirect Assessment Tool*:

Biology Exit Survey

Indirect assessment of SLO4 was carried out through an Exit Survey. This survey has been provided to you along with this report. The outcomes from it are briefly summarized below:

- When Presented with the following statement “*My experience in the HESC major contributed to the development of the following learning goals: Discuss the ways in which health science professions interface with other disciplines in the liberal arts and various aspects of our society including ethics and governance*”
 - 4/7 students Strongly Agreed with it

Hendrix College

Hendrix Health Sciences (HESC) Senior Survey - Program Evaluation

1 - A. Courses and Faculty						
Breadth of curriculum						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	3	42.86%		4.00	
Satisfied	(4)	2	28.57%			
Neither Satisfied nor Dissatisfied	(3)	1	14.29%			
Dissatisfied	(2)	1	14.29%			
Very Dissatisfied	(1)	0	0.00%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	4.00	1.15				

1 - A. Courses and Faculty						
Quality of curriculum						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	2	28.57%		4.14	
Satisfied	(4)	4	57.14%			
Neither Satisfied nor Dissatisfied	(3)	1	14.29%			
Dissatisfied	(2)	0	0.00%			
Very Dissatisfied	(1)	0	0.00%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	4.14	0.69				

1 - A. Courses and Faculty						
Availability of courses						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	0	0.00%		2.86	
Satisfied	(4)	3	42.86%			
Neither Satisfied nor Dissatisfied	(3)	1	14.29%			
Dissatisfied	(2)	2	28.57%			
Very Dissatisfied	(1)	1	14.29%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	2.86	1.21				

1 - A. Courses and Faculty						
Accessibility of faculty						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	4	57.14%		4.57	
Satisfied	(4)	3	42.86%			
Neither Satisfied nor Dissatisfied	(3)	0	0.00%			
Dissatisfied	(2)	0	0.00%			
Very Dissatisfied	(1)	0	0.00%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	4.57	0.53				

Hendrix College

Hendrix Health Sciences (HESC) Senior Survey - Program Evaluation

1 - A. Courses and Faculty						
Quality of instruction						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	3	42.86%		<div style="text-align: center;">4.14</div>	
Satisfied	(4)	3	42.86%			
Neither Satisfied nor Dissatisfied	(3)	0	0.00%			
Dissatisfied	(2)	1	14.29%			
Very Dissatisfied	(1)	0	0.00%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	4.14	1.07				

1 - A. Courses and Faculty						
Preparation for professional school						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	1	14.29%		<div style="text-align: center;">4.00</div>	
Satisfied	(4)	5	71.43%			
Neither Satisfied nor Dissatisfied	(3)	1	14.29%			
Dissatisfied	(2)	0	0.00%			
Very Dissatisfied	(1)	0	0.00%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	4.00	0.58				

1 - A. Courses and Faculty						
Preparation for career						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	1	14.29%		<div style="text-align: center;">4.00</div>	
Satisfied	(4)	5	71.43%			
Neither Satisfied nor Dissatisfied	(3)	1	14.29%			
Dissatisfied	(2)	0	0.00%			
Very Dissatisfied	(1)	0	0.00%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	4.00	0.58				

2 - Do you have any comments or observations about the courses and faculty in the HESC program?	
Response Rate	3/7 (42.86%)
<ul style="list-style-type: none"> • Make more courses accessible both semesters. Offer senior seminar both fall and spring semesters of senior year • Medical terminology is a course that is required for almost all post-graduate programs in the health sciences. Hendrix should consider providing this course for health science majors, as finding another place to take it can be financially and personally challenging and inconvenient. • I wish more kinesiology type classes were offered because the main Electives are either super psychology or biology heavy 	

Hendrix College

Hendrix Health Sciences (HESC) Senior Survey - Program Evaluation

3 - B. Advising						
Availability of advisor						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	4	57.14%		4.43	
Satisfied	(4)	2	28.57%			
Neither Satisfied nor Dissatisfied	(3)	1	14.29%			
Dissatisfied	(2)	0	0.00%			
Very Dissatisfied	(1)	0	0.00%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	4.43	0.79				

3 - B. Advising						
Helpfulness of advisor						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	4	57.14%		4.57	
Satisfied	(4)	3	42.86%			
Neither Satisfied nor Dissatisfied	(3)	0	0.00%			
Dissatisfied	(2)	0	0.00%			
Very Dissatisfied	(1)	0	0.00%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	4.57	0.53				

3 - B. Advising						
Advisor's knowledge of requirements						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	6	85.71%		4.86	
Satisfied	(4)	1	14.29%			
Neither Satisfied nor Dissatisfied	(3)	0	0.00%			
Dissatisfied	(2)	0	0.00%			
Very Dissatisfied	(1)	0	0.00%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	4.86	0.38				

3 - B. Advising						
Advisor's knowledge of my goals						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	5	71.43%		4.71	
Satisfied	(4)	2	28.57%			
Neither Satisfied nor Dissatisfied	(3)	0	0.00%			
Dissatisfied	(2)	0	0.00%			
Very Dissatisfied	(1)	0	0.00%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	4.71	0.49				

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Hendrix Health Sciences (HESC) Senior Survey - Program Evaluation

3 - B. Advising						
Professional school advising						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	3	42.86%		<div style="text-align: center;">4.00</div>	
Satisfied	(4)	1	14.29%			
Neither Satisfied nor Dissatisfied	(3)	3	42.86%			
Dissatisfied	(2)	0	0.00%			
Very Dissatisfied	(1)	0	0.00%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	4.00	1.00				

3 - B. Advising						
Career advising						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	4	57.14%		<div style="text-align: center;">4.67</div>	
Satisfied	(4)	2	28.57%			
Neither Satisfied nor Dissatisfied	(3)	0	0.00%			
Dissatisfied	(2)	0	0.00%			
Very Dissatisfied	(1)	0	0.00%			
N/A	(0)	1	14.29%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	4.67	0.52				

4 - Do you have any comments or observations about advising in the HESC program?	
Response Rate	0/7 (0%)

5 - C. Internship/Research						
Availability of internship/research opportunities						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	3	42.86%		<div style="text-align: center;">3.86</div>	
Satisfied	(4)	2	28.57%			
Neither Satisfied nor Dissatisfied	(3)	1	14.29%			
Dissatisfied	(2)	0	0.00%			
Very Dissatisfied	(1)	1	14.29%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	3.86	1.46				

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Hendrix Health Sciences (HESC) Senior Survey - Program Evaluation

5 - C. Internship/Research						
Guidance for finding internship/research opportunities						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	3	42.86%		<div style="text-align: center;">3.71</div>	
Satisfied	(4)	1	14.29%			
Neither Satisfied nor Dissatisfied	(3)	1	14.29%			
Dissatisfied	(2)	2	28.57%			
Very Dissatisfied	(1)	0	0.00%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	3.71	1.38				

6 - C. Internship/Research						
The internship/research was an important part of your major						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Strongly Agree	(1)	3	42.86%		<div style="text-align: center;">1.71</div>	
Agree	(2)	3	42.86%			
Neither Agree nor Disagree	(3)	1	14.29%			
Disagree	(4)	0	0.00%			
Strongly Disagree	(5)	0	0.00%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	1.71	0.76				

7 - Do you have any comments or observations about internship/research in the HESC program?	
Response Rate	0/7 (0%)

8 - D. Overall						
Overall quality of HESC program						
Response Option	Weight	Frequency	Percent	Percent Responses	Means	
Very Satisfied	(5)	4	57.14%		<div style="text-align: center;">4.43</div>	
Satisfied	(4)	2	28.57%			
Neither Satisfied nor Dissatisfied	(3)	1	14.29%			
Dissatisfied	(2)	0	0.00%			
Very Dissatisfied	(1)	0	0.00%			
N/A	(0)	0	0.00%			
				0 25 50 75 100	Question	
Response Rate	Mean	STD				
7/7 (100%)	4.43	0.79				

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Hendrix Health Sciences (HESC) Senior Survey - Program Evaluation

9 - A. My experience in the HESC major contributed to the development of the following learning goals:

Describe, interpret, and integrate fundamental principles that underly the health sciences including human anatomy and physiology, human behavior and development, common diseases and disorders, and statistics.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Agree	(5)	4	57.14%		4.57
Agree	(4)	3	42.86%		
Neither Agree nor Disagree	(3)	0	0.00%		
Disagree	(2)	0	0.00%		
Strongly Disagree	(1)	0	0.00%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
7/7 (100%)	4.57	0.53			

9 - A. My experience in the HESC major contributed to the development of the following learning goals:

Connect theory from coursework with practice from a hands-on, in-depth experience in the health science field of their choice.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Agree	(5)	4	57.14%		4.43
Agree	(4)	2	28.57%		
Neither Agree nor Disagree	(3)	1	14.29%		
Disagree	(2)	0	0.00%		
Strongly Disagree	(1)	0	0.00%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
7/7 (100%)	4.43	0.79			

9 - A. My experience in the HESC major contributed to the development of the following learning goals:

Develop professional competencies necessary to prepare for post-graduate pursuits including analytical, written and oral communication, interview, and patient care skills.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Agree	(5)	4	57.14%		4.57
Agree	(4)	3	42.86%		
Neither Agree nor Disagree	(3)	0	0.00%		
Disagree	(2)	0	0.00%		
Strongly Disagree	(1)	0	0.00%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
7/7 (100%)	4.57	0.53			

9 - A. My experience in the HESC major contributed to the development of the following learning goals:

Discuss the ways in which health science professions interface with other disciplines in the liberal arts and various aspects of our society including ethics and governance.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Agree	(5)	4	57.14%		4.57
Agree	(4)	3	42.86%		
Neither Agree nor Disagree	(3)	0	0.00%		
Disagree	(2)	0	0.00%		
Strongly Disagree	(1)	0	0.00%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
7/7 (100%)	4.57	0.53			

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Hendrix Health Sciences (HESC) Senior Survey - Program Evaluation

10 - In a few words, elaborate on how your experience in the department has helped you assess ways in which the health science professions interface with other disciplines in the liberal arts and various aspects of our society including ethics and governance.

Response Rate 6/7 (85.71%)

- My experience has given me a well rounded education and confidence to approach anything with knowledge of the scientific and ethical perspectives.
- My internship provided me with real-world experience of how the health care world intersects with ethics and government. This is an important idea for all health care professionals to understand. Additionally, in Anatomy and Physiology, we often read case studies, teaching about patient care and interaction. Finally, some of my health science courses have introduced the idea that negative actions of health care professionals can cause patients to not seek care when needed. It is important to be aware of this as a health care professional and put your patients first, so they continue to seek the care that they need.
- I thought health psychology was a very useful intersection and practical application of future career skills and patient interaction
- Being a double major in psychology helped me to understand ethics and also socioeconomic disadvantages in the Healthcare system and how the current healthcare system basically sets us up for failure.
- I was given the opportunity to focus in biology chemistry and psychology, I chose to focus in biology and psychology which I believe has set me up in the best way possible for the healthcare system or the human services system.
- Health Psychology was the course that I felt really showed the correlations between health sciences and liberal arts disciplines.

11 - A. What do you think are the strengths of the HESC major, as it is presently constructed?

Response Rate 5/7 (71.43%)

- Professors, Internships,
- I think a strength of the HESC major is the variety of courses that you can take to achieve major credit. Psychology, biology, and chemistry courses all count towards the major, so students can take whichever classes spark their interest. This means that a health science major can look a lot differently for different people with a wide variety of courses. I believe this is a strength because it reflects how the health care field looks in the real world. There are so many different avenues that a person can take in the world of health care, and the Hendrix health science major allows students to explore all of those facets of health care.
- The professors
- I believe the strengths of health science major is that you can choose your focus for what you decide to do after graduation. Health science is a great major to continue into a masters or graduate program but it is also a great major is a bachelors degree
- We are able to have a variety of courses that prepare us for different career paths. I also feel that our courses are quite difficult, but this better prepares us for future schooling and careers.

12 - B. What do you perceive as weaknesses in the HESC major, as it is presently constructed?

Response Rate 6/7 (85.71%)

- Class availability
- One weakness is the unavailability of medical terminology. This is an extremely important course that is required for almost all graduate programs in the health sciences. Additionally, when I expressed that I needed this course for my graduate program and asked for guidance about where to go to take this course, I did not receive much help. I think that Hendrix should consider offering this valuable course (even possibly as a .25 credit opportunity), or at the very least know where to instruct students to go to get this prerequisite that they need. Secondly, I believe that the health science senior seminar should be offered in the fall semester of senior year as opposed to the spring. A lot of the information learned in senior seminar, such as resume and interview skills, are extremely helpful for students who are applying to graduate schools. However, by the time the spring rolls around, students have already applied to graduate schools, and the information is less useful to them at this point (except for those students who are taking gap years). I think a lot of students would find it useful to learn these skills in the fall semester so they can apply it to their graduate school applications.
- The availability and range of specifically health related courses could be improved. Also a lot of the skills learned in the senior seminar would have been more helpful junior year because a lot of us had already gone through interviews and gotten accepted to grad schools
- Lack of courses across multiple areas of health science
- I don't think there is as much information on the (Hendrix) website as there is for other majors and I don't believe that many people know as much about health science as they do about other majors. I think it's important for students to know what they can do with health science without going to a post graduate program
- I think that overall everything was great, but I believe that regarding the preparation for professional school and career, it would be more beneficial for many of the students to have our Health Science Seminar class a semester or two earlier. There is a lot of beneficial information learned regarding interviews, resumes, and other stuff regarding school and career prep, but many of us had already completed our school applications and interviews by the time we took this course in our last semester at Hendrix.

13 - C. Do you have any final comments or observations about your experience as a HESC major at Hendrix?

Response Rate 4/7 (57.14%)

- I double majored (Neuroscience), so making the senior seminar available in the fall semester as well would have been so helpful.
- I have really enjoyed my experience as a health science major at Hendrix! The faculty are absolutely wonderful and have given me so many opportunities for success. I will take what I have learned from my time in this department on with me in my future career in the health sciences! Thank you so much for everything!!
- I came and wanting to do health science and I stayed with it all four years I had a great experience with it even though I had my strength and weaknesses
- na

14 - Gender:Race:Overall GPA Range: 2.0-2.5 2.5-3.0 3.0-3.5 3.5-4.0

Response Rate 6/7 (85.71%)

- Female Caucasian 3.0-3.5
- Gender: cis woman Race: white Overall GPA range: 3.5-4.0
- Female, white, 3.5-4.0
- 4.0
- 3.0-3.5
- Female White 3.0-3.5

Hendrix College
Hendrix Health Sciences (HESC) Senior Survey - Program Evaluation

15 - Are you a first generation college student?

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Yes	(1)	1	14.29%		1.86
No	(2)	6	85.71%		
Prefer Not to Answer	(3)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
7/7 (100%)	1.86	0.38			

16 - Are you a member of the LGBTQ community?

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Yes	(1)	0	0.00%		2.29
No	(2)	5	71.43%		
Prefer Not to Answer	(3)	2	28.57%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
7/7 (100%)	2.29	0.49			

17 - Think of the rungs of a ladder as representing where people stand in the United States. At the top of the ladder are the people who are the best off—those who have the most money, etc. At the bottom are the people who are the worst off—who have the least money, etc. Please choose a number representing the rung where you stand relative to other people in the United States.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
5	(5)	2	28.57%		6.57
6	(6)	1	14.29%		
7	(7)	3	42.86%		
9	(9)	1	14.29%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
7/7 (100%)	6.57	1.40			

- 3/7 students Agreed with it
-
- Students were also asked to elaborate on SLO4 in an open-response format. As can be seen in the survey, student responses were very positive, with several reporting feeling well-rounded and able to make connections between the health care professions and other human endeavors, including ethics, government, and psychology.

Reflection of faculty members on SLO4 outcomes

The BIOL/HESC department faculty found the outcomes from this assessment (both direct and indirect) as positive and as evidence that we are meeting the Student Learning Outcome quite well. The answers from the open response question on the Exit Survey was particularly revealing in that they showed that students feel that their education has contributed to their ability to make connections between their major and other disciplines.

Additional notes on SLO4 Assessment

- The current Assessment Plan for SLO4 includes hosting a senior dinner and developing an assessment rubric following conversations with students. We decided to remove this tool due to our limited time and resources. As the HESC major continues to develop, we hope to re-incorporate this in our assessment plan in the future. We will work in the fall to revise the Assessment Plan to reflect this change.
- The response rates on the Exit Survey were a bit low (7 out of 17 graduating seniors) – in future years, we plan to incorporate the Exit Survey into senior seminar in order to increase participation.