

Annual Report for Assessment of Outcomes 2012-13

Subject Area Committee Name: Biology

Contact person: Josephine Pino

For LDC/DE: Core outcome(s) assessed: Professional Competence

For CTE: Degree or certificate* assessed: _____

*please attach a table showing the alignment of the degree or certificate outcomes with the College Core Outcomes

Please address the questions below and
send to learningassessment@pcc.edu by **June 21, 2013** with Annual Report in the subject line

During Academic Year 2011-2012 The Biology SAC assessed the college core outcome of Self Reflection. The action plan from that assessment was to bring the results to the full SAC , discuss what the SAC thinks self reflection should involve and formulate a plan of how to incorporate more self reflection in our courses. Unfortunately the SAC did not follow through with that plan.

During Academic Year 2012-2013 the Biology SAC chose to assess the college core outcome of Professional Competence. As a lower division transfer SAC this presented a bit of a challenge for us as the courses we teach do not directly lead to a profession. Since many of our courses are required for students in PCC allied health and engineering programs we decided to assess how well our Introduction to Human Anatomy & Physiology (BI 121/122) course prepared students for the materials presented in their programs. Those programs that require BI 121/122 are Medical Assisting, Ophthalmic Medical Technology, Medical Laboratory Technology, and Biomedical Engineering Technology. We believe that if we are providing students with a course that will help them be successful in their program then we were aiding in the development of their professional competence.

We created a survey to assess how well BI 121/122 prepared students for the work in their allied health and engineering program. The questions were designed to determine how well we addressed the college and course outcomes. This was an indirect assessment as we were asking for the student's perception of how well our course prepared them for the content of their program. We chose this form of assessment because BI 121/122 provides students with information that would be used throughout their program. We could not identify discrete activities or products from the allied health and engineering programs that would give us a full direct assessment. Also, since each program teaches different material we felt a survey of perception was the best way to capture feedback from all programs.

We surveyed all students in the final term of Medical Assisting, Ophthalmic Medical Technology, Medical Laboratory Technology, and Biomedical Engineering Technology. Below is the survey students completed.

BI 121/122 Assessment of Core Outcome: Professional Competence

The Biology SAC appreciates your time and assistance in the assessment of this core college outcome. Please answer questions on both sides of this page.

Which program are you completing? _____

	Cascade	Sylvania	Rock Creek
Where did you take BI 121?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Where did you take BI 122?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please rank the following statements about your experience during BI 121/122 (Human Anatomy and Physiology) or since completing BI 121/122.

1. During BI 121/122, I was trained to successfully use laboratory equipment, e.g., microscopes.

Strongly Agree Agree Neutral Disagree Strongly Disagree NA

2. Since taking BI 121/122, I am able to access and use scientific literature beyond the textbook.

Strongly Agree Agree Neutral Disagree Strongly Disagree NA

3. BI 121/122 provided basic terminology and knowledge that aided me in the understanding of concepts presented in my professional program.

Strongly Agree Agree Neutral Disagree Strongly Disagree NA

4. BI 121/122 encouraged collaboration in problem-solving.

Strongly Agree Agree Neutral Disagree Strongly Disagree NA

5. BI 121/122 deepened my knowledge of a particular concept or topic through completion of a class project or presentation.

Strongly Agree Agree Neutral Disagree Strongly Disagree NA

6. BI 121/122 expanded my knowledge and understanding of the human body.

Strongly Agree Agree Neutral Disagree Strongly Disagree NA

7. Since taking BI 121/122, I feel more confident researching and presenting information in a public forum.

Strongly Agree Agree Neutral Disagree Strongly Disagree NA

8. I transferred concepts and skills gained in BI 121/122 to my current program.

Strongly Agree Agree Neutral Disagree Strongly Disagree NA

9. The knowledge gained in BI 121/122 has aided my success in my current program.

Strongly Agree Agree Neutral Disagree Strongly Disagree NA

10. I feel confident discussing concepts learned in 121/122 with others

Strongly Agree Agree Neutral Disagree Strongly Disagree NA

Are there any specific concepts, topics or skills related to Human Anatomy & Physiology that you felt were not sufficiently covered in 121/122 that would have benefitted you in your program? If so, please list below.

The data were compiled and analyzed by a single individual. The raw data are included in Appendix A. Because of the nature of the survey, subjective bias could not be a factor. Figure 1 shows the average scores of students in each program. We felt it was important to separate the programs to determine if we were addressing the needs of all students required to take BI 121/122. Figures 2 and 3 demonstrate that BI 121/122 were helpful for students' entire programs.

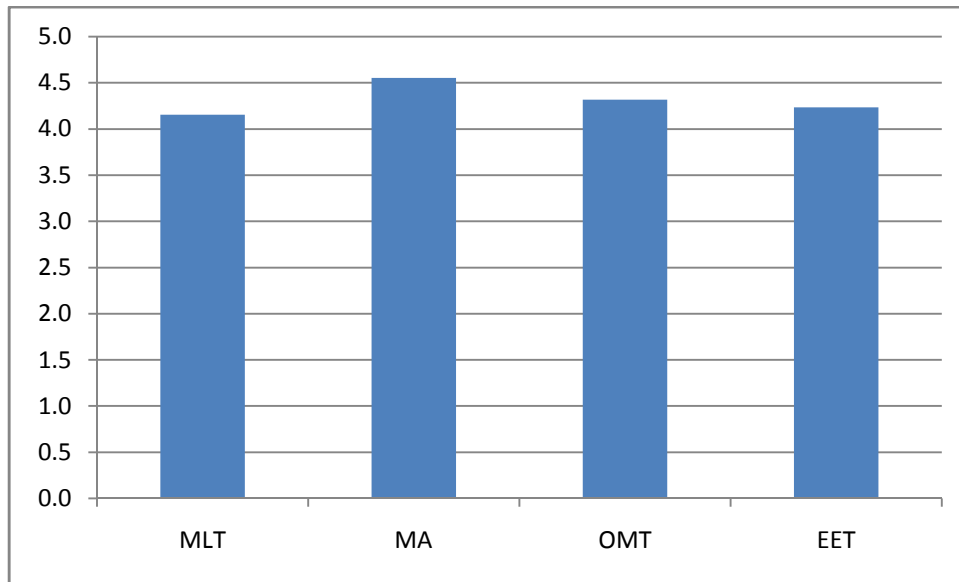


Figure 1. Average value for all questions, separated by professional program (MLT = Medical Lab Technician, MA = Medical Assisting, OMT = Ophthalmic Medical Technology, EET = Biomedical Engineering Technology)

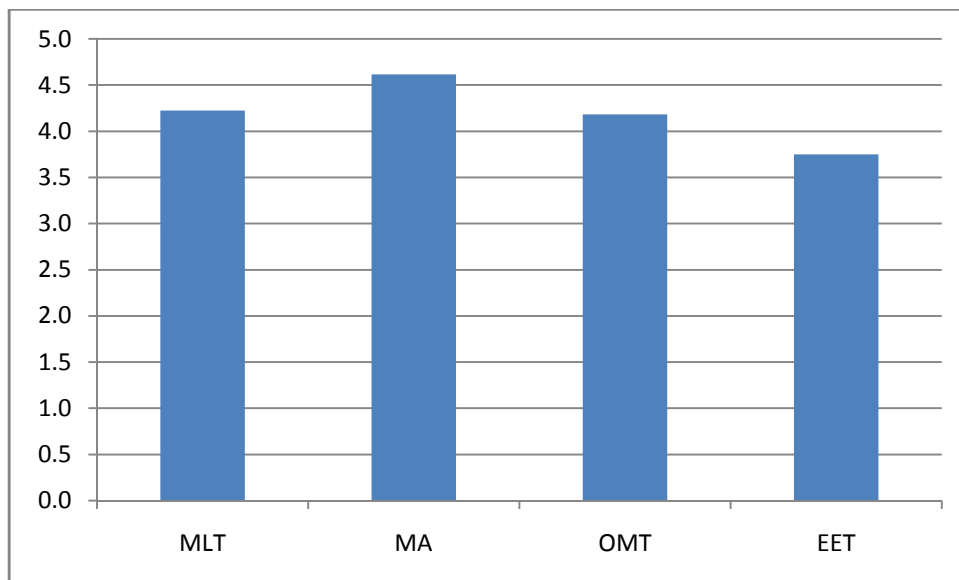


Figure 2. Average values for Question 8: I transferred concepts and skills gained in BI 121/122 to my current program. (MLT = Medical Lab Technician, MA = Medical Assisting, OMT = Ophthalmic Medical Technology, EET = Biomedical Engineering Technology)

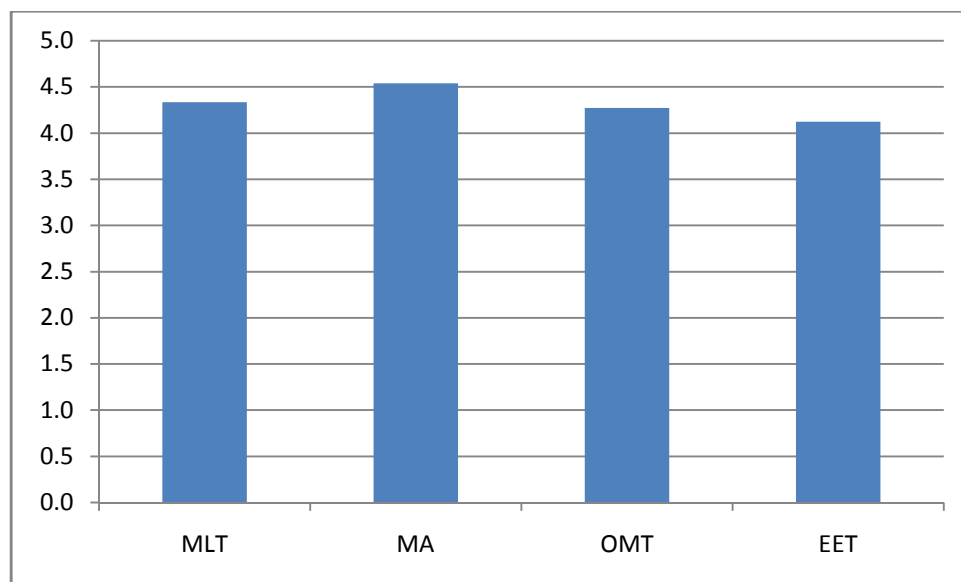


Figure 3. Average values for Question 9: The knowledge gained in BI 121/122 has aided my success in my current program. (MLT = Medical Lab Technician, MA = Medical Assisting, OMT = Ophthalmic Medical Technology, EET = Biomedical Engineering Technology)

Across the board students in all programs agreed/strongly agreed that BI 121/122 provided knowledge that they could transfer to their program and the material helped them be successful in their program. Medical Assisting students as a group ranked our course slightly higher than other programs. Our assumption is, that of the programs listed, Medical Assisting is the only program that involves all body systems in their studies. The other programs are more specific and thus students may find portions of the material presented in BI 121/122 irrelevant to their profession.

At the end of our survey, we asked students to list any specific topics they felt were not adequately covered in BI 121/122 that would be helpful in their programs. We did receive several suggestions from students. The results from this survey will be shared with all BI 121/122 instructors and the instructors will be encouraged to incorporate the student suggestions in future BI 121/122 offerings.

The assessment survey we created successfully gave us the desired student feedback. This is a survey that could be used in other courses (e.g. BI 231-233 or BI 234) which also are required for professional programs. Although the information gathered in this survey is a useful starting point, future assessment of this outcome could possibly be a direct assessment. The Biology SAC could work with instructors in the professional programs to identify program specifics that we could measure to gauge how well BI 121/122 has

Appendix A: Results from Student Survey

	Program	Campus	121	122	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
1	MLT	C	C	C	4	3	5	5	2	4	3	4	4	4
2	MLT	C	C	C	4	4	5	4	5	5	4	5	5	5
3	MLT	C	C	C	5	5	5	4	5	5	5	5	5	5
4	MLT	C	C	C	4	4	4	4	4	4	4	4	4	4
5	MLT	C	S	S	3	4	4	4	4	4	4	4	4	4
6	MLT	C	C	C	4	4	4	4	4	5	4	4	5	4
7	MLT	C	S	S	5	3	5	4	5	5	5	5	5	5
8	MLT	C	C	C	4	4	4	2	2	4	4	3	3	3
9	MLT	C	C	C			4	4	4	5	3	4	4	4
1	MA	C	C	C	5	5	5	5	5	5	5	5	5	5
2	MA	C	S	S	5	4	5	4	5	5	4	5	5	4
3	MA	C	C	C	5	5	5	5	5	5	5	5	5	4
4	MA	C	S	R	3	5	5	5	5	5	5	5	5	4
5	MA	C	S	S	5	5	4	4	4	5	5	4	4	4
6	MA	C	C	C	5	5	5	5	5	5	5	5	5	5
7	MA	C	C	C	4	5	5	5	5	5	5	5	5	5
8	MA	C	S	C	4	3	4	4	4	4	3	4	4	4
9	MA	C	S	S	5	5	4	4	4	4	4	4	4	4
10	MA	C	C	C	5	5	5	5	5	5	4	5	5	5
11	MA	C		S	5	5	5	5	4	4	4	4	3	4
12	MA	C	R	R	5	5	5	3	5	5	3	5	5	5
13	MA	C	S	S	4	4	4	3	4	4	4	4	4	4
1	OMT	C	C	C	3	4	4	3	4	4	4	4	4	4
2	OMT	C	S	C	5	2	5	5	5	5	5	5	5	5
3	OMT	C	C	C	4	4	2	4	4	4	4	3	3	4
4	OMT	C	C	C	4	4	4	4	4	5	4	4	4	4
5	OMT	C	C	C	5	5	5	5	5	5	4	4	4	4
6	OMT	C	C	C	4	4	4	4	4	4	4	4	4	3
7	OMT	C	C	C	5	5	5	5	5	5	5	5	5	5
8	OMT	C	C	C	5	5	5	5	5	5	5	5	5	5
9	OMT	C	S	C	5	4	4	4	5	5	4	4	4	4
10	OMT	C	R	R	5	4	5	3	5	5	4	4	5	4
1	EET	S	S	S	4	4	4	3	5	5	4	4	4	4
2	EET	S	C	C	5	5	5	4	5	5	3	4	5	4
3	EET	S	S	S	5	4	5	6	4	5	4	4	5	4
4	EET	S	S	C	5	5	5	5	5	5				
5	EET	S	S	S	4	4	3	3	4	4	2	2	2	4
6	EET	S	C	S	4	4	5	5	5	5	4	5	5	5
7	EET	S	S		4	4	5	4	3	5	3	4	4	5
9	EET	S	S	R	4	3	5	4	5	5	3	4	4	5

