

Assessment Report for BCMB Program 2019-2020 Academic Year

The BCMB Program faculty held a Teams virtual session on May 14, 2020 to assess the success of the program in meeting the following BCMB Learning Goals:

- *Describe, interpret, and integrate foundational and core concepts in the discipline.*
- *Conduct appropriate scientific literature and database searches.*
- *Develop hypotheses and propose appropriate experiments to test them.*

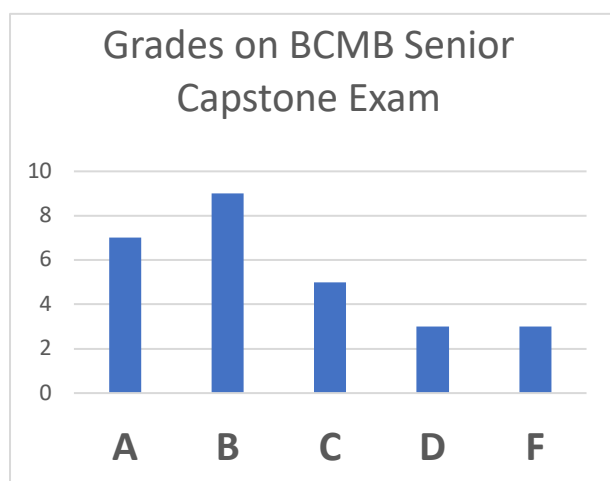
To help us assess these, we used the following assessment tools:

- Direct Assessment Tools:
 - ***Grades on Senior Capstone Exams***
 - ***Rubrics and Grades for Final Research Reports***
 - ***Grades on Oral Research Presentations at BCMB Senior Seminar***
- Indirect Assessment Tool:
 - ***Senior Exit Survey (this is provided to you as a separate attached document)***

Below, are the data for each of the *Direct Assessment Tools*.

Grades on Senior Capstone Exams

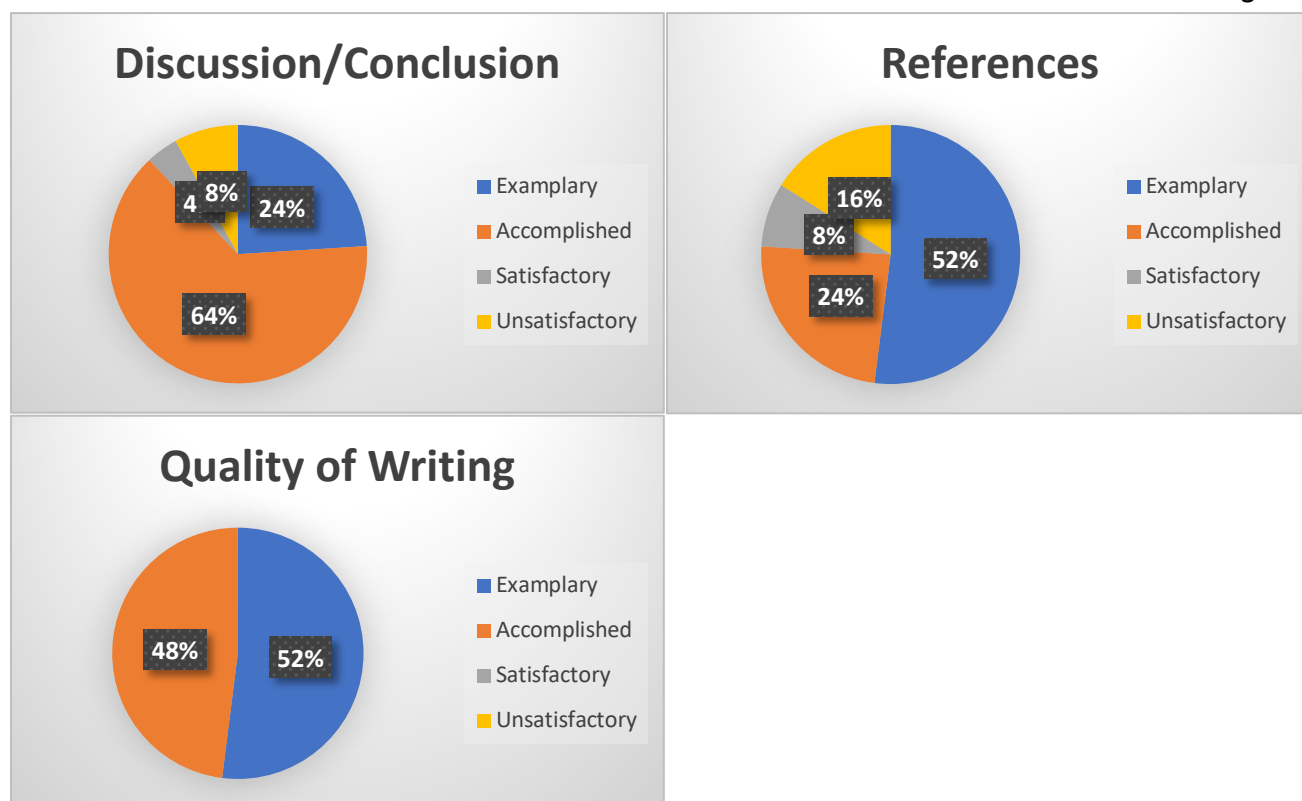
The Senior Capstone Exam is a comprehensive exam that assesses knowledge across the BCMB curriculum. The grade distribution on the exams (a total of 27) after curving is shown below:



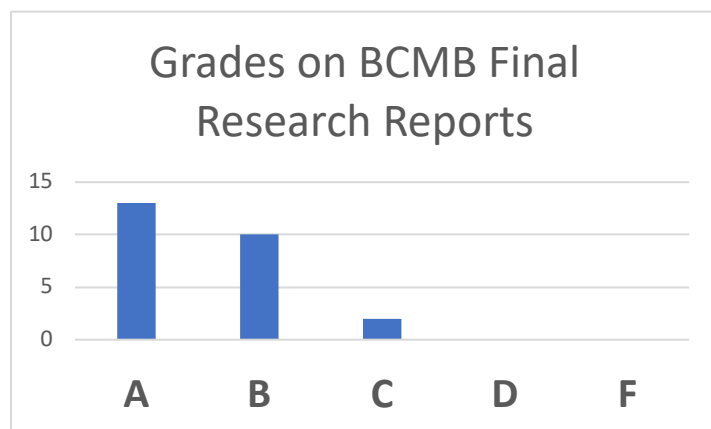
Rubrics and Grades for Final Research Reports

The Final Research Reports are based on the research projects students were involved in as part of the research requirement for the BCMB major. The reports were graded using a rubric addressing proficiency in each of nine different categories. The charts below show the distribution of the proficiency levels for each category (a total of 25 rubrics were assessed):



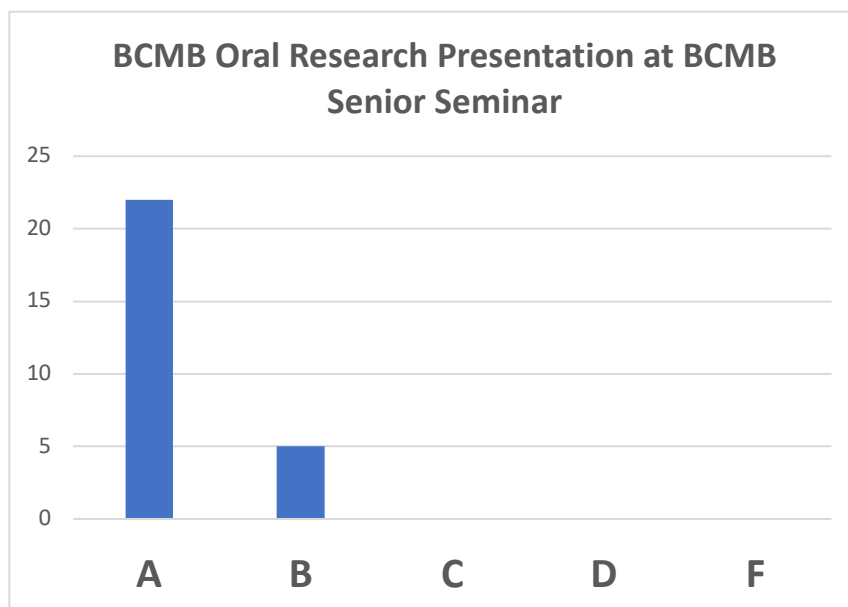


The overall grade distribution on the reports (a total of 25) is shown below:



Grades on Oral Research Presentations at BCMB Senior Seminar

For the Oral Research Presentation at BCMB Senior Seminar, students present the research they have done in the context of the BCMB research requirement to their peers and a few BCMB faculty members. The grade distribution on these presentations (a total of 27) is shown below:



Reflections by BCMB Faculty on the Assessment Data

Overall, the BCMB faculty viewed the student outcomes on the different assessment tools as very positive and as indications that our students are receiving a high-quality education through our program. Thoughts on each of the learning goals, including ways in which we can make improvements on them, are presented below:

1. To better assess the **first learning goal** (*Describe, interpret, and integrate foundational and core concepts in the discipline*), we thought it would be a good idea if in the future we categorize each question on the Capstone Exam based on the Bloom's Taxonomy, and then assess the student's outcomes in each of these categories. We plan to carry out this analysis starting next year. The Indirect Assessment tool (Senior Exit Survey) indicates that, on average, the students perceive themselves as having achieved a high level of proficiency in developing the skills associated with this learning goal (4.50 average on a 5-point scale, see Senior Exit Survey, first question on Item 5).

2. When considering the **second learning goal** (*Conduct appropriate scientific literature and database searches*), the data seem to indicate that we could do a better job helping our students develop literature and database search skills (see the “References” category in the Final Research Report rubric summary). We also realized that whereas some of our classes do engage students in literature and database searches, we could do a better job in being more intentional about developing these skills. Moving forward, we plan to incorporate learning modules in the laboratory sections of our General Chemistry and Genetics courses dedicated to literature and database searches. The Indirect Assessment tool (Senior Exit Survey) indicates that, on average, the students perceive themselves as having achieved a high level of proficiency in developing the skills associated with this learning goal (4.31 average on a 5-point scale, see Senior Exit Survey, second question on Item 5).
3. We then moved on to consider the **third learning goal** (*Develop hypotheses and propose appropriate experiments to test them*). Through their research experiences, students have the opportunity to learn how hypothesis are generated and the different strategies that can be used to address them. However, we realized that it would be helpful for future assessments if we conducted a survey of our teaching labs to determine which ones require students to come up with their own hypotheses and develop experimental designs to address them. We plan to conduct this survey next year and to use that in future assessments. Finally, we agreed that determining how many students present their research at scientific meetings would also be a helpful tool to assess this learning goal since part of most presentations include presentation of hypotheses and experimental approach to address them. The Indirect Assessment tool (Senior Exit Survey) indicates that, on average, the students perceive themselves as having achieved a high level of proficiency in developing the skills associated with this learning goal (4.31 average on a 5-point scale, see Senior Exit Survey, third question on Item 5).
4. As a final point, since next year we will be working on redesigning the BCMB Senior Seminar course from a non-credit bearing course to a credit bearing one, we will consider incorporating elements to the course to further develop the skills indicated above (*i.e.*, literature and database searches and hypothesis development and testing.)

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201920 BCMB Senior Survey

1 - A. Courses and Faculty

Breadth of curriculum

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.38
Dissatisfied	(2)	0	0.00%		
Neither Satisfied nor Dissatisfied	(3)	1	6.25%		
Satisfied	(4)	8	50.00%		
Very Satisfied	(5)	7	43.75%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.38	0.62			

1 - A. Courses and Faculty

Quality of curriculum

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.63
Dissatisfied	(2)	0	0.00%		
Neither Satisfied nor Dissatisfied	(3)	0	0.00%		
Satisfied	(4)	6	37.50%		
Very Satisfied	(5)	10	62.50%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.63	0.50			

1 - A. Courses and Faculty

Availability of courses

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.13
Dissatisfied	(2)	1	6.25%		
Neither Satisfied nor Dissatisfied	(3)	3	18.75%		
Satisfied	(4)	5	31.25%		
Very Satisfied	(5)	7	43.75%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.13	0.96			

1 - A. Courses and Faculty

Accessibility of faculty

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.81
Dissatisfied	(2)	0	0.00%		
Neither Satisfied nor Dissatisfied	(3)	0	0.00%		
Satisfied	(4)	3	18.75%		
Very Satisfied	(5)	13	81.25%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.81	0.40			

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201920 BCMB Senior Survey

1 - A. Courses and Faculty

Quality of instruction

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.63
Dissatisfied	(2)	0	0.00%		
Neither Satisfied nor Dissatisfied	(3)	0	0.00%		
Satisfied	(4)	6	37.50%		
Very Satisfied	(5)	10	62.50%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.63	0.50			

1 - A. Courses and Faculty

Preparation for professional school

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.36
Dissatisfied	(2)	0	0.00%		
Neither Satisfied nor Dissatisfied	(3)	1	6.25%		
Satisfied	(4)	7	43.75%		
Very Satisfied	(5)	6	37.50%		
N/A	(0)	2	12.50%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.36	0.63			

1 - A. Courses and Faculty

Preparation for graduate school

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.75
Dissatisfied	(2)	0	0.00%		
Neither Satisfied nor Dissatisfied	(3)	0	0.00%		
Satisfied	(4)	3	18.75%		
Very Satisfied	(5)	9	56.25%		
N/A	(0)	4	25.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.75	0.45			

2 - B. Advising

Availability of advisor

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.75
Dissatisfied	(2)	0	0.00%		
Neither Satisfied nor Dissatisfied	(3)	1	6.25%		
Satisfied	(4)	2	12.50%		
Very Satisfied	(5)	13	81.25%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.75	0.58			

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201920 BCMB Senior Survey

2 - B. Advising

Advisor's ability in providing insight and assistance

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.56
Dissatisfied	(2)	1	6.25%		
Neither Satisfied nor Dissatisfied	(3)	0	0.00%		
Satisfied	(4)	4	25.00%		
Very Satisfied	(5)	11	68.75%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.56	0.81			

2 - B. Advising

Advisor's ability in assisting me in Identifying and meeting major's requirements.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.88
Dissatisfied	(2)	0	0.00%		
Neither Satisfied nor Dissatisfied	(3)	0	0.00%		
Satisfied	(4)	2	12.50%		
Very Satisfied	(5)	14	87.50%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.88	0.34			

2 - B. Advising

Advisor's receptiveness of my goals

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.75
Dissatisfied	(2)	0	0.00%		
Neither Satisfied nor Dissatisfied	(3)	1	6.25%		
Satisfied	(4)	2	12.50%		
Very Satisfied	(5)	13	81.25%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.75	0.58			

2 - B. Advising

Advisor's ability in assisting me with career planning

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.44
Dissatisfied	(2)	0	0.00%		
Neither Satisfied nor Dissatisfied	(3)	1	6.25%		
Satisfied	(4)	7	43.75%		
Very Satisfied	(5)	8	50.00%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.44	0.63			

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201920 BCMB Senior Survey

2 - B. Advising

Advisor's ability in assisting me with graduate school advising

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.46
Dissatisfied	(2)	0	0.00%		
Neither Satisfied nor Dissatisfied	(3)	1	6.25%		
Satisfied	(4)	5	31.25%		
Very Satisfied	(5)	7	43.75%		
N/A	(0)	3	18.75%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.46	0.66			

3 - C. Research Requirement

Availability of on-campus opportunities

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.31
Dissatisfied	(2)	1	6.25%		
Neither Satisfied nor Dissatisfied	(3)	1	6.25%		
Satisfied	(4)	6	37.50%		
Very Satisfied	(5)	8	50.00%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.31	0.87			

3 - C. Research Requirement

Guidance for finding off-campus opportunities

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.27
Dissatisfied	(2)	0	0.00%		
Neither Satisfied nor Dissatisfied	(3)	2	12.50%		
Satisfied	(4)	4	25.00%		
Very Satisfied	(5)	5	31.25%		
N/A	(0)	5	31.25%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.27	0.79			

3 - C. Research Requirement

The research experience was an important part of your education

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.63
Dissatisfied	(2)	1	6.25%		
Neither Satisfied nor Dissatisfied	(3)	0	0.00%		
Satisfied	(4)	3	18.75%		
Very Satisfied	(5)	12	75.00%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.63	0.81			

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201920 BCMB Senior Survey

4 - D. Overall

Overall quality of BCMB program

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Very Dissatisfied	(1)	0	0.00%		4.50
Dissatisfied	(2)	0	0.00%		
Neither Satisfied nor Dissatisfied	(3)	0	0.00%		
Satisfied	(4)	8	50.00%		
Very Satisfied	(5)	8	50.00%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.50	0.52			

5 - My experience in BCMB courses contributed to the development of the following learning goals:

Describe, interpret, and integrate foundational and core concepts in the discipline.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Disagree	(1)	0	0.00%		4.50
Disagree	(2)	0	0.00%		
Neither Agree nor Disagree	(3)	0	0.00%		
Agree	(4)	8	50.00%		
Strongly Agree	(5)	8	50.00%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.50	0.52			

5 - My experience in BCMB courses contributed to the development of the following learning goals:

Conduct appropriate scientific literature and database searches.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Disagree	(1)	0	0.00%		4.31
Disagree	(2)	1	6.25%		
Neither Agree nor Disagree	(3)	1	6.25%		
Agree	(4)	6	37.50%		
Strongly Agree	(5)	8	50.00%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.31	0.87			

5 - My experience in BCMB courses contributed to the development of the following learning goals:

Develop hypotheses and propose appropriate experiments to test them.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Disagree	(1)	0	0.00%		4.31
Disagree	(2)	1	6.25%		
Neither Agree nor Disagree	(3)	0	0.00%		
Agree	(4)	8	50.00%		
Strongly Agree	(5)	7	43.75%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.31	0.79			

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5 - My experience in BCMB courses contributed to the development of the following learning goals:

Conduct research effectively as an individual and as a team member.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Disagree	(1)	0	0.00%		4.81
Disagree	(2)	0	0.00%		
Neither Agree nor Disagree	(3)	0	0.00%		
Agree	(4)	3	18.75%		
Strongly Agree	(5)	13	81.25%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.81	0.40			

5 - My experience in BCMB courses contributed to the development of the following learning goals:

Design and/or conduct experiments and record/archive the data appropriately.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Disagree	(1)	0	0.00%		4.38
Disagree	(2)	1	6.25%		
Neither Agree nor Disagree	(3)	0	0.00%		
Agree	(4)	7	43.75%		
Strongly Agree	(5)	8	50.00%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.38	0.81			

5 - My experience in BCMB courses contributed to the development of the following learning goals:

Perform experiments safely in the laboratory.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Disagree	(1)	0	0.00%		4.75
Disagree	(2)	0	0.00%		
Neither Agree nor Disagree	(3)	0	0.00%		
Agree	(4)	4	25.00%		
Strongly Agree	(5)	12	75.00%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.75	0.45			

5 - My experience in BCMB courses contributed to the development of the following learning goals:

Analyze and interpret experimental results using appropriate quantitative tools.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Disagree	(1)	0	0.00%		4.44
Disagree	(2)	0	0.00%		
Neither Agree nor Disagree	(3)	1	6.25%		
Agree	(4)	7	43.75%		
Strongly Agree	(5)	8	50.00%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.44	0.63			

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5 - My experience in BCMB courses contributed to the development of the following learning goals:

Summarize and express information orally, visually and in writing.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Disagree	(1)	0	0.00%		4.50
Disagree	(2)	0	0.00%		
Neither Agree nor Disagree	(3)	1	6.25%		
Agree	(4)	6	37.50%		
Strongly Agree	(5)	9	56.25%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	4.50	0.63			

5 - My experience in BCMB courses contributed to the development of the following learning goals:

Recognize the ethical issues involved in both the conduct of research and in the dimensions of research.

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Strongly Disagree	(1)	1	6.25%		3.88
Disagree	(2)	2	12.50%		
Neither Agree nor Disagree	(3)	2	12.50%		
Agree	(4)	4	25.00%		
Strongly Agree	(5)	7	43.75%		
N/A	(0)	0	0.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
16/29 (55.17%)	3.88	1.31			

6 - Were you a double major?

Response Option		Weight	Frequency	Percent	Percent Responses		Means				
Yes		(2)	3	18.75%	<div><div></div></div>		1.19				
No		(1)	13	81.25%							
					0	25	50	75	100	Question	
Response Rate		Mean	STD								
16/29 (55.17%)		1.19	0.40								
<div><div>• Spanish</div><div>• Economics</div><div>• Neuroscience</div></div>											

7 - Are you a transfer student from another college or university?

Response Option		Weight	Frequency	Percent	Percent Responses					Means	
Yes		(2)	1	6.25%	<div><div></div></div>					1.06	
No		(1)	15	93.75%	<div><div></div></div>						
					0	25	50	75	100	Question	
Response Rate		Mean	STD								
16/29 (55.17%)		1.06	0.25								
• About 14 Hendrix credits were transferred to Hendrix.											

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201920 BCMB Senior Survey

8 - How many years did you attend Hendrix?

Response Rate 16/29 (55.17%)

- 3
- 4
- 4
- 4
- 4
- 4
- 4
- 4
- 4
- 4
- 4
- 4
- 4
- 4
- 4

9 - What will your anticipated GPA be at graduation?

Response Rate 16/29 (55.17%)

- 4.0
- 3.9
- 3.3
- 3.8
- 3.9
- 3.3
- 3.5
- 3.7
- 3.8
- 3.9
- 3.25
- 3.97
- 3.9
- 3.0
- 3.93
- 4.0

10 - Have you applied to any postgraduate school (e.g., graduate school, medical school)?

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Yes	(2)	4	25.00%	<div style="width: 25%;">25%</div>	1.25
No	(1)	12	75.00%	<div style="width: 75%;">75%</div>	
				0 25 50 75 100	Question

Response Rate	Mean	STD
16/29 (55.17%)	1.25	0.45




- Master's Graduate Programs
- I intend to apply for next year.
- I will apply next year to medical school
- Yes
- Doctoral Candidate Program
- Pharmaceutical Sciences
- I plan to apply to medical school in the next cycle.
- Medical School

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201920 BCMB Senior Survey




11 - If you do not intend to apply to postgraduate schools, please answer the following questions regarding your future work plans.

Have you applied for a job?

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Yes	(2)	6	42.86%		1.60
No	(1)	4	28.57%		
N/A	(0)	4	28.57%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
14/29 (48.28%)	1.60	0.52			




11 - If you do not intend to apply to postgraduate schools, please answer the following questions regarding your future work plans.

If yes, have you been offered a position?

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Yes	(2)	6	42.86%		1.86
No	(1)	1	7.14%		
N/A	(0)	7	50.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
14/29 (48.28%)	1.86	0.38			

11 - If you do not intend to apply to postgraduate schools, please answer the following questions regarding your future work plans.

Have you accepted a position?

Response Option	Weight	Frequency	Percent	Percent Responses	Means
Yes	(2)	5	35.71%		1.71
No	(1)	2	14.29%		
N/A	(0)	7	50.00%		
				0 25 50 75 100	Question
Response Rate	Mean	STD			
14/29 (48.28%)	1.71	0.49			

12 - IF you have accepted a position, please briefly describe it.

Response Rate	6/29 (20.69%)
<ul style="list-style-type: none"> I applied to work at the United International College in Zhuhai, China as a teaching assistant in the Food, Science and Technology Division. Due to the corona virus, I am unsure of the possibility of this internship. Therefore, I was accepted for the job but I have not accepted it yet. Medical Scribe Plan to apply to medical school this cycle. Accepted a position at MedOptim as a medical scribe for various clinics in central AR. A medical scribe at Little Rock Diagnostic Clinic working for an endocrinologist named Dr. Rapp. I have accepted an offer to serve a year as a volunteer (through the Young Adult Volunteer Program with the PC(USA)) in New Orleans, Louisiana. I am still waiting to find out my specific work placement, but this year will help me to further explore my interest in public/community health. I plan to apply to Master's programs for Public Health for the Fall of 2021. Research Assistant in the Experimental Hematology Laboratory at The Ohio State University. 	

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201920 BCMB Senior Survey

13 - What do you think are the strengths of the BCMB major, as it is presently constructed?

Response Rate 15/29 (51.72%)

- Diverse instruction between chemistry and biology. Research requirement is very good.
- I think the strengths of the BCMB major is the major requirement to conduct research. This requirement opened unique opportunities for me including traveling to Massachusetts and conducting independent research for an entire summer.
- Lab safety, relating classes to each other.
- I think the program advises the students well and that the classes are set up in a way that the students get the most out of the course.
- The classes were always available when we needed to take them, and the instructors were very good.
- Research oriented, consistent lab courses, and overall preparation for graduate school
- It's a great fit for students who wish to attend medical school
- -It covers a wide range of topics that are relevant to research or medicine. Advanced Cell Biology and Advanced Biochemistry are the strongest courses for putting the information together in a comprehensive way. Also, they used scientific literature as part of the curriculum. -Several classes successfully integrated biomedical applications into course material (for example, explaining how a function can lead to disease). -The professors are enthusiastic about what they teach.
- Doing research as a requirement for the major sets this major apart, I believe.
- I personally loved the research aspect of the major and the openness of the faculty
- Research and preparing students for post-graduate positions in research labs, graduate school or medical school. I also think most of the professors are very invested in the students and help them navigate courses, college life and their career plans.
- Wide variety of career-applicable skills, good integration of chemistry and biology concepts
- It helps people be prepared for graduate or professional school and has a broad range of courses required
- I think that the BCMB major has many strengths, but I think that the research requirement in particular allows students to get invaluable experience at the undergraduate level that can often be career-motivating. I also appreciate the breadth of the major and the requirement to take an elective upper level biology course--this provided a way to actually choose a course based on my own interest within this generally structured major, which I really appreciated.
- It prepares majors for benchwork and scientific writing. It also provides the opportunity for learning many different branches of biology and chemistry.

14 - What do you perceive as weaknesses in the BCMB major, as it is presently constructed?

Response Rate 11/29 (37.93%)

- Bit heavy on the chemistry side.
- I think a weakness is our inability to take many courses outside of the major. Many times I have sacrificed taking classes I am interested in due to major class timing or due to labs. Additionally, the only appropriate time to study abroad is during first semester of senior year. Luckily this worked out for me but I also had to take classes during the summer and plan since freshman year in order to study abroad. This process should be made available to freshman early on to freshman with a clear timeline of when it is the best time to study abroad. I had to figure this out on my own because most BCMB majors do not study abroad, but I did not want to miss such an amazing opportunity. And I am honestly glad that I did not, because my study abroad experience was more than I could ever ask for.
- I know the BCMB major was not originally set up for pre-med students, but there are many students in the major that plan to go to medical school. I think that the major could be better constructed to prepare students for medical school AND graduate schools (learning things that will be tested on MCAT and GRE, etc)
- Finding research was hard for a lot of my classmates, I just got really lucky my sophomore year.
- Weak in preparing students for tests such as the MCAT or GRE.
- The senior capstone classes are a bit confusing to sign up for.
- I felt like the BCMB Seminar was a letdown: We did not get the curve or review sessions that we were promised.
- I think it is seen as the pre-med route for students at Hendrix, but it is really more research-focused and that is not well explained to first- and second-year students.
- A lot of BCMB majors are also pre-med, so I think there should be more things/courses geared to preparing for medical school as well as graduate school/research.
- If anything, I would say that one weakness is the limited research requirement. I think that, if required, more extensive research would have enriched my college academic experience even more.
- The organic chemistry and physical chemistry courses seem disconnected with the BCMB curriculum. It may not be possible, but it would be helpful if these courses had some focus on applications to biomedical research or medical practices. It almost seems as if these could be replaced with some additional biochemistry courses that address organic and physical chemistry topics. I also think scientific literature should be used sooner and more frequently within the major. Course content can often be taught within the context of literature, and information is much easier to process in this way. It would also help expose students to more areas of research and career options.

Hendrix College

201920 BCMB Senior Survey

15 - Do you have any final comments or observations about your experience as a BCMB major at Hendrix?

Response Rate	11/29 (37.93%)
<ul style="list-style-type: none">• N/A• The BCMB major is not easy, especially for minority and female students. There needs to be some extra support for disadvantaged groups in STEM. I was lucky enough to be part of IRIS my sophomore year and I had great support from upper class-men friends also in disadvantaged groups that supported me throughout the process, but others are not as lucky as I am or come from a highschool that did a decent job at preparing me to go into STEM. Therefore, professors and advisors in the BCMB major need to do a better job at supporting disadvantaged groups wanting to go into STEM early on, because I know so many great people that have switched majors because they didn't feel as good as their white peers in STEM classes. Check on them, support them, and make them feel empowered. Actions speak louder than words. I know the school is on a hiring freeze, but in the future, hire more faculty of color and peer learning associates of color. Representation matters, I promise and if you don't believe me, there's research behind it. Teach students about stereotype threat and teach coping strategies on how to overcome it. There are so many stereotype threat situations in STEM and if the department chooses to ignore them then the BCMB major is not structured to support all students and is not an inclusive environment.• It was a fun ride, learned a lot from the major, and am overall satisfied with my overall experience. Thanks for a good 4 years!• The research and capstone requirements should be clarified earlier within the major. There seemed to be confusion about requirements and how to document research all the way into senior year.• I really enjoyed all my classes and teachers here.• I really loved and appreciate the BCMB program, the faculty and a lot of the courses that I had to take• Thank you to the professors for a wonderful experience and for continuing to cultivate my curiosity.• Dr. Laura MacDonald is a hero and deserves the highest possible praise and recognition.• This was a very challenging and rewarding major to be a part of, and I appreciate all of the professors involved in this program for all of their hard work and caring hearts for me and every other student they encounter• I loved my time spent as a BCMB major!• I feel as if this major has prepared very well me for a future in healthcare.	