



# BIOS 10140 19 - Inquiry-based Exploration of Biology - Instructor(s) - Katelyn Butler

Project Title: **College Course Feedback - Spring 2024**

Number Enrolled: **23**

Number of Responses: **14**

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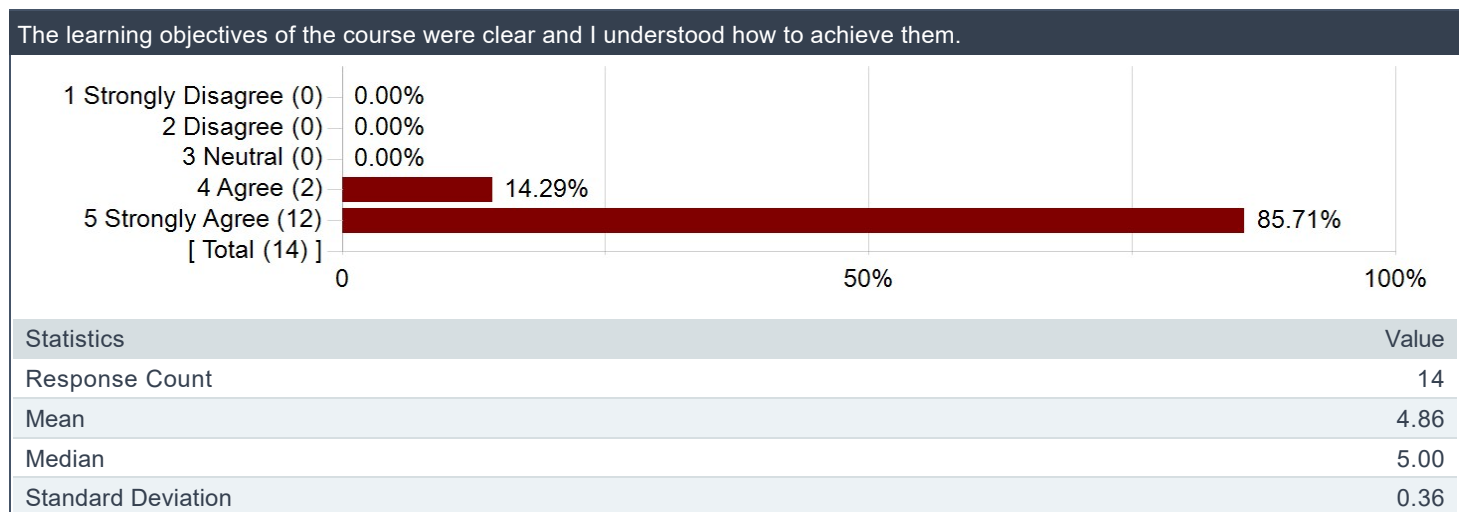
## Report Comments

Opinions expressed in these evaluations are those of students enrolled in the specific course and do not represent the University.

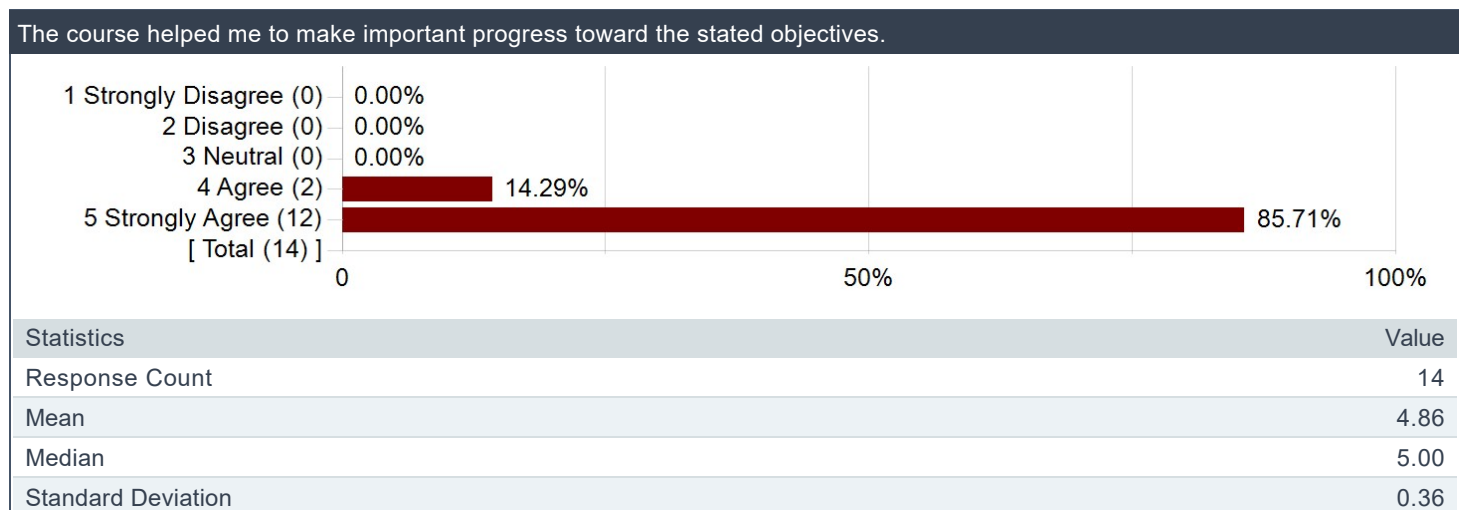
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Creation Date: **Thursday, July 11, 2024**

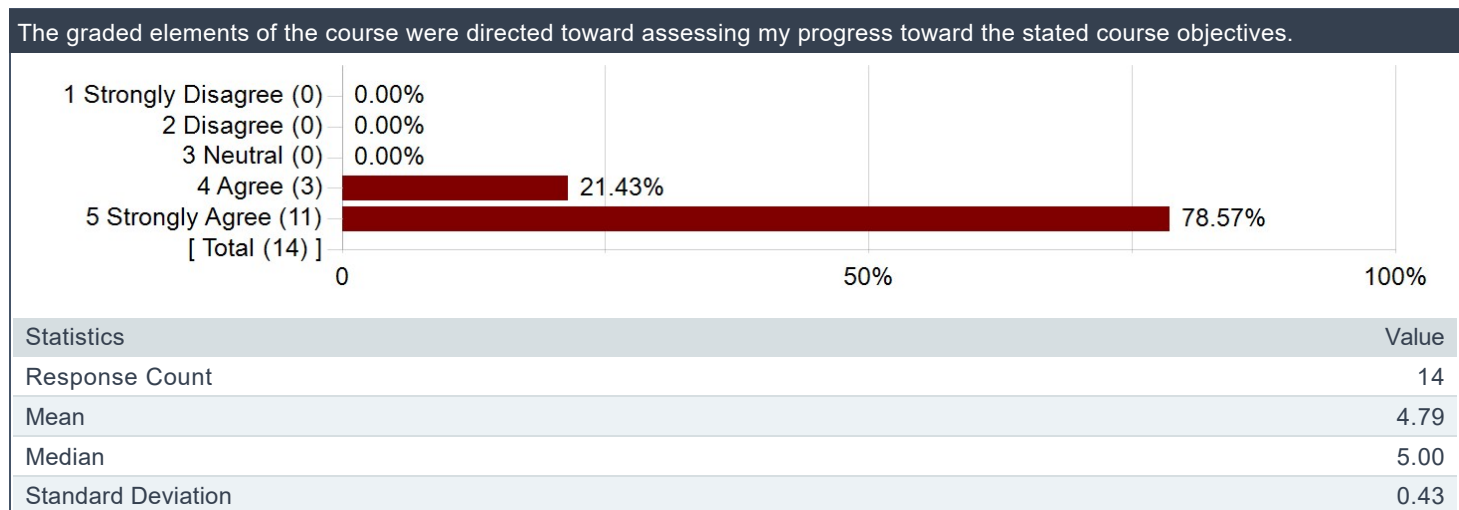
## The learning objectives of the course were clear and I understood how to achieve them.



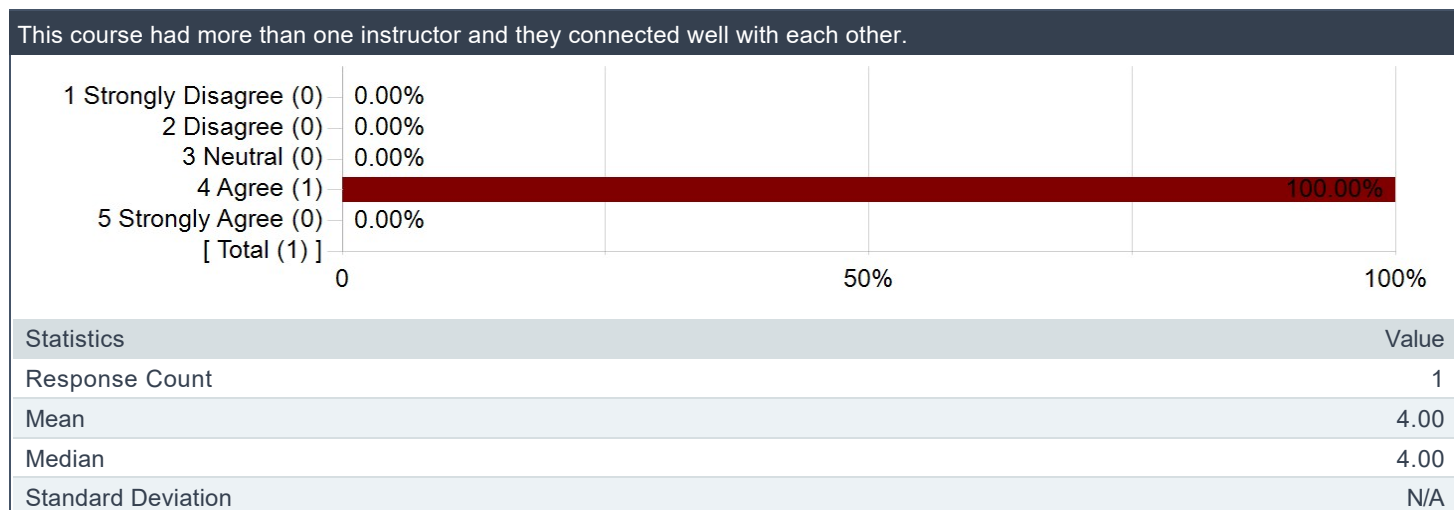
## The course helped me to make important progress toward the stated objectives.



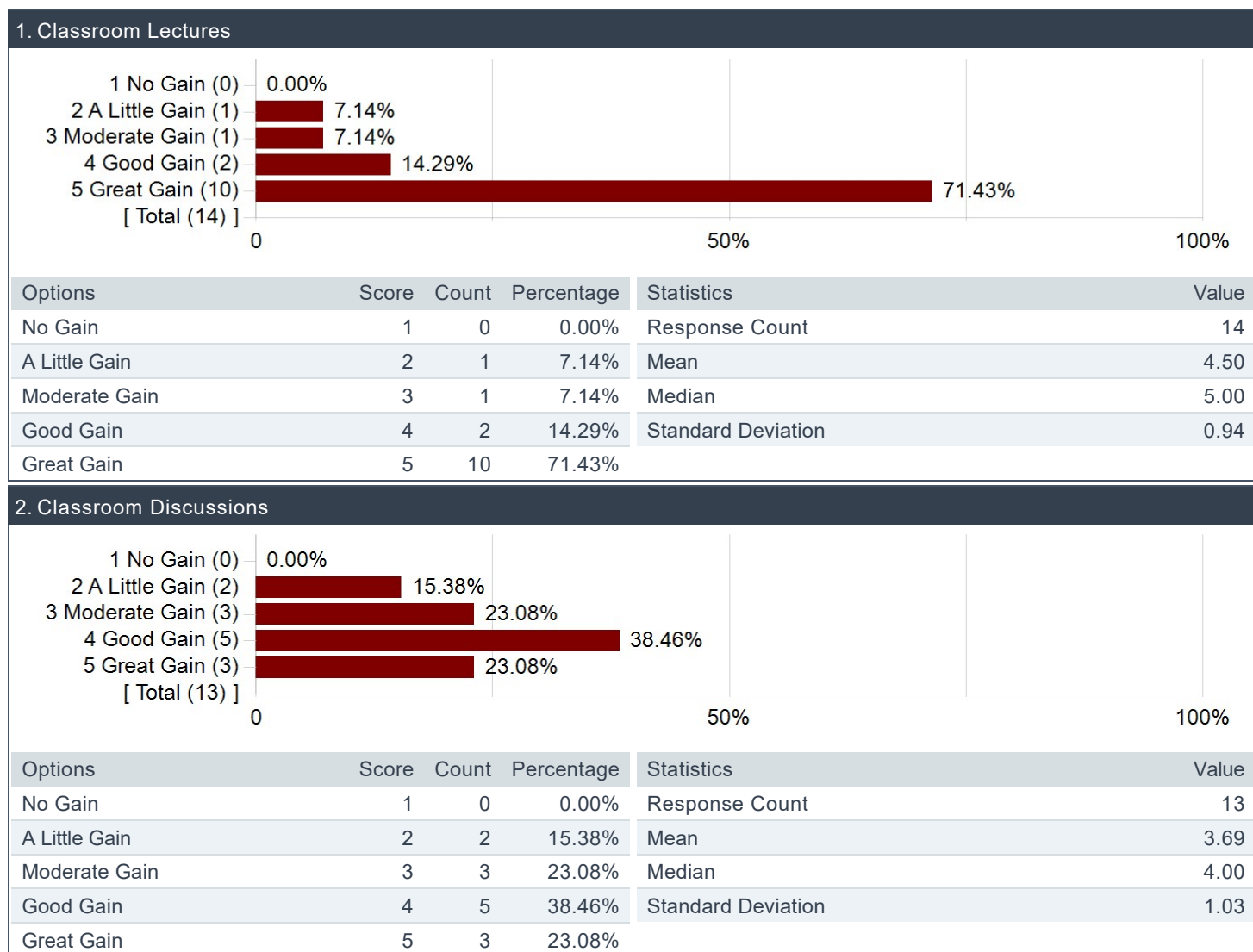
## The graded elements of the course were directed toward assessing my progress toward the stated course objectives.



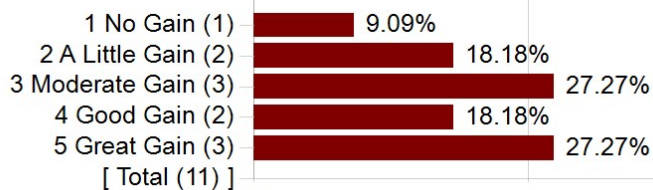
## This course had more than one instructor and they connected well with each other.



## How much did the following elements of the course contribute to your learning gains?

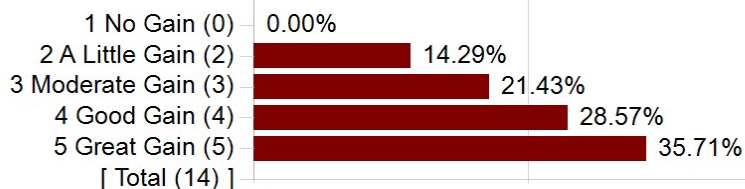


### 3. Assigned Readings



Options	Score	Count	Percentage	Statistics	Value
No Gain	1	1	9.09%	Response Count	11
A Little Gain	2	2	18.18%	Mean	3.36
Moderate Gain	3	3	27.27%	Median	3.00
Good Gain	4	2	18.18%	Standard Deviation	1.36
Great Gain	5	3	27.27%		

### 4. Homework Exercises



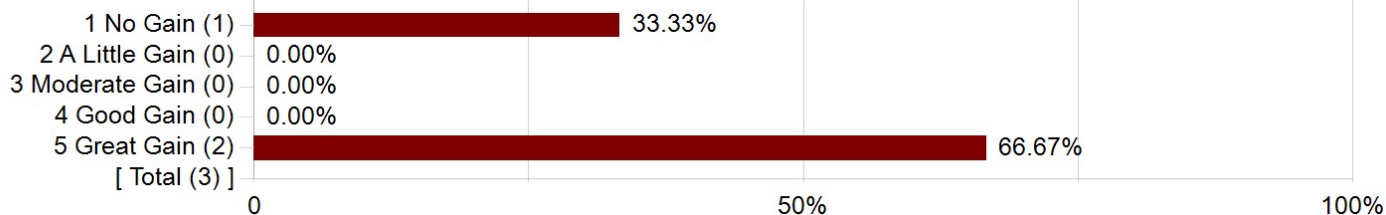
Options	Score	Count	Percentage	Statistics	Value
No Gain	1	0	0.00%	Response Count	14
A Little Gain	2	2	14.29%	Mean	3.86
Moderate Gain	3	3	21.43%	Median	4.00
Good Gain	4	4	28.57%	Standard Deviation	1.10
Great Gain	5	5	35.71%		

### 5. Lab Experiences



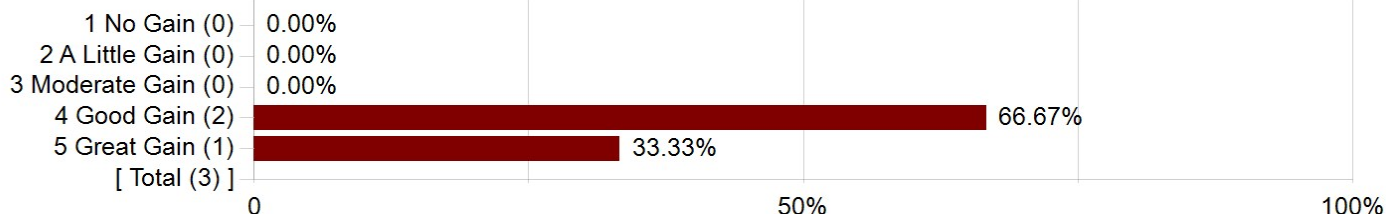
Options	Score	Count	Percentage	Statistics	Value
No Gain	1	0	0.00%	Response Count	14
A Little Gain	2	0	0.00%	Mean	4.79
Moderate Gain	3	1	7.14%	Median	5.00
Good Gain	4	1	7.14%	Standard Deviation	0.58
Great Gain	5	12	85.71%		

## 6. Discussion Sessions



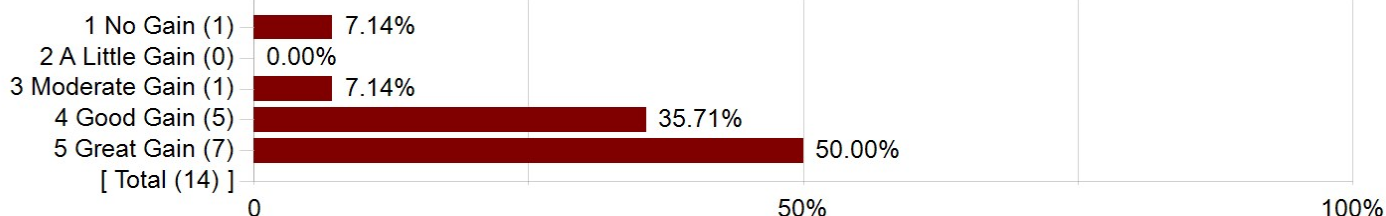
Options	Score	Count	Percentage	Statistics	Value
No Gain	1	1	33.33%	Response Count	3
A Little Gain	2	0	0.00%	Mean	3.67
Moderate Gain	3	0	0.00%	Median	5.00
Good Gain	4	0	0.00%	Standard Deviation	2.31
Great Gain	5	2	66.67%		

## 7. Review Sessions



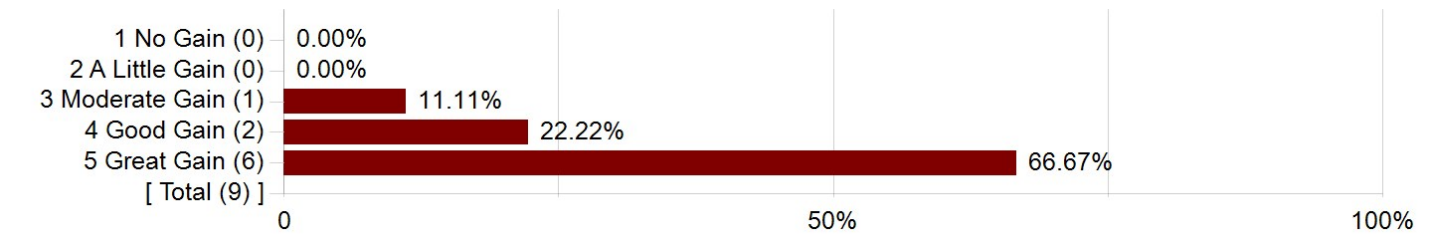
Options	Score	Count	Percentage	Statistics	Value
No Gain	1	0	0.00%	Response Count	3
A Little Gain	2	0	0.00%	Mean	4.33
Moderate Gain	3	0	0.00%	Median	4.00
Good Gain	4	2	66.67%	Standard Deviation	0.58
Great Gain	5	1	33.33%		

## 8. Interactions with Other Students



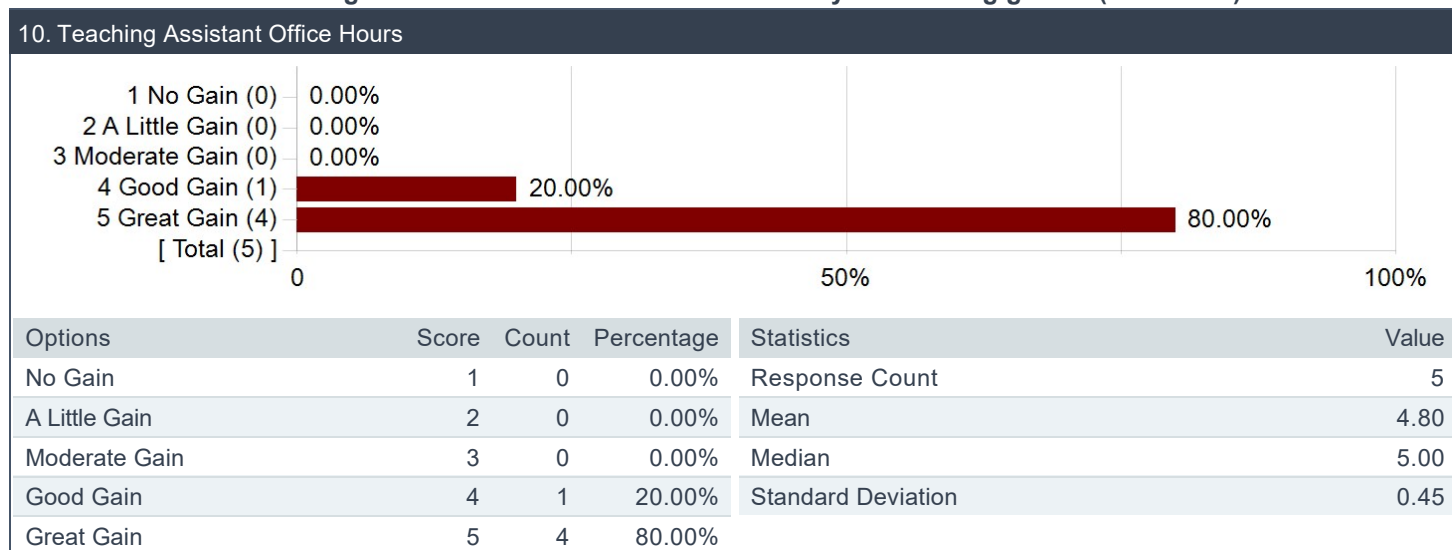
Options	Score	Count	Percentage	Statistics	Value
No Gain	1	1	7.14%	Response Count	14
A Little Gain	2	0	0.00%	Mean	4.21
Moderate Gain	3	1	7.14%	Median	4.50
Good Gain	4	5	35.71%	Standard Deviation	1.12
Great Gain	5	7	50.00%		

9. Faculty Office Hours



Options	Score	Count	Percentage	Statistics	Value
No Gain	1	0	0.00%	Response Count	9
A Little Gain	2	0	0.00%	Mean	4.56
Moderate Gain	3	1	11.11%	Median	5.00
Good Gain	4	2	22.22%	Standard Deviation	0.73
Great Gain	5	6	66.67%		

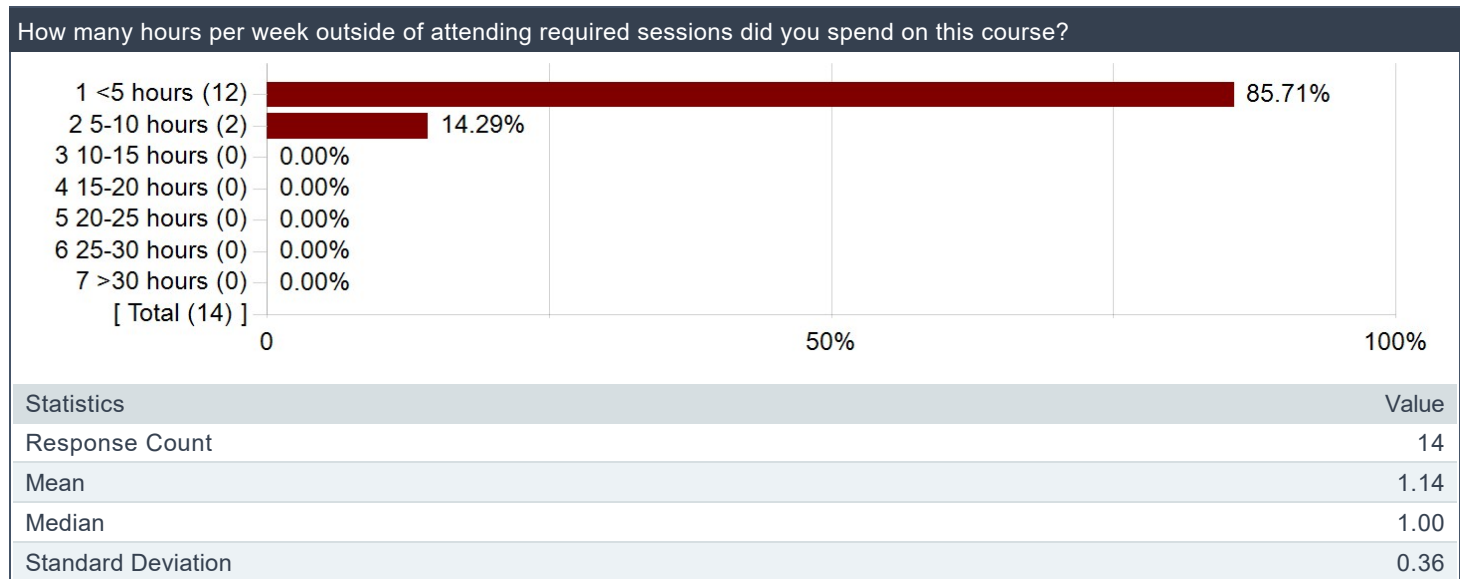
## How much did the following elements of the course contribute to your learning gains? (continued)



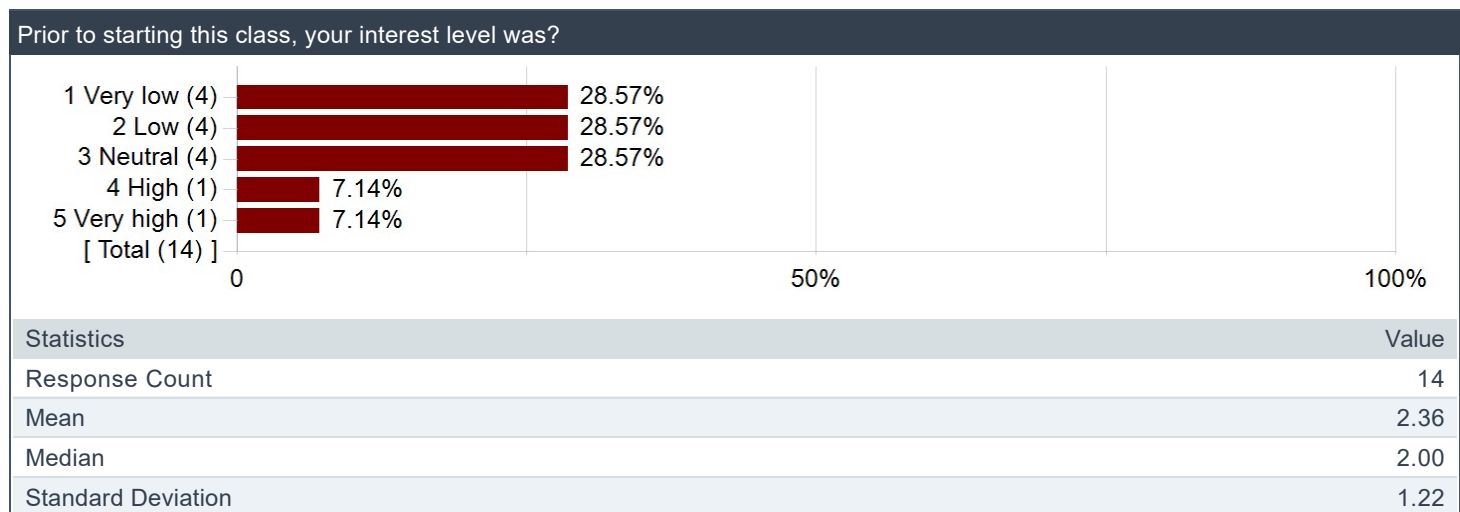
## What was the most important thing (to you) that you learned in this course? What aspect of the material is still unclear for you, that you wish you could have learned better?

Comments
It was very interesting to learn about the scientific (specifically in an agricultural context) ways in which we can address climate change. It felt rewarding to be working with a model organism, <i>Arabidopsis thaliana</i> , which has the potential to provide us with information on more agriculturally relevant crops. Along these lines, it was interesting to learn about genetic engineering, something which I am curious to enhance my learning on.
plant genetics
The most important thing I learned was how to structure a research project and work within a group. Personally, I would have liked to talk a little bit more about other methods of future research steps.
An understanding of how scientists study genes for the very real purpose of feeding the world! We grew plants under stress and then observed how it impacted their germination, and then popped our results into a database that was able to find genes associated with the plants that could withstand the stress. Made the mysterious world of genetics quite approachable.
I liked how she related the course material to real-world issues in agriculture.
How to conduct plant biology research + why genetics and crop breeding is so important. Something that's still slightly unclear is the selective breeding process

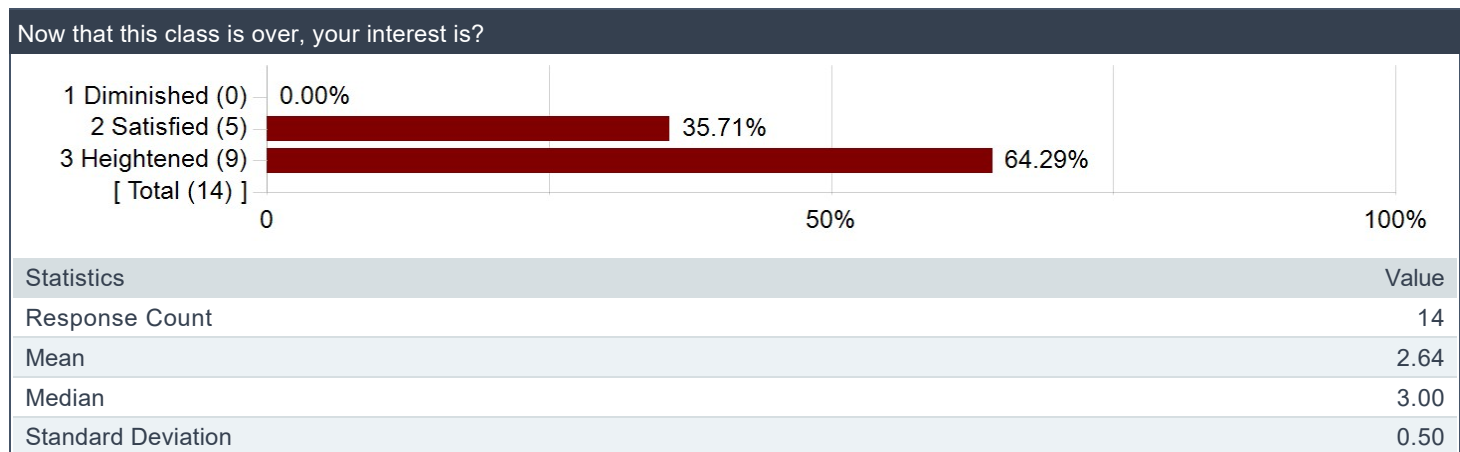
## How many hours per week outside of attending required sessions did you spend on this course?



## Prior to starting this class, your interest level was?

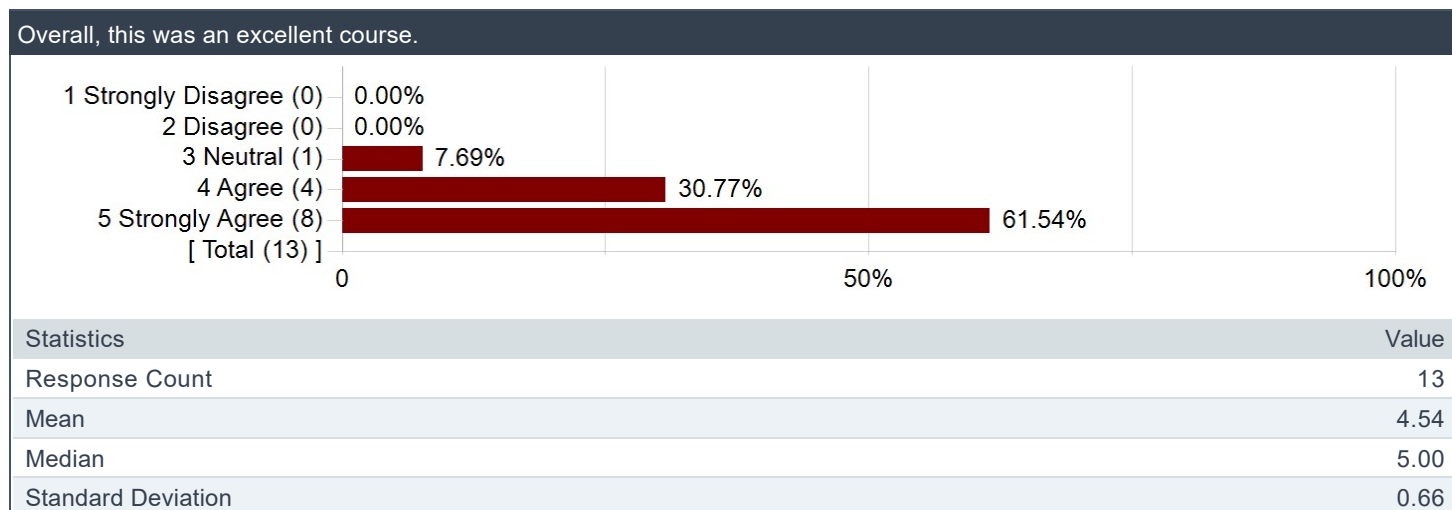


## Now that this class is over, your interest is?





## Overall, this was an excellent course.

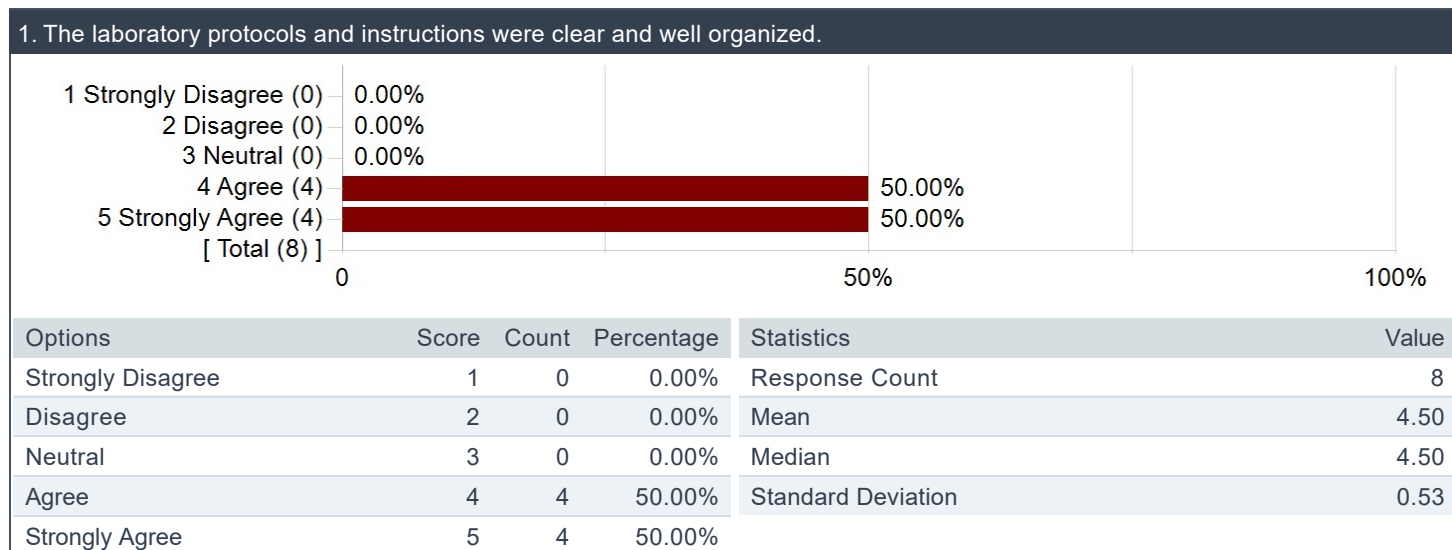


## Please share any advice you have for students who are considering taking the course.

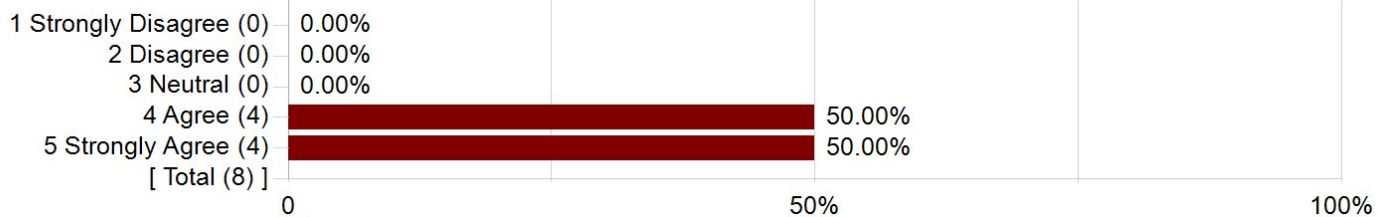
Comments
Don't be so afraid of the lab component—many students have the same worries as you. and Dr. Butler creates a safe and encouraging environment for us all to learn!
Dr. Butler is super nice and makes the class very accessible for someone who hasn't studied a lot of stem before!
Keep up with the lab notebook, turn in assignments on time, and take lecture notes on the slides. If you do all of these things, it won't be difficult to keep up and get an A, as Professor Butler structures this class very intuitively.
Prof. Butler is the best!
Great course to satisfy core bio! Manageable workload.
Definitely worth taking for core bio! Accessible to beginners (having intro-level biology background is helpful though) and expectations are reasonable. Also ended up having a decent amount of interest in the course material despite being not having much to begin with

## Laboratory Meetings

For each of the following statements, please indicate your level of agreement.

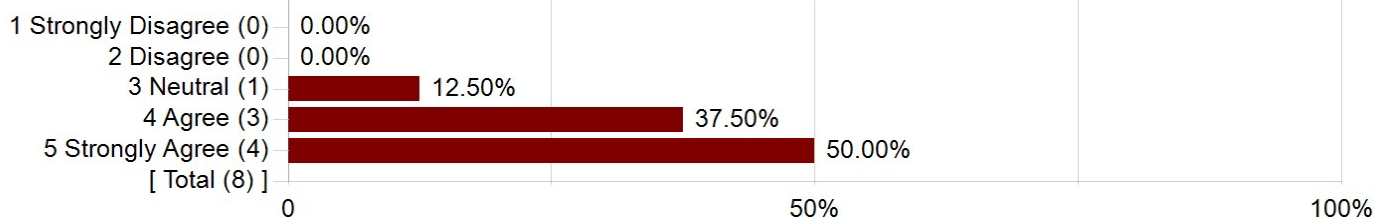


## 2. Materials and equipment needed for performing the exercises were readily available.



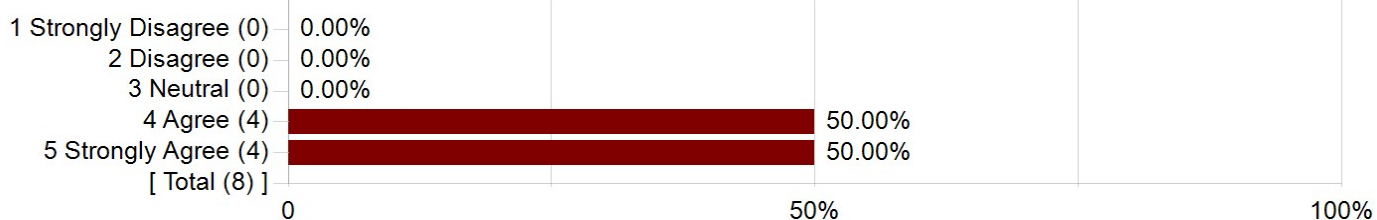
Options	Score	Count	Percentage	Statistics	Value
Strongly Disagree	1	0	0.00%	Response Count	8
Disagree	2	0	0.00%	Mean	4.50
Neutral	3	0	0.00%	Median	4.50
Agree	4	4	50.00%	Standard Deviation	0.53
Strongly Agree	5	4	50.00%		

## 3. The lab exercises had clear educational goals.



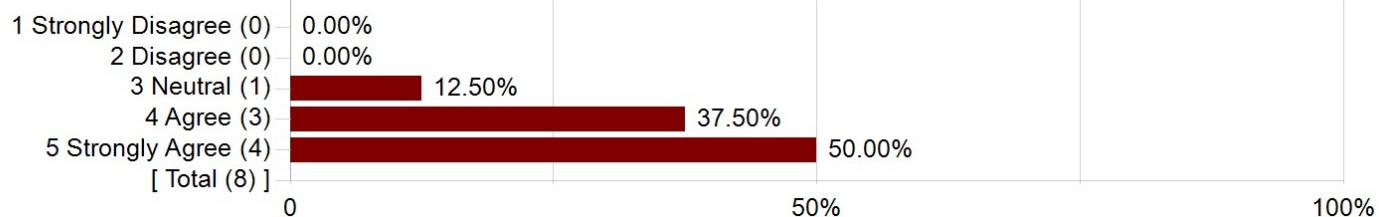
Options	Score	Count	Percentage	Statistics	Value
Strongly Disagree	1	0	0.00%	Response Count	8
Disagree	2	0	0.00%	Mean	4.38
Neutral	3	1	12.50%	Median	4.50
Agree	4	3	37.50%	Standard Deviation	0.74
Strongly Agree	5	4	50.00%		

## 4. The goals of the lab exercises were well integrated with the overall objectives of the course.



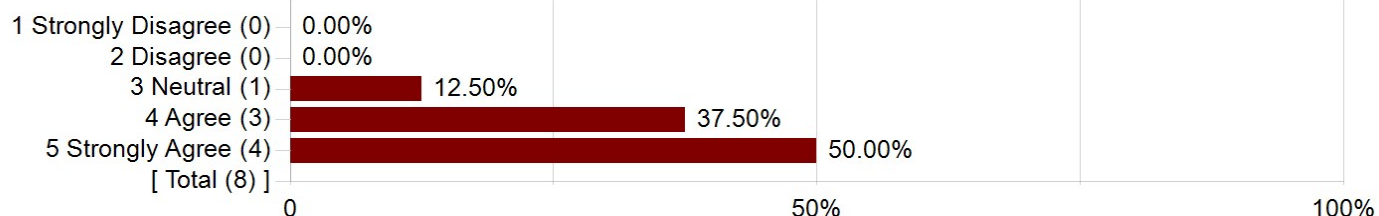
Options	Score	Count	Percentage	Statistics	Value
Strongly Disagree	1	0	0.00%	Response Count	8
Disagree	2	0	0.00%	Mean	4.50
Neutral	3	0	0.00%	Median	4.50
Agree	4	4	50.00%	Standard Deviation	0.53
Strongly Agree	5	4	50.00%		

#### 5. The lab exercises explored course topics in ways that could not have been accomplished in lecture or discussion.



Options	Score	Count	Percentage	Statistics	Value
Strongly Disagree	1	0	0.00%	Response Count	8
Disagree	2	0	0.00%	Mean	4.38
Neutral	3	1	12.50%	Median	4.50
Agree	4	3	37.50%	Standard Deviation	0.74
Strongly Agree	5	4	50.00%		

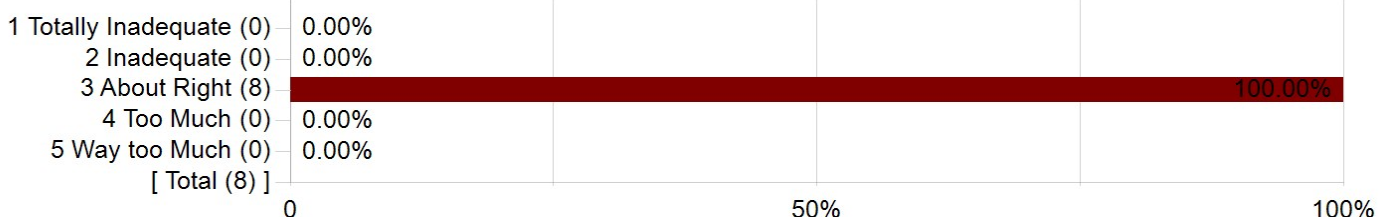
#### 6. Overall, this was an excellent laboratory experience.



Options	Score	Count	Percentage	Statistics	Value
Strongly Disagree	1	0	0.00%	Response Count	8
Disagree	2	0	0.00%	Mean	4.38
Neutral	3	1	12.50%	Median	4.50
Agree	4	3	37.50%	Standard Deviation	0.74
Strongly Agree	5	4	50.00%		

#### The time allocated for completing the lab was:

The time allocated for completing the lab was:



Statistics	Value
Response Count	8
Mean	3.00
Median	3.00
Standard Deviation	0.00

**What observational, analytical, or technical skills did you gain during the laboratory exercises that enhanced your understanding of how biologists answer questions in this particular field?**

Comments
Lab work equipped me with the skills needed to understand how to set up and run a GWAS. We also got to run a PCR one day, which aided my understanding of this tool.
Linking phenotypic variation to genotypic variation! How we can use observational skills and complex statistics to identify desirable genes that will help us feed the world.
Our projects helped us understand what genetic association is, how to determine its existence, and what its implications are. We learned how plant geneticists do their work. The labs were very integrated with the course material.

**Please share any recommendations to improve the laboratory learning experience.**

Comments
Mostly great!