BIOS 10500 1 - Metabolism and Exercise - Instructor(s): Beatrice Fineschi, Mark D Osadjan

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

Number Enrolled: **73**
Number of Responses: **44**

Report Comments

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

Creation Date: **Thursday, March 28, 2024**

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

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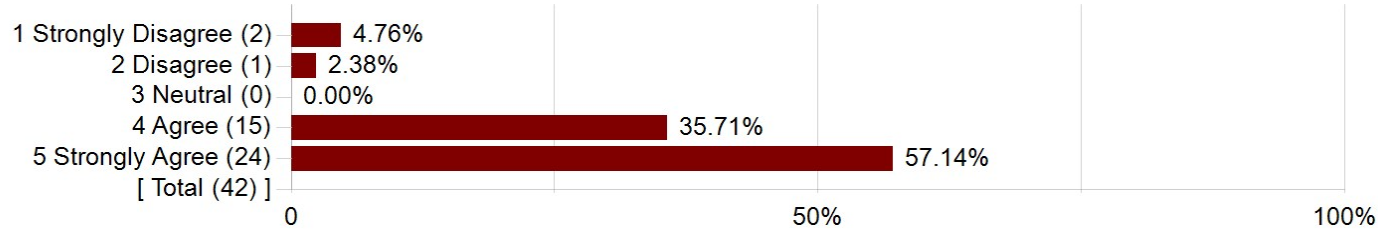

Statistics	Value
Response Count	42
Mean	4.38
Median	5.00
Standard Deviation	0.99

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

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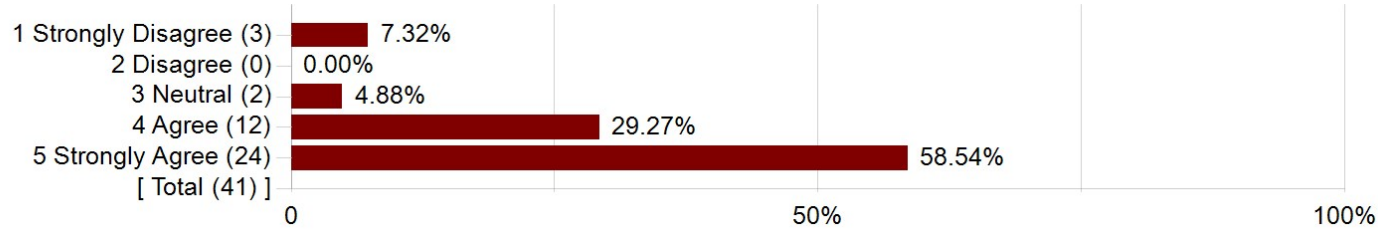

Statistics	Value
Response Count	41
Mean	4.32
Median	5.00
Standard Deviation	1.11

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

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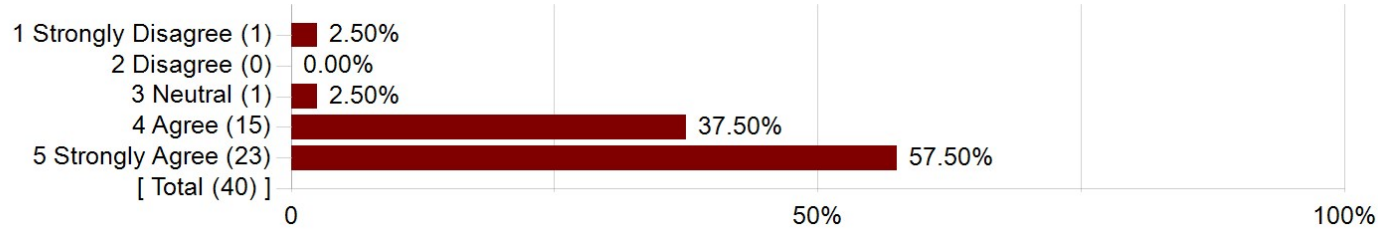

Statistics	Value
Response Count	40
Mean	4.48
Median	5.00
Standard Deviation	0.78

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

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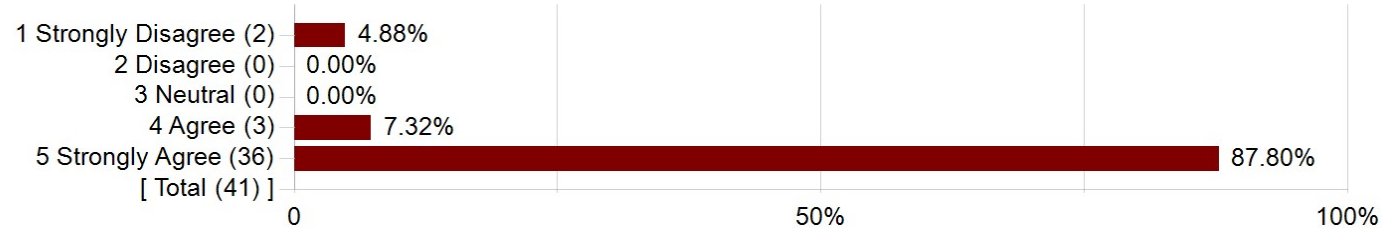
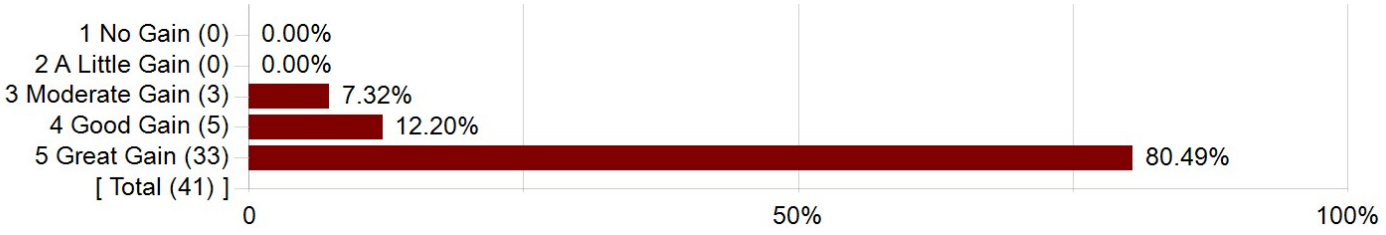


Statistics	Value
Response Count	41
Mean	4.73
Median	5.00
Standard Deviation	0.90

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

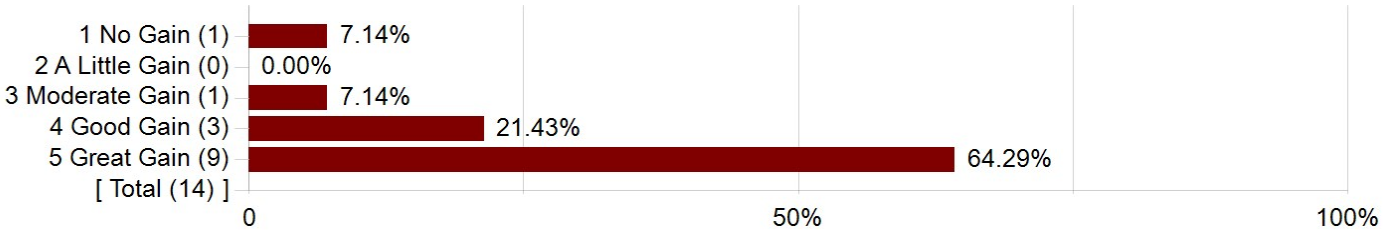
1. Classroom Lectures



Options	Score	Count	Percentage
No Gain	1	0	0.00%
A Little Gain	2	0	0.00%
Moderate Gain	3	3	7.32%
Good Gain	4	5	12.20%
Great Gain	5	33	80.49%

Statistics	Value
Response Count	41
Mean	4.73
Median	5.00
Standard Deviation	0.59

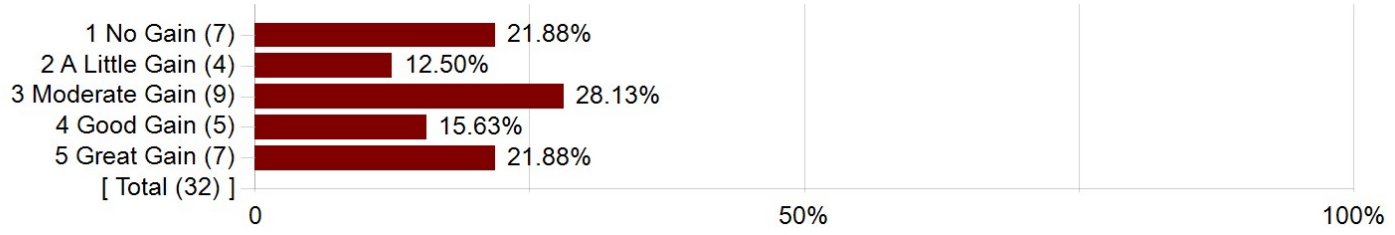
2. Classroom Discussions



Options	Score	Count	Percentage
No Gain	1	1	7.14%
A Little Gain	2	0	0.00%
Moderate Gain	3	1	7.14%
Good Gain	4	3	21.43%
Great Gain	5	9	64.29%

Statistics	Value
Response Count	14
Mean	4.36
Median	5.00
Standard Deviation	1.15

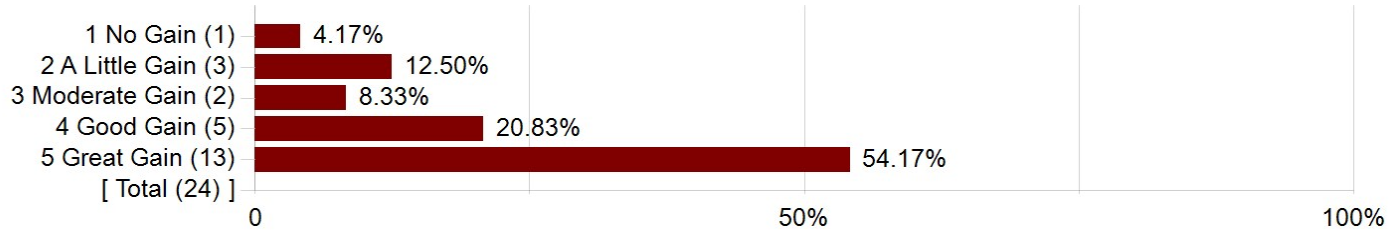
3. Assigned Readings



Options	Score	Count	Percentage
No Gain	1	7	21.88%
A Little Gain	2	4	12.50%
Moderate Gain	3	9	28.13%
Good Gain	4	5	15.63%
Great Gain	5	7	21.88%

Statistics	Value
Response Count	32
Mean	3.03
Median	3.00
Standard Deviation	1.45

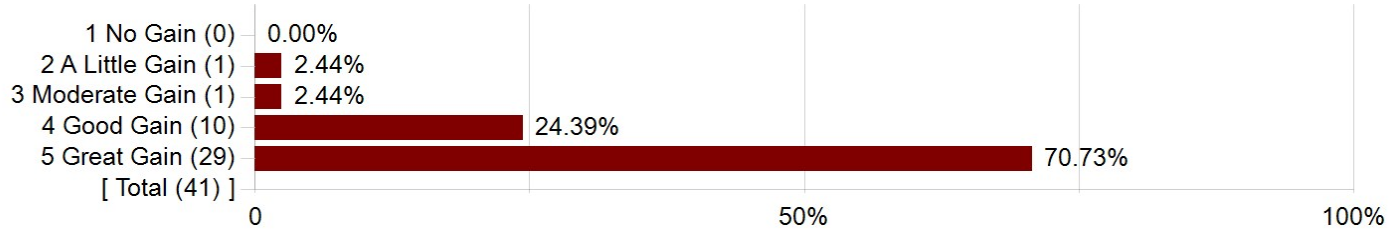
4. Homework Exercises



Options	Score	Count	Percentage
No Gain	1	1	4.17%
A Little Gain	2	3	12.50%
Moderate Gain	3	2	8.33%
Good Gain	4	5	20.83%
Great Gain	5	13	54.17%

Statistics	Value
Response Count	24
Mean	4.08
Median	5.00
Standard Deviation	1.25

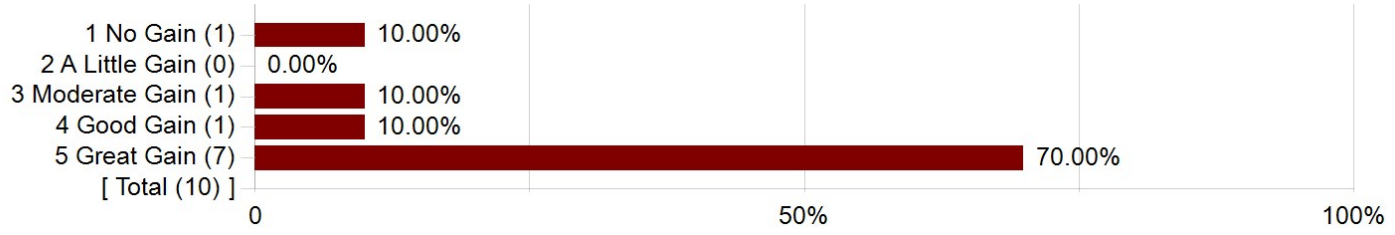
5. Lab Experiences



Options	Score	Count	Percentage
No Gain	1	0	0.00%
A Little Gain	2	1	2.44%
Moderate Gain	3	1	2.44%
Good Gain	4	10	24.39%
Great Gain	5	29	70.73%

Statistics	Value
Response Count	41
Mean	4.63
Median	5.00
Standard Deviation	0.66

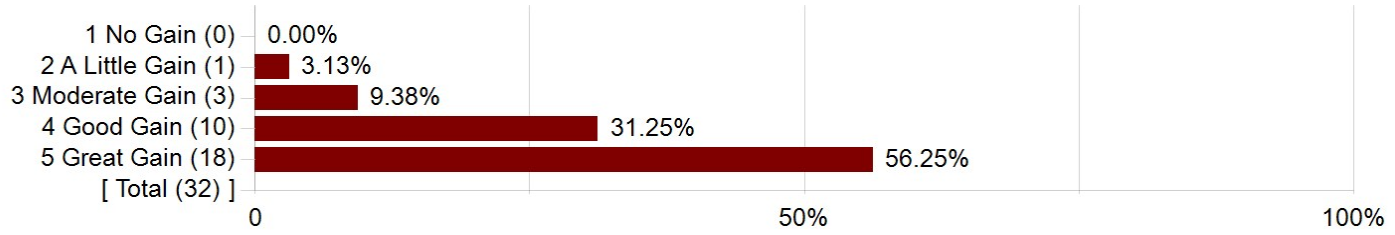
6. Discussion Sessions



Options	Score	Count	Percentage
No Gain	1	1	10.00%
A Little Gain	2	0	0.00%
Moderate Gain	3	1	10.00%
Good Gain	4	1	10.00%
Great Gain	5	7	70.00%

Statistics	Value
Response Count	10
Mean	4.30
Median	5.00
Standard Deviation	1.34

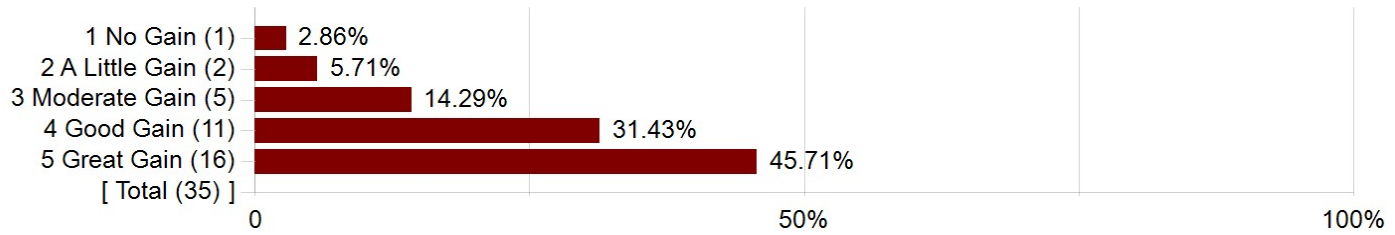
7. Review Sessions



Options	Score	Count	Percentage
No Gain	1	0	0.00%
A Little Gain	2	1	3.13%
Moderate Gain	3	3	9.38%
Good Gain	4	10	31.25%
Great Gain	5	18	56.25%

Statistics	Value
Response Count	32
Mean	4.41
Median	5.00
Standard Deviation	0.80

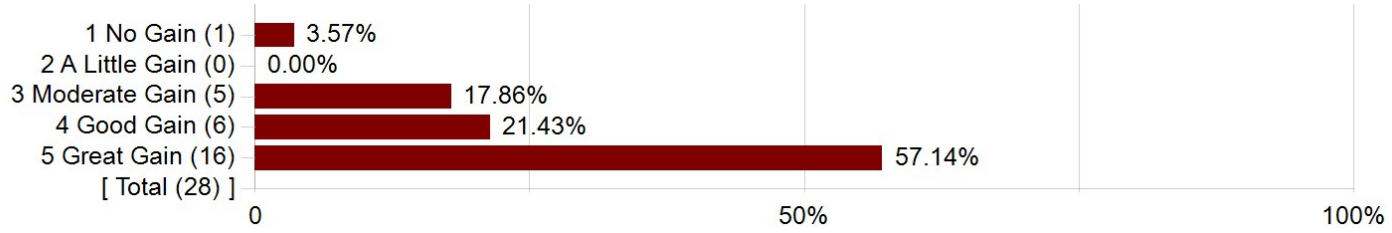
8. Interactions with Other Students



Options	Score	Count	Percentage
No Gain	1	1	2.86%
A Little Gain	2	2	5.71%
Moderate Gain	3	5	14.29%
Good Gain	4	11	31.43%
Great Gain	5	16	45.71%

Statistics	Value
Response Count	35
Mean	4.11
Median	4.00
Standard Deviation	1.05

9. Faculty Office Hours

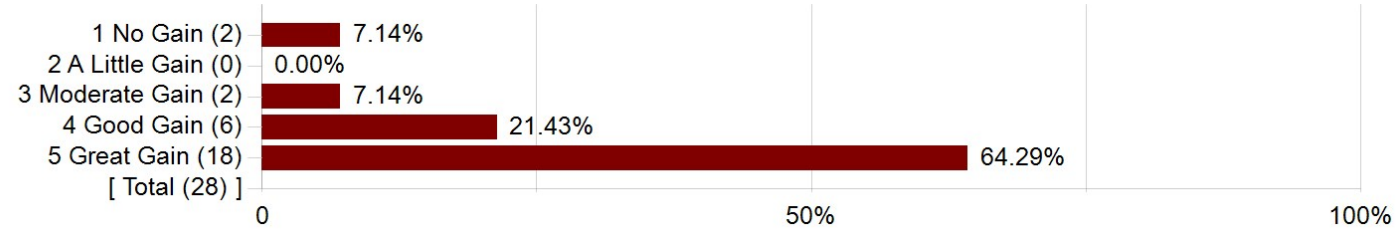


Options	Score	Count	Percentage
No Gain	1	1	3.57%
A Little Gain	2	0	0.00%
Moderate Gain	3	5	17.86%
Good Gain	4	6	21.43%
Great Gain	5	16	57.14%

Statistics	Value
Response Count	28
Mean	4.29
Median	5.00
Standard Deviation	1.01

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

10. Teaching Assistant Office Hours



Options	Score	Count	Percentage
No Gain	1	2	7.14%
A Little Gain	2	0	0.00%
Moderate Gain	3	2	7.14%
Good Gain	4	6	21.43%
Great Gain	5	18	64.29%

Statistics	Value
Response Count	28
Mean	4.36
Median	5.00
Standard Deviation	1.13

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
I now have a better understanding of how oxygen and blow flow adjusts during increasing exercise workloads.
I learned a lot about muscles and how they're affected during exercise. I am still unclear about the super specific cellular processes.
The ability to connect the course material to real–time processes in our bodies
I wish we could've spent more time on neurotransmitters—they were really interesting to me.
I learnt about the mechanisms behind human exercise and movement. I was sometimes confused about how the different processes linked together because they were separately explained.
The most important thing I have learned this course is the value of eating carbs.
I learned so much about how exercise can affect our body
Common bio knowledge
The most important thing I learned is that the body has systems in place to maintain homeostasis. These systems contain sensors, processes, and features that continuously work together to keep the body healthy at all times. I am still unsure as to how blood pressure is sensed. There were a lot of things to remember for this concept.
Aerobic endurance training (ex. long walks, jogging, jump rope, swimming, etc.) starting from a young age all throughout our life is the best thing we can do for our bodies in the long run.
The most important thing to me was learning about metabolism just because I thought that topic was super interesting. I wish I could've learned more about the cardiovascular system but I feel like there was just a lot of content to get through.
Get outside and be active. I wish I could have spent more personal time studying cardiac output but this is not due to a lack of resources. It was taught extremely well and it heightened my interest!
A lot of the material about cell physiology is still a bit confusing. However, the main takeaways at the end about exercise and nutrition are definitely applicable to my life.
Applied material learned from last quarter to practical labs
I learned how the different body systems respond to exercise
How to keep a healthy body
How physiologically think about the processes of the body in exercise and what that means for implementation.
I was really excited by the more practical material we learned in the second half of the course. I enjoyed the material that was on a more surface level and more practical and I wish I could've learned more about different types of exercise and muscles. The nitty gritty and chemical processes that are not helpful for a non–biology student was hard to be interested in. A lot of the material also felt repetitive. I feel like learning about different muscles would've been so much more interesting and practical than learning about the different parts of the heart, for example. Especially since we already learned that last quarter.
how to improve metabolic state while exercising
What happens to our body during exercise. I would like to learn more about optimizing nutrition.
I learned about the metabolism of fats and carbs and when the body wants to metabolize fats versus carbs and the biological processes that cause the body to do so.
this course was much too difficult for a bio class geared towards non–bio majors. the material was complicated, and overwhelming
I would say the importance of physical exercise for your physical/mental/emotional well–being stands out as a running theme. Out of all the topics, metabolism (the more microscopic parts) is the most confusing, though there is only a certain amount of depth required.
I learned a lot about what the body does during exercise.

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

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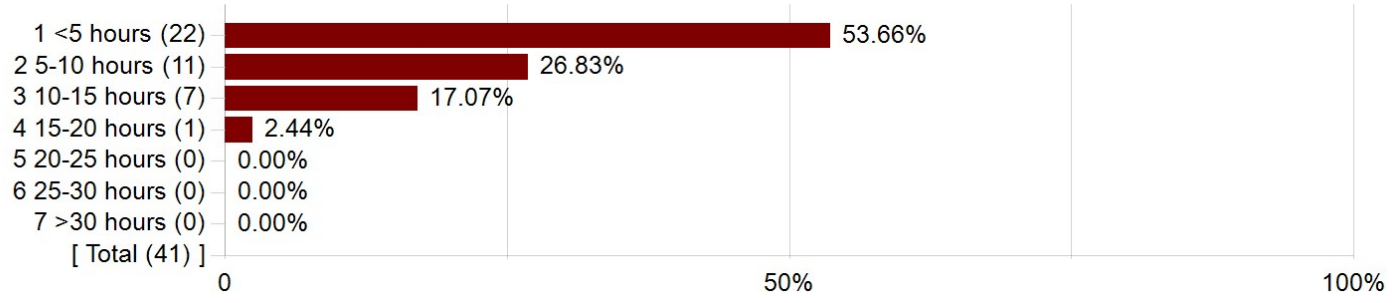
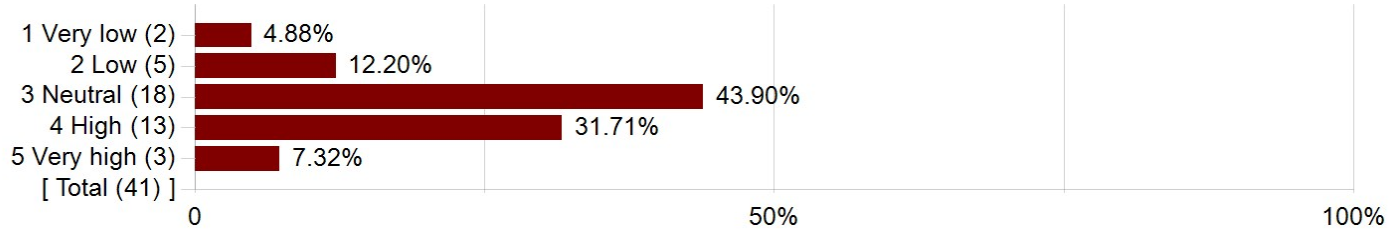


Statistics	Value
Response Count	41
Mean	1.68
Median	1.00
Standard Deviation	0.85

Prior to starting this class, your interest level was?

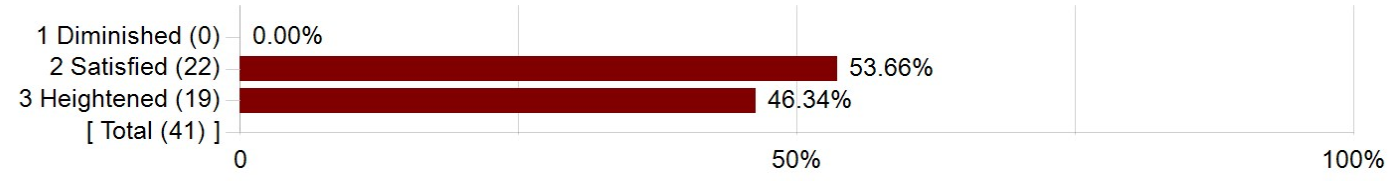
Prior to starting this class, your interest level was?



Statistics	Value
Response Count	41
Mean	3.24
Median	3.00
Standard Deviation	0.94

Now that this class is over, your interest is?

Now that this class is over, your interest is?



Statistics	Value
Response Count	41
Mean	2.46
Median	2.00
Standard Deviation	0.50

Overall, this was an excellent course.

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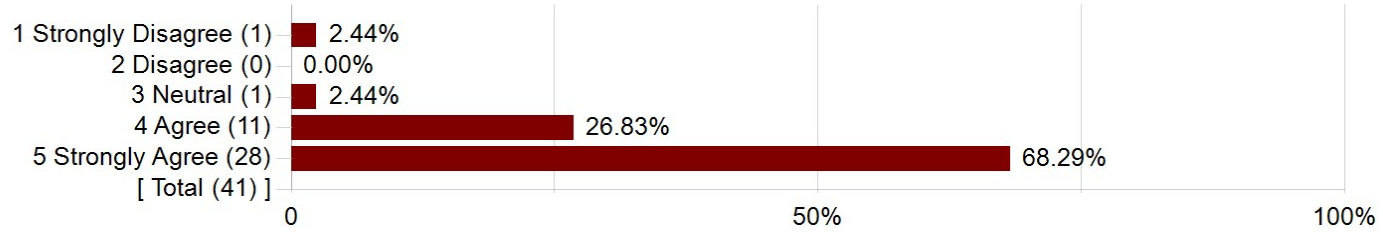


Statistics	Value
Response Count	41
Mean	4.59
Median	5.00
Standard Deviation	0.77

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

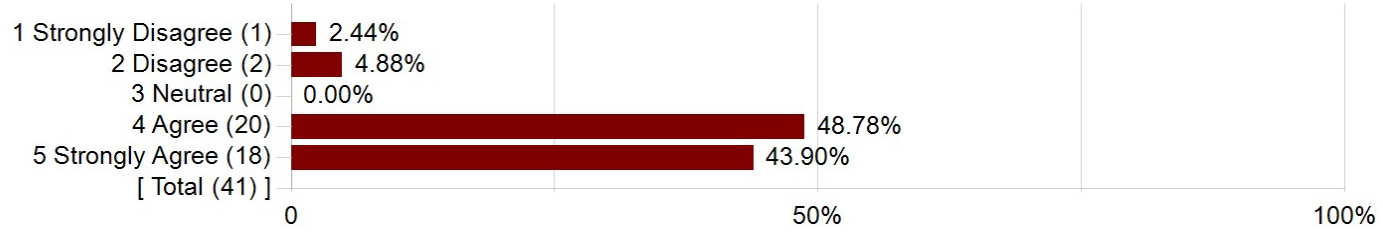
Comments
The professors are great, and the course material is very interesting, especially for people interested in knowing how body functions adjust during periods of exercise. However, make sure you actually study the course content. The tests only have content that has been discussed in lecture, but it's still a lot of information, so just keep that in mind when creating your study schedule. (It's not too bad if you space out our studying. It also helps that the tests were non–cumulative.) I also thought that the labs were very fun and did an excellent job of reiterating and emphasizing information from lectures. They helped me to understand the course content better.
Don't be afraid to ask questions!
Go to office hours.
It is not much work, besides a lot of studying for the three midterm exams. Labs play a huge part in grading which is nice as material is well applied in labs.
Do the readings and study with time not beforehand.
Make sure you find a good lab group or you'll be having a rough quarter.
Be prepared to study a lot for exams.
This class is not as easy as the other bio classes but it is very useful and interesting material. If you like exercise take this class.
NA
NA
Take it!!!! This class is super chill and fun. Just make sure to leave ample time to study for midterms.
If this method works for you, I strongly recommend using notecards to study for the exams; be working on creating them throughout the quarter. Also, practice explaining the concepts to other people, as the exaam questions are often about pieces ideas and systems together as opposed to entirely recalling facts from memory.
This course is great if you're interested in learning how your body works and at the end of the course I was surprised by how much I had learned. Overall this course is fantastic and I would 100% recommend for non–majors. Dr. O and Dr. F are just fantastic and some of the best professors I've had.
Stay on top of the material.
This class is challenging but rewarding nonetheless. There is a lot of cell physiology that you have to learn. Lectures move fast.
Quite manageable and honestly quite interesting because we get to see how the material relates to our own bodies
Definitely take the course. Do the extra readings
A bit challenging first quarter, but eventually get the hang of it. No need to read the textbook; labs were kind of tedious at times
Taking this class if your interested in physiology but don't want to take the pre–med/bio major version. The first quarter of the sequence is more external work, but it all pays off in this quarter during lab.
This class is about metabolism and exercise, but if you are just interested in the practical aspects of that the difficulty of this class isn't worth it. This is a hard course with a lot of material covered that is on an inaccessible anatomic level. The labs are also hard

Comments
and long. From what I've heard from friends, this class is definitely harder than other core bio classes. There isn't too much work though if you finish your lab reports during the lab–time as the only other weekly assignment is a quick pre–lab quiz. You do have to design your own lab in week 8 and then do a 15–minute presentation about it with your lab group during week 9 which is a lot of work. The professors are really excited about this class though and they are really sweet so if you do want to work hard, this is a good class.
it is great that this course is after bios 10501 now
Go to all of the lectures and take notes. Attend office hours sessions. Participate in the labs!
Biz–Econ major here. I think overall this class is a pretty solid bet for getting your core bio requirement out of the way. As it is taught as a sequence, the part of the course that has the labs is more work, but is not hard to get an A or A– in. The sequence without labs is pretty brutal/comprable to other principles of bio class. The bulk of your grade for this portion of the class is the three exams. If you do bad on one of these, you wont be getting an A. I think it definitely like manageable, if you consistentntly go to class and Office hours during this part of the course you should be fine, but don't be shocked if you get a B in this portion of the course. Overall, not like a complete joke of a class, but if you take it seriously for the most part you should be fine.
this course was unnecessarily difficult. I was excited to take it, as someone who has never loved biology, because it seemed this course was geared towards students like me. The material was interesting but very difficult to comprehend at the high level at which it was being presented. On top of that, this course was disorganized in terms of grading because there were too many TAs involved, and it was unclear who was grading what at different times. Overall, I am glad I took this course, but I would definitely not choose to take it again if I had the choice. The second quarter of this sequence was more reasonable in terms of expectations than the first, but really this is no intro/core–style class. This is a heavy load.
Attend lectures, utilize lecture recordings, go to office hours before the exams, make sure to really polish your lab reports.
Utilize the TAs and Professors, they are great resources and always excited to help you.

Laboratory Meetings

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

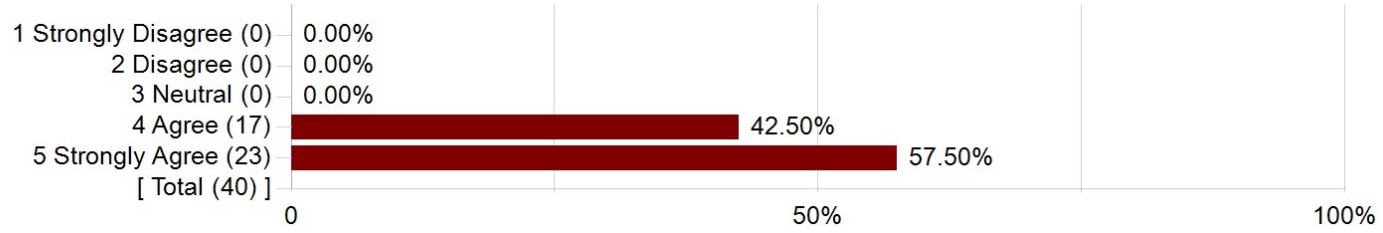
1. The laboratory protocols and instructions were clear and well organized.



Options	Score	Count	Percentage
Strongly Disagree	1	1	2.44%
Disagree	2	2	4.88%
Neutral	3	0	0.00%
Agree	4	20	48.78%
Strongly Agree	5	18	43.90%

Statistics	Value
Response Count	41
Mean	4.27
Median	4.00
Standard Deviation	0.90

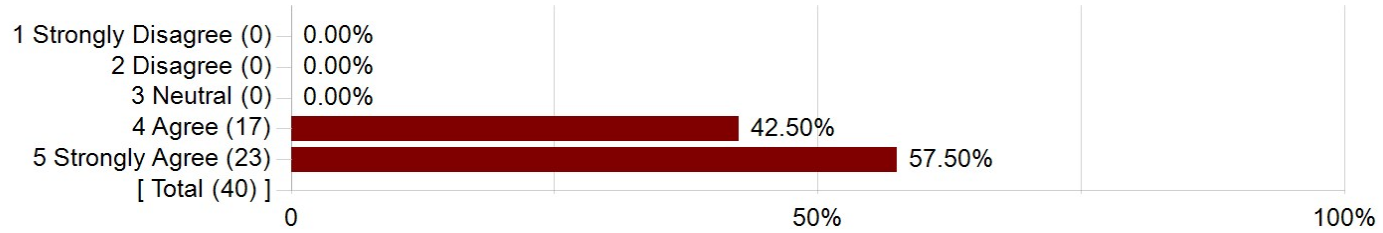
2. Materials and equipment needed for performing the exercises were readily available.



Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	0	0.00%
Agree	4	17	42.50%
Strongly Agree	5	23	57.50%

Statistics	Value
Response Count	40
Mean	4.58
Median	5.00
Standard Deviation	0.50

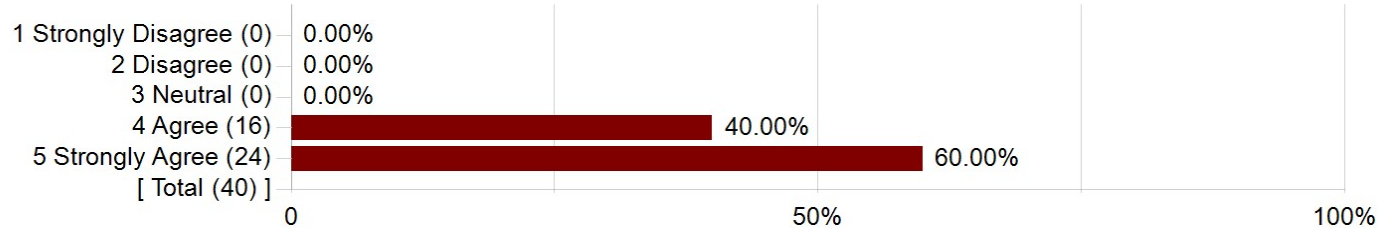
3. The lab exercises had clear educational goals.



Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	0	0.00%
Agree	4	17	42.50%
Strongly Agree	5	23	57.50%

Statistics	Value
Response Count	40
Mean	4.58
Median	5.00
Standard Deviation	0.50

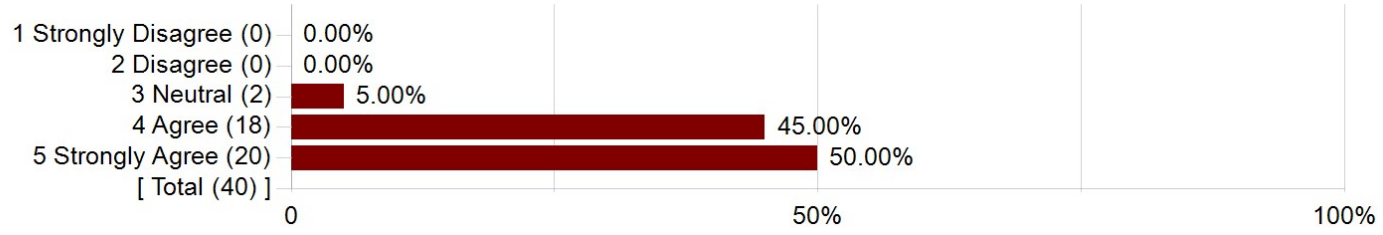
4. The goals of the lab exercises were well integrated with the overall objectives of the course.



Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	0	0.00%
Agree	4	16	40.00%
Strongly Agree	5	24	60.00%

Statistics	Value
Response Count	40
Mean	4.60
Median	5.00
Standard Deviation	0.50

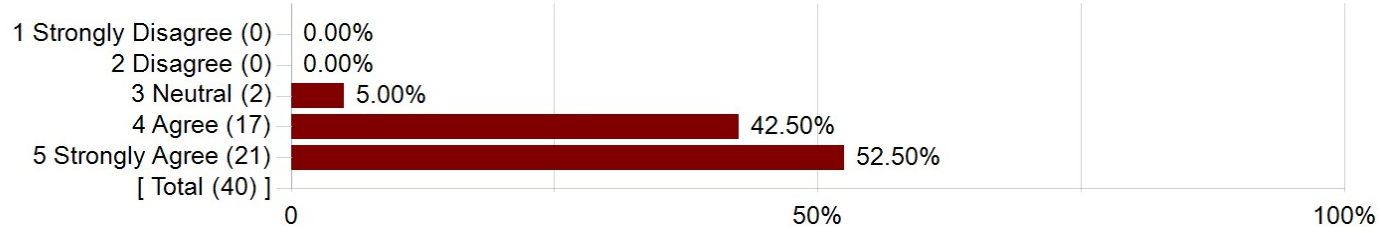
5. The lab exercises explored course topics in ways that could not have been accomplished in lecture or discussion.



Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	2	5.00%
Agree	4	18	45.00%
Strongly Agree	5	20	50.00%

Statistics	Value
Response Count	40
Mean	4.45
Median	4.50
Standard Deviation	0.60

6. Overall, this was an excellent laboratory experience.



Options	Score	Count	Percentage
Strongly Disagree	1	0	0.00%
Disagree	2	0	0.00%
Neutral	3	2	5.00%
Agree	4	17	42.50%
Strongly Agree	5	21	52.50%

Statistics	Value
Response Count	40
Mean	4.48
Median	5.00
Standard Deviation	0.60

The time allocated for completing the lab was:

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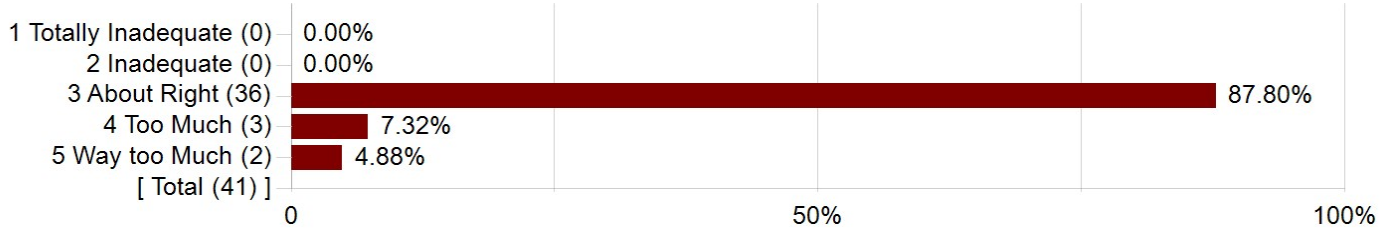

Statistics	Value
Response Count	41
Mean	3.17
Median	3.00
Standard Deviation	0.50

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
We used bikes, treadmill, heartrate monitor, Powerlab (a computer program), and other equipment to complete labs. Although I am pursuing biology beyond this course, it was interesting to learn how to collect data related O2 and CO2 exhalation, muscle twitch strength, heartrate, etc. and understand why such data is relevant, even in our daily lives.
I learned how to actually measure and view what we learned about.
Observational data is extremely important
How to evaluate and analyse collected data.
I learned how to callibrate
NA
I learned skills related to being meticulous and thorough. I also learned to be more curious and question results.
I practiced recorded data through technology.
I got to work with a lot of interesting lab equipment that had to do with physiology which was fun.
Scientific method, a priori reasoning enhancement, procedural compliance.
I learned how to use different tools such as EKG, heart rate monitors, breathing monitors and more to monitor the body's functions during exercise
How to put the theory we learned in practice
I learned how to analyze data from various types of labs (muscle contraction, VO2, EKG, etc) and how to identify trends. I also learned how experimental graphs and data often do not look like those of the textbook, due to extraneous factors.
Didn't really gain any.
the data collecting on the computer was cool
I learned how to calculate data using different applications, and how to set up a successful experiment through the self–designed lab activity we did.
it was very insightful into metabolism measurements
I utilized Excel spreadsheets for formula calculations and how to measure indicators such as blood pressure, lactic threshold, and RER using lab equipment.
Good experience. Learned to use different software and lab materials.

Please share any recommendations to improve the laboratory learning experience.

Comments
Please for the love of god don't make students stay in the same lab groups all quarter.
Clearer instructions would help
NA
I would maybe add more pictures to lab instructions for reference?
Given that labs are already quite long, could we reduce the number of lectures?
Arrive on time
The presentations at the beginning of labs seemed unnecessary and it would be nice to have more teachers/tas there to help more than one group at a time when equipment doesn't work.
nothing
N/A