2021 Spring Fall Quick Report for Zhiwu Zhang ANIM_SCI 545;BIOLOGY 545;CROP_SCI 545;HORT 545;PL_P 545

Project Title: **College of Agricultural, Human, and Natural Resource Sciences Course Evaluations 2020-2021**

Course Audience: **6**
Responses Received: **6**
Response Ratio: **100%**

Report Comments

This Quick Report for Instructors gives a summary of student responses in the course above for each question from the college's Course Evaluation in Blue. If a course has multiple sections, each section has a separate Quick Report. Student comments are provided at the end of the report or at the end of each question group on the report.

Instructor Quick Report for ANIM_SCI 545;BIOLOGY 545;CROP_SCI 545;HORT 545;PL_P 545.01;02;03;04;05-PULLM;TRICI

If you have a question about your Instructor Quick Report please contact your college's course evaluation coordinator, **Alanna Ellis**, or email esg.blue@wsu.edu.

Prepared by: **Enterprise Course Evaluation Team**
Creation Date: **Friday, May 14, 2021**

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Rating Scale Definitions

- 5: Always
- 4: Very Often
- 3: Sometimes
- 2: Rarely
- 1: Never
- [NA]

- 5: Strongly Agree
- 4: Mildly Agree
- 3: Neutral
- 2: Mildly Disagree
- 1: Strongly Disagree
- [NA]

Data: This report provides:

- Frequency distributions of student responses to individual questions
- Mean and median values
- Student comments at the end of each question group
- Overall response rate; and response counts for each question
- See Making Sense of Course Evaluations and Midterm Feedback from Students: A Quick Guide for Instructor

Notes

Does Not Apply/NA:	In questions with a “Does Not Apply” choice, the NA count is shown in the frequency graphs but is NOT included in any statistical analysis (mean/median).
Response thresholds to protect student confidentiality:	If fewer than five (5) students respond to your course evaluation, an Instructor Quick Report is not generated.
Multiple sections:	If a course has multiple sections, each section has a separate Instructor Quick Report.
Team-taught courses:	Each instructor receives results only for themselves as instructor and for all other questions about the course or non-instructor-specific topics.

Overall

What is your overall rating of the instructor Zhiwu Zhang in this course?

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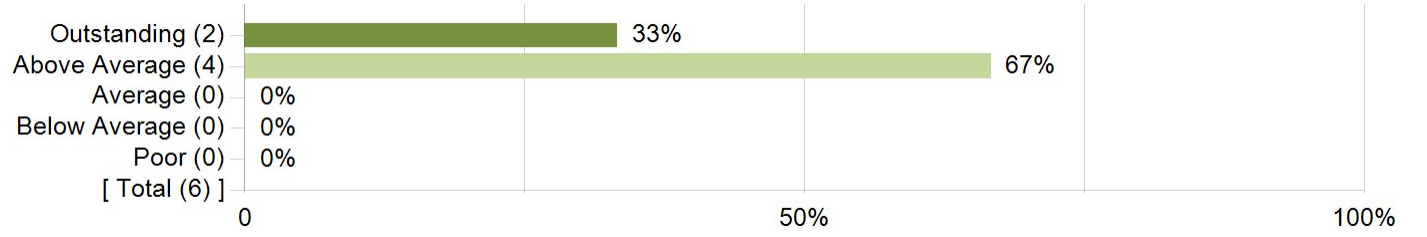

Statistics	Value
Response Count	6
Mean	4.3
Median	4.0

What is your overall rating of this course?

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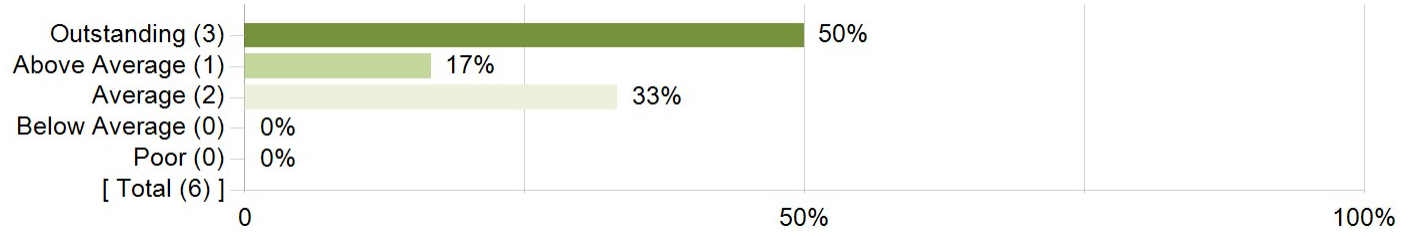
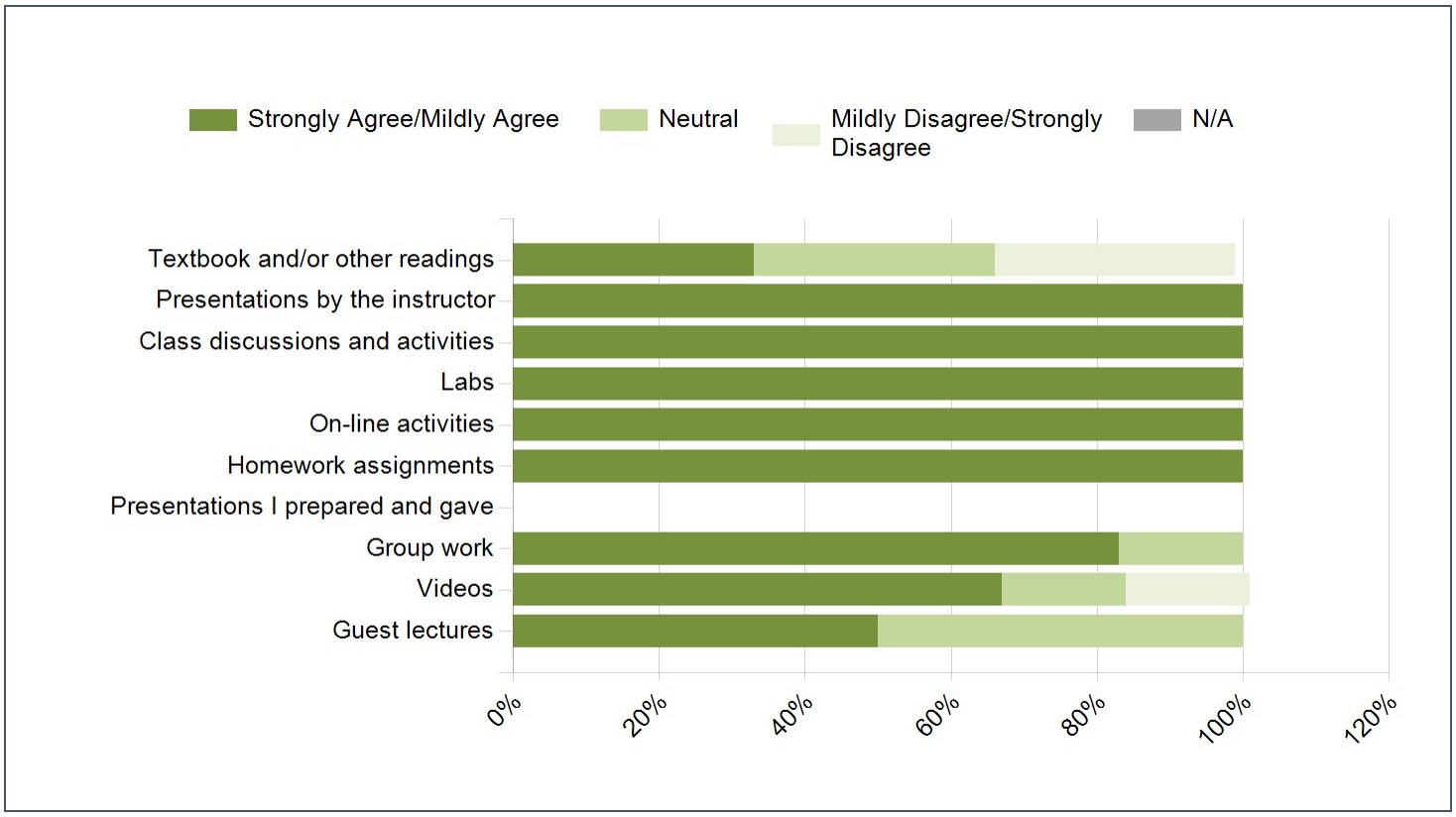


Statistics	Value
Response Count	6
Mean	4.2
Median	4.5

How strongly do you agree or disagree with each statement about this course?

The following elements of this course help me learn:



Overall Student Experience

How much have you learned -- increased your skills and knowledge -- about the main subject/topics in this course?

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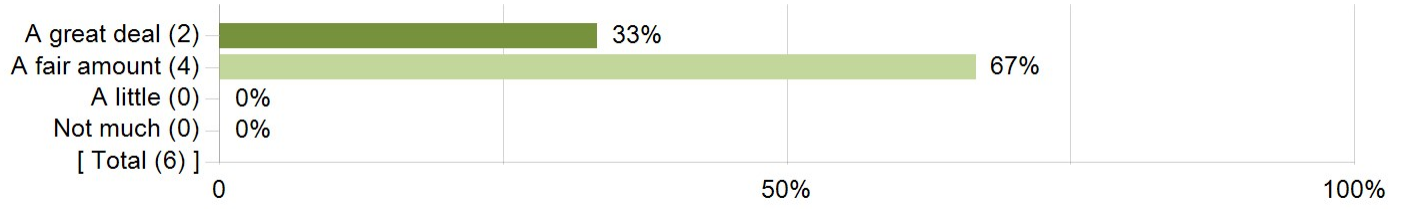
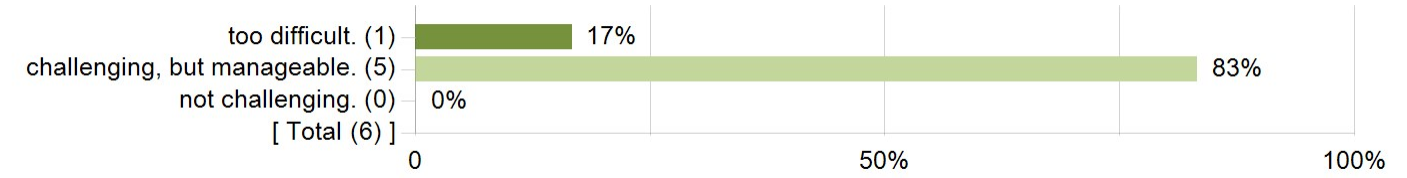


Statistics	Value
Response Count	6
Mean	3.3
Median	3.0

Overall, this course has been…

Overall, this course has been...



Statistics	Value
Response Count	6

Please explain your choice above regarding how challenging this course has been.

Comments
The homework assignments were definitely large time commitments, even with an R coding background, but they were manageable with the code provided in the lecture and lab. The reality is that, for all of statistical information packed into a very short amount of time, this kind of course will be very challenging for most students regardless of genomic and statistical background, but I think the progression of instruction, along with working with the tools for the statistical applications made that learning a little bit easier.
The class was challenging because it is multidisciplinary. However, the resources available on zzlab help give guidance.
This course has been one of the harder ones I've taken here, but I'm finishing the course, so it's been manageable.
I had less knowledge on R–studio and genomics before taking this class but after taking this class I am very much confident in doing analysis and debugging my problems.
It has taken a lot of time and energy to grasp concepts that can be 'abstract' as it's the case in statistic.
I think it is difficult to draw parallels between the fundamentals of statistics and the computational workflows (if any) being taught. In fact, it's not easy to delineate such workflows, compared to what I've learnt in bioinformatics. As I mentioned before, the slides are simply not informative enough, and there's no tailored background reading material. Although the current TA seems quite knowledgeable, especially in R, he also has the same English proficiency problem.

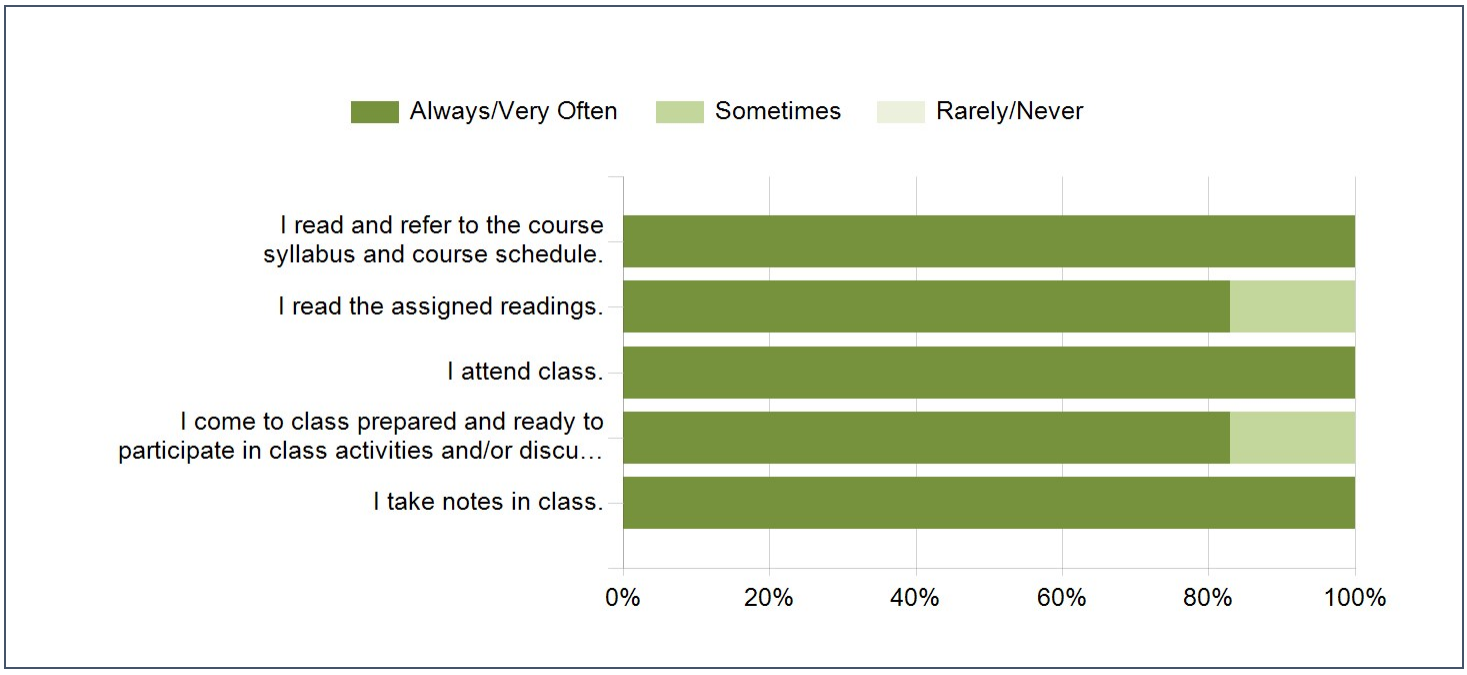
Overall, what suggestions or changes, if any, would you make to improve the content or format of this course regardless of who is teaching it?

Comments
This was mentioned in class before, but there are two things that would help the homework process. 1) Guidance on dataset selection beginning on the second assignment – even if the data are in genomic format, there are some things that might interfere with GAPIT performance (in the GM file, the chromosome and position need to be as.integer() and in the GD file column 1 should have the taxa – so maybe a quick guide on tips for data formatting success?)....also potentially resources for converting from vcf if some students want. I do think that being able to choose the data you want to work with, and not always just using the class data is an important option that gives this class extra value, but it might need some extra guidance. 2) in the lectures, assign variable names with more meaning – following just X and y gets confusing between lectures
Definitely improve delivery through better communication and simplification of the materials.
Please try to put more theoretical stuff in the lecture slides before putting all the codes and explain all the figures and graphs in words so that students can understand that whenever they look at the slides.
Maybe provide some real–life examples and case studies to inspire and motivate the students
My opinion is that, the content/syllabus IS attractive. However, the question is whether the delivery can cultivate/strengthen interest beyond the scope of the course. I feel that Dr. Zhiwu could eventually formalize his course material as a pamphlet as background reading material, for example, which should back up the slides. Also, I think an additional TA who is good in English would strengthen the TA position.

Student Effort and Responsibility

How often do you do the following to learn in this course, ANIM_SCI 545/BIOLOGY 545/CROP_SCI 545/HORT 545/PL_P 545 (16392;16393;16394;16395;16396;8941;8943;894?

	Count	Median	Mean	Always/Very Often	%	Sometimes	%	Rarely/Never	%
I read and refer to the course syllabus and course schedule.	6	5.0	4.7	6	100%	0	0%	0	0%
I read the assigned readings.	6	4.5	4.3	5	83%	1	17%	0	0%
I attend class.	6	5.0	4.8	6	100%	0	0%	0	0%
I come to class prepared and ready to participate in class activities and/or discussion.	6	4.5	4.3	5	83%	1	17%	0	0%
I take notes in class.	6	4.5	4.5	6	100%	0	0%	0	0%



Typically, how much time PER WEEK do you spend on this course outside of class?

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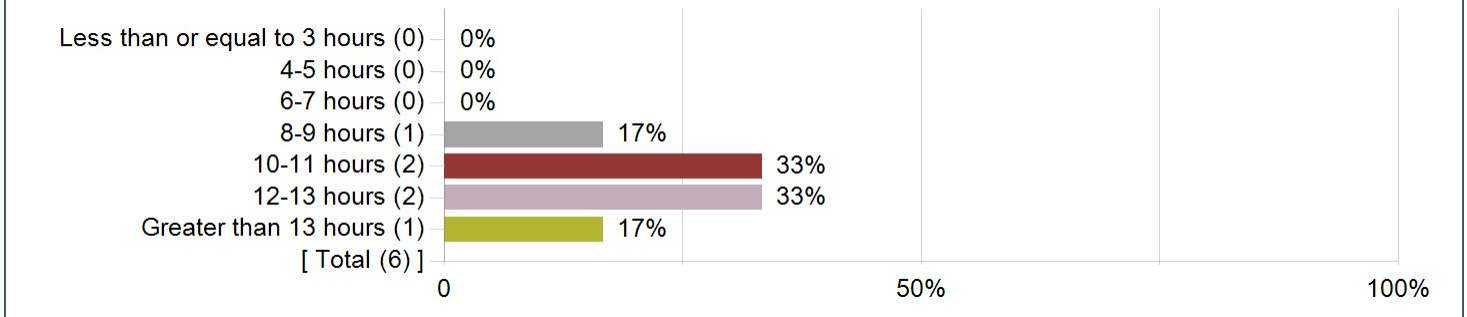
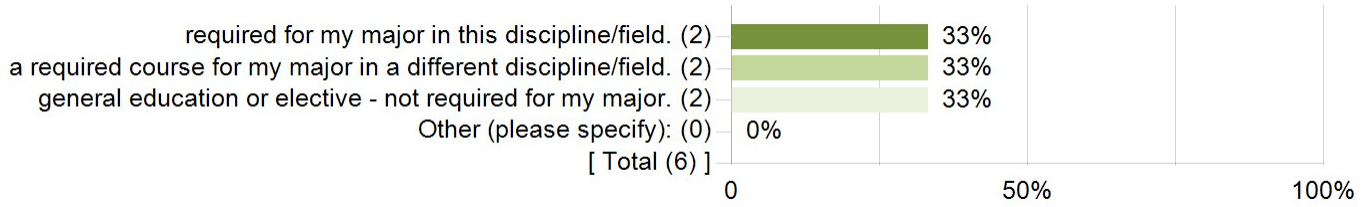


Statistics	Value
Response Count	6

This course is...

This course is...



Statistics	Value
Response Count	6

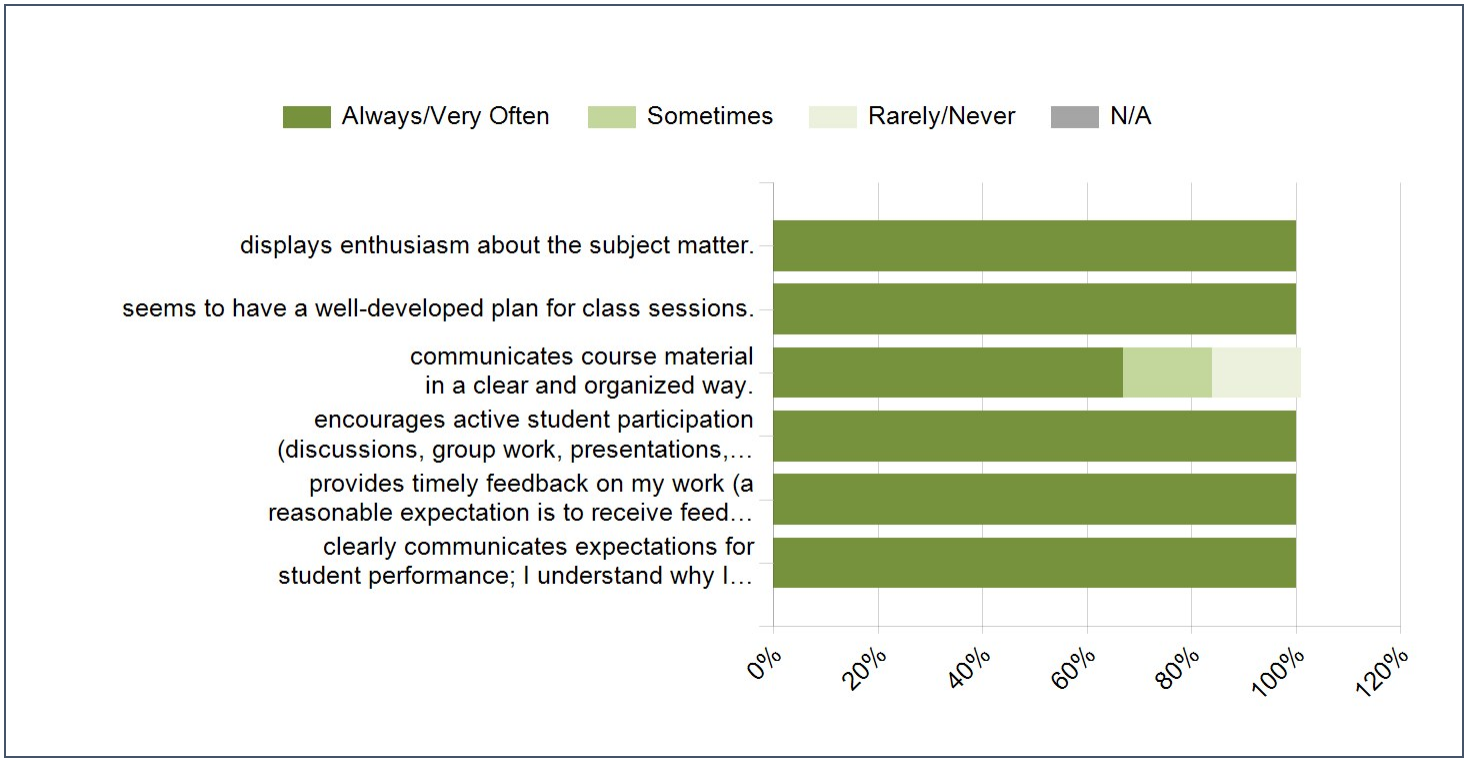
Questions about the Instructor

This section provides two summary views followed by breakdowns by question.

How often does your instructor Zhiwu Zhang do the following?

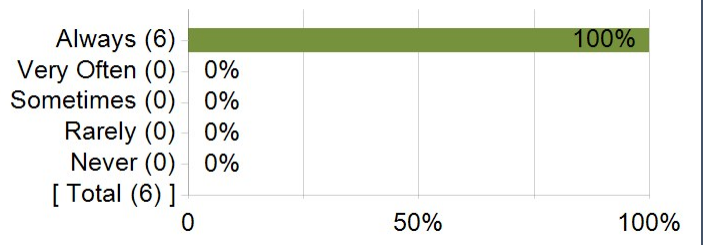
My Instructor...

	Count	Median	Mean	Always/Very Often	%	Sometimes	%	Rarely/Never	%
displays enthusiasm about the subject matter.	6	5.0	5.0	6	100%	0	0%	0	0%
seems to have a well-developed plan for class sessions.	6	4.5	4.5	6	100%	0	0%	0	0%
communicates course material in a clear and organized way.	6	4.0	3.7	4	67%	1	17%	1	17%
encourages active student participation (discussions, group work, presentations, questions, etc.).	6	5.0	5.0	6	100%	0	0%	0	0%
provides timely feedback on my work (a reasonable expectation is to receive feedback on an assignment within 2 weeks).	6	5.0	4.8	6	100%	0	0%	0	0%
clearly communicates expectations for student performance; I understand why I get the grades I get.	6	5.0	4.7	6	100%	0	0%	0	0%



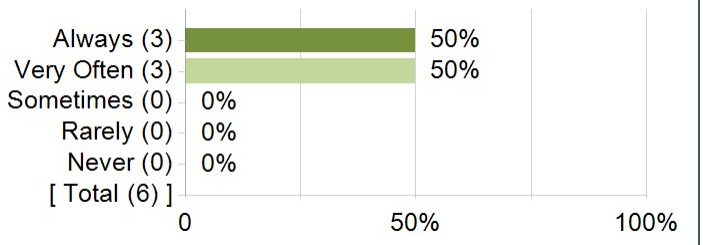
How often does your instructor Zhiwu Zhang do the following?

1. displays enthusiasm about the subject matter.



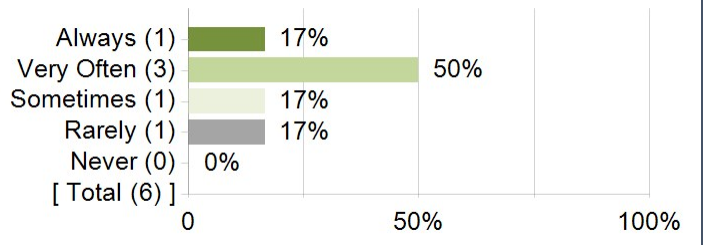
Statistics	Value
Response Count	6
Mean	5.0
Median	5.0

2. seems to have a well-developed plan for class sessions.



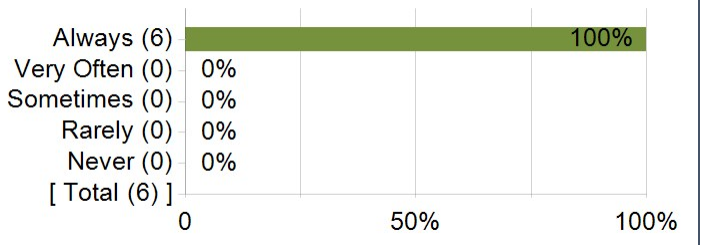
Statistics	Value
Response Count	6
Mean	4.5
Median	4.5

3. communicates course material in a clear and organized way.



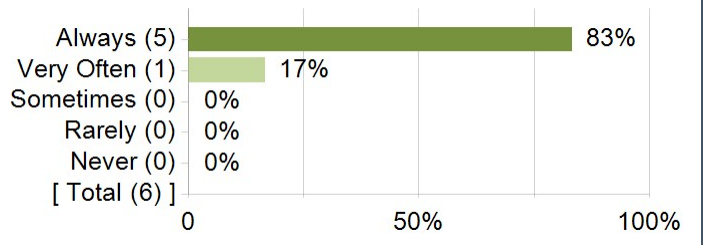
Statistics	Value
Response Count	6
Mean	3.7
Median	4.0

4. encourages active student participation (discussions, group work, presentations, questions, etc.).



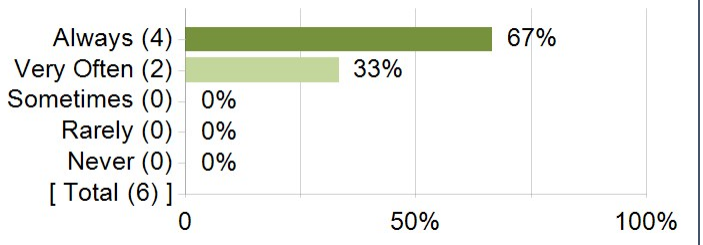
Statistics	Value
Response Count	6
Mean	5.0
Median	5.0

5. provides timely feedback on my work (a reasonable expectation is to receive feedback on an assignment within 2 weeks).



Statistics	Value
Response Count	6
Mean	4.8
Median	5.0

6. clearly communicates expectations for student performance; I understand why I get the grades I get.



Statistics	Value
Response Count	6
Mean	4.7
Median	5.0

What are the strengths of Zhiwu Zhang as an instructor?

Comments
Zhiwu's lectures are a good balance of material and the code/tools required to put the theory into use. He goes out of his way to provide additional reading material and time. The amount of time he puts into his lectures and to finding innovative ways to visualize the concepts is very evident.
Very knowledgeable and enthusiastic
Dr. Zhang is always available to help if questions arise. He is enthusiastic about GWAS and genomic selection and deftly explains tricky concepts.
He has crystal clear knowledge of all the genomics aspects and tries his best to explain it to the student, which is a very hard task.
Enthusiastic, very knowledgeable, keen to help students and patient.
I feel that he comes as one with zeal and friendly demeanor.

What are one or two specific things the instructor, Zhiwu Zhang, could do to improve his/her teaching?

Comments
Generally, I really like this approach of flipping the class, however on rare occasions there were issues with some of the video lectures posted ahead of time, for example some audio problems, or on occasion when the zoom meeting would end and cut the recording short. I don't feel this disrupted my learning all that much, but it is worth more closely vetting these if this particular approach will be used in the future. I also preferred the class sections later in the semester where Zhiwu spent more time going through the important lecture slides than just going through the quiz questions – I found that reinforcing the concepts from the pre–recordings that way to be more helpful.
Improve communication skills and clarity in question formulation
Having slides in the powerpoints that summarize differences between different models and methods would be super helpful
He should put more basic theory on specific topics before going to the whole of it and before going to the codes. Also, he should include more information on the figures he presents in the slides.
Provide slides with more explanation rather than just graphs. Improve his diction as sometimes it's hard to understand the last words he speaks in a sentence.
It seems that his command of English is not yet there, making it hard to grasp his ideas, especially given that the powerpoint slides are not informative enough. Also, the office hours should not immediately precede the involving lab sessions, by which time students are really too tired to hold meaningful conversations.

Questions about the Course

How strongly do you agree or disagree with each statement about this course? The following elements of this course help me learn:

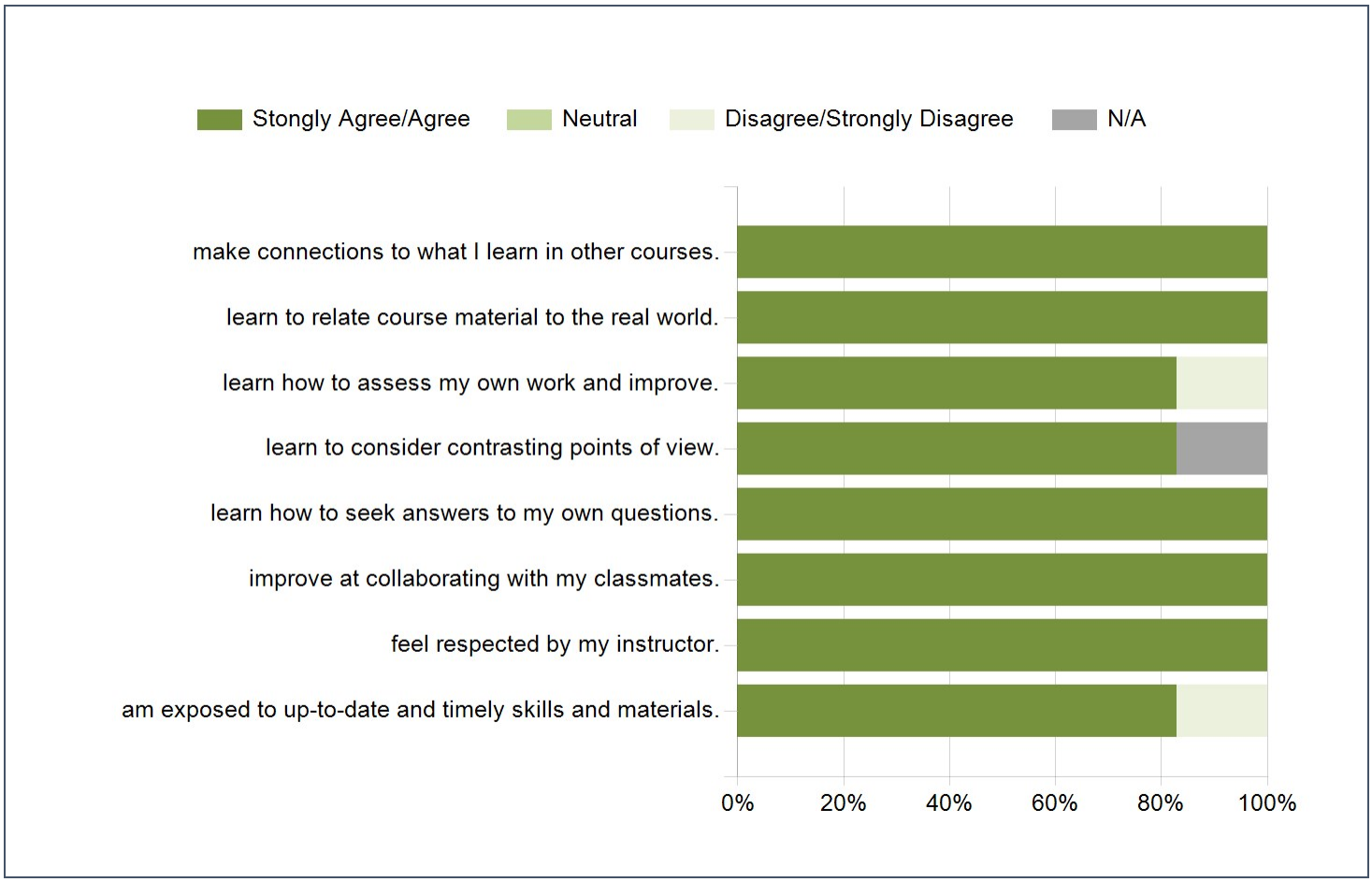
	Resp	Median	Mean	Strongly Agree/Mildly Agree	%	Neutral	%	Mildly Disagree/Strongly Disagree	%
Textbook and/or other readings	6	3.0	3.0	2	33%	2	33%	2	33%
Presentations by the instructor	6	5.0	4.7	6	100%	0	0%	0	0%
Class discussions and activities	6	5.0	4.7	6	100%	0	0%	0	0%
Labs	6	4.0	4.3	6	100%	0	0%	0	0%
On-line activities	4	4.0	4.3	4	100%	0	0%	0	0%
Homework assignments	6	4.5	4.5	6	100%	0	0%	0	0%
Presentations I prepared and gave	0	NRP	NRP	0	N/A	0	N/A	0	N/A
Group work	6	5.0	4.5	5	83%	1	17%	0	0%
Videos	6	5.0	4.0	4	67%	1	17%	1	17%
Guest lectures	4	4.0	4.0	2	50%	2	50%	0	0%

Please provide comments about what elements of the course did or did not help you learn:

Comments
The zzlab website with the resources from previous courses is a great place to learn.
I really appreciated having "in person" discussions. They helped round out the concepts learned in the pre–recorded lectures. I think a small portion of a lecture devoted to data file types and how to manipulate them into the proper format for GWAS/GS would be helpful. Since there isn't a uniform format for data files to be in, it can get really tricky to know how to manipulate data for analysis if the data are in a format you're not familiar with.
There is no specific book for this course which is the only downside I guess.
It helped that recordings from previous years were provided.
I feel that the presentation slides were not informative enough. I think the class material should help explain the fundamentals and algorithms. The lab materials can then focus on the implementation. To put it in another way, I feel that a lot of class slides are occupied with R–code that cannot help understand the fundamentals, and should be moved to lab slides. Moreover, this course badly needs dedicated background notes/reading material.

How strongly do you agree or disagree with each statement about this course?

In this course, I ...



Please comment on which skill/item above is particularly valuable to you and why it is valuable.

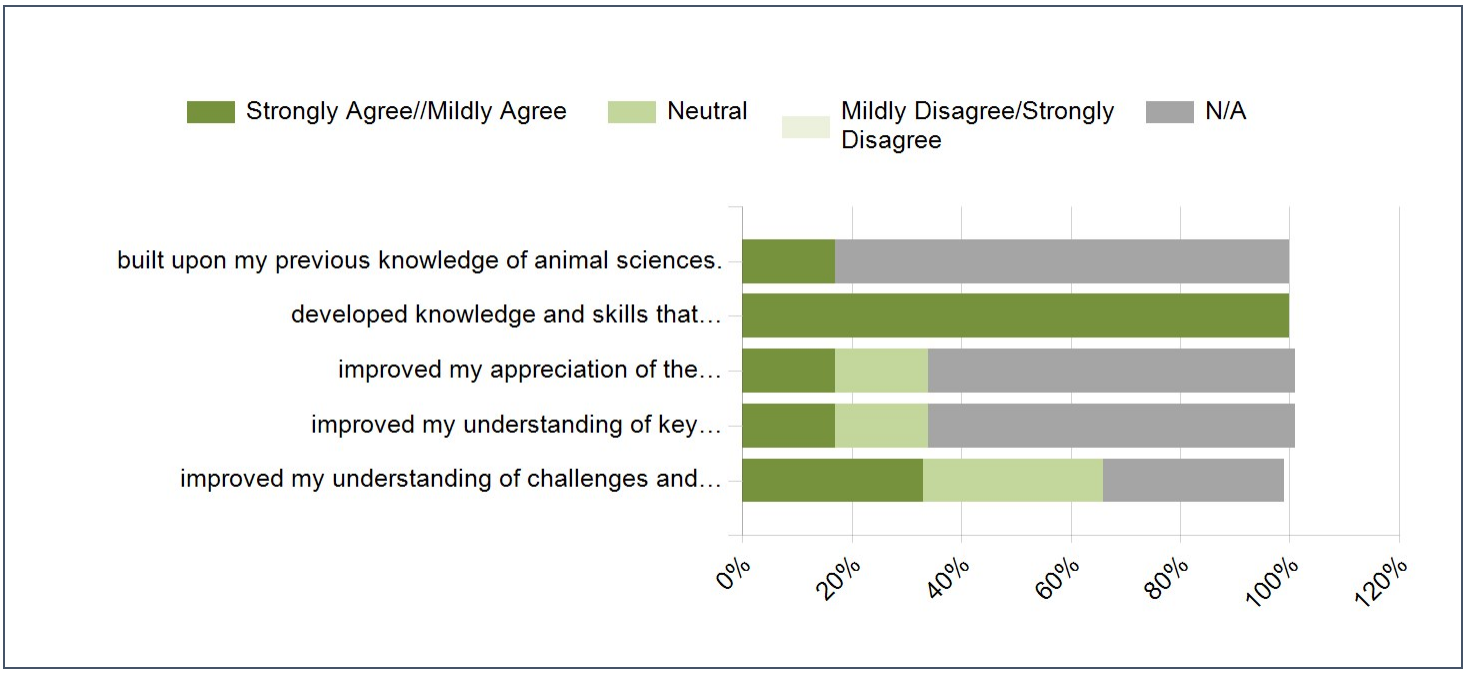
Comments
The instructor is really available to help you understand.
Making connections in this class to what I learn in other classes or through my dissertation research has been very valuable to me. It's helped me make sense of theoretical concepts and has set me up for success in analyzing my own data.
I am very glad that I learn GWAS and Genomic selection from this class and can apply them in real research scenarios.
Most precious skill I've gained from this course analysis in R, which is immediately applicable for my transcriptomics research.

Questions about Animal Science

How strongly do you agree or disagree with the following statements?

In this course, I have...

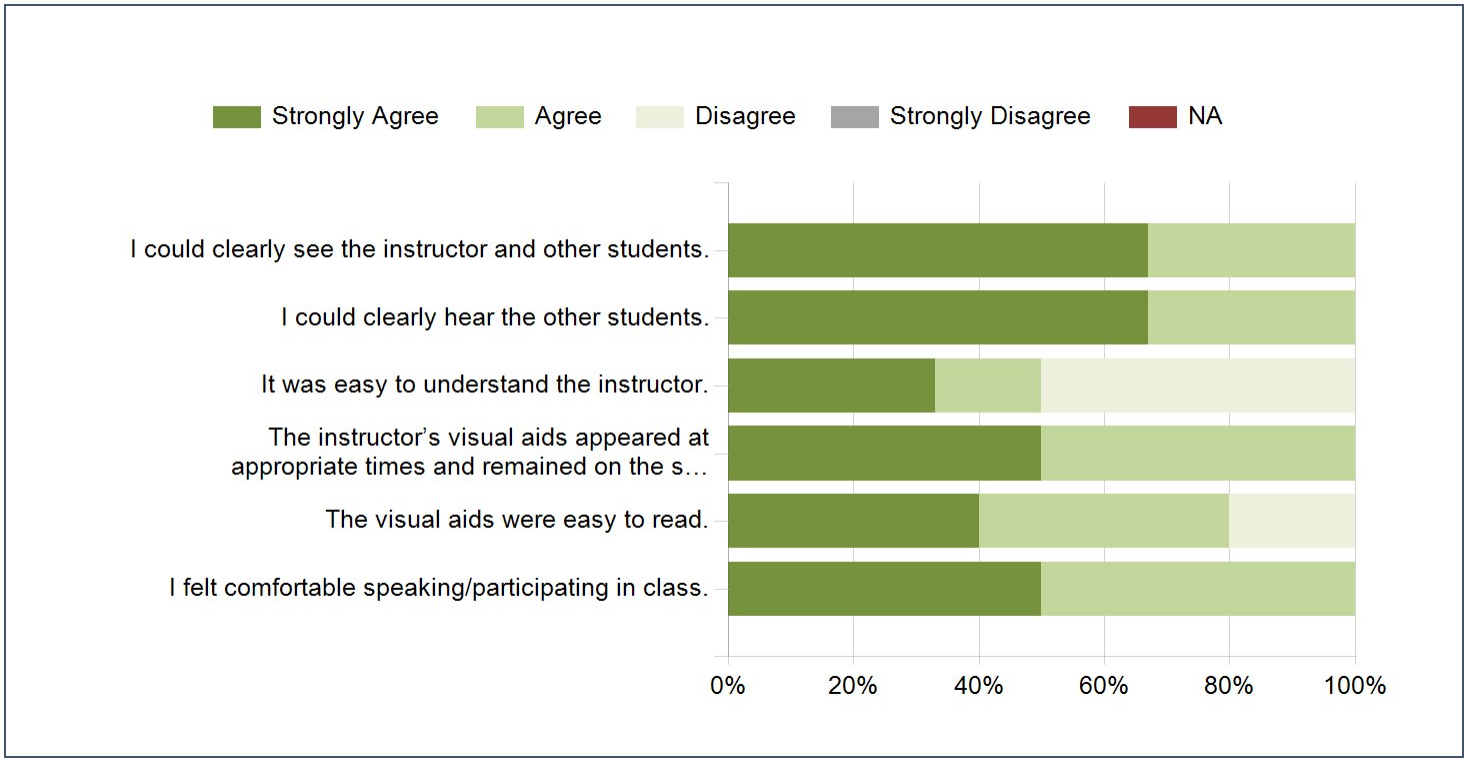
	Count	Median	Mean	Strongly Agree//Mildly Agree	%	Neutral	%	Mildly Disagree/Strongly Disagree	%
built upon my previous knowledge of animal sciences.	1	5.0	5.0	1	100%	0	0%	0	0%
developed knowledge and skills that I expect to use in my future career.	6	5.0	4.8	6	100%	0	0%	0	0%
improved my appreciation of the contributions of animals to society.	2	3.5	3.5	1	50%	1	50%	0	0%
improved my understanding of key components of animal function, management or production.	2	3.5	3.5	1	50%	1	50%	0	0%
improved my understanding of challenges and opportunities in the field of animal sciences.	4	3.5	3.8	2	50%	2	50%	0	0%



AMS Student Experience

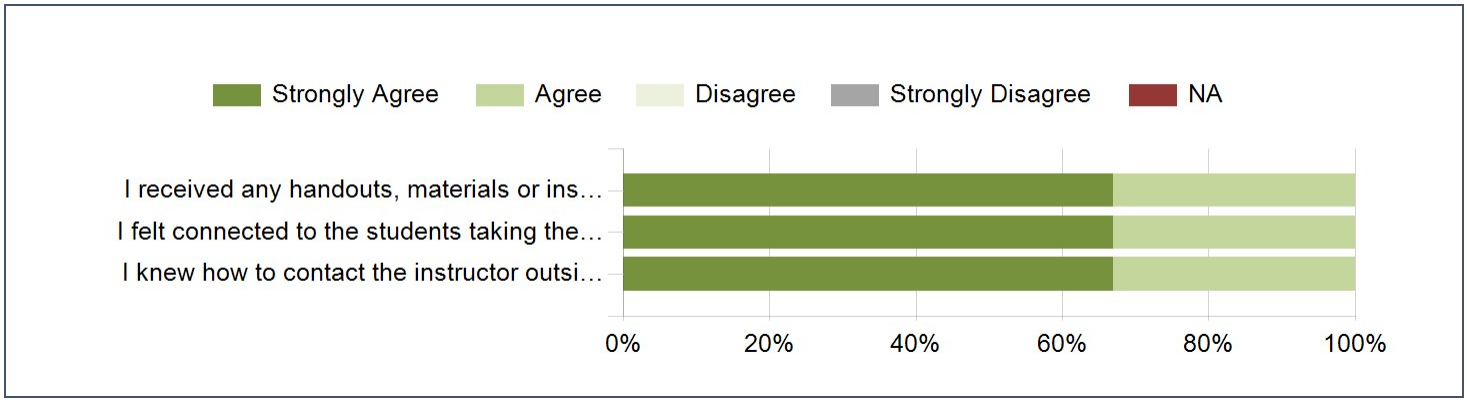
Please provide feedback about your experience as a student participating via video-conferencing. (Results may be shared with the instructor, department/college, and Global Campus.)

	Resp	Mean	Median	Strongly Agree	%	Agree	%	Disagree	%	Strongly Disagree	%
I could clearly see the instructor and other students.	6	3.7	4.0	4	67%	2	33%	0	0%	0	0%
I could clearly hear the other students.	6	3.7	4.0	4	67%	2	33%	0	0%	0	0%
It was easy to understand the instructor.	6	2.8	2.5	2	33%	1	17%	3	50%	0	0%
The instructor's visual aids appeared at appropriate times and remained on the screen as long as necessary.	6	3.5	3.5	3	50%	3	50%	0	0%	0	0%
The visual aids were easy to read.	5	3.2	3.0	2	40%	2	40%	1	20%	0	0%
I felt comfortable speaking/participating in class.	6	3.5	3.5	3	50%	3	50%	0	0%	0	0%



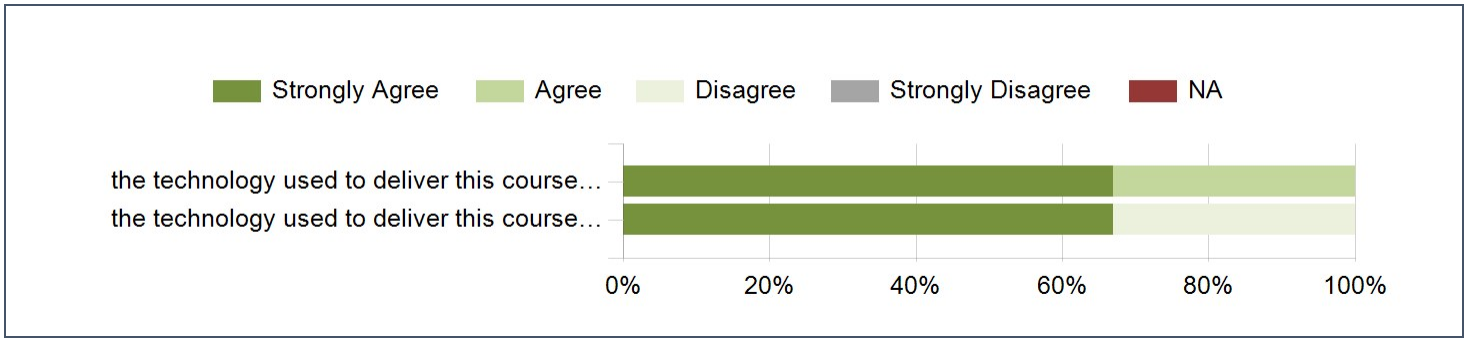
Please answer the following questions...

	Count	Strongly Agree	%	Agree	%	Disagree	%	Strongly Disagree	%
I received any handouts, materials or instructions, required to complete the course in a timely manner.	6	4	67%	2	33%	0	0%	0	0%
I felt connected to the students taking the course from other locations.	6	4	67%	2	33%	0	0%	0	0%
I knew how to contact the instructor outside of class (office hours) for help.	6	4	67%	2	33%	0	0%	0	0%



Overall...

	Count	Strongly Agree	%	Agree	%	Disagree	%	Strongly Disagree	%
the technology used to deliver this course did *not hinder* my learning	6	4	67%	2	33%	0	0%	0	0%
the technology used to deliver this course did *enhance* my learning	6	4	67%	0	0%	2	33%	0	0%

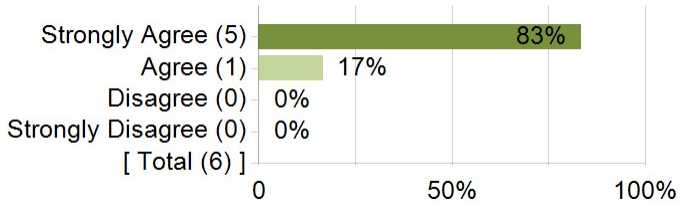


Please provide comments about technology, delivery, experience

Comments
Technology worked rather well, but sometimes it's easier to explain by drawing on a board.
He gave us a lecture recording before class which is very handy because we can listen to the video again and again if we don't understand anything.
I really liked the component of labs and R studio; it was easy to follow.
There wasn't any glitch with zoom. However, the content of material presented needed to be more informative.

Instructor experience...

Instructor experience...



Statistics	Value
Response Count	6
Mean	3.8
Median	4.0

End of Report