Quick Report for Zhiwu Zhang CROP_SCI 545

2017 Spring College of Agricultural, Human, and Natural Resource Sciences

Project Audience 7
Responses Received 7
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 Spring 2017 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 CROP_SCI 545.01;02-PULLM

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

Table of Contents

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?

Outstanding (14%)
Above Average (71%)
Average (14%)
Below Average (0%)
Poor (0%)
[Total (7)]
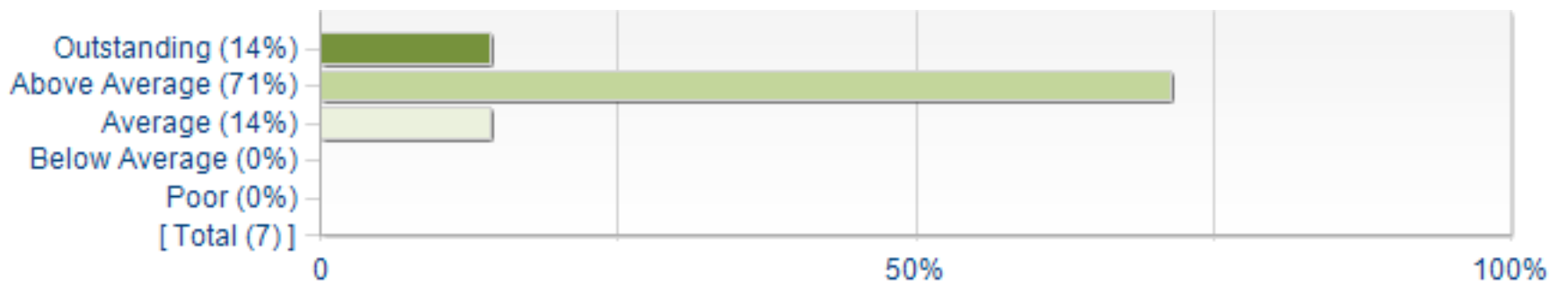
Statistics	Value
Response Count	7
Mean	4.0
Median	4.0

What is your overall rating of this course?

Outstanding (14%)
Above Average (71%)
Average (14%)
Below Average (0%)
Poor (0%)
[Total (7)]
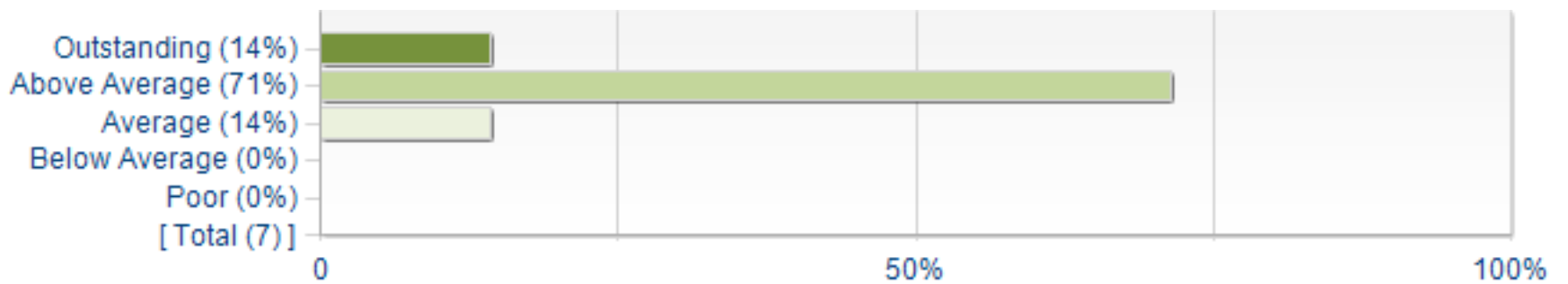
Statistics	Value
Response Count	7
Mean	4.0
Median	4.0

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

course?

The following elements of this course help me learn:

Legend: Strongly Agree/Mildly Agree | Neutral | Mildly Disagree/Strongly Disagree | N/A

| Element	
Textbook and/or other readings	Neutral (100%)
Presentations by the instructor	Strongly/Mildly Agree (100%)
Class discussions and activities	Strongly/Mildly Agree (100%)
Labs	Neutral (100%)
On-line activities	Neutral (100%)
Homework assignments	Strongly/Mildly Agree (100%)
Presentations I prepared and gave	
Group work	Strongly/Mildly Agree (~67%), Mildly Disagree (~33%)
Videos	Strongly/Mildly Agree (~67%), Neutral (~33%)
Guest lectures	Strongly/Mildly Agree (~80%), Neutral (~20%)

Overall Student Experience

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

- A great deal (29%)
- A fair amount (71%)
- A little (0%)
- Not much (0%)
- [Total (7)]
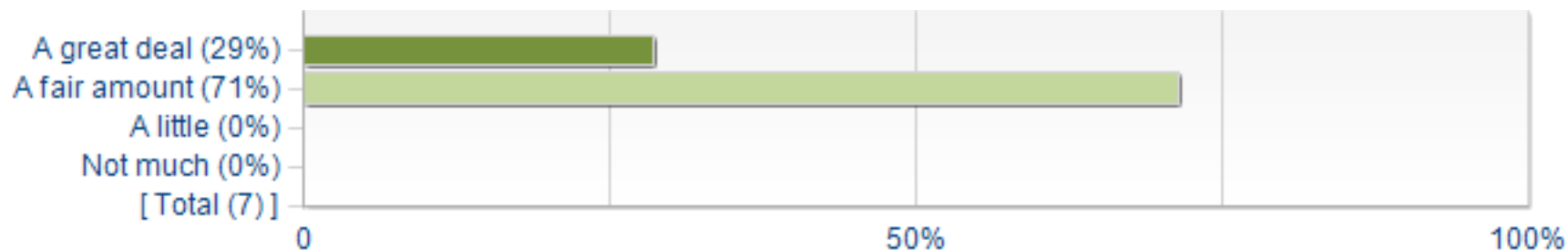
Statistics	Value
Response Count	7
Mean	3.3
Median	3.0

Overall, this course has been…
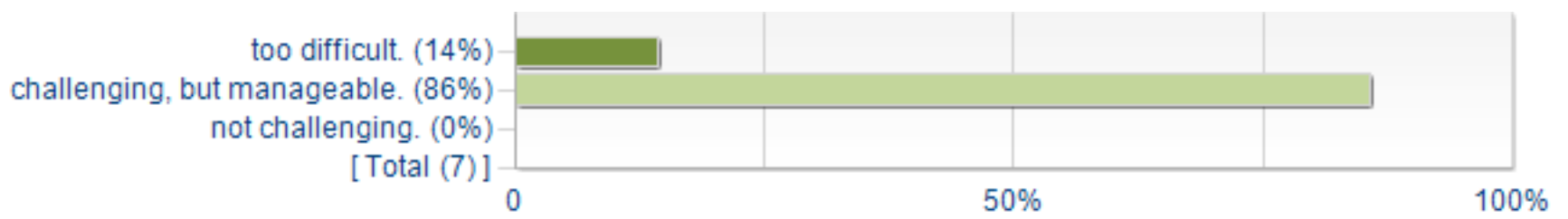
Statistics	Value
Response Count	7

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

Comments
This course was not an easy one but was very helpful. I learned a lot.
– homework assignments required are fair amount of time
The course need a fair amount of programming skills, but I don't have strong programming background
This course is very challenging - given the incredible breadth and depth of the material it covers, however, the difficulty is very reasonable, and the professor is cognizant of this and makes the most of the students' time. Students who have not had extensive experience with R or other coding, who do not have much of a background in statistics, or who are otherwise new to graduate school should be aware that at least up front, this class will take more than 10 hours/week. This class is best taken when there are not other major courses in the student's schedule. The reward is definitely worth the time put in as anyone taking this class will leave with a very good understanding of everything to do with GWAS and genomic prediction, and this can be an asset to labs that do not have bioinformaticists readily available.
The exams and material have been okay for me. Sometimes the lecture material is above my understanding as well as the homework.
The course was engaging, but a little more time-consuming than I would have liked

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
I would add a lab session each week so that specific programming issues could be addressed.
– a lab lecture that focus on programming - talking about the homework assignments after submission
I would spend more time on the mathematical and algorithmic workings of MLMM, FarmCPU, and SUPER. Beyond the general differences between them, I would like to better understand how the algorithms work at the code level.
We can still keep the homework assignments and maybe we need some pop quiz about the programming language
It is a little hard since this course does cover a lot of material and is meant to serve both GWAS and genomic prediction. If possible, I think having an extra lecture devoted to basics of the linear model, explaining the technical terms used later, and referencing basic material throughout the course would make the material easier to initially understand. To make room, I think there could be a little less time going over code in class - while this information was invaluable, I found I learned it best when implementing it in the homework or running over the code at home.
I believe that it would be beneficial to make sure that students who take the course have background in R.

Student Effort and Responsibility

How often do you do the following to learn in this course, CROP_SCI 545 (5066;5067) Statistical Genomics?

	Count	Median	Mean	Always/Very Often	%	Sometimes	%	Rarely/Never	%
I read and refer to the course syllabus and course schedule.	7	4.0	3.9	6	86 %	0	0 %	1	14 %
I read the assigned readings.	6	3.5	3.5	3	50 %	2	33 %	1	17 %
I attend class.	7	5.0	4.9	7	100 %	0	0 %	0	0 %
I come to class prepared and ready to participate in class activities and/or discussion.	7	4.0	4.1	6	86 %	1	14 %	0	0 %
I take notes in class.	7	5.0	4.3	6	86 %	0	0 %	1	14 %
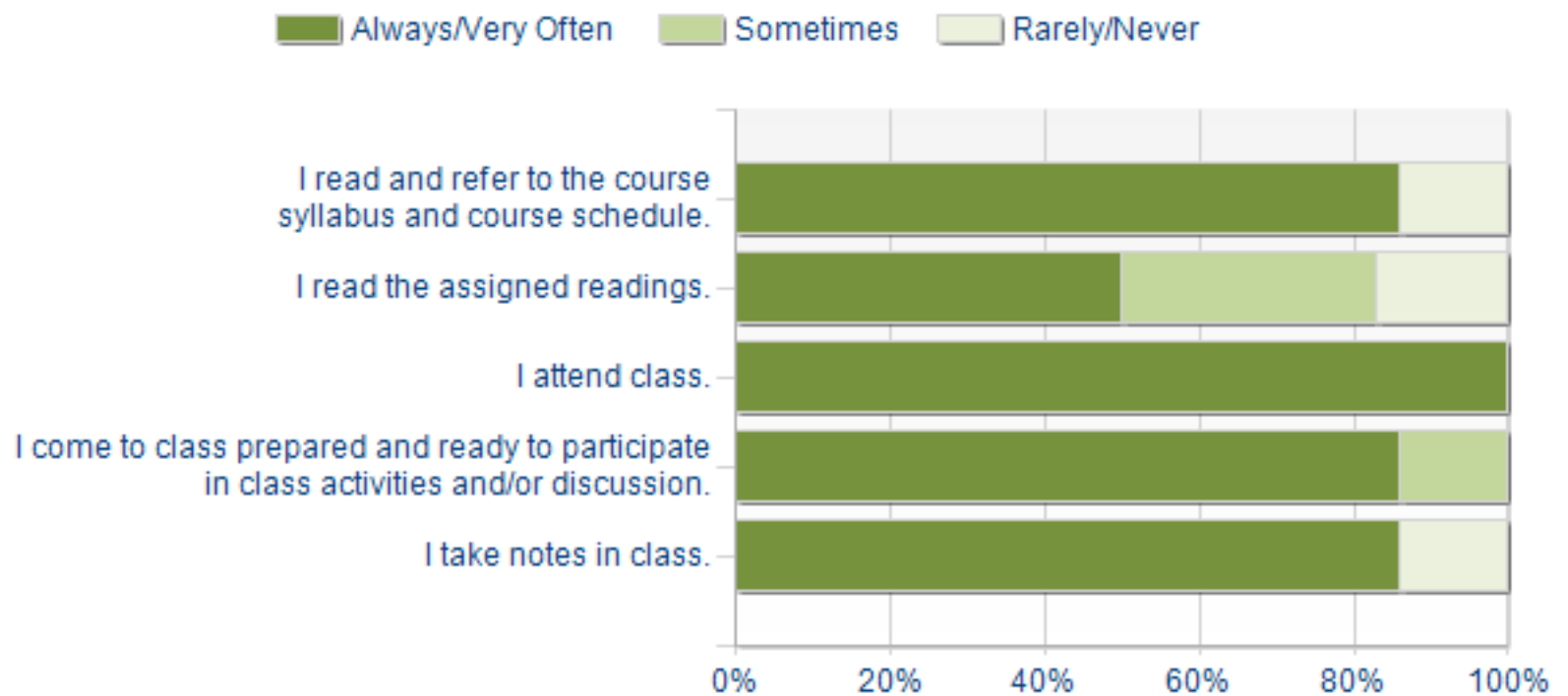
Typically, how much time PER WEEK do you spend on this course outside of

class?
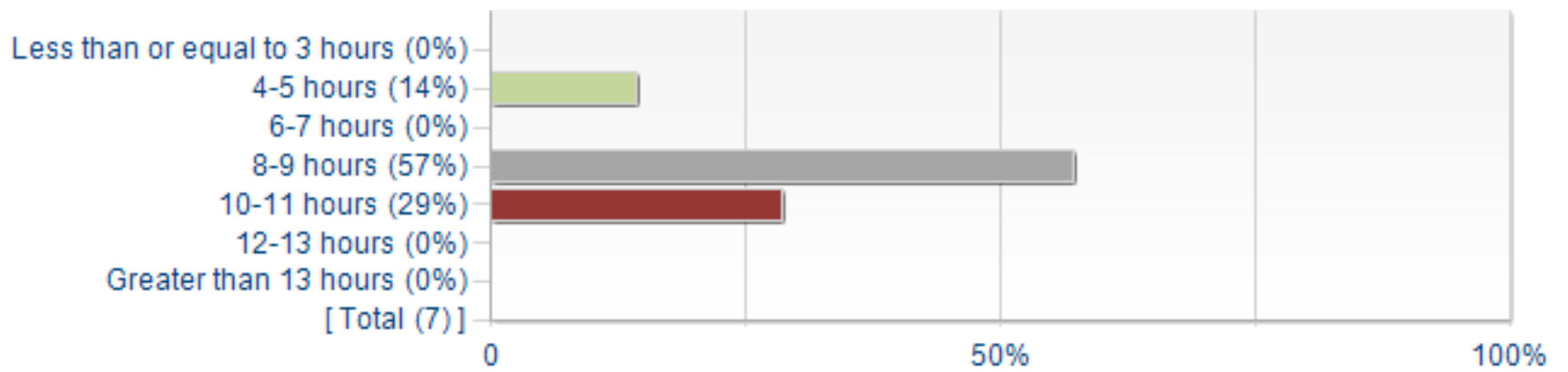
Less than or equal to 3 hours (0%)
4-5 hours (14%)
6-7 hours (0%)
8-9 hours (57%)
10-11 hours (29%)
12-13 hours (0%)
Greater than 13 hours (0%)
[Total (7)]

Statistics	Value
Response Count	7

This course is...

required for my major in this discipline/field. (14%)
a required course for my major in a different discipline/field. (29%)
general education or elective - not required for my major. (43%)
Other (please specify):   (14%)
[Total (7)]
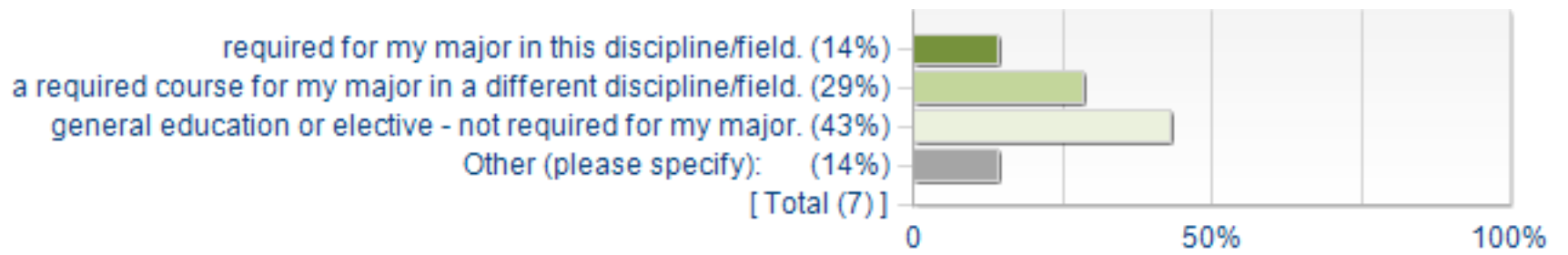
Statistics	Value
Response Count	7

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.	7	5.0	4.6	7	100 %	0	0 %	0	0 %
seems to have a well-developed plan for class sessions.	7	4.0	4.1	5	71 %	2	29 %	0	0 %
communicates course material in a clear and organized way.	7	3.0	3.4	3	43 %	3	43 %	1	14 %
encourages active student participation (discussions, group work, presentations, questions, etc.).	7	4.0	4.4	7	100 %	0	0 %	0	0 %
provides timely feedback on my work (a reasonable expectation is to receive feedback on an assignment within 2 weeks).	7	5.0	4.4	6	86 %	1	14 %	0	0 %
clearly communicates expectations for student performance; I understand why I get the grades I get.	7	5.0	4.6	7	100 %	0	0 %	0	0 %

displays enthusiasm about the subject matter.

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

communicates course material in a clear and organized way.

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

provides timely feedback on my work (a reasonable expectation is to receive feedback on an assignment within…

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

0%   20%   40%   60%   80%   100%

How often does your instructor Zhiwu Zhang do the following?

1. displays enthusiasm about the subject matter.

Always (57%)
Very Often (43%)
Sometimes (0%)
Rarely (0%)
Never (0%)
[Total (7)]
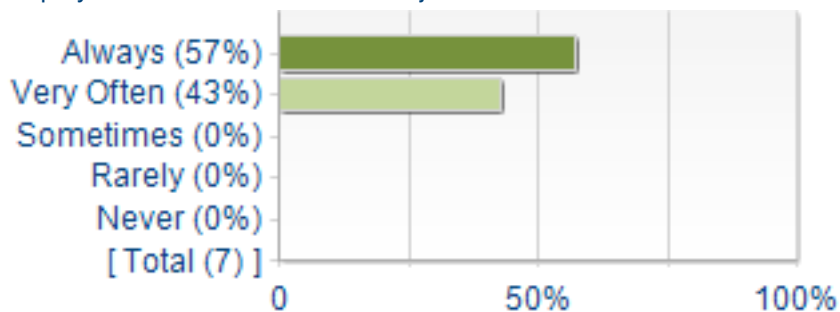
Statistics	Value
Response Count	7
Mean	4.6
Median	5.0

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

Always (43%)
Very Often (29%)
Sometimes (29%)
Rarely (0%)
Never (0%)
[Total (7)]
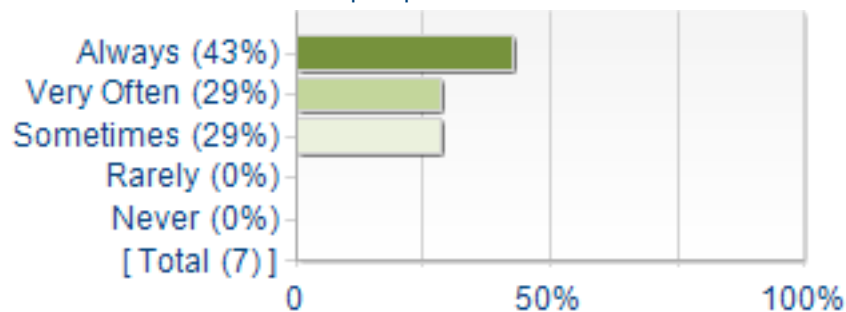
Statistics	Value
Response Count	7
Mean	4.1
Median	4.0

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

Always (14%)
Very Often (29%)
Sometimes (43%)
Rarely (14%)
Never (0%)
[Total (7)]
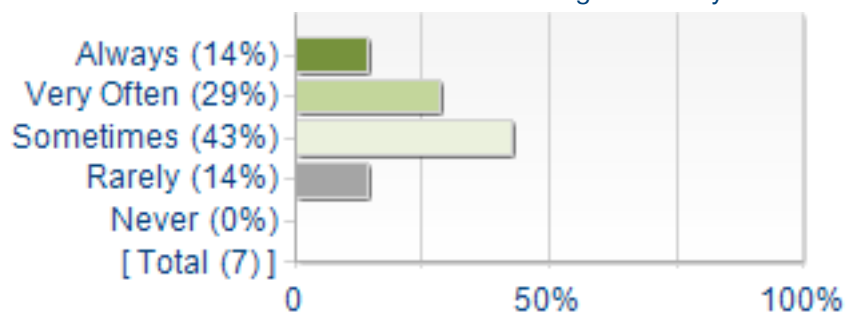
Statistics	Value
Response Count	7
Mean	3.4
Median	3.0

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

Always (43%)
Very Often (57%)
Sometimes (0%)
Rarely (0%)
Never (0%)
[Total (7)]
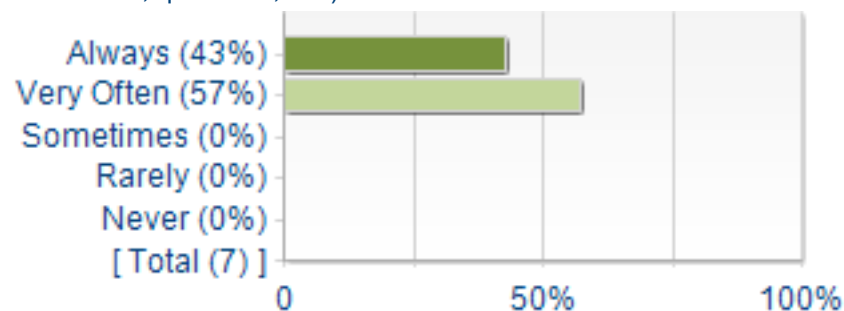
Statistics	Value
Response Count	7
Mean	4.4
Median	4.0

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

Always (57%)
Very Often (29%)
Sometimes (14%)
Rarely (0%)
Never (0%)
[Total (7)]
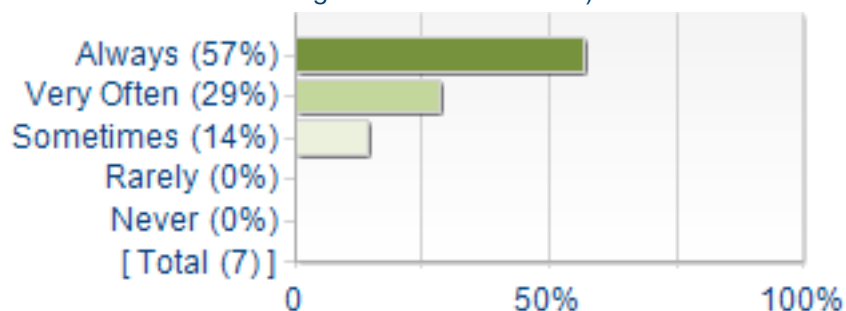
Statistics	Value
Response Count	7
Mean	4.4
Median	5.0

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

Always (57%)
Very Often (43%)
Sometimes (0%)
Rarely (0%)
Never (0%)
[Total (7)]
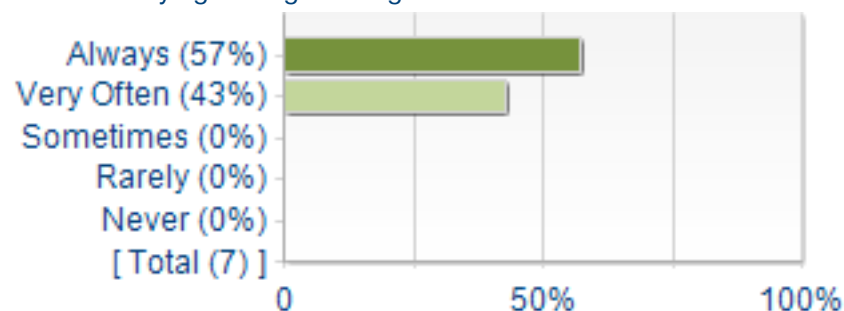
Statistics	Value
Response Count	7
Mean	4.6
Median	5.0

What are the strengths of Zhiwu Zhang as an instructor?

Comments

Dr. Zhang is very enthusiastic about the subject material and was always willing to help with homework assignments and other questions.

– highly motivated
- well organized lecture
- always encouraged students to ask questions

Very enthusiastic. Homework is designed to apply the methods learned in lecture. Is approachable and tries to answer any questions.

He has a broad and deep understanding of Statistic Genomics

1) Extremely enthusiastic about the material and makes lecture interesting and fun to attend; 2) The lectures are very organized and clear about what the covered material; 3) He takes care to give the history and current state of the field, with a focus on histories, important figures and publications, and what is currently considered "state of the art" - which is extremely important for graduate students; 4) Extremely available to student questions even outside of office hours and puts a lot of time and care into feedback and discussions

He is very enthusiastic about the material and tries to make sure you understand it.

He is very enthusiastic and knowledgeable about the material.

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

Comments

Sometimes concepts were not as clear as they could have been.

The code provided in class has no commenting and is very difficult to read. It would be a lot more helpful to thoroughly comment all R code provided so that users can clearly follow every step taken and relate the code back to equations and theory presented in class.

If he could explain some of concepts more clearly, it would help us understand the specific statistic model

If possible, the class would benefit from more time spent on major conceptual hurdles such as what a linear model is, the purpose of each new method, and similar concepts - the math underlying each formula and intricacies of code could maybe use less time in class as these benefit more from studying and implementing the code at home.

I think that it would be helpful to go through the code he talks about in class more in depth as to why he is using it, or what the code specifically does.

I feel that we get look at the efficiency of one method versus another more than is helpful, and it might be more helpful to spend a little more time discussing their underlying models and assumptions.

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	4	3.0	3.0	0	0 %	4	100 %	0	0 %
Presentations by the instructor	7	4.0	4.3	7	100 %	0	0 %	0	0 %
Class discussions and activities	7	4.0	4.4	7	100 %	0	0 %	0	0 %
Labs	1	3.0	3.0	0	0 %	1	100 %	0	0 %
On-line activities	2	3.0	3.0	0	0 %	2	100 %	0	0 %
Homework assignments	7	5.0	4.6	7	100 %	0	0 %	0	0 %
Presentations I prepared and gave	0	NRP	NRP	0	0 %	0	0 %	0	0 %
Group work	6	4.0	3.5	4	67 %	0	0 %	2	33 %
Videos	3	4.0	4.0	2	67 %	1	33 %	0	0 %
Guest lectures	5	4.0	3.8	4	80 %	1	20 %	0	0 %

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

Comments
Although the homework assignments took a lot of effort, they really helped with understanding the material. I felt that the lectures were sometimes hard to understand but after doing the homework, concepts were much clearer.
– homework assignments were useful to understand some part of the class lectures
Homework assignments help me a lot in terms of programming and understanding the statistic model
The homework was extremely helpful for understanding the material, and the division between homework and tests made sense (e.g., the homework covers implementation of functions, versus tests cover the major conceptual underpinnings). Prof. Zhang is very up front about the fact that the majority of learning will take place in class with questions and discussions and during homework, and that is exactly how I learned - it was a good balance of didactic and interactive learning and worked well for me. The guest presenters were enthusiastic and it was nice to hear from people who had different experience working with methods such as PC and cross validation. However, these lectures could be a bit disorganized and quick, and it would have been nice to have a little more detail in text so I could go back and catch what I had missed or been unable to piece together in class.
I found the Homeworks helpful, but would have preferred less repetition. Also, I did not find the group project helpful at all.

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

course?

In this course, I ...

Legend: Stongly Agree/Agree · Neutral · Disagree/Strongly Disagree · N/A

- make connections to what I learn in other courses.
- learn to relate course material to the real world.
- learn how to assess my own work and improve.
- learn to consider contrasting points of view.
- learn how to seek answers to my own questions.
- improve at collaborating with my classmates.
- feel respected by my instructor.
- am exposed to up-to-date and timely skills and materials.

0%   20%   40%   60%   80%   100%

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

why it is valuable.

Comments
I felt that the R programming skills alone that I gained made this course worth it.
– programming skills in R to analyze my data
Programming with R language and do basic data management with R language
With each lecture was a strong emphasis on how these materials are realistically implemented and what their strengths and weaknesses are. This was VERY helpful and should stay in all future class iterations. Similarly, it was good to openly question the "whys" and what we still don't understand about certain methods - even if I was not always able to think quickly through it in class, I learned to question the basics a bit more.

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.	3	3.3	3.0	1	33 %	2	67 %	0	0 %	0	0 %
I could clearly hear the other students.	3	3.3	3.0	1	33 %	2	67 %	0	0 %	0	0 %
It was easy to understand the instructor.	3	3.3	3.0	1	33 %	2	67 %	0	0 %	0	0 %
The instructor's visual aids appeared at appropriate times and remained on the screen as long as necessary.	3	3.3	3.0	1	33 %	2	67 %	0	0 %	0	0 %
The visual aids were easy to read.	3	3.3	3.0	1	33 %	2	67 %	0	0 %	0	0 %
I felt comfortable speaking/participating in class.	3	3.0	3.0	1	33 %	1	33 %	1	33 %	0	0 %

Legend: Strongly Agree, Agree, Disagree, Strongly Disagree, NA

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.	2	1	50 %	1	50 %	0	0 %	0	0 %
I felt connected to the students taking the course from other locations.	3	1	33 %	1	33 %	1	33 %	0	0 %
I knew how to contact the instructor outside of class (office hours) for help.	3	2	67 %	1	33 %	0	0 %	0	0 %

Legend: Strongly Agree ■ Agree ■ Disagree □ Strongly Disagree ■ NA ■

I received any handouts, materials or instructions,...
I felt connected to the students taking...
I knew how to contact the instructor...

0%   20%   40%   60%   80%   100%
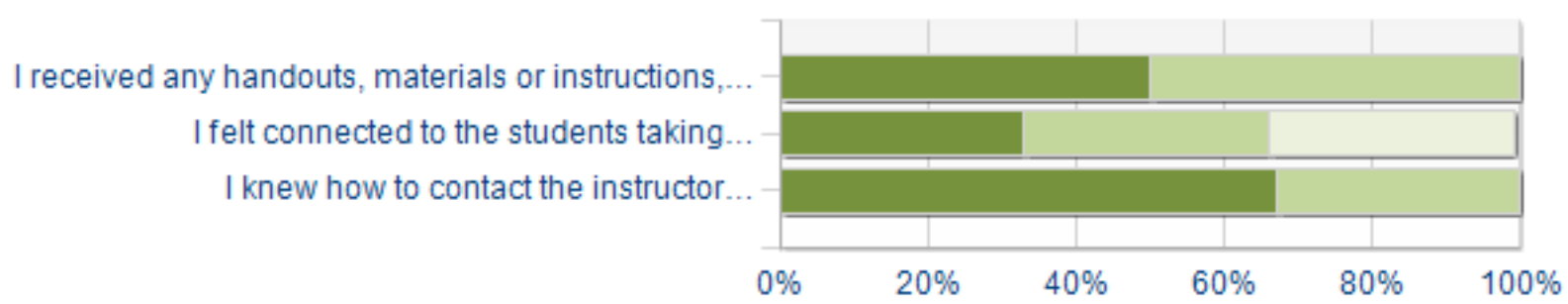
Overall...

	Count	Strongly Agree	%	Agree	%	Disagree	%	Strongly Disagree	%
the technology used to deliver this course did *not hinder* my learning	3	1	33 %	2	67 %	0	0 %	0	0 %
the technology used to deliver this course did *enhance* my learning	3	1	33 %	2	67 %	0	0 %	0	0 %

Legend: Strongly Agree ■ Agree ■ Disagree □ Strongly Disagree ■ NA ■

the technology used to deliver this...
the technology used to deliver this...

0%   20%   40%   60%   80%   100%
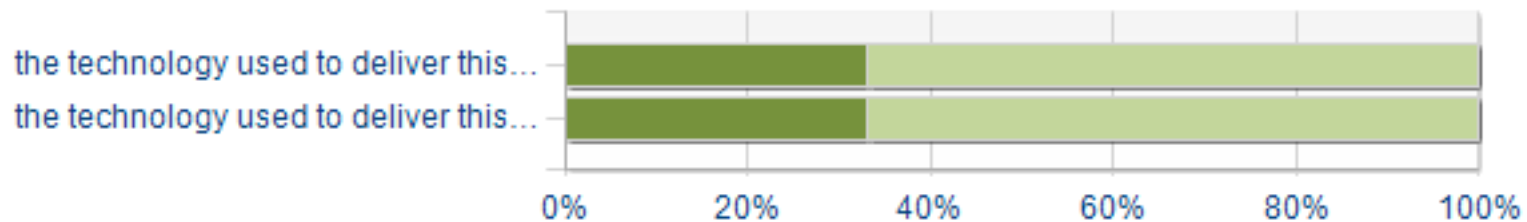
Please provide comments about technology, delivery, experience

Comments
At the beginning of the semester there were a lot of issues with AMS but as the semester continued these issues were resolved.
I can re-watch the recording before the exam to help me prepare for the exam
I was not a video conference student

Instructor experience...

Strongly Agree (33%)
Agree (67%)
Disagree (0%)
Strongly Disagree (0%)
[Total (3)]

0   50%   100%
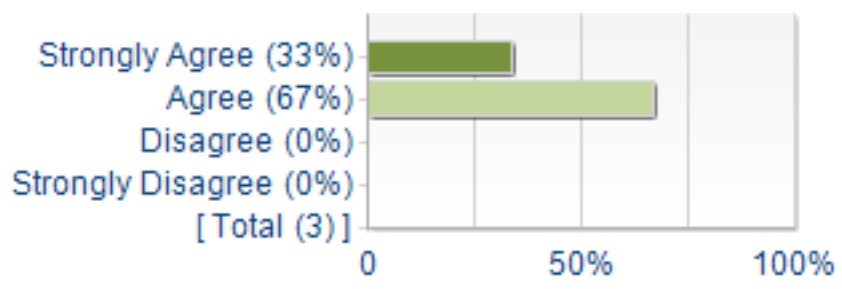
Statistics	Value
Response Count	3
Mean	3.3
Median	3.0