

# Quiz Summary

Section Filter ▾



**Student Analysis** ([https://utah.instructure.com/files/103115938/download?download\\_frd=1&verifier=tRYcCYrehFX4TZTxMW7dqZiUhk37Ob80O1AwI6Jv](https://utah.instructure.com/files/103115938/download?download_frd=1&verifier=tRYcCYrehFX4TZTxMW7dqZiUhk37Ob80O1AwI6Jv))



**Item Analysis**

Ⓜ Average  
Score

**455%**



High Score

700%



Low Score

0%



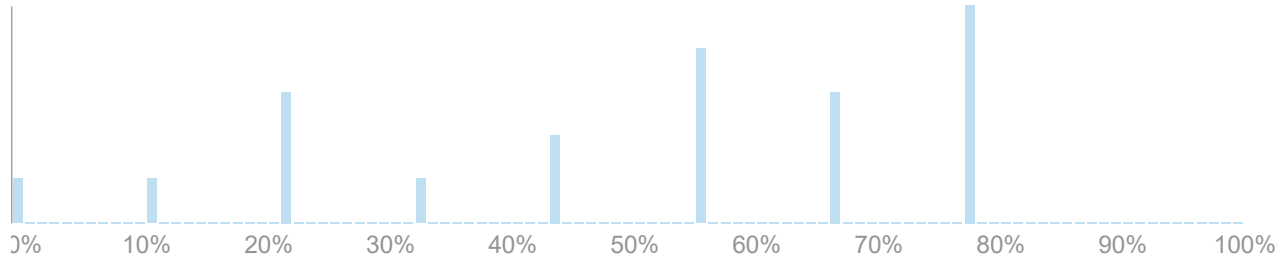
Standard  
Deviation

2.16



Average  
Time

09:18



## Question Breakdown

Attempts: 20 out of 20

## June 16 - 19: Mathematics

Overall, how clear and well organized was the curriculum for the Math module.

**+0.66**

Discrimination  
Index (?)

<b>Excellent</b>	5 respondents	<b>25 %</b>	✓
Very good	10 respondents	50 %	
Good	5 respondents	25 %	
Needs improvement		0 %	

25%  
answered  
correctly

Attempts: 20 out of 20

## June 16-19: Mathematics

Was this module useful in providing you with insight into the field of pure mathematics?

**+0.59**

Discrimination  
Index (?)

Yes	16 respondents	80 %	✓
No		0 %	
Somewhat	4 respondents	20 %	

80%  
answered  
correctly

Attempts: 20 out of 20

## June 16-19: Mathematics

Was this module useful in providing you with insight into the field of applied mathematics?

**+0.48**

Discrimination  
Index (?)

Yes	19 respondents	95 %	✓
No		0 %	
Somewhat	1 respondents	5 %	

95%  
answered  
correctly

Attempts: 20 out of 20

## June 16-19: Mathematics

Please rate the overall effectiveness of Professor Chaika.

**+0.79**

Discrimination  
Index (?)

<b>excellent</b>	9 respondents	<b>45 %</b>
very good	7 respondents	35 %
good	4 respondents	20 %
poor		0 %



45%  
answered  
correctly

Attempts: 20 out of 20

June 16-19: Mathematics

Please rate the overall effectiveness of Professor Golden.

**+0.87**

Discrimination  
Index ?

excellent	13 respondents	65 %
very good	7 respondents	35 %
good		0 %
poor		0 %



65%  
answered  
correctly

Attempts: 20 out of 20

June 16-19: Math

Did this learning experience make you more interested in the field of mathematics? *\*This question does not reference any likelihood you will choose to major in chemistry.*

**+0.87**

Discrimination  
Index ?

Yes	13 respondents	65 %
No	1 respondents	5 %
Somewhat	6 respondents	30 %



65%  
answered  
correctly

Attempts: 20 out of 20

*Please select all that apply to you*

**After the SCI3000/ACCESS Math Module....**

**I am considering a double major that includes math**

**6**  
respondents **30 %**



I am considering changing my major to math

**3**  
respondents **15 %**

I am considering a minor in math

**8**  
respondents **40 %**

I enjoyed the module but have no interest in a major/minor in math

**8**  
respondents **40 %**

I did not enjoy the math module

**1**  
respondents **5 %**

I was already planning on a math major

**3**  
respondents **15 %**

0%  
answered  
correctly

Attempts: 20 out of 20

I learned things about the field of mathematics that I didn't know previously...

**+0.77**

Discrimination  
Index ?



**Strongly Agree****16**  
respondents **80 %**

Agree

**4**  
respondents 20 %I can't really say one way or  
another

0 %

Disagree

0 %

Strongly Disagree

0 %

80%  
answered  
correctly

Attempts: 20 out of 20

June 16 - 19: Math

Please share your favorite things about the curriculum presented during the Math module and/or areas where you feel improvements should be considered.

Ungraded answers **20**  
respondents 100 %

Student Comments from SCI 3000, Summer 2020, Math Module in ACCESS Program  
Professors Golden and Chaika

I really enjoyed learning about how to apply math to the real world and learning about fractals and surfaces was actually super fun and interesting. I think a little more explanation of assignments before we began them would've been nice just so we kinda knew what we were trying to do. Professor Cherkaev's assignment was super confusing and I think it would've been better to talk over altogether instead of in breakout groups. Also it was a little annoying navigating to some different places on canvas to find all the different assignments/ quizzes, so maybe providing a list somewhere of every single thing that needs to be completed, turned in, or printed before a class would've been nice.

I really enjoyed learning about the importance of mathematics in environmental studies, and about the different kinds of fractals. It was a good challenge and mentally stimulating.

~†

An improvement I think that could be made is moving the math module to a later time in the SCI 3000 course. Because it is the most challenging course of the program, I feel that it would be better placed in the 2nd or 3rd week, after students have adjusted to the coursework and class expectations.

It was very challenging and difficult but the information learned was super helpful and insightful. It is very hard to change the lessons to be over zoom but it still helped me understand more of what majoring in math means~†

One of my favorite things about the curriculum presented during the Math module is the variety of ways that math was presented within the environment. I enjoyed learning about how ice can be modeled by math in various ways. Such as learning that sea ice covers about 12% of the Earth's ocean surface. And how the amount of summer Arctic sea ice that's been lost is equivalent to 2/3's of the United States land mass. I found the math module quite insightful and engaging, it also helped me make further connections to climate change and how the world around us is changing.~†

I most enjoyed learning applications of the principles that we learned, and applying formulas we were exposed to to practice problems. Since I came late, I feel that I was behind the power curve and a bit disorganized to begin with, but I also feel that the organization of the module was a bit confusing. However, I very much enjoyed it overall.~†

I loved learning about fractals and models that are created to portray various items associated with climate change. I also found learning about~† the sea ice to be fascinating.~† For some of the math, it would be helpful to see the problems worked out step by step as it was kind of hard to follow the information on the powerpoint without being able to see a whole problem worked out cohesively on one page.

I enjoyed the math module and I liked learning about sea ice and fractals and applied math but there were also times when I struggled. I thought that it was interesting to see how much more difficult it is to understand simple math when it is over zoom. I really enjoyed the topography unit because I thought it was cool to see the models and I liked flipping coins because it was fun and easy to grasp. My favorite part though was learning about climate change and how mathematics could be applied in different ways whether it was with sea ice or atmospheric feedback loops or changes in habitats. I thought that some of the worksheets we had to do were difficult to get done and we didn't quite have enough time to finish them in our breakout groups so I would have liked a little more time for those. I also thought that some of the videos we had to watch (whole being informative and inyteresting) could have been a little shorter because we are already spending so much time on our screens for zoom. One thing that I thought made canvas difficult in conjunction with the online notebook we are required to do is that some of the assignments were due at 8am the next day and some were do at midnight the day of the class. So I wasn't sure if I was supposed to put the assignments in the day I learned them or the day that they were due (at 8am).-†

I really enjoyed fractals at first, but the lectures confused me at times. Not everything was made clear or Professors went over material or slides too quickly (mostly Professor Chaika). I also asked a couple of questions in the chat but was ignored on two occasions. I was able to understand concepts better when I went over slides again on my own. I enjoyed the interesting information on climate change.-†

My favorite part was learning about how we can apply math to climate change. I also enjoyed learning about fractal dimension, although sometimes difficult. Professor Patel was hard to understand, but her discussion sheet was very fascinating.-†

This week was enlightening. The topics discussed and the harsh reality that is climate change was never introduced to me in high school and I was so oblivious/ignorant. This brought real things to the forefront and changed my perception of math (something, before, I felt I couldn't do). This week gave me confidence. My most favorite part was witnessing how the pure math (concepts we worked on a day before) would mesh with the applied math content the next day. That was a great structure because something that seemed so unrealistic was involved in everything we discussed in applied math. The most integral part of math week for me the "office hours" by Professor Chaika and Golden. I felt like I got to know them and actually understand the content one-on-one because sometimes I would be overwhelmed with confusion after class. I genuinely have no improvements for this week. It was foundational and led me to consider a double major or minor in math, specifically applied math.-†-†

I enjoyed learning how math can and is used. It was also helpful to have teachers be excited about math.

,ÄÇ I really enjoyed the fundamentals that were presented in all lectures this week. All presentors did a good job.

,ÄÇ I personally had difficulties understanding Professor Chiaka's examples and teaching style. It took me a lot longer to connect fundamental ideas and principles in his lessons. A few of his lectures did not get recorded, which made it more difficult to go back and try to relearn the matter after class.

,ÄÇ I really enjoyed being able to do the after sessions with Professor Golden. I want to go into applied math, so his session was fun and informative. It helped me solidify my major and my plans for my undergrad.

,ÄÇ I liked learning about fractals and seeing different examples.

My favorite things about the math module were Professor Golden's presentations. Not only did it provide insight into applied mathematics, but also allowed me to learn more about sea ice, its environment, the melting of it, and how it all relates to climate change. I also really enjoyed the panel at the end of the week. Getting to hear about the speaker's experiences in math careers was quite interesting.¬†

Things that I think that could've been improved was how the assignments were given out. Some of the assignments weren't in the modules, and had to be found in the assignments section, which was tricky.¬†

I really enjoyed the math week! I'd only suggest going over things a little slower (and maybe more in depth) during our lectures; sometimes it was really hard to keep up, and I know many of us spent a significant amount of time outside of class filling in missing areas of our notes that we couldn't fill in during class. I loved learning about the math in sea ice, and had never considered that sea ice could be so interesting! I also really enjoyed learning about areas of math that were completely new to me, like topology or fractal math. Overall, while very challenging, this week was fantastic!

I really loved how I was shown all the different applications of math and different topics of pure math that I hadn't really thought of before!

In my preference, I feel like I would have wanted to learn about other different topics of math related to this year's theme instead of a single topic with many different subtopics, like learning about fractals and all the different methods of fractals in relation to climate change.

I really enjoyed Prof. Patel's presentation. It was very engaging, and I found her presentation style with the animations very informative and interesting. Also, I thought it was inspiring when the professors/TAs acknowledged or connected math to what else is going on in the world (i.e. when Prof. Patel said, (paraphrased) "math is for women, math is for people of color, math is for people who aren't able-bodied" and when Rebecca acknowledged that it was Juneteenth). These connections to the "real world" were refreshing, made the class seem more supportive and down to earth.

I also found Dr. Reimer's answer to my question about grants, the funding of research, and why seals matter very interesting. She talked about seals as a keystone species and as an important source of food for people who live in the arctic. It made me realize that there is a larger picture that I was missing and gave me a more complete picture about what it means to do research.

I thought that the post-class session with Prof. Golden was very informative as well, and I am thankful that he was so generous with his time and support.→†

I also found the whole discussion of fractals quite interesting and beautiful. I had no idea what they were before, but, now, I think I have a decent grasp on them as a concept, and I am seeing them all over.→†

Really enjoyed this week, I was already considering majoring in something related to math, now I feel almost certain I'll double major in applied math/another science.→†

I did enjoy learning about the different ways math can be used not only pure versus applied math but also how these are used in real life as a career and all the options there are. I do feel, however, the math was very difficult and overwhelming for me to understand and perhaps it should be more taken into consideration that not all the women in the cohort are at the same level in math.

My favorite things about the curriculum presented was pure mathematics because I didn't know that area of math existed! I really liked it! I think you should address how you can edit PDFs as a resource →†for those who don't have access to a printer. I figured out that I should use Lumin to easily edit PDF, →†such as →†to write text or draw on the document.→†

I thought learning about the sea ice algae and sea level rise was very interesting. I also really liked learning about fractals in nature was super interesting!