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TO: Paul Milewski, Department Head and Professor

FROM: Jack Huizenga, Associate Professor

DATE: October 2, 2024

SUBJECT: Teaching evaluation of Christopher-Lloyd Simon

I visited Christopher-Lloyd Simon's section of MATH 141 on Monday, September 30 at 4:40 PM. In this class, Simon discussed the several possible indeterminate forms of limits at infinity, and how to use L'Hospital's rule to compute them. Often this required converting a problem where L'Hospital's rule could not obviously be applied into a different form first. Overall, my impression of Simon's teaching is very good.

I met Simon on his way over to the classroom, and we arrived a few minutes ahead of the class time. There were between 15 and 20 students in attendance. He interacted with a couple of students before the class, and then began lecturing. He recalled the indeterminate forms of limits from the previous lecture, and then worked several examples. His board work is good although it was a bit hard to read because the chalkboard light was not turned on. While working examples, he got the students to lead him to the next step in many of the computations. This was very good.

Simon then switched to discussing the growth rates of functions at infinity. In my opinion this discussion was a little too abstract and technical, and it would have been better to do some more examples instead of doing any (admittedly simple) proofs. Simon stopped lecturing with 10 minutes left and had the students work on a worksheet which was mostly related to the material from the first part of the lecture. In my opinion it would have been better to have them work on the problems earlier in the lecture to break things up a bit, and then he could have finished with the new material on growth rates.

Overall, Simon did a very good job and I have no major concerns about his teaching.

Best,

Jack Huizenga
Associate Professor of Mathematics

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To the Department Head,

On Wednesday, October 25, I observed Christopher-Lloyd Simon teaching a section of Math 141. Overall this was a competently run section. Let me describe in more detail.

The class started on time, with 10 students in attendance. Simon started by reviewing the Integral Test, which they had apparently seen in a previous class. He wrote out the statement of the test and then worked through the example $\sum_{n=1}^{\infty} \frac{1}{n \log n}$. At various points during the work through of this example he asked the students for their input, for example was the function $\frac{1}{x \log x}$ decreasing, and how would one tell? At least 5 different students interacted with him during this or other examples throughout the class. He then introduced the Comparison Test and used it on the example $\dfrac{n^2 + (\text{lower order terms})}{n^3 \log n + (\text{lower order terms})}$. This efficient choice minimized busy calculation since the divergence of the $\sum_{n=1}^{\infty} \frac{1}{n \log n}$ had already been established. Next he introduced the Limit Comparison Test and also applied it to solve the same more complicated series using the simpler one. This was effective as it highlighted the differences between the tests. He also started out saying "we see the limit of $\dfrac{n^2 + (\text{lower order terms})}{n^3 \log n + (\text{lower order terms})} \cdot \dfrac{n \log n}{1}$ is 1" but when the class did not nod with him on this, he showed again how to derive that limit. To conclude, he introduced the Alternating Series Test and discussed using a helpful picture the different behaviors that the sequence of partial sums of an alternating series could take.

The class was well-prepared and organized. The pacing was just right for this group. His verbal explanations were clear, though perhaps aimed at the higher-understanding student, while the examples were at just the right level of difficulty. He asked them many questions throughout the class and succeeded in eliciting responses from at least 5 different students, and used this to adjust his pace. He also spoke loudly and clearly enough and at a good speed. He had a gentle and encouraging attitude toward the students and they seemed engaged in the lesson. The board writing was clear and legible and included all the main equations and steps that needed to be taken. One area of improvement would be in the board's organization, where it was sometimes difficult to tell in what order the things on the board were meant to be read, or where one idea ended and the next began. This was particularly

important for the statements of the tests, which at times blended into the examples. Overall though, my impression was positive and I would summarize the section as competent and enjoyable.

Sincerely,

Linda Westrick
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