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**A case study on students' concept images of the uniform convergence of sequences of continuous functions.**

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Summary: In this research, we investigated students' understanding of the definitions of a sequence of continuous functions and its uniform convergence. We selected three female and three male students out of the senior class of a university and conducted four questionnaire surveys. We examined students' concept images of a sequence of continuous functions and its uniform convergence and also how they approach to the right concept definitions for those through several progressive questions. Furthermore, we presented some suggestions for effective teaching-learning for the sequences of continuous functions.

*Classification:* I25 D75 C35

*Keywords:* concept image; concept definition; sequence of continuous functions; uniform convergence; point-wise convergence;  $\varepsilon$ - $N$  definition;  $\varepsilon$ - $N$  proof