1163-97-614 Erika L. Ward* (eward1@ju.edu). Metric Spaces Sooner: Context in Undergraduate Analysis Courses.

A standard one-semester undergraduate real analysis course revisits calculus and develops the rigorous mathematical underpinning for those ideas. As an undergraduate student, I found this incredibly frustrating: I was already convinced of the truth of these ideas. Now, as an analyst who teaches undergraduate real analysis, I have seen that frustration reflected back by my students. Introducing the broader context – wanting to understand how the calculus they know operates so that we can try to do calculus in other contexts – provides the grounding and motivation that I and my students often found to be missing. I will discuss that motivation, and share examples of how I incorporate this into the course, and student reactions and outcomes. (Received September 10, 2020)