

1077-O5-1914 **Shumei C Richman*** (richmansmc@gmail.com), 220 North Woodlake Dr., Columbia, SC 29229.

On WeBWork: how to Design a Model Course that is Concise and Complete? Preliminary report.

When designing a model course on WeBWork, there are many factors to consider in order to make it effective. Above all is how to achieve conciseness and at the same time completeness. More precisely, how to include all the necessary problems, but avoid any duplicated ones? This question is more complex than it seems, and the answer varies, depending on one's teaching experiences, philosophies of math, and goals for students to reach. In this talk, we will first discuss degrees of duplicatedness. Then, based on an ultimate goal for students to master math, we will discuss what problems should be considered necessary. As an example, for the topic of solving linear equations, we try to answer whether the following two equations

A. $3(5x + 4) - 7(5x - 4x) = 2(5x \bullet 4) + 8(5x/4),$

B. $9[(5x^2 - 4)]^3 - 7 = 2$

should be included as core problems. (Received September 21, 2011)