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Ron Barnes\* (barnes@dt.uh.edu), CMS Department, 1 Main Street, Houston, TX 77002, and Edwin Tecarro (tecarroe@uhd.edu), CMS Department, 1 Main Street, Houston, TX 77002. Short Courses in Biomathematics Topics for NSF Undergraduate Biology Mathematics Program (UBM Grant). Preliminary report.

This paper describes a number of short courses, some with one semester hour of credit, that have been developed and presented by various mathematics and biology faculty to the research students taking part in a 5 year NSF funded proposal - Undergraduate Biology and Mathematics Program. The five courses that will be discussed briefly in this talk are: Introduction to Mathematical Biology, which describes the five areas of research in the UBM grant- which include studies of Wetlands characteristics; Fungi Distributions in Brays Bayou; Dynamical Systems Models; Biological Regulation with emphasis on Physiological Cycles; Multivariate Statistics including an overview of chi-square tests, correlation and regression, factor and cluster analysis; and Math Models for Biology using MATLAB with an emphasis on the logistic equation and Fibonacci sequences. (Received September 22, 2010)