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**Erin McNelis\*** ([emcnelis@email.wcu.edu](mailto:emcnelis@email.wcu.edu)), Dept. of Mathematics and Computer Science, Western Carolina University, Cullowhee, NC 28723. *Environmental Mathematics: The Unifying Theme in an Introduction to Scientific Computing Course.*

An Introduction to Scientific Computing course is an ideal setting for introducing students to mathematical modeling, solving complex problems, and interdisciplinary applications of mathematics. The Spring 2013 offering of this course at Western Carolina University will adopt the theme of Environmental Mathematics to help raise awareness of the role mathematics plays in understanding and potentially solving our environmental problems. This course introduces students to a variety of models (discrete, continuous, stochastic, systems-based, individual-based, statistical, etc.) and this year the examples and applied homework projects will be developed to highlight environmental mathematics applications such as predator-prey dynamics, invasive species models, mathematics in epidemiology, ecological succession models, and analysis of environmental data. As this course is required for mathematics and mathematics education majors, course discussion and projects will also address students ideas on how to better incorporate environmental mathematics in our high school and college mathematics courses. This presentation will provide an outline for course topics, examples of associated environmental mathematics applications and projects, and ideas for possible long-term course projects. (Received September 25, 2012)