

NSCI 6900
MASTER'S RESEARCH FOR COURSE CREDIT

Number of Credits: 2
INSTRUCTOR: K.D. Hyrenbach
MEETING TIME: TBA

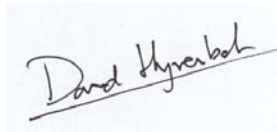
STUDENT NAME: Devon Francke

TELEPHONE AND E-MAIL FOR STUDENT: (651) 235-8023 devon.francke@gmail.com

TELEPHONE AND E-MAIL FOR INSTRUCTOR: khyrenbach@hpu.edu (808) 236-3563

COURSE DESCRIPTION:
(include problem being addressed, general nature of work done, location of work, other pertinent information)

Devon Francke will initiate the analysis of a complete and integrated dataset (March – September 2010) of the distribution, habitats, and diving behavior of individually marked green sea turtles (*Chelonia mydas*) tagged off Kaimalino (Oahu) with acoustic and time-depth-temperature-recorder (TDTR) loggers, visual observations of turtle foraging and diving behavior, water temperature recorded by loggers deployed in the study site, and changes in algal cover and biomass. During the fall semester of 2010, Devon will process all of the available observations, and will integrate these data spatially and temporally to assess the available sample sizes for statistical analyses. Thus, the outcomes of this semester-long course will be: (i) developing standardized criteria for quantifying turtle diving / activity patterns from the TDTR loggers and the visual observations; (ii) assessing the sample size of turtle diving records / acoustic records for habitat analysis; and (iii) performing spectral / time-series analysis of the data from the temperature loggers and the TDTRs. These preliminary data exploration will allow Devon to tackle an integrated analysis of these four integrated datasets in the spring semester. Devon will meet with Dr. Hyrenbach (~1-2 hr/week) to review and discuss related studies, as well as Brenda's research.



(Print) K. David Hyrenbach (Sign)
THESIS COMMITTEE co-CHAIR

(Date) August 18, 2010

(Print) _____ (Sign) _____ (Date) _____
ASSOCIATE DEAN OF MARINE SCIENCE PROGRAMS