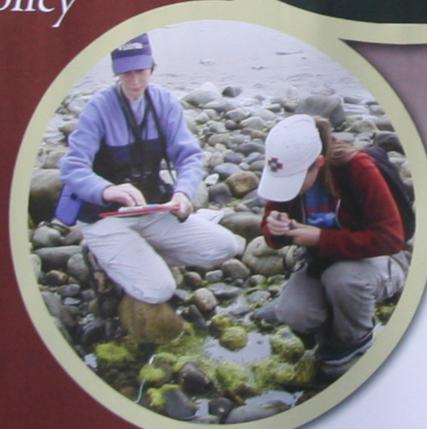
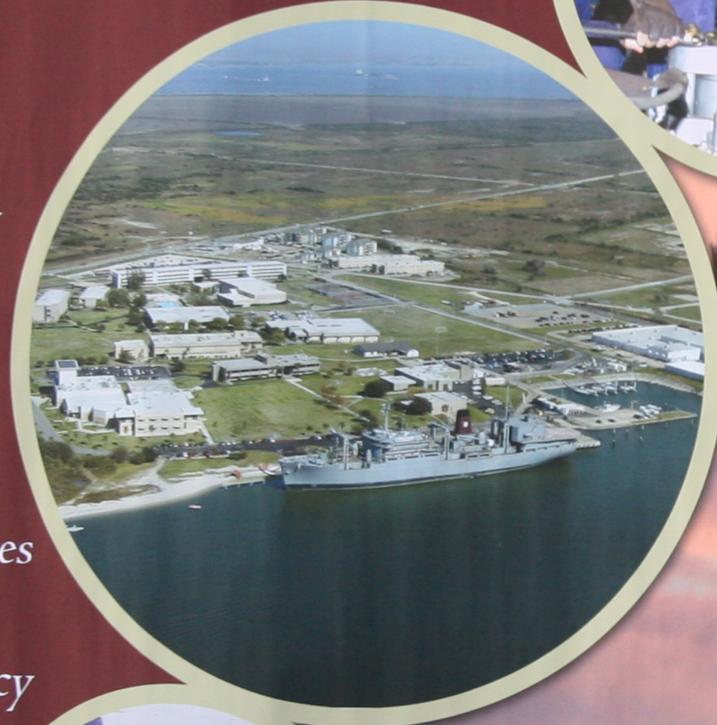


With the advent of IMO model courses and implementation of STCW competency assessment, the Shiphandling/Seamanship course offered to midshipmen at the United States Merchant Marine Academy was redesigned to employ practical demonstration, performance evaluation, and competency assessment. Part-task and full mission simulators are used to facilitate the understanding of ship maneuvering concepts.

This poster will demonstrate the use of Blackboard, a web-based course management system, as an integral part of mariner competency assessment and effective record keeping for audit purposes. It will also demonstrate that small group collaborative learning activities lead to increased student engagement.

The poster will confer the relevance of the use of simulators as an essential element of experiential learning and reinforce the importance of the facilitation of practical shiphandling skills in the virtual classroom. The Coast Guard Academy has developed and adopted a set of Shared Learning Outcomes (SLO's) that articulate the desired knowledge, skills, and behaviors of our graduates. The Marine and Environmental Sciences curriculum achieves the SLO's through a developmental approach to learning where reading, writing, quantitative analysis and critical reasoning skills improve incrementally as students progress through the MES program. In order to assess student learning and achievement of these Shared Learning Outcomes in individual courses and across the MES curriculum, the Science Department initiated the development of a comprehensive, multi-dimensional Student Development Model (SDM). The structure of the SDM is built on four categories of desired skills and behaviors, which we call Core Competencies. The Core Competencies are Knowledge, Technical Proficiency, Leadership and Communication. Each Core Competency has a set of desired performance-based outcomes, which we call Performance Dimensions. Each Performance Dimension in turn, has associated with it more specific behaviors and skills which we call Developmental Dimensions. Developmental Dimensions are classroom-level skills and behaviors that can be assessed for student proficiency. They are sequenced to represent appropriate student development from simple to more complex (i.e., more advanced). Development of the SDM began during the Summer 2006. Implementation began during the Fall 2006 with cataloging of current SDM practices as part of a larger MES program review process. Full implementation of the SDM will begin during the 2007-2008 academic year. A study of the Revenue Cutter Service (RCS) School of Instruction (SOI), the forerunner of the U.S. Coast Guard Academy, during its initial period from 1877 to 1890. Addresses context of national efforts to move toward merit-based personnel systems and promote greater professionalism within the maritime sphere. Covers originators of the School, first ships in which it was conducted, and both professional and academic instruction during the first two years, when many precedents were set and lasting procedures established. Discusses methods by which training and education were simultaneously pursued in parallel in integrated program.

- *Homeland Security*
- *Marine Biology*
- *Engineering*
- *Galveston Bay Location*
- *Texas Clipper*
- *Marine Sciences*
- *Maritime Policy & Law*



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