A Functional Curriculum Model for Undergraduate Course in Hydrography Surveying

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Abstract

Flooding induced by storm events is a major concern in many regions of the world. Climate change has brought urgency to predict flood level and damages along vulnerable coastal and other regions. Risk reduction strategies requires the geospatial knowledge from hydrographic surveying for beach nourishment projects dredge and dump operations in shallow coastal waters, and measurements to establish tidal datums. The licensed surveyor, in many states, performs hydrographic surveys. However, a perusal of Surveying/Geomatics curricula at various universities and colleges seems to suggest that Hydrographic surveying is not taught much at all. The International Hydrographic Organization (IHO) is looking to raise the academic minimum standards of competence for hydrographic surveying. This paper addresses these limitations and describes a learner-centered functional curriculum model in terms of the design elements, course development, and implementation.