



The University of the West Indies

Organization of
American States

**PROFESSIONAL DEVELOPMENT PROGRAMME:
COASTAL INFRASTRUCTURE DESIGN, CONSTRUCTION AND
MAINTENANCE**

**A COURSE IN
COASTAL DEFENSE SYSTEMS I**

Edited by

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FOREWORD

This course on coastal defense systems, which is being delivered in two parts in St. Lucia and Dominica respectively, is the second in a series of four short courses in the Coastal Infrastructure Design Construction and Maintenance (CDCM) professional development training programme being offered between June and September 2001. This programme is a first step toward systematically building the capability of the Caribbean region to adequately address its coastal infrastructure. The vulnerability of this infrastructure was realised in the aftermath of Hurricane Lenny in November 1999, which has served to galvanize efforts within the region toward mitigating the impacts from hurricanes and other natural disasters. The training programme aims at providing an understanding of the processes that may trigger failure and the approaches available toward increasing the effective life of the coastal infrastructure. The main focus of this course is towards the engineering design of coastal defense systems and coastal infrastructures. These range from sea walls and breakwaters to marinas, moorings, and piers.

Lecture notes presented in this course have been prepared by eminent international and Caribbean experts; who have taken into account the peculiarities--physical, economic, social and cultural—of the Caribbean environment. The experts, from the United States, the University of the West Indies and a regional consulting engineer, have provided sound approaches which should be adaptable to our Caribbean islands. It is the intention of the course, that with discussion and interaction among the group of experts and the participants, that these approaches can be adapted for providing effective coastal solutions to the Caribbean islands.

These course notes were edited by the course coordinator, Dr. Gyan S. Shrivastava.

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Table of Contents

<i>Acknowledgments</i>	<i>i</i>
<i>Contributors</i>	<i>ii</i>
<i>Advisory Board</i>	<i>iii</i>
<i>Table of Contents</i>	<i>iv</i>
<i>Foreword to Coastal Defense Systems I</i>	<i>vi</i>
1. Coastal Hazards and Vulnerability <i>Gillian Cambers</i>	1-1
2. Cross-Shore Sediment Processes <i>William Birkemeier</i>	2-1
3. Introduction to Coastal Engineering <i>Patrick Holmes</i>	3-1
4. Coastal Processes: Tides and Tidal Flows <i>Patrick Holmes</i>	4-1
5. Coastal Processes: Waves <i>Patrick Holmes</i>	5-1
6. Longshore Sediment Transport Processes <i>Dave Basco</i>	6-1
7. Coastal Mapping <i>William Birkemeier</i>	7-1
8. Sediment Budgets and Modelling <i>Patrick Holmes</i>	8-1

9. Alternatives for Coastal Storm Damage Mitigation and Functional Design Of Coastal Structures <i>Dave Basco</i>	9-1
10. Coastal and Offshore Structures <i>Patrick Holmes</i>	10-1
11. Structural Design <i>Dave Basco</i>	11-1
