# MARA - MARITIME ADMINISTRATION

### MARA 604 Marine Natural Resource Economics

Credits 3. 3 Lecture Hours. Critical evaluation of policies and procedures in the development and use of natural resources relevant to marine and maritime markets; identification of problems in resource exploration, development, and transportation; the political /economic decision-making processes; analytical tools used to make economic decisions in resource markets. Prerequisite: Graduate status or special approval.

## MARA 610 Maritime Strategic Management

Credits 3. 3 Lecture Hours. Introduction to the strategic management process, with an emphasis on the maritime industry in the domestic and international context; formulation of strategy in the context of environmental opportunities and threats, how to analyze industry competition, and how to implement strategies and build competitive advantage; selection of a company engaged in domestic or international waterborne commerce and analyze the strategic planning processes of the firm using the standard techniques such as SWOT analysis, the Five Forces model and the Value Chain analysis. Prerequisites: Approval of instructor, graduate classification or special approval.

#### MARA 612 Strategic Human Resource Management

Credits 3. 3 Lecture Hours. Leveraging the competitive value of human capital in organizations; exploration of current issues and practices associated with workforce management, legal and regulatory elements of managing employees, staffing, job analysis, performance management, discipline, compensation systems, benefits and termination; practical perspective methods of measuring the financial implications of human resource practices. Prerequisite: Graduate classification or approval of department head.

### MARA 616 Management of Port Facilities and Infrastructure

Credits 3. 3 Lecture Hours. Problems associated with the management of buildings, piers, bulkheads and associated structures and connecting waterways focusing on corrosion, adverse affects of climate, tide and current affects, dredging cycles and related facilities access issues associated with structures in the coastal zone. Particular attention is paid to the requirements of state and federal agencies regarding equipment and facilities used in the safe loading, discharge, and storage of cargoes, including hazardous materials. Prerequisite: Approval of instructor, graduate status or special approval.

## MARA 623 Maritime Economics Theory and Applications

Credits 3. 3 Lecture Hours. The role of domestic and international shipping in the American economy; discussion of the economic characteristics of waterborne transportation, including the nature of transport demand and cost functions; economic dimension of transport service; transport market structures; and transport pricing theory and practice; emphasis on managerial implications of transport economic principles for domestic and international shipping. Prerequisite: Approval of instructor.

### MARA 624 Port Development and Intermodal Freight

Credits 3. 3 Lecture Hours. Survey of economic and operational characteristics of intermodal transportation, rail, trucking, air, shipping, and pipelines; emphasis on the interface of surface transportation with the maritime industry; pricing strategies, cost structures, and regulatory issues. Prerequisite: Approval of instructor.

#### **MARA 625 Maritime Law and Policy**

Credits 3. 3 Lecture Hours. Advanced topics in the maritime law and policy areas, national and international contexts; analytical and writing abilities as per practice in the maritime law; extensive use of web-based research methods within the maritime law context. Prerequisite: Approval of instructor.

### MARA 627 Marketing of Maritime Services

**Credits 3. 3 Lecture Hours.** Marketing planning and analysis applicable to service firm; assessment of customer needs; quality control; competitive strategies; applications of marketing principles and practices to the maritime industry. **Prerequisite:** Approval of instructor.

### MARA 636 Maritime Managerial Decision Making

**Credits 3. 3 Lecture Hours.** Construction of mathematical models of business environments; linear programming techniques; planning, analysis and control of operations in complex organizations through mathematical techniques. **Prerequisite:** Approval of instructor.

#### **MARA 640 Global Logistics**

Credits 3. 3 Lecture Hours. Transportation and logistic activities of multinational firms with an emphasis on transportation, customer service, inventory control facility location, global sourcing, customs documentation, and the role of government in importing and exporting. Attention is given to current events and their effects on the marketing and logistics activities of U.S. based organizations. Prerequisite: Approval of instructor, graduate status or special approval.

## MARA 641 Maritime Financial Management

Credits 3. 3 Lecture Hours. Management of the corporation's sources and uses of funds with emphasis on risk and return, investment valuation, the selection of risky investment projects, capital structure, dividend policy, and methods of raising long-term capital; applications to the maritime industry are made where appropriate. Prerequisite: Approval of instructor.

#### **MARA 645 Maritime Cybersecurity**

Credits 3. 3 Lecture Hours. Basic terminology, concepts, technology, and trends of cybersecurity; foundations of cybersecurity to include cryptography, public key infrastructure, standards and protocols, physical security, network fundamentals; workings of systems, networks, infrastructure; legal and ethical issues in cybersecurity. Prerequisite: Approval of instructor.

### MARA 647 Law and Policy in Cybersecurity

Credits 3. 3 Lecture Hours. Law and policy issues related to cybersecurity including procurement, operations, maintenance, governance, oversight, protection, defense; analyze law, policies, and regulations domestically and globally. Prerequisite: Graduate classification. Cross Listing: CSCE 702 and CYBR 602.

#### MARA 650 Supply Chain Management

Credits 3. 3 Lecture Hours. Contemporary distribution logistics and integrated supply chain management; emphasis on customer service, transportation modes, inventory policies, warehousing, order processing and optimizing the logistics gross margin. Prerequisite: Approval of instructor, graduate status or special approval.

### MARA 652 Marine Transportation System Design and Policy

**Credits 3. 3 Lecture Hours.** Interaction between shipping policy and design of marine transportation and port systems; effects of market structure on economics and finance; port performance and performance measures. **Prerequisite:** Approval of instructor, graduate status or special approval.

#### **MARA 655 Cybersecurity Risk**

Credits 3. 3 Lecture Hours. Risks in cybersecurity; avoidance, acceptance, mitigation or transference strategies; developing reliable cybersecurity risk assessments to include analysis, categorization and evaluation; cybersecurity risk audit frameworks. Prerequisites: Graduate classification. Cross Listing: CSCE 703 and CYBR 603.

### MARA 658 Port Design, Planning and Security

Credits 3. 3 Lecture Hours. Ground-level issues, tasks, and responsibilities that must be managed by the security manager in concert with the port director and federal and local law enforcement agencies; multiuse port facilities for recreation, hospitality, and external business and commercial interests; design of marine structures for the berthing, mooring, and repair of vessels. Prerequisite: Approval of instructor, graduate status or special approval.

### MARA 660 Risk Assessment and Marine Insurance

Credits 3. 3 Lecture Hours. Theory, techniques, participants and background of risk assessment and management with emphasis given to contemporary issues in marine insurance law; marine liability coverage, cause of loss, additional perils, exclusions, warranties, duration of risk, adjustment clauses, operating clauses, civil commotions, war insurance, and project risk management techniques. Prerequisite: Approval of instructor, graduate status or special approval.

### MARA 664 Maritime Production, Operations and Logistics Management

Credits 3. 3 Lecture Hours. Types of decisions to be made at varying levels and where appropriate; quantitative models and techniques that can be used in decision making areas of the firm; analysis of how the operations function fits in with other functional areas of the firm; interrelationships with firms' strategies. Prerequisite: Approval of instructor.

#### **MARA 665 Maritime Business Analytics**

Credits 3. 3 Lecture Hours. Deep understanding of the nature of big data and business analytics; practical toolkit applicable to the Maritime and Logistics field on how to perform big data analysis; ways to generate business value from in-house and open big data sets for the purpose of increasing competitiveness in the global marketplace; provision of evidence to sustain managerial claims, applying an analytical process that covers all activities from problem formulation to result communication and reflecting on and managing potential pitfalls. Prerequisite: Approval of instructor.

### MARA 670 Coastal and Inland Waterways Transportation

Credits 3. 3 Lecture Hours. Policy, strategy and management, port and terminal development, competition with other modes of transportation, manpower, rates, environmental concerns, the impact of waterway systems on regional economies and national economic development; commercial aspects of the inland waterways with emphasis on operations, freight rate structures and applied cash flow methods.

Prerequisite: Approval of instructor, graduate status or special approval.

### MARA 672 Global Maritime Trading System

Credits 3. 3 Lecture Hours. Introduction to the theory of international waterborne trade; provides a basis for examining American foreign trade policy, and regional and world trade institutions such as the WTO, ASEAN, the EU, GATT, and NAFTA; includes international trade theory and policy, open-economy macroeconomic policy, tariffs, non-tariff barriers and enhancements, multinational enterprises and foreign direct investment, global competition and integration. Prerequisite: Approval of instructor.

## MARA 673 International Maritime Industry Graduate Management Experience

Credits 1 to 4. 1 to 4 Lecture Hours. Combines clasroom and graduate research work with international travel and provides the student direct contact with maritime industry managers. The trip emphasizes cultural and historical aspects of the maritime industry outside of the United States providing a better understanding of differing management styles, business practices, and regulatory focus. Prerequisite: Graduate status.

### MARA 675 Leadership in the Maritime Industry

Credits 3. 3 Lecture Hours. Focus on theory and real world practice of leadership; recognize components of leadership, management and labor; the basis of leadership authority, values and styles as applied to organizational vision, mission and life cycle; assess own leadership traits in preparation of entering work force. Prerequisite: Graduate classification or approval of instructor.

### MARA 678 Service Operations Management

Credits 3. 3 Lecture Hours. Case-study on the management of service operations; an overview of the role of services in the economy, the experience-oriented and service-dominant logic in the pure service sector, and the extension of service functioning of manufacturing, government, and not-for-profits. Prerequisite: Graduate classification or approval of department head.

#### **MARA 684 Professional Internship**

**Credits 1 to 4. 1 to 4 Other Hours.** On the job training in the field of maritime administration and logistics. **Prerequisites:** Graduate classification; approval of department head.

#### **MARA 685 Directed Studies**

**Credits 1 to 6. 1 to 6 Lecture Hours.** Selected topics in an identified area of Maritime Administration and Logistics not covered in another course curriculum. **Prerequisite:** Approval of instructor.

#### MARA 689 Special Topics in...

**Credits 1 to 4.1 to 4 Other Hours.** Selected topics in an identified area of Maritime Business Administration. May be repeated for credit. **Prerequisites:** Graduate classification and approval of instructor.

## MARA 690 Maritime Interdisciplinary Studies - Business, Law and Policy

**Credits 2. 2 Lecture Hours.** Emphasis on cultural, economic, political, social and historical aspects of the maritime industry; coverage of different management styles, business practices and regulatory focus. **Prerequisites:** Graduate classification or approval of instructor.

#### MARA 691 Research

**Credits 1 to 4.1 to 4 Other Hours.** Research methodologies and practices applicable to Maritime Business; for thesis or dissertation. **Prerequisite:** Graduate classification or approval of instructor.