

PROGRAM CONCENTRATION: Architectural, Construction,

Communication, and Transportation

CAREER PATHWAY: Maritime Studies

COURSE TITLE: Maritime Industry Careers

Course Description: This course is designed to offer students a comprehensive view of the many careers in the maritime industry. Students will develop a career plan designed to reflect the education, training, government service and licensure for the shoreside and seagoing careers covered in this course. They will identify the career paths and salary expectations, certification and licensure, educational and training requirements, geographical regions, prospective employment, and essential roles of the shoreside and seagoing careers. To make the connection between the classroom and the maritime industry substantial, tours of the local port, Coast Guard and other maritime industries are necessary. Mastery of standards through project-based learning, interviews with industry professionals, technical skills practice, and leadership development activities or the Career Student Organization will provide students with a competitive edge for entry into government/military services, the global market and/or post-secondary education.

ACCT-MIC-1. Identify the career paths and salary expectations, certification and licensure, educational and training requirements, geographical regions, prospective employment, and essential roles of the shoreside (government agencies) maritime industry. Students will:

- a. Identify the essential roles of the government agencies as they relate to the maritime industry.
- Differentiate between the levels of training for the many careers of government agencies as they relate to the maritime industry to include salary expectations, certification and licensure, educational and training requirements, geographical regions, prospective employment
- c. Participate in interactive activities as they relate to the careers of the maritime industry.
- d. Assemble documentation for the required portfolio.

### Academic Standards:

ELA9RC3: The student acquires new vocabulary in each content area and uses it correctly.

- a. Demonstrates an understanding of contextual vocabulary in various subjects.
- b. Uses content vocabulary in writing and speaking.

ELA9W3: The student uses research and technology to support writing.

a. Formulates clear research questions and utilizes appropriate research venues (i.e., library, electronic media, personal interview, survey) to locate and incorporate evidence from primary and secondary sources.



c. Synthesizes information from multiple sources and identifies complexities and discrepancies in the information and the different perspectives found in each medium (i.e., almanacs, microfiche, news sources, in-depth field studies, speeches, journals, or technical documents).

ELA9LSV2: The student formulates reasoned judgments about written and oral communication in various media genres. The student delivers focused, coherent, and polished presentations that convey a clear and distinct perspective, demonstrate solid reasoning, and combine traditional rhetorical strategies of narration, exposition, persuasion, and description.

When responding to written and oral texts and media (i.e., television, radio, film productions, and electronic media), the student:

- b. Analyzes the types of arguments used by the speaker, including argument by authority, emotion, and logic.
- c. Formulates judgments about ideas under discussion and supports those judgments with convincing evidence.

ScSh3: Students will identify and investigate problems scientifically.

a. Suggest reasonable hypothesis for identified problems.

ScSh6: Students will communicate scientific investigations and information clearly.

- b. Write clear, coherent accounts of current scientific issues, including possible alternative interpretations of the data.
- c. Use data as evidence to support scientific arguments and claims in written or oral presentations.
- d. Participate in group discussions of scientific investigation and current scientific issues.

ScSh9: Students will enhance reading in all curriculum areas by:

a. Read technical texts related to various subject areas.

ACCT-MIC-2. Identify the career paths and salary expectations, certification and licensure, educational and training requirements, geographical regions, prospective employment, and essential roles of the shoreside (private sector) maritime industry. Students will:

- a. Identify the essential roles of the private sector as they relate to the maritime industry.
- b. Differentiate between the levels of training for the many careers of private sector as they relate to the maritime industry to include salary expectations, certification and licensure, educational and training requirements, geographical regions, prospective employment
- c. Participate in interactive activities as they relate to the careers of the private maritime industry.
- d. Assemble documentation for the required portfolio.



### Academic Standards:

ELA9RC3: The student acquires new vocabulary in each content area and uses it correctly.

- a. Demonstrates an understanding of contextual vocabulary in various subjects.
- b. Uses content vocabulary in writing and speaking.

ELA9W3: The student uses research and technology to support writing.

- a. Formulates clear research questions and utilizes appropriate research venues (i.e., library, electronic media, personal interview, survey) to locate and incorporate evidence from primary and secondary sources.
- c. Synthesizes information from multiple sources and identifies complexities and discrepancies in the information and the different perspectives found in each medium (i.e., almanacs, microfiche, news sources, in-depth field studies, speeches, journals, or technical documents).

ELA9LSV2: The student formulates reasoned judgments about written and oral communication in various media genres. The student delivers focused, coherent, and polished presentations that convey a clear and distinct perspective, demonstrate solid reasoning, and combine traditional rhetorical strategies of narration, exposition, persuasion, and description.

When responding to written and oral texts and media (i.e., television, radio, film productions, and electronic media), the student:

- b. Analyzes the types of arguments used by the speaker, including argument by authority, emotion, and logic.
- c. Formulates judgments about ideas under discussion and supports those judgments with convincing evidence.

ScSh3: Students will identify and investigate problems scientifically.

a. Suggest reasonable hypothesis for identified problems.

ScSh6: Students will communicate scientific investigations and information clearly.

- b. Write clear, coherent accounts of current scientific issues, including possible alternative interpretations of the data.
- c. Use data as evidence to support scientific arguments and claims in written or oral presentations.
- d. Participate in group discussions of scientific investigation and current scientific issues.

ScSh9: Students will enhance reading in all curriculum areas by:

a. Read technical texts related to various subject areas.

ACCT-MIC-3. Identify the career paths and salary expectations, certification and licensure, educational and training requirements, geographical regions, prospective



employment, and essential roles of the seagoing (deckside) maritime industry. Students will: Identify the essential roles of deckside careers as they relate to the maritime industry.

- a. Differentiate between the levels of training for the many deckside careers as they relate to the maritime industry to include salary expectations, certification and licensure, educational and training requirements, geographical regions, prospective employment, hitch duration.
- b. Participate in interactive activities as they relate to the careers of the maritime industry.
- c. Assemble documentation for the required portfolio.

#### Academic Standards:

ELA9RC3: The student acquires new vocabulary in each content area and uses it correctly.

- a. Demonstrates an understanding of contextual vocabulary in various subjects.
- b. Uses content vocabulary in writing and speaking.

ELA9W3: The student uses research and technology to support writing.

- a. Formulates clear research questions and utilizes appropriate research venues (i.e., library, electronic media, personal interview, survey) to locate and incorporate evidence from primary and secondary sources.
- c. Synthesizes information from multiple sources and identifies complexities and discrepancies in the information and the different perspectives found in each medium (i.e., almanacs, microfiche, news sources, in-depth field studies, speeches, journals, or technical documents).

ELA9LSV2: The student formulates reasoned judgments about written and oral communication in various media genres. The student delivers focused, coherent, and polished presentations that convey a clear and distinct perspective, demonstrate solid reasoning, and combine traditional rhetorical strategies of narration, exposition, persuasion, and description.

When responding to written and oral texts and media (i.e., television, radio, film productions, and electronic media), the student:

- b Analyzes the types of arguments used by the speaker, including argument by authority, emotion, and logic.
- c. Formulates judgments about ideas under discussion and supports those judgments with convincing evidence.

ScSh3: Students will identify and investigate problems scientifically.

a. Suggest reasonable hypothesis for identified problems.

ScSh6: Students will communicate scientific investigations and information clearly.

- b. Write clear, coherent accounts of current scientific issues, including possible alternative interpretations of the data.
- c. Use data as evidence to support scientific arguments and claims in written or oral presentations.
- d. Participate in group discussions of scientific investigation and current scientific issues.



ScSh9: Students will enhance reading in all curriculum areas by:

a. Read technical texts related to various subject areas.

ACCT-MIC-4. Identify the career paths and salary expectations, certification and licensure, educational and training requirements, geographical regions, prospective employment, and essential roles of the seagoing (engineering) maritime industry. Students will:

- a. Identify the essential roles of engineering careers as they relate to the maritime industry.
- b. Differentiate between the levels of training for the many engineering careers as they relate to the maritime industry to include salary expectations, certification and licensure, educational and training requirements, geographical regions, prospective employment, hitch duration.
- c. Participate in interactive activities as they relate to the careers of the maritime industry.
- d. Assemble documentation for the required portfolio.

#### Academic Standards:

ELA9RC3: The student acquires new vocabulary in each content area and uses it correctly.

- a. Demonstrates an understanding of contextual vocabulary in various subjects.
- b. Uses content vocabulary in writing and speaking.

ELA9W3: The student uses research and technology to support writing.

- a. Formulates clear research questions and utilizes appropriate research venues (i.e., library, electronic media, personal interview, survey) to locate and incorporate evidence from primary and secondary sources.
- c. Synthesizes information from multiple sources and identifies complexities and discrepancies in the information and the different perspectives found in each medium (i.e., almanacs, microfiche, news sources, in-depth field studies, speeches, journals, or technical documents).

ELA9LSV2: The student formulates reasoned judgments about written and oral communication in various media genres. The student delivers focused, coherent, and polished presentations that convey a clear and distinct perspective, demonstrate solid reasoning, and combine traditional rhetorical strategies of narration, exposition, persuasion, and description.

When responding to written and oral texts and media (i.e., television, radio, film productions, and electronic media), the student:

- b. Analyzes the types of arguments used by the speaker, including argument by authority, emotion, and logic.
- c. Formulates judgments about ideas under discussion and supports those judgments with convincing evidence.

ScSh3: Students will identify and investigate problems scientifically.

a. Suggest reasonable hypothesis for identified problems.



ScSh6: Students will communicate scientific investigations and information clearly.

- b. Write clear, coherent accounts of current scientific issues, including possible alternative interpretations of the data.
- c. Use data as evidence to support scientific arguments and claims in written or oral presentations.
- d. Participate in group discussions of scientific investigation and current scientific issues.

ScSh9: Students will enhance reading in all curriculum areas by:

a. Read technical texts related to various subject areas.

ACCT-MIC-5. Identify the career paths and salary expectations, certification and licensure, educational and training requirements, geographical regions, prospective employment, and essential roles of the seagoing (support positions) maritime industry. Students will:

- a. Identify the essential roles of support positions as they relate to the maritime industry.
- b. Differentiate between the levels of training for the numerous support positions as they relate to the maritime industry to include salary expectations, certification and licensure, educational and training requirements, geographical regions, prospective employment, hitch duration.
- c. Participate in interactive activities as they relate to the careers of the maritime industry.
- d. Assemble documentation for the required portfolio.

### Academic Standards:

ELA9RC3: The student acquires new vocabulary in each content area and uses it correctly.

- a. Demonstrates an understanding of contextual vocabulary in various subjects.
- b. Uses content vocabulary in writing and speaking.

ELA9W3: The student uses research and technology to support writing.

- a. Formulates clear research questions and utilizes appropriate research venues (i.e., library, electronic media, personal interview, survey) to locate and incorporate evidence from primary and secondary sources.
- c. Synthesizes information from multiple sources and identifies complexities and discrepancies in the information and the different perspectives found in each medium (i.e., almanacs, microfiche, news sources, in-depth field studies, speeches, journals, or technical documents).

ELA9LSV2: The student formulates reasoned judgments about written and oral communication in various media genres. The student delivers focused, coherent, and polished presentations



that convey a clear and distinct perspective, demonstrate solid reasoning, and combine traditional rhetorical strategies of narration, exposition, persuasion, and description. When responding to written and oral texts and media (i.e., television, radio, film productions, and electronic media), the student:

- b. Analyzes the types of arguments used by the speaker, including argument by authority, emotion, and logic.
- c. Formulates judgments about ideas under discussion and supports those judgments with convincing evidence.

ScSh3: Students will identify and investigate problems scientifically.

a. Suggest reasonable hypothesis for identified problems.

ScSh6: Students will communicate scientific investigations and information clearly.

- b. Write clear, coherent accounts of current scientific issues, including possible alternative interpretations of the data.
- c. Use data as evidence to support scientific arguments and claims in written or oral presentations.
- d. Participate in group discussions of scientific investigation and current scientific issues.

ScSh9: Students will enhance reading in all curriculum areas by:

a. Read technical texts related to various subject areas.

### **Reading Across the Curriculum**

#### **Reading Standard Comment**

After the elementary years, students engage in reading for learning. This process sweeps across all disciplinary domains, extending even to the area of personal they experience text in all genres and modes of discourse. In the study of various disciplines of learning (language arts, mathematics, science, social studies), students must learn through reading the communities of discourse of each of those disciplines. Each subject has its own specific vocabulary, and for students to excel in all subjects, they must learn the specific vocabulary of those subject areas in context.

Beginning with the middle grades years, students begin to self-select reading materials based on personal interests established through classroom learning. Students become curious about science, mathematics, history, and literature as they form contexts for those subjects related to their personal and classroom experiences. As students explore academic areas through reading, they develop favorite subjects and become confident in their verbal discourse about those subjects.

Reading across curriculum content develops both academic and personal interests in students. As students read, they develop both content and contextual vocabulary. They also build good habits for reading, researching, and learning. The Reading Across the Curriculum standard



focuses on the academic and personal skills students acquire as they read in all areas of learning.

Students will enhance reading in all curriculum areas by:

- a. Reading in all curriculum areas
  - a. Read a minimum of 25 grade-level appropriate books per year from a variety of subject disciplines and participate in discussions related to curricular learning in all areas.
  - Read both informational and fictional texts in a variety of genres and modes of discourse.
  - Read technical texts related to various subject areas.
- b. Discussing books
  - Discuss messages and themes from books in all subject areas.
  - Respond to a variety of texts in multiple modes of discourse.
  - Relate messages and themes from one subject area to messages and themes in another area.
  - Evaluate the merit of texts in every subject discipline.
  - Examine author's purpose in writing.
  - Recognize the features of disciplinary texts.
- c. Building vocabulary knowledge
  - Demonstrate an understanding of contextual vocabulary in various subjects.
  - Use content vocabulary in writing and speaking.
  - Explore understanding of new words found in subject area texts.
- d. Establishing context
  - Explore life experiences related to subject area content.
  - Discuss in both writing and speaking how certain words are subject area related.
  - Determine strategies for finding content and contextual meaning for unknown words.

#### **CTAE Foundation Skills**

The Foundation Skills for Career, Technical and Agricultural Education (CTAE) are critical competencies that students pursuing any career pathway should exhibit to be successful. As core standards for all career pathways in all program concentrations, these skills link career, technical and agricultural education to the state's academic performance standards.



The CTAE Foundation Skills are aligned to the foundation of the U. S. Department of Education's 16 Career Clusters. Endorsed by the National Career Technical Education Foundation (NCTEF) and the National Association of State Directors of Career Technical Education Consortium (NASDCTEc), the foundation skills were developed from an analysis of all pathways in the sixteen occupational areas. These standards were identified and validated by a national advisory group of employers, secondary and postsecondary educators, labor associations, and other stakeholders. The Knowledge and Skills provide learners a broad foundation for managing lifelong learning and career transitions in a rapidly changing economy.

- **CTAE-FS-1 Technical Skills:** Learners achieve technical content skills necessary to pursue the full range of careers for all pathways in the program concentration.
- **CTAE-FS-2 Academic Foundations:** Learners achieve state academic standards at or above grade level.
- **CTAE-FS-3 Communications:** Learners use various communication skills in expressing and interpreting information.
- **CTAE-FS-4 Problem Solving and Critical Thinking:** Learners define and solve problems, and use problem-solving and improvement methods and tools.
- **CTAE-FS-5 Information Technology Applications:** Learners use multiple information technology devices to access, organize, process, transmit, and communicate information.
- **CTAE-FS-6 Systems:** Learners understand a variety of organizational structures and functions.
- **CTAE-FS-7 Safety, Health and Environment:** Learners employ safety, health and environmental management systems in corporations and comprehend their importance to organizational performance and regulatory compliance.
- **CTAE-FS-8 Leadership and Teamwork:** Learners apply leadership and teamwork skills in collaborating with others to accomplish organizational goals and objectives.
- **CTAE-FS-9 Ethics and Legal Responsibilities:** Learners commit to work ethics, behavior, and legal responsibilities in the workplace.
- **CTAE-FS-10 Career Development:** Learners plan and manage academic-career plans and employment relations.
- **CTAE-FS-11 Entrepreneurship:** Learners demonstrate understanding of concepts, processes, and behaviors associated with successful entrepreneurial performance.

