

FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER: MTE 2801

COURSE TITLE: Electronic Navigation

PREREQUISITE(S): None

COREQUISITE(S): None

CREDIT HOURS: 3

CONTACT HOURS/WEEK: 3

CONTACT HOUR BREAKDOWN:

 Lecture/Discussion: 3

 Laboratory:

 Other _____:

FACULTY WORKLOAD POINTS: 3

STANDARDIZED CLASS SIZE
ALLOCATION: 30

CATALOG COURSE DESCRIPTION:

This course is a study of weather systems, navigational aids, electronic navigation, chart navigation, magnetic and gyrocompasses, piloting, chart plotting, tide and tidal currents, and practical stability.

SUGGESTED TEXT(S): The American Practical Navigator: "Bowditch." Illustrate Edition (September 25, 2002). Author: Nathaniel Bowditch. Publisher: Paradise Cay Publications. ISBN: 0939837544.

IMPLEMENTATION DATE: Spring Term, 2008 (20082)

REVIEW OR MODIFICATION DATE:

COURSE TOPICS	<u>CONTACT HOURS PER TOPIC</u>
I. Navigation Fundamentals	11
a. Nautical Charts	
b. Nautical Publications	
c. Aids to Navigation	
d. Dead Reckoning	
e. Piloting	
II. Magnetic and Gyro Compass	11
a. Magnetism and Variation	
b. The Magnetic Compass and Deviation	
c. The Gyro Compass	
d. Nomenclature of the Magnetic and Gyro compasses	
III. Electronic Navigation	14
a. Electronic Navigation	
b. Satellite Navigation	
c. LORAN-C	
d. Radio Direction Finder	
e. Echo Sounders	
f. Speed Logs	
g. Radar Navigation	
h. Automatic Identification Systems (AIS)	
i. Navigation Software	
IV. Tides and Currents	9
a. Definitions - Tides	
b. Definition of Currents	
 TOTAL CONTACT HOURS	 45

PROGRAM TITLE: Industrial Management (2278)

COURSE TITLE: Electronic Navigation

CIP NUMBER: 00606200101

LIST PERFORMANCE STANDARD(S) ADDRESSED:

NUMBER(S): TITLES(S):

01.0 APPLY SUPERVISION SKILLS - The student should be able to:

- 01.03 Follow leadership principles and approaches.
- 01.04 Apply positive approaches to discipline.
- 01.06 Develop organizational plans.

02.0 COMMUNICATE EFFECTIVELY IN SUPERVISION - The student should be able to:

- 02.01 Solve problems in communicating.
- 02.03 Apply listening skills.
- 02.04 Use communication feedback effectively.
- 02.10 Prepare a written technical report.

07.0 EMPLOY CREATIVE THINKING TO ACHIEVE BUSINESS OBJECTIVES - The student should be able to:

- 07.01 Conduct and apply techniques for maximum production of ideas.
- 07.04 Oversee problem solving.

09.0 DEMONSTRATE APPROPRIATE COMMUNICATION SKILLS - The student should be able to:

- 09.02 Read and understand graphs, charts, diagrams, and tables commonly used in the industrial/occupational area.
- 09.03 Read and follow both written and oral instructions.
- 09.04 Answer and ask questions coherently and concisely.

10.0 DEMONSTRATE APPROPRIATE MATH SKILLS - The student should be able to:

- 10.03 Add, subtract, multiply, and divide using fractions, decimals, and whole numbers.

11.0 DEMONSTRATE APPROPRIATE UNDERSTANDING OF BASIC SCIENCE - The student should be able to:

- 11.02 Draw conclusions or make inferences from data.
- 11.04 Understand pressure

14.0 DEMONSTRATE KNOWLEDGE OF DATA-PROCESSING ACTIVITIES - The student should be able to

- 14.04 Interpret operations of a flowchart of a simulated business job.
- 14.05 Check printout for error, correct, and resubmit



NOTE: Use either the Tab key or mouse click to move from field to field. The box will expand to accommodate your entry.

<i>Section 1</i>	
COURSE PREFIX AND NUMBER: MTE 2801	SEMESTER CREDIT HOURS: 3
COURSE TITLE: Electronic Navigation	

Section 2

TYPE OF COURSE: (Click on the box to check all that apply)

<input type="checkbox"/> AA Elective	<input type="checkbox"/> AS Required Professional Course	<input type="checkbox"/> College Prep
<input checked="" type="checkbox"/> AS Professional Elective	<input checked="" type="checkbox"/> AAS Required Professional Course	<input type="checkbox"/> Technical Certificate
<input type="checkbox"/> Other		
<input type="checkbox"/> General Education: (For General Education courses, you must also complete Section 3 and Section 7)		

Section 3 (If applicable)

INDICATE BELOW THE DISCIPLINE AREA FOR GENERAL EDUCATION COURSES:

<input type="checkbox"/> Communications	<input type="checkbox"/> Social & Behavioral Sciences	<input type="checkbox"/> Mathematics
<input type="checkbox"/> Natural Sciences	<input type="checkbox"/> Humanities	

Section 4

INTELLECTUAL COMPETENCIES:

<input checked="" type="checkbox"/> Reading	<input checked="" type="checkbox"/> Speaking	<input checked="" type="checkbox"/> Critical Analysis	<input checked="" type="checkbox"/> Quantitative Skills	<input checked="" type="checkbox"/> Scientific Method of Inquiry
<input checked="" type="checkbox"/> Writing	<input checked="" type="checkbox"/> Listening	<input checked="" type="checkbox"/> Information Literacy	<input checked="" type="checkbox"/> Ethical Judgment	<input checked="" type="checkbox"/> Working Collaboratively

<i>Section 5</i>		
LEARNING OUTCOMES		METHOD OF ASSESSMENT
•	Upon completion students will be able to:	
•	Demonstrate knowledge of the theory of Electronic Navigation software and equipment	Group discussions, oral presentations, written tests, reports, and/or demonstrate competency in the field
•	Identify the appropriate Electronic Charts for the current area of operations	Projects / Tests / Quizzes
•	Determine position and develop a navigation plot that incorporates collision/allision avoidance and safe navigation	Projects / Tests / Quizzes
•	Gather, analyze and interpret data using navigation software to make appropriate navigation decisions	Projects / Tests / Quizzes

<i>Section 6</i>	Name of Person Completing This Form: Amaya Davis	Date: July 12, 2007
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