Boat Operation

Course Title

SE101

Dept. & Course No.

I. COURSE DESCRIPTION:

This course is designed to familiarize students with safe operation of outboard boats in order to break in engines and test engine repair. Pre: None (2 credit lect., 1 credits lab)

II. SEMESTER CREDITS: 3

III. CONTACT HOURS PER WEEK:

2
Lec
Lab
Total

IV. PREREQUISITES: None

V. STUDENT LEARNING OUTCOMES:

VI: COURSE CONTENT:

Upon completion of the course, the students will be able, with 70% accuracy, to:

- 1. Explain and demonstrate the importance of codes for operating small boats.
- Locate different types of uniform waterway markers and channel buoys.
- 3. Explain and apply the proper techniques of driving safely when taking off, passing another boat and approaching the dock.
- 4. Use a compass to show directions.
- 5. Maintain the appearance of the boat and keep the engine operating at its peak performance.

- A. Water Safety
 - 1. Palau codes
 - 2. International codes
 - 3. Water markers and buoys
- B. Safe Driving Techniques
 - 1. Taking off procedures
 - 2. Passing/right of way
 - 3. Docking procedures
- C. Compass Use
 - 1. North, East, South, West
 - 2. North-East, North-West
 - 3. South-East, South-West
- D. Maintenance
 - Routing cleaning of boat hull
 - 2. Basic mechanics
 - 3. Routine cleaning and lubrication of engines.
 - 4. Factory recommendations for maintenance.

VII. MATERIALS AND EQUIPMENT

- A. Outboard motor boat
- B. Personal Floatation Devices
- C. 150 ft. 3/8 in. rope
- D. Compass

VIII. TEXTS

A. Text(s): supplied by instructor

IX. METHODS OF INSTRUCTION

- A. Lectures
- B. Guest Speakers
- C. Laboratory work
- D. Demonstrations
- E. Reinforcement activities
- F. Application

X. METHOD OF EVALUATION

Four criteria considered when evaluating projects and performance

- 1. Accuracy
- 2. Techniques
- 3. Appearance
- 4. Completion

The components with corresponding weight in percent included in the computation of the final grade.

Attendance/participation	15%
Final Exam	15%
Mid-term	15%
Tests and Homework	10%
Projects	45%

Transmutation of percent to letter grade is as follows:

$$90 - 100 = A$$

$$80 - 89 = B$$

$$70 - 79 = C$$

$$65 - 69 = D$$

$$0 - 64 = F$$

TASK LIST

SE101 - Boat Operation Credits: 2 48 Course No. & Title Lec. Lab Total Lab Hrs. Student Learning Outcome 1-2 1. Demonstrate proper use of Palau and International safety codes. 6 hrs 2. Locate different types of uniform waterway markers (state & local). 3. Locate all channels buoys. Student Learning Outcome 3 1. Take off smoothly. 16 hrs 2. Apply right-of way and right ways of passing boats. 3. Approach docks properly. Student Learning Outcomes 4 3 hrs 1. Use compass to show directions. Student Learning Outcome 5 23 hrs 1. Clean and wash boats 2. Service engines 3. Remove and change spark plugs. 4. Drain and change oil. 5. Lubricate all grease fittings with proper lubricant. 6. Keep program of routine maintenance

Total hours: 48

Note: Lab hours may be switched as necessary depending on class needs.

Palau Community College SE101 Boat Operation Course Learning Outcomes

During the course experience, the *course learning outcomes* (CLOs) will be assessed through the use of signature assignments. A rating scale will be used to determine the students' proficiency level of each CLO using specifically aligned assignments. The numerical ratings of 4, 3, 2 and 1 are not intended to represent the traditional school grading system of A, B, C, D and F. The descriptions associated with each of the numbers focus on the level of student performance for each of the course learning outcomes listed below.

Rating Scale: 4 Outstanding 2 Developing 3 Proficient 1 Emerging

Course Learning Outcome 1: Students will be able to explain and apply Palau and international boat safety precautions as they apply to small boats.

Outstanding 4	Fully explains Palau and International boat safety standards without error. Able to readily identify all waterway markers
Proficient 3	Explains Palau and International boat safety standards with minor errors that do not cause safety issues. Able to identify most waterway markers.
Developing 2	Needs some assistance to explain and interpret Palau and International boat safety standards. Able to identify some waterway markers.
Emerging 1	Needs constant assistance to understand and interpret Palau and International boat safety standards. Only able to identify waterway markers with assistance.

Course Learning Outcome 2: Students will be able to perform correct boat operation safety driving techniques.

	Outstanding 4	Competently applies safe driving techniques including approach and departure from docks. Competently uses a compass.
	Proficient 3	Applies safe driving techniques including approach and departure from docks.
5	Developing 2	Applies safe driving techniques including approach and departure with some assistance.
T	Emerging 1	Applies safe driving techniques, including approach and departure from docks only under the constant supervision of an instructor.

Course Learning Outcome 3: Students will be able to maintain boat engines and hulls in a safe working condition.

Competently performs all care, maintenance, and routine procedures for small boat engines and hulls without supervision. Carries
out minor tune-ups of the fuel and ignition systems of an outboard motor without supervision.
Performs all care, maintenance, and routine procedures for small boat engines and hulls with minor supervision. Carries out minor
tune-ups of the fuel and ignition systems of an outboard motor under minor supervision.
Performs all care, maintenance, and routine procedures for small boat engines and hulls under constant supervision. Carries out
minor tune-ups of the fuel and ignition systems of an outboard motor only with some supervision.
Understands the need to perform all care, maintenance, and routine procedures for small boat engines and hulls but cannot
perform unless instructed. Carries out minor tune-ups of the fuel and ignition systems of an outboard motor only under constant
supervision and instruction.