

MARINE TRANSPORTATION (MTR)

MTR S119 Small Vessel Operator

1 credit (1+0)

Learn to safely operate a small vessel in Alaskan waters. Covers navigation, rules of the road, trip planning including weather, radio operation, line handling and vessel operation including a practice session on the water. Foul weather/rain gear may be required.

MTR S120 Outboard Motor Maintenance

1 credit (0+2)

An introduction to outboard systems that need maintenance and upkeep for efficient operation. Ignition, carburetion power head and lower unit systems will be studied emphasizing preventive maintenance.

MTR S121 Outboard and Small Engine Repair

3 credits (1+4)

Outboard and small engine repair theory, diagnosis service and repair of outboard and other small gasoline engines.

MTR S122 Diesel Engine Maintenance

1 credit (1+0)

An introduction to diesel engine systems that need maintenance and upkeep for efficient operation. Basic principles, fuel, air intake and exhaust, lubricating, cooling and starting systems will be studied, emphasizing preventive maintenance.

MTR S129 Basic Training

2 credits (2+1)

This US Coast Guard approved course meets the requirements of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) 95. The four modules of the course are Personal Survival, Basic Fire Fighting, First Aid/CPR, and Personal Safety Social Responsibility. Beards must be shaven to insure a good Self Contained Breathing Apparatus (SCBA) face mask seal.

Prerequisite: Must have a doctor's approval to physically demonstrate practical competencies, and must pass an English proficiency exam.

MTR S181 Marine Electrical Systems

3 credits (3+0)

An overview of the theory and practice of electrical circuits as applied to alternating and direct current. Provides an introduction to basic electrical theory, circuit fundamentals and practical wiring techniques, and theory of operation and use of VOM meters. Includes marine applications of power generation and power distribution systems.

MTR S182 Naval Architecture and Engineering Systems

1 credit (1+0)

An overview of ship design and construction including ship nomenclature, fittings, and equipment. Ship layout and operation to include tanks, valves, piping systems and boilers.

MTR S220 Proficiency in Survival Craft

2 credits (1.5+1)

This U.S. Coast Guard approved course provides training in the use of lifeboats, life rafts and survival gear. It meets the requirements of 46 CFR 12.10-3(a)(6) and 46 CFR 12.10-5 for endorsement for Lifeboatman. It also meets the requirements of Section A-VI/2 and Table A-VI/2-1 of the Standards of Training, Certification and Watchkeeping for Seafarers (STCW) 95. Rain gear may be needed for outside drills.

MTR S225 Able Seaman

2 credits (1.5+1)

Students will learn rules of the road, ship nomenclature, knots, splices, and general seamanship topics. This course is approved for third party testing. A UAS certificate of completion is accepted as a substitute for testing by the U.S. Coast Guard.

Prerequisite: MTR S220 (formerly offered as MT S230) or instructor permission.

MTR S226 Ratings Forming Part of a Navigation Watch (RFPNW)

1 credit (1+0)

This U.S. Coast Guard approved course satisfies the Standards of Training and Certification of Watchkeeping (STCW) 95 for Ratings Forming Part of a Navigation Watch. Included in the course are helm commands and duties of a mariner on a navigation watch.

MTR S228 Fast Rescue Boat (FRB)

2 credits (1+2)

Required for persons assigned to operate Fast Rescue Boats. It is USCG approved and meets the requirements for Standards, Training and Certification of Watchkeeping (STCW) 95. Much of the class time is spent operating a fast rescue boat on the water. Requires prior experience handling a skiff, warm clothing and rain gear.

MTR S233 Celestial Navigation

1 credit (1+0)

Basic concepts of celestial navigation and nautical astronomy. Definitions and solutions of the astronomical triangle utilizing publication 229 (H.O. 229) will be emphasized for practical application in the off shore navigation environment utilizing the marine-type sextant.

MTR S239 Master 100 Ton and Operator of Uninspected Passenger Vessel

5 credits (4+2)

This course and instructor have been approved by the US Coast Guard for third party testing. A UAS certificate of completion is accepted as a substitute for testing by the Coast Guard. Depending on sea experience and other Coast Guard requirements, a person passing this course is eligible to receive an Operator of Uninspected Passenger Vessel (OUPV, commonly called a 6-pack license) up to a Master 100 Gross Ton license.

MTR S240 Master 200 Ton Upgrade

2 credits (2+0)

Intended for mariners with a USCG 100 Ton Master's license who want to upgrade to a 200 Ton license. The course and instructor are USCG approved for testing in class. Subjects covered are chart plotting, regulations, stability, power plants, and vessel construction.

Prerequisite: MTR S239 or USCG Master's license.

MTR S241 Towing Apprentice Mate (Steersman) Upgrade

1 credit (1+0)

Intended for mariners seeking a license as Apprentice Mate (Steersman) of Towing Vessels. Any student successfully completing the course will satisfy the Coast Guard examination requirements of 46 CFR 10.205(i) for original issuance or 46 CFR 10.209(c)(iii) for renewal of a license as Apprentice Mate (Steersman) of Towing Vessels or Mate (Pilot) of Towing Vessels.

Prerequisite: USCG Master/Mate not more than 200 GRT License or mariners holding a 25, 50, or 100-Ton license must complete MTR S240 Master 200-Ton Upgrade within one year of completion of this Apprentice Mate course.

MTR S242 Advanced Fire Fighting

2 credits (2+0)

Marine firefighting preparedness and response leadership. Subjects include fire prevention, ship organization, damage control and stability. This course is USCG approved and meets the Standards of Training and Certification of Watchkeeping (STCW) 95.

Prerequisite: MTR S129 or a certificate in Basic Fire Fighting.

MTR S244 Crisis Management and Human Behavior

1 credit (1+0)

Intended for mariners responsible for cargo and the safety of passengers in emergency situations. It meets the Crisis Management and Human Behavior requirements of Standards, Training and Certification of Watchkeeping (STCW) 95 including Roll On Roll Off (Ro-Ro) passenger vessels.

Prerequisite: Requires US Coast Guard approved certificate of completion in Crowd Management, or instructor approval.

MTR S250 Radar Observer

2 credits (1+2)

U.S. Coast Guard approved course provides training in basic radar theory. Topics include navigation and collision avoidance. Great emphasis is placed on plotting techniques. Radar Observer utilizes the Nautilus Educational Systems (NRAS) radar simulator. Meets the requirements for uninspected tow vessels greater than 26 feet.

MTR S252 Automatic Radar Plotting Aids (ARPA)

2 credits (1+2)

This US Coast Guard approved course satisfies the Standards of Training and Certification of Watchkeeping (STCW) 95 for ARPA. Assessments for Officer in Charge of a Navigation Watch (OICNW) relating to ARPA are included in the course. Students are strongly advised to review Rapid Radar Plotting before the start of class.

Prerequisite: MTR S250 or US Coast Guard license with Radar Observer endorsement.

MTR S254 Electronic Chart Display Information Systems (ECDIS)

2 credits (1+2)

Provides USCG approved training in the theory and use of Electronic Chart Display Information Systems (ECDIS). Practical exercises using the Transas ECDIS operating program entail voyage planning and responding to maneuvering situations with other vessels in a real-time navigational environment using ship bridge simulators. Course meets Standards, Training and Certification of Watchkeepers (STCW) requirements in the use of ECDIS as revised by 2010 Manila Amendments.

Prerequisite: Students must have working knowledge of the nautical Rules of the Road, basics of navigation, radar, and ship handling.

MTR S282 Marine Transportation Laboratory

3 credits (.5+5)

This supervised laboratory serves as an extension for student classwork from other classes in the marine transportation program. All projects must be approved by the instructor prior to the start of class. Course may be repeated as necessary for project completion.

Prerequisite: Instructor permission required.

MTR S291 Internship

1-9 credits (0+0+ 4-36)

Pass/Fail grading.

MTR S294 Marine Transportation Practicum

1-6 credits variable (0+0+ 4-24)

Students are assigned projects designed to gain experience while working aboard a vessel under a qualified supervisor in cooperation with the instructor. Projects will emphasize practical use of knowledge. Instructor permission required.