



USPS UNIVERSITY ADVANCED COURSES

SEAMANSHIP

Seamanship is the recommended first course for new members. Members learn: boat handling; hull design and performance; responsibilities of the skipper; boat care; operating a boat under normal and abnormal conditions; and nautical customs and common courtesy on the water. A new course redo for 2007! We take you the next step beyond the boating safety course to get you on the water and to handle your boat safely.

PILOTING

Piloting is the first of a two-part series studying inland and coastal navigation. It focuses on the fundamentals of piloting—keeping track of a boat's movements, determining your position at any time, and laying out courses to a planned destination. Included: charts and their use; aids to navigation; the mariner's compass; variation and deviation of the compass; plotting and steering courses; dead reckoning; plotting and labeling charts; and use of electronic navigation including GPS and chartplotters. You may take *Piloting* before *Seamanship*.

ADVANCED PILOTING

This is the final part of the inland and coastal navigation series. It emphasizes the use of modern electronic navigation systems and other advanced techniques for finding position. Topics covered: tides and currents and their effects on piloting; finding position using bearings and angles; simple use of the mariner's sextant; and electronic navigation - radar, LORAN, GPS, etc. Successful completion of the *Seamanship*, *Piloting*, and *Advanced Piloting* exams are required to earn the USPS Grade of "Advanced Pilot (AP)."

JUNIOR NAVIGATION

Junior Navigation is the first of a two-part series in offshore navigation. Subjects include: basic concepts of celestial navigation; how to use the mariner's sextant to take sights of the sun and moon; the importance and techniques of accurate time determination; use of the Nautical Almanac; how to reduce sights to establish lines of position; the use of special charts, plotting sheets, and other navigational data for offshore positioning and passage planning; and use of electronic navigation equipment for off-shore passagemaking. Members should complete *Seamanship*, *Piloting*, and *Advanced Piloting* before beginning *Junior Navigation*. Successful completion of those exams are required to earn the USPS Grade of "Junior Navigator (JN)." A new course redo for 2007, and it is great!

NAVIGATION

Navigation is the second part of the offshore navigation series. The student further develops a complete understanding of celestial theory necessary to navigate anywhere in the world without electronic navigation equipment. The course introduces the member to additional sight reduction techniques, and the member develops greater skill and precision in sight taking, positioning, and the orderly methods of carrying on the day's work of a navigator at sea. Members must complete *Junior Navigation* before beginning *Navigation*. You may earn the USPS Grade of "Navigator (N)" upon successful completion of all USPS Advanced Courses." A new course redo in the 2008 timeframe aligns it with the new *JN Course*!

SAFE BOATING!
Learn More! Take Classes!



USPS UNIVERSITY ELECTIVE COURSES

CRUISE PLANNING

Designed for members who plan to cruise for a day or for a year—in a sail or power boat—this course covers such topics as: planning a voyage; financing a voyage; managing commitments back home; equipping a cruising boat; selecting the crew; provisioning; managing a voyage; entering and clearing foreign ports; emergencies afloat; and security measures.

ENGINE MAINTENANCE—New Redo for 2007!

The new Engine Maintenance course redo for 2007 has been put into one, ten-chapter course that stresses the diagnosis of modern marine engine systems, while also teaching the basics of engine layout and operation. Gasoline inboards and outboards and diesel engines are taught in a way that reinforces the common aspects of how engines work. This new course is complete in one book with one exam.

INSTRUCTOR DEVELOPMENT

This course deals with effective communication for speakers and teachers. It offers practical instruction for preparing for teaching assignments; preparing for meeting presentations; effective teaching techniques; conducting efficient meetings; and selecting and using audiovisual aids. Completion of the course results in earning the USPS Certified Instructor and the Virginia State Boating Safety Instructor Certificates, both of which are required to teach the boating safety course.

MARINE ELECTRONICS (101, 102, and 103)

This three-part Marine Electronics course teaches essential knowledge about a boat's electrical and electronic systems including: proper wiring; grounding; corrosion and electrolysis control; batteries and their maintenance; depth finders; marine radiotelephones; radar; LORAN; GPS; and other electronic positioning systems. After the complete redo of the course by 2008, successful completion of two parts will earn credit for Marine Electronics.

SAIL - Introduction to Sail 101 and Advanced Sail 102

The introduction course teaches basic elements of sailing, including terminology; sailboat rigs and sail plans; boat design and hull types; sails; standing and running rigging; boat, true, and apparent wind; leaving and returning to dock; sailing upwind and downwind; marlinespike for sailors; and the sailing navigation rules (rules of the road). The advanced course teaches forces, stability, and balance; sail trim; tuning a rig; steering and helmsmanship; spinnaker handling; heavy weather sailing; survival in storm conditions; safety procedures; racing and race management; and the complete navigation rules for sailing vessels.

WEATHER

This course teaches students how to make weather observations and predictions for more enjoyable boating. Topics include: awareness of weather phenomena; how to read the weather map and sky; how to understand and anticipate weather developments; structure and characteristics of the atmosphere; factors considered in weather forecasting; sources and use of weather reports and forecasts; and instruments and visual observations the skipper can make. A new book for 2008!

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USPS UNIVERSITY LEARNING GUIDES

Amateur Radio

Boat Design and Construction

Boat Insurance

Calculators for Navigation

Compass Adjusting

GPS

How to Fly Flags

Introduction to Sailing

**Knots, Bends and Hitches
(Marlinspike)**

Loran C

Navigational Astronomy

Oceanography

Plotting and Labeling Standards

Predicted Log Contests

Radar

Sight Reduction Methods

Skipper Saver

USPS Glossary

Water Sports

USPS UNIVERSITY SEMINARS

How to Use a GPS

How to Use a VHF/DSC Marine Radio

How to Use a Chart

On-Board Weather Forecasting

Boat Handling Under Power

Sail Trim and Rig Tuning

USPS Seminars are approximately 2 ½ hours and include up-to-date in-depth materials on their subject matter, as well as, laminated water-resistant guides for use in your cockpit. More seminars will be released over the next two years.

Successful completion of all USPS University Advanced and Elective Courses and Seminars is credited to the up and coming “Boat Operator Certificate,” which will comply with the requirements of UN Resolution 40 specifying the International Boat Operator Certificate.

As of: 5 October 2007

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