Updated- January 2023

Nautical Science Program- Naut. 301a
Introduction to Seamanship and Navigation

Academic Degree Credit Units: 2

Offered: **Spring and Fall Term**

Sections:

1) Monday, 6:00-8:50 Pm -Capt. Harding
2) Monday, 6:00-8:50 Pm – Capt.Ugoretz
3) Tuesday, 6:00-8:50 Pm– Capt Harding
4) Tuesday, 6:00-8:50 Pm – Capt. Monk
4) Wednesday, 6:00-8:50 – Capt. Prioleau

Contact Hours:
Lectures – 15 hours, semester weeks 1-5
Laboratories – 35 hours, (3-hour Dockside Demonstration& 32-hour Sailing Voyage)
Additional on-line contact & office hours weekly

Review Dates: April 24th – 26th
Final Exam Dates: May 3rd – 10th
(Students should not make travel arrangements which conflict w/ assigned exam times per university policy)

Location:

http://priceschool.usc.edu/naut/
USC Campus for lectures during weeks 1-5. Port of LA for dockside demonstration laboratory and San Pedro or other locations for the 2-day sailing voyages.

Instructors:

Captain. Lars Harding, Program Administrator
Captain. John Ugoretz
Captain Paul Prioleau
Captain David Monk

Office: Physical Education Building - PED 302b
(Enter from west side lobby doors and follow the signs)

Office Hours:
Capt. Harding ,Wednesday, 5:15 PM-5:45PM
Capt. Ugoretz, Tuesday, 5:15-5:45 PM during lecture weeks

Contact Info:
Captain Harding - (562) 230-5277cell, Lharding@usc.edu
Captain Ugoretz - Ugoretz@usc.edu
Captain Prioleau - Ppriolea@usc.edu
Phone and email messages will be returned within 24 hours during lecture weeks and at least weekly otherwise.

USCG Accreditation:

This course is certificated by the United States Coast Guard for license track students pursuing a "Merchant Mariners Masters Credential" **(USCG Certificate UNIVSC-155).**

Course Description

This level one introductory nautical science class is taught in the classroom and aboard ship. The course provides an introduction to the history, termonology and basics of operating and navigating sailing vessels at sea. Lectures focus on vessel construction, nomenclature, hydrodynamics, aerodynamics of sail, safety at sea, charting and navigational geometry.. Students also learn about 18th and 19th century wooden tallship construction, design, and rigging during a 1-day seminar conducted at the Port of Los Angeles.
Students apply the concepts and skills learned in the classroom in a collaborative effort to ensure the safe operation and navigation of a working sail training vessel during a 2-day overnight ocean voyage. They must also demonstrate their understanding of US Coast Guard and Homeland Security Governance as it applies to piloting laws of vessels operating within commercial coastal waterways.. Nautical science classes attract and welcome all Undergraduate Majors, Masters, Ph.D students and faculty, as a result this cross-disiplanary involvement creates a intersectoral collaboration aboard ship.

Learning Objectives

Students gain knowledge and an introductory understanding of:

- Traditional and modern ship construction, design and vessel nomenclature & terminology
- Basic vessel physics, hydrodynamics, aerodynamics and performance
- Maritime history and vessel design
- United States Coast Guard "Piloting Rules of the Sea Ways", admiralty law and goverance
- US. Coast Guard required safety gear, equipment and their application at sea
- Applied piloting and seamanship skills under power and sail
- Navigation theory and at-sea chart and electronic navigation
- Deck and navigation watch collaborartion to ensue safe passage of the vessel.
- Leadership and communication skills in seamanship, deck operations and vessel handling

Prerequisite(s): None

Co-Requisite(s): None

Concurrent Enrollment: Note: concurrent enrollement in Nautical Science 301B, Advanced Navigation and Seamanship is permitted but is not required.

Course Notes

Course enrollment is for a Letter Grade, Pass/Not Pass, and Audit. Note: the lecture portion of this course meets during the first five consecutive weeks of classes except holidays. For safety reasons, lecture attendance is mandatory in order to participate in the "at sea laboratories". A Sunday, 10:00 a.m. – 12:30 p.m. "Dockside Demo" laboratory and a "Two-day Sea Voyage", held on Fridays & Saturday's are a required portion of the class. Dates for these components of the course will be arranged during the first three weeks of lecture. Copies of lecture slides, instructional videos, and other class information will be posted on Blackboard along with pre-voyage quizes.

Required Readings and Supplementary Materials

The following are available at the USC Book Store:

Text: The Annapolis Book of Seamanship, J. Rousmaniere (Optional)
Charts: 1210TR Martha's Vineyard to Block Island (provided)
18746 Catalina Channel (provided)
18751 Los Angeles Harbor (provided)
18757 Catalina Island (provided)
Videos Annapolis Video Series Volumes 1-5

Suggested Readings and Supplementary Materials

Charles F. Chapman, Hearst Corp. "Chapman Piloting" 62nd edition
U.S. Dept.of Homeland Security/U.S. Coast Guard "Navigation Governance International and Inland" Chart 18740 Channel Islands

Other Readings, Videos, Study Guides and Self Check Quizes

Power point presentations will be made available each week of class via blackboard. Suggested videos, deadlines, lab assignment reminders and self check quizes will be communicated by email or blackboard. **Please ensue you are receiving blackboard emails ASAP.**

Description and Assessment of Assignments

A mid-term examination will be given during the 4th or 5th week of classes to determine readiness to participate in the "2-Day Sea Voyage". Students will demonstrate proficiency in navigation and seamanship throughout the two-day sailing voyage, letter grades will be impacted by participation. The final examination will include significant demonstration of chart navigation skills and understanding of the course materials.

5%	Lecture attendance. Attendance is required to participate in the off-campus activities (At Sea Labs)
5%	Dockside Demonstration Laboratory attendance
30%	Midterm Examination
15%	2-Day Sailing Voyage (48 hour lab). Skills acquired in this lab will be assessed during the final exam
45%	Final Exam

Grading of Final Examination

(Due to the challenging nature of this exam and historical results the following curve is used)

A	95-100%	C+	57-59	D-	≤ 39%
A-	80-94	C	53-56		
B+	77-79	C-	50-52		
B	66-76	D+	47-49		
B-	60-65	D	43-46		

Overall Course Grading Scale

≥ 90% = A ≥ 80% = B ≥ 70% = C ≥ 60% = D, Failing Work < 49% or missing assignments or lack of attendance

Assignment Submission Policy

Mid-term examination must be taken during the scheduled lecture. Participation in both the "Dockside Demonstration Laboratory" and "Two-Day Sea Voyage" are mandatory. Off-campus activities will be scheduled during the first three weeks of class. Changes to scheduled at-sea voyages can only be made with advanced notice and **made in person** with legitimate compelling conflict or documented illness.

Grading Timeline

Final grades will be submitted per university schedules and policies.

Additional Policies

Due to safety considerations, students will not be permitted to participate in the "Two-Day Sea Voyage" without having participated in the five on-campus lectures or on approval of instructor.

Special Needs Students are Welcome!

Please contact Capt. Lars P. Harding, Program Administrator to discuss accomodations

Course Schedule: A Weekly Breakdown

	Topics / Daily Activities	Learning Objectives	Readings and Homework	Deliverable/ Due Dates
Week 1	Syllabus Review Nomenclature	Traditional and modern ship construction, design and vessel nomenclature	Annapolis Book of Seamanship: 3-27 Blackboard Anapolis Video 1	
Week 2	Hull and sail design, maritime history	Traditional and modern ship construction, design and vessel nomenclature Maritime history and changes in vessel design	Annapolis Book of Seamanship: 40-45, 46-56 Blackboard Anapolis Video 5	Nomenclature & Sail Plans quiz - due end of Week 2
Week 3	Physics, oceanography, and beginning seamanship	Basic vessel physics, hydrodynamics, aerodynamics and performance	Annapolis Book of Seamanship: 67	
Week 4	USCG Requirements, safety, and watch standing	United States Coast Guard "Piloting Rules of the Sea ways", basic admiralty law. Required safety gear and vessel equipment and their application	Annapolis Book of Seamanship: 189-230 Blackboard Anapolis Videos 2 and 3	Navigation Lights Midterm during lecture week 4
Week 5	Navigation	Navigation theory and at-sea chart and electronic navigation	Annapolis Book of Seamanship: 231-301 Blackboard Anapolis Video 4	Pre-Voyage Quiz – due end of week 5
Weeks 5-15	Dockside Demonstration Two-Day Sailing Voyage	Traditional and modern ship construction, design and vessel nomenclature U. S. Coast Guard/ Homeland security "Piloting Laws, basic admiralty law and governance. Required safety gear and vessel equipment and their application Vessel piloting and seamanship skills under power and sail	Schooner diagrams Packing and preparation lists Driving Instructions Charts and navigation tools supplied	Dates to be determined during lecture weeks 1-3
Week 15	Final Review Session	Full review of practical navigation and sailing theory learned in course.		Last week of regularly scheduled classes for each section
Exams	Final Examination			Date: Consult the USC *Schedule of Classes* at classes.usc.edu/.

Statement on Academic Conduct and Support Systems:

Academic Conduct:

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, "Behavior Violating University Standards" policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in *Scampus* and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct.

Support Systems:

Student Counseling Services (SCS) – (213) 740-7711 – 24/7 on call
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. engemannshc.usc.edu/counseling

National Suicide Prevention Lifeline – 1 (800) 273-8255
Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. www.suicidepreventionlifeline.org

Relationship and Sexual Violence Prevention Services (RSVP) – (213) 740-4900 – 24/7 on call
Free and confidential therapy services, workshops, and training for situations related to gender-based harm. engemannshc.usc.edu/rsvp

Sexual Assault Resource Center
For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: sarc.usc.edu

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086
Works with faculty, staff, visitors, applicants, and students around issues of protected class. equity.usc.edu

Bias Assessment Response and Support
Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. studentaffairs.usc.edu/bias-assessment-response-support

The Office of Disability Services and Programs
Provides certification for students with disabilities and helps arrange relevant accommodations. dsp.usc.edu

USC Support and Advocacy (USCSA) – (213) 821-4710
Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. studentaffairs.usc.edu/ssa

Diversity at USC
Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. diversity.usc.edu

USC Emergency Information
Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible. emergency.usc.edu

USC Department of Public Safety – UPC: (213) 740-4321 – HSC: (323) 442-1000 – 24-hour emergency or to report a crime.
Provides overall safety to USC community. dps.usc.edu

Academic Integrity

The University of Southern California is foremost a learning community committed to fostering successful scholars and researchers dedicated to the pursuit of knowledge and the transmission of ideas. Academic misconduct is in contrast to the university's mission to educate students through a broad array of first-rank academic, professional, and extracurricular programs and includes any act of dishonesty in the submission of academic work (either in draft or final form).

This course will follow the expectations for academic integrity as stated in the USC Student Handbook. All students are expected to submit assignments that are original work and prepared specifically for the course/section in this academic term. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s). Students suspected of engaging in academic misconduct will be reported to the Office of Academic Integrity.

Other violations of academic misconduct include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see the student handbook or the Office of Academic Integrity's website, and university policies on Research and Scholarship Misconduct.