



**Cape Cod Collaborative  
Advanced Studies and Leadership Program**

*in Partnership with Massachusetts Maritime Academy*

***Parent / Student Catalogue***

*2019 Summer Session*

*July 7 (Sunday Evening) to Friday, July 26*

***Mission***

*To provide an enriched learning and social experience within a collegial and supportive residential environment that emphasizes project-oriented instruction, team building and leadership development for high achieving students from Cape Cod Collaborative member districts and off-Cape affiliated districts.*

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## **About Cape Cod Collaborative**

Cape Cod Collaborative is an educational organization providing services to students, parents and public school staff from its member districts, which include: Barnstable, Bourne, Brewster, Cape Cod Technical High School, Dennis-Yarmouth, Eastham, Falmouth, Martha's Vineyard Regional High School, Mashpee, Monomoy Regional School District, Nantucket, Nauset Regional School District, Provincetown, Sandwich, Truro, Upper Cape Cod Regional Technical School, and Wareham. The Collaborative was originally established in 1975 to provide high quality services to low incident special student populations whose needs could be best addressed through a multi-district effort.

Supervision and oversight of Collaborative operations is the responsibility of the Executive Director who answers to a Board of Directors. The Board is comprised of school committee representatives from the 19 Cape and Islands school districts that make-up its membership.

Currently, the Collaborative provides a wide range of services to students and staff. Student services include alternative education programs, programs for the multi-handicapped, therapy and support services for students requiring specialized support and transportation services for both special needs students and general education students. Services offered for staff include a wide array of professional development including college courses, workshops, and summer institutes. Collegial sharing opportunities are coordinated and facilitated for various professional groups including the Superintendents of Schools, Administrators of Special Education, Curriculum Administrators and Principals.

The Advanced Studies and Leadership Program is a program developed (2005) to enhance and enrich the education of high achieving students and has been an exciting addition to the schedule of Collaborative services.

## **About Massachusetts Maritime Academy**

The mission of Massachusetts Maritime Academy is to graduate educated men and women to serve the maritime industry as licensed officers or to serve the transportation, engineering, environmental, and industrial interests of the Commonwealth and the Nation.

The Academy supports national defense by the commissioning of officers in the U.S. Merchant Marine and the U.S. Armed Forces. The Academy believes in learning through application and requires students to spend a portion of their academic program at sea or in internships or cooperatives. Resident life is regimented, instilling in cadets honor, responsibility, discipline, and leadership.

A complementary mission of MMA is to provide lifelong learning opportunities, particularly for those in marine industries, and to serve the Commonwealth and region in furthering their maritime interests.

### **Objectives**

The objectives of the ASLP are as follows:

1. To support and stimulate high achieving students by providing a 3-week summer program that offers hands-on academic pursuit and interactive leadership activities within a collegial environment.
2. To provide a total of 48 hours of project-oriented study in \*STEM related subject areas.
3. To provide a total of 24 hours of project-oriented study in a humanity related subject area.
4. To provide an evening program of interactive leadership activities.
5. To provide necessary media and library support to ensure success for each student.

### **Eligibility**

A student is eligible to participate in the Advanced Studies and Leadership Program if:

1. The student is entering grade 8 or 9 in September of 2019.
2. The student is enrolled in a public school within a member district of the Cape Cod Collaborative. Note: a limited number of seats

may be made available to public school students from non-member districts.

3. The student has sufficient background, potential, and the commitment to profit from the courses and residential environment being offered.

\*Science, Technology, Engineering, Math

### **Selection for Summer 2019**

Each member district will be notified of their allotment of seats by November 2, 2018. Seat allotments per district are determined based on the total number of students in grades 7 and grade 8 in each district. No more than 20% of the seats in any district may be allotted to returning students. The number of students selected for participation in the program should not exceed the number of seats allotted to the district. **It is recommended that each district establish a waiting list in the case that additional seats become available.**

Approximately 210 public school students will participate in the program on the basis of:

1. History of academic achievement
2. Interest in subject area to be pursued
3. Current teacher recommendations (two)
4. Guidance Counselor/or Principal recommendations

In order to qualify for participation in the ASLP, students must have achieved, on the most recent administration of the MCAS or PARRC tests, a combined score in math and in English or science that is within the top 15% of the combined math and English grade level scores for the district. **Note:** These scores will span two years: for students entering grade 8, scores to be utilized would be math in grade 6 and science in grade 5; for students entering grade 9, scores to be utilized would be math in grade 6 and ELA in grade 7.

## **Admission Requirements**

Students applying to ASLP need to have their completed application delivered to their school guidance office on the date set by the local school administration. An \$80 application fee is required (the application fee will be waived for those eligible for free/reduced lunch). Students who are accepted for the Program will be notified in writing on or about March 27, 2019. Final acceptance requires the submission of a \$250.00 deposit, completion and submission of our Parent Questionnaire, and submission of the Student Health Form. The deposit and Parent Questionnaire are due within 10 business days from receipt of the initial acceptance letter. The Student Health Information form must be completed and signed by parents/guardians and a physician, and returned no later than May 26, 2019. The aforementioned health information is required to ensure the health and safety of students attending ASLP.

If parents indicate on the Parent Questionnaire that the student will be on prescribed medication during the program, a Prescription Medication Permission Form will be sent to you to be signed by a licensed prescriber and returned no later than May 26, 2019.

## **Student Compartment**

In each session, mature and proper behavior among students is expected. The Program attempts to achieve a balance between the necessities for structure, rules, and regulations, and the desire to allow students the freedom to grow and mature. In essence, the Advanced Studies and Leadership Program seeks those highly-motivated students who themselves are seeking an academic challenge, who are willing to take risks, are not afraid to work, and who want to involve themselves in a stimulating environment which encourages learning and growth.

No student should apply for the Advanced Studies and Leadership Program unless he/she is *COMMITTED TO BE IN RESIDENCE FOR THE ENTIRE THREE WEEKS*, interested in diligent study, and willing to follow the rules and regulations of the Program Code of Conduct.

## **Project Support/Assistance**

An assistance/support service is provided by members of volunteer staff. The assistance is provided on a schedule established between the volunteer and the student(s) involved. Individual and group assistance is provided. Services are provided on a voluntary basis and by teacher referral.

## **Recreation and Social Activities**

Students will not be required to participate in a formal physical education program. However, recreation facilities (including the college gymnasium, swimming pool, and tennis courts) will be available under supervision for students at designated times. Students' dances/socials will be held one evening per week – usually Thursday evening.

## **Core Leadership Course**

As part of the Core Leadership Course the entire student body will assemble three evenings per week for programs planned primarily to provide interactive activities that support personal growth in relation to leadership development. Guest speakers, demonstrations, team building activities and audio/visual presentations will be offered as part of the program.

## **2018-2019 Calendar**

The date to submit your completed application to your principal or guidance counselor will be established by each school district. The selection for admission to ASLP is a district-based decision.

Thursday	November 1, 2018	Contact Liaison Meeting
Friday	February 1, 2019	Deadline for receipt of applications from member school systems
Monday	March 25, 2019	Student acceptance notification from ASLP Office
Friday	April 5, 2019	Parent questionnaire and initial payment due in ASLP office
Friday	May 17, 2019	Last day for final payment of tuition
Friday	May 24, 2019	Student Health Information Form due in
Sunday	July 7, 2019	Move -In, Registration Orientation – 5:00 p.m.
Monday	July 8, 2019	First Day of Program
Friday	July 26, 2019	Commencement Program 9:00 a.m.



## Daily Schedule

7:30 a.m. - 8:15 a.m.	Breakfast
8:30 a.m. - 10:10 a.m.	First Period
10:10 a.m. - 10:30 a.m.	Break
10:30 a.m. - 12:00 p.m.	Second period
12:00 p.m. - 12:30 p.m.	Lunch
12:45 p.m. - 2:30 p.m.	Third Period
3:00 p.m. - 5:00 p.m.	Independent Study, Field Trips, Recreational Activities, Course-Related Activities, Tutorial Sessions
5:00 p.m. - 6:00 p.m.	Dinner
6:30 p.m. - 8:30 p.m.	Leadership Seminar/Activities
8:45 p.m. - 10:00 p.m.	Formal Study (Dormitory)
10:00 p.m.	Lights Out

(Note: The above schedule is subject to change)

## **Curriculum Overview**

### **STEM Pathways and Modules**

The 2019 STEM course format has been redesigned to better accommodate both new students and returning students. Three STEM “Pathways” have been created.

Pathway I - Power Engineering & Renewable Energy (Module I-A), (Module I-B) Discover Science on Cape Cod, Navigation (Module I-C).

Pathway II – Remotely Operated Vehicles and Their Use in Oceanography (Module II-A), Marine Environmental Issues (Module II-B), Ship Handling (Module II-C).

Pathway III –Emergency Management (Module III A), Chemistry of Water (Module III B), Strength of Materials (Module III C)

Note: Each Module will involve 4 days (3.5 hours each day) of exciting hands-on study, which will include demonstrations and interactive work with world-class technology and state-of-the-art science labs (see module descriptions).

### **“Power Engineering and Renewable Energy”**

The “Power Engineering” course consists of an overview of engineering concepts as they relate to power generation. Steam generation, turbine technology, and electrical generation will be covered as appropriate for the age group. Alternative/renewable generation technologies will also be discussed.

The laboratory component of this program includes use of the engine room of the Academy’s 550 ft. training ship, Enterprise. The students will also utilize the Academy’s newest engineering labs to build a working model of the steam cycle. Also to be discussed and demonstrated will be the application of engineering concepts that will be used to resolve issues of renewable energy.

The capstone project is the construction of an operating gas-fired steam plant that will produce an electrical voltage.

### **“Navigation and Ship Handling”**

Topics covered during the “Navigation” module include boating safety, principles of navigation, chart work, voyage planning and seamanship. Imbedded within the course frameworks is the Academy’s Coast Guard approved Boating Operators course.

The laboratory work included in the “Ship Handling” course includes basic seamanship skills such as knot tying and line work as well as lifeboat operations. The Academy’s state-of-the-art Radar labs and Ship’s Bridge Simulator will also be utilized.

The capstone project will be a team-based simulator exercise that requires the students to steam a 600 ft. ship into Boston Harbor.

### **“Marine Environmental Problems on Cape Cod”**

This short course will focus on four environmental problems of concern to Cape Cod and other coastal regions: nutrient loading, harmful algal blooms, conservation and restoration of wetlands, and invasive plants. The daily sessions will consist of lecture, discussion and field or laboratory demonstrations with hands-on participation of the students.

Wetlands are among the most endangered ecosystems. Projects are underway across the country to try to conserve and restore wetland habitats. Students in the Department of Marine Safety and Environmental Protection at MMA have been directly involved for two years in a project to restore a nearby degraded salt marsh to its original condition. They are working in cooperation with the Army Corps of Engineers, the National Marine Life Center and the Town of Bourne. We will discuss the problem of wetlands degradation and methods of remediation, and we will make a field trip to our local wetland restoration site.

The capstone experience of the Marine Environmental Problems on Cape Cod module will be a field trip to a severely degraded wetland for which restoration plans are underway. This trip will bring into focus the four environmental themes to be addressed in the classroom and laboratory:

nutrient loading, algal blooms, invasive plants, and wetlands conversation and restoration.

### **“Remotely Operated Vehicles and Their Use in Oceanography”**

This course consists of an overview of ROV’s, their construction, and their applications in the marine environment. Students will study the history of their use, and learn the components of a ROV model. From this they will also visit the Woods Hole Oceanographic Institution for a tour of the ROV equipment being used in current oceanographic research.

### **“Discover Science on Cape Cod”**

This class will explore the earth sciences in the Cape region, including coastal erosion issues, the impact of storms, and the structure of the beaches. Students will conduct a series of outdoor experiments and attend two local field trips to Sandy Neck Beach and the Cape Cod Canal. They will learn about the canal and its economic and ecological importance. The focus of this class will be on local geology (erosion and coastal processes) and meteorology (lightning and other severe weather events).

### **“Water, Water, Everywhere: The Chemistry of the Ancient Molecule”**

Students will learn some general chemical concepts and utilize the scientific method by exploring the amazing physical and chemical properties of water. Each day will consist of a laboratory activity on physical properties, solutions of water, sources of water and a capstone project on phosphorus and water pollution. Students will use the equipment in a college chemistry laboratory including designated glassware and a spectrophotometer.

### **“Emergency Management”**

This class is an introduction to emergency operations and is based on the National Incident Management System and the EM Disaster Cycle-Preparedness, Response, Recovery, and Mitigation. Course topics include a brief history of EM in the United States over the last 10 years, disaster preparedness, fire safety, light search and rescue, and CERT (Community Emergency Response Team). There are several hands on interactive exercises utilizing the training ship spaces and the emergency management

simulator. Students are assigned specific roles and responsibilities and participate in several related activities.

### **"Strength of Materials"**

In this engineering class students will learn the fundamental concepts of the mechanics of materials, including stress and strain due to tensile and compressive forces, torsion, bending moments, and temperature changes in a variety of structures. Students will work collaboratively to build a model of a bridge from design to a capstone project in which they will test its strength.

### **Humanities Courses – All Students**

One elective Humanities Course (105 minutes per day) to be selected from the following courses (see course descriptions):

Course I	“Improve with Improv I”
Course II	“Improve with Improv II”
Course III	“Improve with Improv III”
Course IV	“Memory Book Writing and Publication
Course V	“Painting and Drawing”
Course VI	“Critics Corner”
Course VII	“Musical Creativity
Course VIII	“Be Your Own Author”
	<i>(see course descriptions)</i>

### **Other Required Related Activities- All Students**

1. Afternoon participation in course related activities (such as field trips or labs), or participation in recreational activities are required.
2. A core seminar program on Leadership from 6:30-8:30 p.m. three evenings per week. This program will involve the entire student body in demonstrations, lectures, films, and team building activities and guest speakers.

Note: Oversubscription in a humanities course may necessitate a student being placed in an alternative humanities course. The Advanced Studies and Leadership Program reserves the right to cancel any course offering.

## **Course Descriptions-Humanities**

### **“Improve with Improv!”**

This is a theatre class designed to explore the two components of Improvisational Theatre: as a technique for creating a character and as a Theatre Style on its own. The first half of the course will present improv as a structured method for learning the craft of acting. Through warm-ups, games and exercises, students will develop their skills for constructing a character, establishing an environment and creating dialogue. The second half of the course will be a workshop on the genre of improv shows. Popularized by Improve troupes throughout the country and the comedy channel’s show, “Whose Line Is It Anyways?” improvisation has blossomed into a stage performance on its own merits. The class will study and rehearse the mechanics of creating such a show, eventually breaking into smaller teams to practice performing improv in front of a live audience. This is a high energy, hands-on class that will stretch the actor’s imagination and allow the student to surrender to the excitement and freedom of improvised theatre.

### **“Painting and Drawing”**

This studio course is designed to develop the painting and drawing skills of all students from beginner to advanced. Topics covered in the session will include: color relationships, composition, and value and art history. Students will work with a variety of subject matter including still life, landscape and the figure. Drawing skills can be learned, and with practice, highly developed. Therefore, this course is designed for students who wish to acquire drawing and painting skills, and for experienced students who wish to augment current skills to a higher degree.

## **“Memory Book Writing and Publication”**

This course is designed to provide inspiration and a creative experience for the students interested in literary expression. The medium for the students’ literacy expression will be the development of an ASLP memory book. This publication will document the students’ academic and social experiences while attending ASLP. The class will consist of a group of dedicated writers who must agree to undertake the responsibilities inherent in a course dealing with production deadline. The workload will consist of short nightly assignments which must be completed and revised the next night. Entries might include creative pieces (poetry and prose) as well as journalistic pieces describing the students’ experiences over the course of the program.

## **“Critics Corner”**

This class will explore the components of what makes a great film great and another mediocre. In a discussion-based format, students will explore such characteristics as plot, sub plots, what makes a character memorable and character development. Specific attention will be brought to what creates suspense or high drama and the use of special effects. Students will not only view and critique movies, but will write movie reviews as well.

## **“Musical Creativity”**

This course will use the venue of the “performing ensemble” to provide a fun and creative opportunity for student musicians and singers.

Participants will learn musical repertoire including voice from the jazz/rock styles, as they work towards performances during their final days at camp. Areas of focus will include embouchure, tone production, technique, improvisation and musical style. All musicians who are able to read music at an age appropriate level will be eligible for this class. This includes: singers and musicians including drums, guitars, trumpets, saxophones, trombones, flutes, clarinets, baritones, tuba, bass, violin, and oboe. All musicians will need to provide their own instruments and will be responsible for their safe keeping.

## **“Be Your Own Author”**

Have a story to tell? Now's your chance! In this class you will explore the world of narrative-based writing, giving you a chance to read great works by great writers and author your own narratives on fiction and non-fiction genres. Students will compile a portfolio of their best original writing. As a capstone project students will have an opportunity to read selections of their favorite work to other students at ASLP. This is a chance to let your creativity shine and learn how to improve your writing and communication skills.

## **Facilities and Housing**

Academic classes will be held in various buildings on the campus of Mass. Maritime Academy. The college library (ABS Building) will be open to all students during their participation in the program. Athletic and recreational facilities of the college will be available at posted times for recreation, including the pool, tennis courts, basketball, softball, and other areas.

Because the program is intensive in nature, and in order to develop and enhance social skills, students are required to live on campus in the assigned Residence Hall.

All students must be picked up **by 12:15 pm on Friday.**

## **Staff**

Direct supervision of the program is the responsibility of the Program Director of the Advanced Studies and Leadership Program.

The teaching staff of the Advanced Studies and Leadership Program is comprised of college professors, professional teachers, and recent college graduates. The faculty has been drawn from the supporting school districts



and Mass. Maritime Academy with due respect for academic training, areas of interest and experience with high achieving students.

Dormitory supervision will be maintained at all times by the Program Director, Assistant Program Director, two resident administrators, male and female proctor/interns.

### **General Information**

Students who are accepted for the Program will receive detailed information regarding orientation, registration procedures, clothing, supplies, and a Code of Conduct.

1. Students will move-in and register on Sunday July 7, 2019. Details will be provided with the acceptance letter.
2. No student will be allowed to remain on campus over the weekends. All students must depart **by 12:15 p.m. on Friday.**
3. Weekly meals will include Monday lunch through Friday breakfast.
4. Daily schedules of individual students may vary a great deal.

### **Commencement**

Formal commencement exercises including the presentation of certificates will be conducted on **Friday, July 26 at 9:00 a.m.** in the Dining Facility.

### **Statement of Non-Discriminatory-Policy**

The Advanced Studies and Leadership Program of the Cape Cod Collaborative and Mass. Maritime Academy admits students without regard to race, sex, sexual orientation, color, disability, creed, or national origin, to all rights, privileges, programs and activities which it provides for or makes available to its students.

Further, the Program does not discriminate on the basis of sex, race, sexual orientation, creed, color, disability, or national origin in the administration of its educational policies, athletic and other school-administered programs. This same statement of policy applies to the Program's personnel and employment policies.

## **Medical Information**

A health provider will be on duty during morning, afternoon, and evening meals, and on call throughout the rest of the day and night. In case of emergency, if parents cannot be reached, the student would be transported to the nearest emergency room and seen by the hospital physician. The parent shall be responsible for all expenses related to any illness or condition for which the student requires professional consultation or hospitalization. A premium to cover student accident insurance is included in the tuition.

## **Code of Conduct**

The emphasis in the program is on self-discipline; it underlies the entire structure of the summer program. It is training which develops self-control, character and consideration of the rights of others.

Students who lack the maturity and responsibility for managing their own lives should not undertake the program. The session is brief and intensive; separation from the program will be necessary for students who cannot meet the responsibility of living under the few reasonable rules.

Students enrolled in the program are expected to treat all members of the program community with dignity and respect, to meet all appointments, not neglect their work, and to maintain socially acceptable behavior on and off campus.

A complete copy of the Code of Conduct will be included with the Letter of Acceptance. To be enrolled in the Program, the parent/guardian is required to sign a statement on the Parental Questionnaire indicating that the parent and child have read, accept, and agree to abide by the Code of Conduct. It will be reviewed during the parent orientation meetings prior to the beginning of the Program and again by the dormitory staff during student orientation the first day of the Program.

## **Dress**

Dress is informal but should engender respect for the individual student. More information on this matter will be forthcoming as part of the admission process.

## **Credit**

Students who successfully complete the Advanced Studies and Leadership Program will be awarded a certificate of achievement.

## **Application Information**

Applications must be accompanied by an eighty (\$80.00) dollar non-refundable application fee. The application fee will be waived for students eligible for free and reduced lunch. Interested students should consult their school principal or guidance counselor for information and application blanks. If further information is necessary, write to the Director, Advanced Studies and Leadership Program, Cape Cod Collaborative, 418 Bumps River Road, Osterville, MA 02655.

An applicant must have the following documents submitted to their guidance/principal's office by the due date designated by the district:

1. Check to cover the eighty (\$80.00) dollar non-refundable application fee.
2. Student application.
3. Two teacher recommendations.
4. Guidance counselor or principal recommendation.

These forms and the eighty (\$80.00) dollar non-refundable application fee should be submitted to your principal/guidance office by the due date set by your district. Because the student enrollment in the Advanced Studies and Leadership is limited, it is encouraged that all applications for enrollment be made prior to your school's established deadline. This action will allow the guidance/principal offices in your member systems to evaluate the applications and forward them to the ASLP office prior to the February 2, 2018 deadline.

## **Tuition and Fees**

Expanded enrollment in Summer 2019 allows for “economies of scale” within the Program. This development coupled with MMA’s generous commitment of space and facilities allows ASLP tuition for summer 2019 to remain reasonable. The total cost for students is \$1380.00 per student including an \$80.00 application fee (\$1300 tuition + \$80.00 application fee = \$1380). The cost includes tuition, dormitory room, meals and activity fee.

An application for financial assistance and scholarships may be obtained from your local guidance office. Financial assistance for those who qualify will be in the range of \$250.00. A limited number of scholarships are also available for qualifying students eligible for free and reduced lunch.

Some of the participating school districts may subsidize part of the cost for each student. Local school guidance/principal offices should be contacted concerning the amount of financial assistance, if any, that local school committees provide.

**All parent balances are to be paid in full by May 17, 2019. Tuition payments (checks to be made out to Cape Cod Collaborative) should be mailed to Cape Cod Collaborative, ASLP Program, 418 Bumps River Road, Osterville, MA 02655.**

### **Refunds**

Within ten (10) days of acceptance, a partial payment (deposit) for tuition of \$250.00 is required (check to be made out to Cape Cod Collaborative). Should a student withdraw from ASLP after acceptance, yet before May 9, 2019; \$125.00 of this deposit is refundable. Should the student withdraw after May 9 the entire payment of \$250.00 will be non-refundable.

Should a student withdraw from the program after it has started, yet before it is completed, the following schedule of refunds will apply. Note: Notification of withdrawal must be in writing.

Exclusive of the non-refundable \$250.00 deposit, the refund will be computed as follows: if the student leaves during the first week of the program, a refund of 50% of the parental payment (exclusive of the

\$250.00 deposit) will be refunded. No refund requests will be approved after the close (12 Noon Friday) of the first week of the program. Refund checks will be mailed out within 20 days after the close of the Program.

### **Financial Aid**

Financial aid is available for those who qualify for free or reduced lunch or unique circumstances. A financial aid form is available at your guidance/principal's office.