

**United States Coast Guard Academy** 



# **Creating Leaders for our United States Coast Guard**

*Kurt Colella, Ph.D., P.E.* (*kurt.j.colella@uscg.mil*) *Dean of Academics* 

**United States Coast Guard Academy** 



### **United States Coast Guard Academy**



#### **Shared Learning Outcomes**

- Leadership Ability
- Personal and Professional Qualities
- Critical Thinking Ability
- Ability to Acquire, Integrate and Expand Knowledge
- Ability to Communicate Effectively







### **USCGA Core Curriculum – Components**

### Well Being/Physical Professional Leadership Liberal Arts Technical







# **Academic Majors**

- Government (international affairs track/public policy track)
- Management
- Marine and Environmental Sciences (chemistry/biology/physics-2 of 3)
- •Operations Research and Computer Analysis
- Civil Engineering
- Electrical Engineering (systems emphasis/computer emphasis)
- Mechanical Engineering
- Naval Architecture and Marine Engineering



**Our Changing World-Curricular Evolution** 

### Activities/Project-based study Elective Courses Outside Sponsorship Enhanced Course Management Tools Pedagogical Variations/Methodologies





# **Co/Extra-Curricular Experiences**

- Scholar's Projects
- Advanced Research Projects
- Directed/Independent Research
- Capstone Courses/Projects
- Honor's Program
- Internships







#### **Undergraduate Research**

**Benefits** 

Attracts students to majors/careers (particularly in STEM) Strong mentoring relationships Cross disciplinary dialogues Develop motivation and confidence to persist Desire to advance studies-lifelong learning Ability to handle open ended problems-uncertainty

#### Costs

Strain on faculty-partnership management 200 week cadet program Tremendous pressure on limited technician and admin support Limited mechanisms for accepting non-appropriated resources (people/funds)





Partnerships/Connectivity CG Field Units CG Directorates Government Labs **Other Colleges/Universities** Leadership Development Center Institute for Leadership **Center for Maritime Policy and Security Studies** 





### **Unique Capacity/Capability**

Tow Tank/Circulating Water Channel SIPRNET Classroom (Secret Internet Protocol Router Network) Ship Bridge/Radar Simulator Cyber-Defense/Network Security Laboratory Laboratory Training Vessels/Boats



11/12/2010