44. Texas A&M University at Galveston

   a. New Courses

   **MARA 475. Business Leadership. (3-0). Credit 3.** Focus on theory and practice of leadership; familiarize with components, theory and models of leadership; compare/contrast styles; review leadership/followership relationship as a collaborative activity resulting in achieved goals; analyze cultural and global components and ethical issues associated with leadership. Prerequisite: Junior or senior classification or approval of instructor.

   **MARB 406. Life in Extreme Environments. (3-0). Credit 3.** Key metabolic and physiological innovations of extremophile organisms; topics include the molecular biology, biochemistry and physiology of organisms living in extreme environments. Prerequisites: MARB 315; CHEM 228; junior or senior classification or approval of instructor.

   **MARS 252. Introductory Marine Science Laboratory. (0-3). Credit 1.** Overview of the global ocean environment and the interrelated sub-disciplines; the important of the ocean for the earth’s ecosystems and human impact on the ocean; field work and boat trip, water and benthic sediment collection and analysis; navigation chart work. Prerequisite: OCNG 251 or concurrent enrollment.

   **MARS 365. Integrated Marine Sciences Laboratory. (1-6). Credit 3.** Integrated lectures, field and laboratory exercises for data collection and analysis of physical, chemical, biological and geological measurements in ocean, coastal and estuarine environments. Prerequisites: MATH 142 or 152, PHYS 202 or PHYS 208, OCNG 251, MARS 252, CHEM 102 and CHEM 112, BIOL 112 and GEOL 101 and GEOL 102, junior or senior classification or approval of instructor.

   **MARS 461. Capstone Undergraduate Research Experience II. (1-0). Credit 1.** Research and scientific communications; development of a scientific abstract, poster presentation, oral presentation or written scientific paper. Prerequisites: MARS 491 or concurrent enrollment, senior classification or approval of instructor.

   **MAST 336. Maritime Foreign Policy. (3-0). Credit 3.** Strategies used by governments to guide international actions; objectives of state leaders in decision making; sources, processes, objectives and outcomes of maritime policy choices. Prerequisite: Junior or senior classification or approval of instructor.

   **MAST 493. Maritime Studies Travel Experience. Credit 1 to 6.** Combination of classroom and travel emphasizing cultural, archaeological, political and historical aspects of maritime humanities related topics. May be taken two times for credit. Prerequisite: Junior or senior classification or approval of instructor.

   b. Change in Courses

   **MARB 437. Pathology of Marine Animals.**

   Lab contact hours and semester credit hours
   From: (3-3). Credit 4.
   To: (3-0). Credit 3.
Course description and prerequisites
From: An introduction to the structural and functional changes in cells, tissues and organ systems of marine invertebrates and vertebrates as they relate to disease and/or injury. Mechanisms of disease and identification of lesions in common diseases and human-induced injuries will be included. Laboratory will consist of gross and microscopic aspects of pathology in both invertebrate and vertebrate animals. Prerequisites: MARB 315, 435, MICR 351. Junior or senior classification or approval of instructor.
To: Examination of changes or loss of physiological function as related to common diseases (viral, bacterial, parasitic) or injury; mechanisms of disease in cells, tissues and organ systems of marine vertebrates; emphasis on marine mammals; fishes and marine reptiles/birds; clinical manifestations, diagnostics and treatments. Prerequisites: MARB 315; junior or senior classification or approval of instructor.


Course title
From: Introduction to Marine Sciences.
To: Marine Science Matters.

MARS 303. Introduction to Computing and Data Display.

Course title
From: Introduction to Computing and Data Display.
To: Computing and Data Display.

Course description
From: The purpose of this course is to introduce the student to the elements of computer programming and data display primarily through the MATLAB computing environment. Students will also be exposed to the FORTRAN programming language and the UNIX operating system.
To: Elements of programming and data display primarily through the MATLAB computing environment; includes an introduction to statistics and hypothesis testing with MATLAB.

MARS 410. Introduction to Physical Oceanography.

Course title
From: Introduction to Physical Oceanography.
To: Physical Oceanography.

Course description and prerequisites
From: Introduction to elements of the physics of the ocean; descriptive aspects and theoretical explanations of circulation, characteristic structure, and waves. Prerequisites: MATH 251, PHYS 208. Junior or senior classification or approval of instructor.
To: Elements of the physics of the ocean; descriptive aspects and theoretical explanations of circulation, characteristic structure and waves. Prerequisites: OCNG 251, MARS 252, MATH 152, PHYS 208, junior or senior classification or approval of instructor.
MARS 430. Geological Oceanography-Plate Tectonics.

Prerequisites
From: GEOL 104. Junior or senior classification or approval of instructor.
To:  GEOL 101, OCNG 251, junior or senior classification or approval of instructor.


Prerequisites
From: GEOL 104. Junior or senior classification or approval of instructor.
To:  GEOL 101, OCNG 251, junior or senior classification or approval of instructor.

MARS 440. Introduction to Chemical Oceanography.

Course title
From: Introduction to Chemical Oceanography.
To:  Chemical Oceanography.

Course description and prerequisites
From: Introduction to chemical processes in the marine environment. Composition of sea salt, chemical specification of dissolved material in the ocean. Biogeochemistry of oxygen, major elements, nutrient elements, and some trace metals in the surface and deep ocean. Formation, chemical composition, and alterations of detrital material and marine sediments. Simple models which relate ocean chemistry to the circulation of identifiable masses of water. Radio isotopes and stable isotopes in chemical oceanography. Prerequisites: CHEM 102. Junior or senior classification or approval of instructor.
To:  Composition of sea salt and dissolved material in the ocean; biogeochemistry and measurements of oxygen, nutrient and other major elements, trace metals and radioisotopes; formation, composition and alterations of detrital material and marine sediments and other chemical processes; simple models relating ocean chemistry to the circulation of masses of water. Prerequisites: CHEM 102, OCNG 251, junior or senior classification or approval of instructor.

MARS 460. Modern Oceanographic Method.

Course title
From: Modern Oceanographic Method.
To:  Capstone Undergraduate Research Experience I.

Lecture contact hours, lab contact hours and semester credit hours
From:  (3-6). Credit 5.
To:  (1-0). Credit 1.

Course description and prerequisites
From:  This course will provide students with hands-on experience with modern oceanographic observational tools and data analysis techniques. Focus is on the four major oceanographic disciplines, i.e. geology, chemistry, physics and biology. Students will receive the necessary theoretical background, collect and analyze their own data and learn how to prepare scientific reports summarizing their work. Prerequisite: Junior or senior classification or approval of instructor.
To: Methodology for research outlines, organization and strategies; research ethics, writing and presentation of results. MARS 491 or concurrent enrollment, senior classification or approval of instructor.

MART 202. Naval Architecture II.

Lecture contact hours and lab contact hours
From: (3-0). Credit 3.
To: (2-2). Credit 3.


Grade mode
From: Grade
To: Must be taken on a satisfactory/unsatisfactory basis.

MAST 352. Maritime Craftsmanship.

Course title
From: Maritime Craftsmanship.
To: Crafts of the Maritime World.
TEXAS A&M University
at Galveston
TAMUG
NEW COURSES
### Texas A&M University

**Departmental Request for a New Course**

**Undergraduate** • **Graduate** • **Professional**

- Submit original form and attach a course syllabus.

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**Form Instructions**

1. **Course request type:**
   - [ ] Undergraduate
   - [ ] Graduate
   - [ ] First Professional (PhD, ED, JD, DMD, DNP)

2. **Request submitted by (Department or Program Name):**
   - Department of Maritime Administration
   - MARA 475: Business Leadership

3. **Course prefix, number and complete title of course:**

4. **Catalog course description (not to exceed 50 words):**
   
   Focus on theory and practice of leadership; familiarize with components, theory and models of leadership; compare/contrast styles; review leadership/followship relationship as a collaborative activity resulting in achieved goals; analyze cultural and global components and ethical issues associated with leadership.

5. **Prerequisite(s):**
   - [ ] Junior/senior status or instructor approval
   - Stacked with:

6. **Is this a variable credit course?**
   - [ ] Yes
   - [x] No
   - If yes, from ______ to ______

7. **Is this a repeatable course?**
   - [ ] Yes
   - [x] No
   - If yes, this course may be taken ______ times.
   - Will this course be repeated within the same semester?
     - [ ] Yes
     - [x] No

8. **Will this course be submitted to the Core Curriculum Council?**
   - [ ] Yes
   - [x] No

9. **How will this course be graded?**
   - [x] Grade
   - [ ] S/U
   - [ ] P/F (CLMO)

10. **This course will be:**
    - [a] required for students enrolled in the following degree program(s) (e.g., B.A. in history)
    - [b] an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

   BS Maritime Administration and
   Master of Maritime Administration and Logistics

11. **If other departments are teaching or are responsible for related subject matter, the course must be coordinated with those departments. Attach approval letters.**

12. [x] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (https://vpr.tamu.edu/resources/export-controls/export-control-basics-for-distance-education).

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### Breakdown of Course:

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**Approval recommended by:**

- [Signature] 
- [Date]

**Department Head or Program Chair (Type Name & Sign):**

- [Signature] 
- [Date]

**Chair, College Provost Committee:**

- [Signature] 
- [Date]

**Department Head or Program Chair (Type Name & Sign) (If cross-listed course):**

- [Signature] 
- [Date]

**Submitted to Coordinating Board by:**

- [Signature] 
- [Date]

**Associate Director, Curricular Services:**

- [Signature] 
- [Date]

**Effective Date:**

- [Signature] 
- [Date]

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Questions regarding this form should be directed to Sandra Williams at 845.8201 or sandra.williams@tamu.edu.

Curricular Services - 07/14
TEXAS A&M UNIVERSITY AT GALVESTON
Department of Maritime Administration

Maritime Administration (MARA) 475- Business Leadership
Spring 2016 Intercessional

Instructor – Steven M. Conway – conwayy@tamu.edu  call – 409-939-4714
Meeting Times: Online
Texts: Northouse: Introduction to Leadership 3e + Northouse: Introduction to Leadership

COURSE DESCRIPTION:
Focus on the theory and practice of leadership. Familiarity with the components of
leadership, leadership theory and leadership models. Compare and contrast various
leadership styles. Review leadership/followship relationship as a collaborative activity
in which those who lead and those who follow work together to achieve goals. Analyze
the cultural and global components of leadership and ethical issues associated with
leadership. Prerequisites: Junior or Senior Classification or approval of the instructor.

COURSE OBJECTIVE:
In studying leadership theory, one must realize that there is a difference between
socialization of a leader and leadership theory education. Many successful leaders obtain
their leadership skills from practice; in other words, they are socialized into leadership as
they have learned from their experiences. However the most successful leaders have
studied the scholarly discipline of leadership theory and then honed their skills in practice
under the watchful eye of a wise mentor.

FULLY ONLINE SECTION:
The fully online section of MARA Leadership Course takes the same amount of time and
effort as any other 3 credit course. It is different in that more of the material is presented
via readings and less orally, it obviously requires that you spend more time online using
the Blackboard learning management system. It requires more discipline on the part of
the student because while there are still regular deadlines there is no regular class meeting
to remind you of these deadlines. The weighting of the assignments is different reflecting
the different process used in an online course. It is CRITICAL that you manage your time
well and don’t get behind.
LEARNING OUTCOMES:

1. Identify and describe major leadership theories and the researchers associated with those theories;
2. Describe the behaviors of effective leaders in a variety of situations;
3. Explain followership and the relationship linkage between followers and leaders
4. Discover the personal, behavioral and situational factors in a leadership situation that lead to success or failure;
5. Use self-assessment tools to evaluate their own level of leadership development and assess their own individual skills, personality dimensions and management competencies;
6. Describe differences in leadership due to cultural and global influences
7. Describe the options for actions and consequences of those actions in an ethical situation in leadership

This course is being supported by the Blackboard learning management system.

GRADING SCHEME:
Online activities and Reading quizzes 60%
Leadership Paper 20%
Final Exam 20%

Grade Structure:
90-100 A
80-89 B
70-79 C
60-69 D
< 60 F

Office Hours: NA. Contact is via email, text or phone
Phone: Cell Phone: (409) 939-4714 (if I don’t answer leave a message and a number and I will return your call)
E-mail: convays@lamug.edu or stevenisretired@gmail.com

TEACHING STRATEGIES
Active student focused online learning with students actively engaged in the learning process by doing problems and exercises or participating in discussions online will be emphasized throughout this course. The course is divided into modules; typically a module may include a brief introductory video/PowerPoint, textbook and online readings, activities such as homework or online discussions, video clips demonstrating leadership concepts, online quizzes over the reading material covered and a PowerPoint of a relevant rule of thumb for that module.
CONTACTING YOU
The department and I will use your University E-mail address. Please check your E-mail account several times a week. Please be aware that forwarding of messages from your Google email account may be restricted and that you make have to check your Google email account to receive all messages.

COURSE SCHEDULE

Introduction Module – Due Midnight Fri 5 June

Module 1-Understanding leadership and your leadership traits. Due Midnight Thurs 11 June 2015

Module 2-Followership and engaging people’s strengths. Due Midnight Sun 14 June 2015

Module 3-Leadership Philosophy and Styles. Due Midnight Thurs 18 June 2015

Leadership Paper. Due Midnight Sun 21 June

Module 4-Developing Leadership Skills and Vision. Due Midnight Thurs 25 June 2015

Module 5-Creating a Climate and Dealing with Conflict. Due Midnight Sun 28 June

Module 6-Ethical Issues in Leadership. Due Midnight Friday 3 July

Final – 8am Sat 4 July through Midnight Mon 6 July 2015

ASSESSMENTS

Online Reading Quizzes – There will be quizzes over assigned textbook and online readings. The purpose of these quizzes over the assigned readings is to ensure that you read the assigned readings. You will normally not be allowed to complete these quizzes after the deadline for the completion of the module where the reading is assigned. These quizzes are 10 points each.

Leadership Paper – A two page leadership paper will be assigned.

Final – The format for this online test will be a combination of multiple choice, true/false and short answer.
COURSE DEADLINES
There are deadlines to complete each course module. Normally after the module deadline you will be unable to access the module materials; you will receive grades only on material completed prior to the deadline. Since the majority of the grade is from the readings and assignments completing the material on time is critical to successfully completing the course with a good grade. If you have a lengthy situation resulting in you being unable to complete online work by the module deadlines please contact the instructor as soon as possible. I strongly suggest not leaving work until the last minute since completion of your work may take longer than you anticipate. Since the system logs activity it is clear when you have put off the work until the last minute. Minor short term problems at the last minute are not excuses for late completion of the modules.

AMERICANS WITH DISABILITIES ACT (ADA) POLICY STATEMENT
The Americans with Disabilities Act, (ADA), is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, the legislation requires that all students be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Counseling Office, Seibel Student Center, or call 409.740.4587. For additional information visit http://www.tamug.edu/counsel/disabilities.html

COURSE ACCOMODATIONS:
As a longtime teacher, I believe that all students have different ways of learning and face different issues that might interfere with their learning. If you have a documented disability, I sincerely encourage you to visit with the Counseling office as soon as possible AND to let me know that you are having this discussion. My experience has been that there are many issues that a student can have that can interfere with their successfully completing a course. I will do my best within the parameters of this course to provide you with tools or methods appropriate to your learning needs and any issues you face. I encourage you to contact me with any disability or other issue that you think might interfere with your ability to complete any course requirements. The earlier we can address these issues the more chance you have of success.

ACADEMIC INTEGRITY STATEMENTS
AGGIE HONOR CODE “An Aggie does not lie, cheat, or steal or tolerate those who do.”

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMUG community from the requirements or the processes of the Honor System. For more information you can review the Honor Council Rules and Procedures on the web: http://www.tamug.edu/HonorSystem.
COLLABORATION:
During this class you will be assigned activities with different amounts of collaboration allowed. Exceeding the allowed amount of collaboration is considered cheating. These range from:

- **Final** – This is an online test and you may review course materials but all work must be yours and yours alone, you are not allowed to communicate with anyone else during the test. Blackboard has extensive logging of all activity including materials accessed, time accessed and the unique ID of the computer used. Logs are routinely reviewed after tests. Any evidence of collaboration will be investigated as cheating.
- **Online Quizzes** – No collaboration or use of other online material is allowed.
- **Homework Assignment** – If you have difficulties you are allowed to discuss how to do the problems with your classmates but you must do all the work yourself and the answers you turn in must be your work. Copying and turning in a classmate’s homework answers is cheating.

**STATEMENT ON COURSE EVALUATIONS**
The PICA (Personalized Instructor/Course Appraisal) is an online course evaluation for Texas A&M. We highly encourage you to complete an evaluation for each course on your schedule. Student input is a critical component used to improve curriculum and teaching. Each faculty member values your input to improve his/her methodology. Your comments can also significantly impact the mix and membership of faculty. The PICA website is available at [http://pica.tamu.edu](http://pica.tamu.edu), your howdy portal, or by scanning.

**STATEMENT ON ABSENCES**
Information concerning absences long enough to interfere with completing a module is contained in the University Student Rules Section 7 http://www.tamu.edu/stulife/Academic%20Rules/Rule%207.pdf The University views timely completion of online materials as an individual student responsibility. All students are expected to complete all assignments on time. If you notify me of any excused absences which require a delay in completing assignments, I will accommodate them through mutual agreement. Please consult the University Student Rules for reasons for excused absences, detailed procedures and deadlines as well as student grievance procedures (Part III, Section 45).

**STATEMENT ON THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)**
FERPA is a federal law designed to protect the privacy of educational records by limiting access to these records, to establish the right of students to inspect and review their educational records and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings. To obtain a listing of directory information or to place a hold on any or all of this information, please consult the Admissions & Records Office.
Items that can never be identified as public information are a student's social security number or institutional identification number, citizenship, gender, grades, GPR or class schedule. All efforts will be made in this class to protect your privacy and to ensure confidential treatment of information associated with or generated by your participation in the class.
Texas A&M University  
Departmental Request for a New Course  
Undergraduate ☑ Graduate ☐ Professional ☐ First Professional (DDS, MD, JD, PharmD, DVM)  

1. Course request type:  
   - ☑ Undergraduate  
   - ☐ Graduate  
   - ☐ First Professional (DDS, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name):  
   Department of Marine Biology

3. Course prefix, number and complete title of course:  
   MARB 406: Life in Extreme Environments

4. Catalog course description (not to exceed 50 words):  
   Key metabolic and physiological innovations of extremophile organisms; topics include the molecular biology, biochemistry and physiology of organisms living in extreme environments.

5. Prerequisite(s):  
   MARB 315; CHEM 228; Junior or Senior Classification or approval of instructor

Stacked with:  

Cross-listed with:

6. Is this a variable credit course?  
   - ☐ Yes  
   - ☑ No
   If yes, from ______ to ______

7. Is this a repeatable course?  
   - ☐ Yes  
   - ☑ No
   If yes, this course may be taken ______ times.

8. Will this course be repeated within the same semester?  
   - ☐ Yes  
   - ☑ No

9. Will this course be submitted to the Core Curriculum Council?  
   - ☐ Yes  
   - ☑ No

10. How will this course be graded?  
    - ☑ Grade  
    - ☐ S/U

11. This course will be:  
    a. required for students enrolled in the following degree programs(s) (e.g., B.A. in history)
    b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

B.S. in Marine Biology, B.S. in Marine Fisheries

12. ☑ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vir.tamu.edu/resources/export-control/export-control-basics-for-distance-education).

13. FYE 406  
    
LIFE IN EXTREME ENVIRONMENTS  

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Approved recommended by:

[Signatures and dates]

Department Head or Program Chair (Type Name & Sign)  
Date  
Chair, College Review Committee  
Date  
Dean of College  
Date  

Submitted to Coordinating Board by:  
Chair, GC or UCC  
Date  

Associate Director, Curricular Services  
Date  
Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
Course title and number: MARB 406 – Life in Extreme Environments
Term: Spring 2017
Meeting times and location: Time: MWF, 12:00pm – 12:50 pm. Location: CLB 212.

COURSE DESCRIPTION: MARB 406 (3-0). 3 Credits.

This course presents the key metabolic and physiological innovations of extremophile organisms. Topics include the molecular biology, biochemistry and physiology of organisms living in extreme environments.

Life in Extreme Environments is the study of how various organisms have adapted to and thrive in so-called ‘extreme’ environments. This course will provide a comprehensive understanding of the biochemical and physiological adaptations of extremophile organisms. Key concepts covered will include: the types of extreme environments, extremophile metabolism and physiology, along with an overview of how changing environmental conditions can impact the adaptive capabilities of threatened species.

PREREQUISITES:
- MARB 315, CHEM 228, Junior or Senior Classification (or approval of Instructor).

LEARNING OUTCOMES:
Upon successful completion of this course, students will be able to:

- OUTLINE key biochemical principles.
- IDENTIFY the biological mechanisms responsible for adaptive success in extreme environments.
- RECOGNIZE the interaction between changing environmental conditions and species survival success.

INSTRUCTOR INFORMATION:
Name: Dr. David Haia
Telephone number: 409-740-4535
Email address: halad@tamug.edu
Office hours: Monday 9-11 am; Wednesday 3-5 pm or by appointment
Office location: OCSB 266

TEXTBOOK AND RESOURCE MATERIAL (OPTIONAL):
"Life at Extremes: Environments, Organisms and Strategies for Survival" edited by Elanor M. Bell.
"Physiology and Biochemistry of Extremophiles" edited by Charles Gerday and Nicolas Glansdorff.
GRADING:

90-100% = A  
80 - 89% = B  
70 - 79% = C  
60 - 69% = D  
<60% = F

COMPONENTS OF GRADE:

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CLASS LECTURE SCHEDULE:

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<td>WEEK 1: COURSE INTRODUCTION</td>
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<td>WEEK 2: KEY CONCEPTS IN CHEMISTRY/BIOLOGY</td>
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<td>WEEK 3: RARE EARTH – THE UNEQUENESS OF LIFE ON EARTH</td>
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<td>WEEK 4: EXTREMOPHILES AND THE ORIGIN OF LIFE</td>
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<td>WEEK 6: PSYCHOPHILES AND THEIR ADAPTATIONS</td>
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<td>WEEK 7: HALOPHILES AND THEIR ADAPTATIONS</td>
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<td>WEEK 8: ACIDOPHILES AND THEIR ADAPTATIONS</td>
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<td>WEEK 9: ADAPTATIONS TO HYPOXIA</td>
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<td>SEMESTER EXAM 2 (30%)</td>
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<td>WEEK 10: ADAPTATIONS IN ISOLATED ENVIRONMENTS (SUB-GLACIAL LAKES AND HYDROTHERMAL VENTS)</td>
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<td>WEEK 11: NOVEL ADAPTATIONS IN THE ANTHROPOCENE</td>
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<td>WEEK 12: BIOTECHNOLOGICAL APPLICATIONS OF EXTREMOPHILES</td>
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<tr>
<td>WEEK 13: EXOBIOLOGY AND THE SEARCH FOR LIFE IN THE UNIVERSE</td>
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<tr>
<td>WEEK 14: COURSE OVERVIEW AND FINAL EXAM REVIEW</td>
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<td>WEEK 15: FINAL EXAM (40%)</td>
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*Syllabus is subject to change.
EXAMS: There will be 2 semester exams and 1 final exam each worth 100 points. All exams are in-class, closed book and must be done independently. No electronic devices will be allowed to be out during the exam. Exams are not cumulative and may contain true/false, multiple choice, short and/or essay questions. Students will have the entire class time to complete an exam. Each question will exhibit points awarded towards exam total. Students may ask for clarification of exam questions from the exam proctor but may not ask for help getting the answer.

MAKE UP POLICY: If an absence is excused, the instructor will either provide the student an opportunity to make up any quiz, exam or other work that contributes to the final grade or provide a satisfactory alternative by a date agreed upon by the student and instructor. If the instructor has a regularly scheduled make up exam, students are expected to attend unless they have a university approved excuse. The make-up work must be completed in a timeframe not to exceed 30 calendar days from the last day of the initial absence. The reasons absences are considered excused by the university are listed below. See Student Rule 7 for details (http://www.tamu.edu/stulife/Academic%20Rules/Rule%207.pdf). The fact that these are university-excused absences does not relieve the student of responsibility for prior notification and documentation. Failure to notify and/or document properly may result in an unexcused absence. Falsification of documentation is a violation of the Honor Code.

1) Participation in an activity that is required for a class for which a University excused absence has been issued by the Vice President for Academic Affairs.
2) Death or major illness in a student's immediate family.
3) Illness of a dependent family member.
4) Participation in legal proceedings or administrative procedures that require a student's presence.
5) Religious holy day, NOTE: Prior notification is NOT required.
6) Injury or illness that is too severe or contagious for the student to attend class.
   a) Injury or illness of three or more class days: Student will provide a medical confirmation note from his or her medical provider within one week of the last date of the absence (see Student Rules 7.1.6.1)
   b) Injury or illness of less than three class days: Student will provide one or both of these (at instructor's discretion), within one week of the last date of the absence: (i) Texas A&M University Explanatory Statement for Absence from Class form available at http://www.tamu.edu/stulife/Absence%20Statement.pdf or (ii) Confirmation of visit to a health care professional affirming date and time of visit.
7) Required participation in military duties.
8) Mandatory admission interviews for professional or graduate school that cannot be rescheduled.

Other absences may be excused at the discretion of the instructor with prior notification and proper documentation. In cases where prior notification is not feasible (e.g., accident or emergency) the student must provide notification by the end of the second working day after the absence, including an explanation of why notice could not be sent prior to the class.

ATTENDANCE/PARTICIPATION: To successfully complete this course, you should attend all lectures. The textbook covers advanced topics and hence lectures will interpret and synthesize topics presented in the text. In order to obtain a full comprehension of course materials you are encouraged to read the material before coming to class. If a student misses a class, it is the student's responsibility to obtain lecture notes and material from classmates.

ABSENCES: Information concerning absences can be found in the University Student rules Section 7: (http://www.tamu.edu/stulife/Academic_Rules7_Attendance.html). The University views class attendance as an individual student responsibility. All students are expected to attend class and to complete all assignments/exams. For a University excused absence, the student should contact the Counseling Office to request a letter for the instructor stating the student's absence as excused. Please consult the University Student rules for reasons for excused absences, detailed procedures and deadlines.

INDEPENDENCE, APPROPRIATE REFERENCES AND THEIR CITATION: All aspects of the course
must be done independently and NOT as team efforts except where specifically requested by the course teachers. All perceived copying or sharing will be penalized by subtraction of that part of the assignment from the final grade. Plagiarism can include but is not limited to:

- Steal and pass off (the ideas or words of another) as one’s own.
- To use (another’s production) without crediting the source.
- To commit literary theft.
- To present as new and original an idea or product derived from an existing source.

CLASSROOM BEHAVIOR: The TAMUG Academic Rule 21 states “Texas A&M University supports the principle of freedom of expression for both instructors and students. The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede their exercise. Classroom behavior that seriously interferes with either (1) the instructor's ability to conduct the class or (2) the ability of other students to profit from the instructional program will not be tolerated. And individual engaging in disruptive classroom behavior may be subject to "disciplinary action". Limit private conversations, use of electronic devices, or anything that could distract the instructor or other students. If you have business to conduct, quietly leave the room. See http://www.tamu.edu/stullife/Academic%20Rules/Rule%2021.pdf for more information.

AGGIE CODE OF HONOR AND ACADEMIC INTEGRITY: For many years Aggies have followed a code of Honor, which is stated in this very simple verse:

"An Aggie does not lie, cheat, or steal, or tolerate those who do."

The Aggie Code of Honor is an effort to unify the aims of all Texas A&M men and women toward a high code of ethics and personal dignity. This code also applies in the classroom. For most, living under this code will be no problem, as it asks nothing of a person that is beyond reason. The Aggie code of honor and the scholastic dishonesty section in the TAMUG University Rules will be the standard upon which scholastic integrity is maintained in MARB 408. Refer to the Honor Council Rules and Procedures at http://www.tamu.edu/honor/system.

AMERICANS WITH DISABILITIES ACT (ADA) POLICY STATEMENT: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Counseling Office, Seibel Student Center, or call (409) 740-4587. For additional information visit http://www.tamu.edu/counsel/Disabilities.html.

STATEMENT ON THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA): FERPA is a federal law designed to protect the privacy of educational records by limiting access to these records, to establish the right of students to inspect and review their educational records and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings. To obtain a listing of directory information or to place a hold on any or all of this information, please consult the Admissions & Records Office. Items that can never be identified as public information are a student’s social security number or institutional identification number, citizenship, gender, grades, GPR or class schedule. All efforts will be made in this class to protect your privacy and to ensure confidential treatment of information associated with or generated by your participation in the class.

STATEMENT ON COURSE EVALUATIONS: The PICA (Personalized Instructor/Course Appraisal) is an online course evaluation for Texas A&M. We highly encourage you to complete an evaluation for each course on your schedule. Student input is a critical component used to improve curriculum and teaching. Each faculty member values your input to improve his/her methodology. Your comments can also significantly impact the mix and membership of faculty. The PICA website is available at http://pica.tamu.edu or your Howdy portal.
Texas A&M University
Departmental Request for a New Course
Undergraduate + Graduate + Professional
Submit original form and attach a course syllabus.

Form Instructions
1. Course request type:
   - Undergraduate [ ]
   - Graduate [ ]
   - First Professional (M.D., J.D., Ph.D., D.P.M.) [X]

2. Request submitted by (Department or Program Name):
   Marine Sciences

3. Course prefix, number and complete title of course:
   MARS 252 Introductory Marine Science Laboratory

4. Catalog course description (not to exceed 50 words):
   Overview of the global ocean environment and the interrelated sub-disciplines; the importance of the ocean for the earth's ecosystems and human impact on the ocean; field work and boat trip, water and benthic sediment collection and analysis; navigation chart work.

5. Prerequisite(s):
   - Completion of or concurrent enrollment in CENG 251 required

6. Is this a variable credit course? [ ] Yes [X] No
   If yes, from _____ to _____

7. Is this a required course? [ ] Yes [X] No
   If yes, this course may be taken _____ times.

8. Will this course be repeated within the same semester? [ ] Yes [ ] No
   If yes, this course may be taken _____ times.

9. Will this course be submitted to the Core Curriculum Council? [ ] Yes [ ] No
   If yes, this course may be taken _____ times.

10. How will this course be graded? [X] Grade [ ] S/U [ ] P/F (Credit)

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. [ ] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://www.tamu.edu/courses/export-control-basics-for-distance-education).

13. Prefix Course # Title (excluding punctuation)
   MARS 252 Intro Marine Sciences Lab

   Lect. Lab. Other SCH CHP and Fund Code Admin. Unit Aced. Year FICE Code
   0.00 3.00 0.00 1.00 4006070002 1810 16 - 17 0 1 0 2 9 8

Approval recommended by:

Chair, College Review Committee

Department Head or Program Chair (Type Name & Sign) Date

Department Head or Program Chair (Type Name & Sign) Date

Submitted to Coordinating Board by:

Chair, GC or UCC

Date

Associate Director, Curricular Services

Date

Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 07/14
MARS 252 Introductory Marine Science Laboratory

Syllabus and Schedule

Fall 2016
Lab will meet in SAGC Rm. 405
Time TBA
Instructors: Charlie Coleman (Instructional Assistant Professor)
Office: SAGC 701; Office Hours: call or email for an appointment
Office Phone: (409)740-4516
Hm. Phone: (409)737-2942
E-mail colemanc@tamug.edu

Lab Manual: Required*** must have for first lab***
Introductory Oceanography Laboratory Manual
Franz E. Anderson (3rd edition)

Course Description and Prerequisites

An overview of the global ocean environment and the interrelated sub-disciplines; the importance of the ocean for the earth's ecosystems and human impact on the ocean; Field work and boat trip, water and benthic sediment collection and analysis; navigation chart work.

The course is a 3 hour lab based overview of the global ocean environment looking at how the many sub-disciplines interrelate, so that students understand the importance of the ocean for the earth's collective ecosystems and how they themselves impact the ocean.

This lab is a science major level course designed to prepare students for their upper level science major courses. Some outside of class time work will be required. Some field work for collecting specimens to be used in lab will be required, as well as an end of semester 3 hour boat trip where students will need to show proficiency in water collection and analyses, benthic bottom sediment collection and analyses and some navigation chart work.

Prerequisite: Completion of or concurrent registration in OCNG 251 is required.

Course Objectives

To recognize and evaluate how Oceanography is an inter-disciplinary synergy of Geology-Physics-Chemistry-Biology. Its apparent complexity is an illusion once you understand how all the separate parts work together as a whole. This then leads to an appraisal of the ocean's role in all of earth's environments and should encourage students to have better stewardship of their world now and into the future.

*Students demonstrate teamwork skills working in -4 person groups to obtain basic data.

*The experiments and supplemental work are designed to allow the students to speculate how to alter the experiments parameters to achieve more useful data. Empirical and quantitative skills will be developed taking raw data and comparing observed values to what was theoretically predicted from empirical formula. Calculating results and assessing possible errors will illustrate possible limitations in experiments and how to possibly modify them.

*Critical thinking skills will be developed as data and calculations are used to draw conclusions and answer cause and effect type questions.
Communication skills will be developed, as it will be necessary to come up with a plan of attack to get the best data possible in the time permitted. If the best data is not the result, group discussion skills will be needed to find problems in methodology.

The above will be assessed in the grading and subsequent discussion of grade each week. The end of semester Boat Trip and take home final will require students to use all the above skills to integrate and inter-relate totality of semester material and how the many sub-disciplines have to be viewed as a whole.

Learning Outcomes

Upon completion of this course, the student is expected to be knowledgeable in the following specific areas and be able to:

1. Describe how the earth became so irregular in elevation with respect to mountain highs and ocean basin lows under the influences of isostacy given the chemistry and densities of the ocean crust versus continental crust.
2. Illustrate how acoustic techniques are used to sound the depths and even the stratigraphy beneath, as well as the skills needed to interpret contours as to structure and ocean processes.
3. Discuss how the erosion of continents with their granitic composition, supply the sediment and chemistry to the ocean and relate this to the idea the ocean is in chemical equilibrium.
4. Assess the accuracy and precision of different methods for measuring salinity, as well as explain how some could not be used in different environmental applications.
5. Relate the physical factors affecting seawater density to what drives the thermo-haline circulation of water masses and how each ocean basin came to have its own distinct water mass layering with depth and latitude.
6. Describe the formation, classification and energy of ocean waves and how these become the coastal processes that form or destroy such features as Barrier Islands.
7. Demonstrate the basic principles of navigation, the reading of Mercator Projection Maps and how to use the tools of the trade like sextants, compass, triangles or parallel rulers.
8. Explain why ocean life can be divided into Planktonic, Neptonic and Benthic Communities and how these Communities are organized and influenced by the geology-chemistry-physics. Show the immense variety of habitat of our ocean world is a result of the synergy of these influences.

Grading Policies

<table>
<thead>
<tr>
<th>Component</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Exercises</td>
<td>80%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Lab Final</td>
<td>7%</td>
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<tr>
<td>Lab Etiquette and Instructor Evaluation</td>
<td>3%</td>
</tr>
<tr>
<td></td>
<td>100%</td>
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</tbody>
</table>

grading scale (A=90-100, B=80-89, C=70-80, D=60-70, F=< 60)

Hints and Sage Advice:

Students must show up on time. Turn in your previous week’s lab report first thing. It must have your name, section and group number. At the start of the hour students take their 10 point quiz over the lab being covered that day. A lecture over the lab and techniques is given. The Lab section is 2hrs & 30min. long. Use your time wisely. Establish a plan of attack. You may assign tasks among group. Collect all data and then compile and share group collected data making sure every student in group is familiar with techniques used to acquire it. Any time you have an experimental value that should agree with a theoretical value you’re looking for less than 10%
difference and you should always show your relative % difference calculations in your report. A completed lab is due the following lab! Each student in a group is required to write and turn in their own lab report do not just copy a fellow group members' sentences. Each lab should be unique to its author. Write or print legibly as unreadable hand writing will not be graded. Use complete sentences for all questions. If the question asks “explain” and all you say is yes or no it is marked incorrect. Points will be subtracted for incorrect units. Always read the appendix of your lab manual for the chapter being performed. It contains conversions and values you will need in the homework section of each lab.

*** Note: The first 10 minutes of Lab will be a Ten Point Quiz over the Lab for that day! Make sure you have read the correct lab (use the schedule provided!)

Lab Safety: Goggles, gloves, eye-wash bottles, fire extinguisher, first aid kit are provided in room.

Lab Equipment: It’s expensive and much of it is delicate and breakable. Handle accordingly.

***** You are expected to clean and put up equipment used every lab!*****

AMERICAN DISABILITIES ACT
The American Disabilities Act (ADA), is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Director of Counseling and each of your course instructors. Please contact the Counseling Office, Northern Student Center, or call (619)740-4587. For further information, visit http://www.tamug.edu/counseling/.

Aggie Honor System: Aggie Honor Code: "An Aggie does not lie, cheat, or steal or tolerate those who do." Upon accepting admission to Texas A&M University at Galveston, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not excuse any member of the TAMUG community from the requirements or the processes of the TAMUG Honor System. For additional information visit http://www.tamug.edu/agghonor.

Statement on Absences: Information concerning absences are contained in the University Student Rules Section 7, http://www.tamug.edu/students/Academic%20Rules/Rule%2007.pdf. The University views class attendance as an individual student responsibility. All students are expected to attend class and to complete all assignments. Please consult the University Student Rules for reasons for excused absences, detailed procedures and deadlines as well as student grievance procedures (Part III, Section 43).

Statement on the Family Educational Rights and Privacy Act (FERPA): FERPA is a federal law designed to protect the privacy of educational records by limiting access to those records, to establish the right of students to inspect and review their educational records and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings. To obtain a listing of directory information or to place a hold on any or all of this information, please consult the Admissions & Records Office. Items that can never be identified as public information are a student's social security number or institutional identification number, citizenship, gender, grades, GPR or class schedule. All efforts will be made in this class to protect your privacy and to ensure confidential treatment of information associated with or generated by your participation in the class.

Plagiarism Statement
As commonly defined, plagiarism consists of passing off as one's own ideas, words, writing, etc., which belong to another. In accordance with this definition, you are committing Plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academics, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated.
Course Schedule: Fall 2016  
RM. 405 SAGC  
*Text.* *Introductory Oceanography, 3rd ed.* Franz E. Anderson  
(Chapters are the Chapters from Lab Manual)  

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lab Title</th>
<th>Chapter(lab book's)</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>Crust Models, Isostacy &amp; Rock Density</td>
<td>Ch.1</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Bathymetry Ch.3 In addition to chapter there are three detailed supplemental Hand Outs: Oceanographic Atlas of Bathymetry offshore North Carolina, Sub bottom Seismic Profiling and a Bathymetry supplement.</td>
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<tr>
<td>3</td>
<td></td>
<td>Sedimentation Ch.10 In addition to chapter includes a detailed supplement on beach morphology and you will have to experimentally determine the size of an unknown grain size using Stoke’s Law.</td>
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<tr>
<td>4</td>
<td></td>
<td>Salinity</td>
<td>Ch.4</td>
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<tr>
<td>5</td>
<td></td>
<td>Coastal Navigation Ch.2*** In addition to chapter includes supplemental field work with sextant and brunton compass, as well as triangulating boat position with a Mercator chart.</td>
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<tr>
<td>6</td>
<td></td>
<td>Phys. Factors Affecting Seawater Density</td>
<td>Ch.5</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>Waves</td>
<td>Ch.7</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>Water Mass Mixing and T-S Diagrams Ch.11 ***In addition you will have to describe the Ocean’s current conveyer belt system.</td>
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</tr>
<tr>
<td>9</td>
<td></td>
<td>Nekton lab Handout.*** Includes a look at the Physiological and Anatomical evolutionary adaptations of Marine Mammals. Weather permitting the towing of a Bag Seine and assessing catch.</td>
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</tbody>
</table>
10 Phytoplankton/Zooplankton lab Handout.*** Includes field collection of beach plankton for a semi-quantitative assessment of plankton ecosystem’s diversity and richness.

11 Benthos lab Handout.*** Includes field sampling of oyster reefs and comparison of two Galveston bay oyster communities as to diversity and richness.

12 *(Boat trip)* Field Application of topics learned during semester. Take home Final will be passed out.

13 *****Thanksgiving Week (No Labs)******

14 Take home Final help session
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional

1. Course request type: ☑ Undergraduate  ☐ Graduate  ☐ First Professional (MKT, MKE, M. Eng., M.P.A.)

2. Request submitted by (Department or Program Name): Marine Sciences

3. Course prefix, number and complete title of course: MARS 365 Integrated Marine Sciences Laboratory

4. Catalog course description (not to exceed 50 words):
Integrated lectures, field and laboratory exercises for data collection and analysis of physical, chemical, biological and geological measurements in ocean, coastal and estuarine environments.

5. Prerequisite(s): MATH 152 or 142, PHYS 208 or 202, OCNG 251, MARS 252, CHEM 102/112, BIOL 112 and GEOL 101/102.

6. Is this a variable credit course? ☐ Yes  ☑ No

7. Is this a repeatable course? ☐ Yes  ☑ No

8. Will this course be submitted to the Core Curriculum Council? ☐ Yes  ☑ No

9. How will this course be graded? ☑ Grade  ☐ S/U  ☐ P/F (CLMP)

10. This course will:
   a. be required for students enrolled in the following degree program(s) (e.g., B.A. in history)
      Marine Sciences
   b. be an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)
      Ocean and Coastal Resources (can substitute for MARS 310)

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. ☑ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-control/basics-for-distance-education).

13. Pref course # Title (excluding punctuation)

<table>
<thead>
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<th>Course #</th>
<th>Title (excluding punctuation)</th>
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<tr>
<td>MARS 365</td>
<td>Integrated Marine Sciences Lab</td>
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</tbody>
</table>

Approval recommended by:

Kyeong Park
Department Chair or Program Chair (Type Name & Sign) Date

Chair, College Review Committee Date

Dean of College Date

Submitted to Coordinating Board by:

Chair, GC or UCC Date

Associate Director, Curricular Services Date

Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8301 or sandra.williams@tamu.edu.
Curricular Services – 07/14
MARS 365 – Integrated Marine Sciences Laboratory

SPRING 2017
Time: TBA
Place: TBA
Faculty Office Hours: TBA

Catalog Description:
Integrated lectures, field and laboratory exercises for data collection and analysis of physical, chemical, biological and geological measurements in ocean, coastal and estuarine environments.

Course Goal:
The main goal of this junior level course is to provide students hands-on experience with modern data collection and analysis techniques. We will focus on the four major oceanographic disciplines: geology, chemistry, physics, and biology. Students will receive the required theoretical background, collect and analyze their own data, and learn how to prepare a scientific report summarizing their work.

Instructor Information:
- MARS Faculty in the disciplines of oceanography: geology, chemistry, physics, and biology.
  The lead faculty are:
  Dr. Ayal Anis (anisa@tamug.edu; 409 740-4987)
  Dr. Karl Kaiser (kaiserk@tamug.edu; 409 740-4879)
  Dr. Tim Delpet (delpet@tamug.edu; 409 740-4952)
- Graduate students will serve as teaching assistants and will work closely with the students.

Prerequisites
- MATH 152 (or MATH 142), PHYS 208 (or PHYS 202), OCNG 251, MARS 252, CHEM 102/112, GEOL 101/102, BIOL 112, junior standing or approval of instructor.

Required Materials and Texts:
- Field notebook and various office supplies, clothing suitable for work on a research vessel (specifically, closed toes boots and raingear).
  - Physical Oceanography - No standard textbook; However, several recommended textbooks will be on reserve in the library:
    - R. H. Stewart, on-line: oceanworld.tamu.edu/resources/ocng_textbook/contents.html

  - Biological and Chemical oceanography - No standard textbook; hand-outs will be given.
    The following have been put on reserve in the library:
A manual of chemical and biological methods for seawater analysis by Timothy R. Parsons, Yoshiaki Malai and Carol M. Lalli


- Geological Oceanography
  None required, selected readings will be offered listed from the following references, which will be on reserve in the library:
  Marine Geology, by J.P. Kennett
  The Sea Floor: An Introduction to Marine Geology, by E. Seibold and W. Berger
  The Ocean Basins: Their Structure and Evolution, by the Open University Course Team
  Ocean Chemistry and Deep Sea Sediments, by the Open University Course Team

Attendance, Grading, Methods of Evaluation:
This is a 3 credit course and is limited to not more than 15 students per section. Grading will be based on mandatory attendance and participation in all labs and research cruises, work to be completed during and after cruises, and submission of research results in the format of a scientific paper. Final grade will be calculated as follows: lab reports – 85%; and in-class presentations – 15% (Each student is responsible to receive the instructor's approval on her/his chosen topic). Before submitting their research paper, students are required to consult with the writing lab staff. Grading scale: A □ 90.0%; B □ 80.0%; C □ 70.0%; D □ 60.0%.

Class/Lab Meetings and Research Excursions:
Note, this is a lab class, so, it will meet for a minimum of 6 hours per week and you will be expected to put in additional time outside of the scheduled lab hours, as needed to complete our work. The course meetings will be each Friday, 9-12 in the morning and 1-4 in the afternoon (exact meeting locations TBA). During this time lectures and/or lab sessions will be held, except when a research cruise is scheduled). The class will be divided into three modules, each running four weeks, the modules are 1) Physical Oceanography, 2) Biological/Chemical Oceanography, 3) Geological Oceanography. Each module will be run by a faculty member and graduate students within the respective discipline.

Research Cruises (tentative):
TBA

Learning Outcomes:
Although topics are subdivided into respective oceanographic disciplines, they will be integrated with the other disciplines to demonstrate the interdisciplinary nature of oceanography. Summary:
1. Conduct, compare and contrast data collection techniques in each sub-discipline.
2. Plan research cruises, including the development of both field and lab-based data
collection plans
3. Collect both field and lab data, and review and execute appropriate methods and techniques required for data acquisition.
4. Validate, analyze, interpret collected data and present in formal scientific reports and presentations.

Class Schedule:

Week 1
Introduction
Introduction to faculty and graduate students
Field and Lab Safety Training and Orientation
Pre-cruise planning

Weeks 2-5

Physical Oceanography (Anis and Park):
The physical oceanography section will familiarize you with different types of hydrographic and surface meteorological measurements and provide the tools for a basic understanding of data acquisition, processing, visualization, and interpretation. Observations will be made in estuaries (Galveston Bay as well as potentially other bays) and the coastal ocean. The different dynamics involved will be discussed and data collected by the students will be used to answer questions related to the physical processes, the temporal and spatial variability of various physical parameters, as well as related forcing mechanisms.

Students will use state-of-the-art instrumentation, which will include: conductivity-temperature-depth (CTD) profilers, acoustic Doppler current profilers (ADCP), tide and wave gauges, and meteorological instruments to collect their own data. Data obtained with these instruments will be processed and analyzed using modern data analysis techniques, which will be discussed in depth during class sessions. Each student will use the datasets collected during the course to answer scientific questions using various analysis methods. Team-work is encouraged, discussion with the lecturer and TA's, however, the student will have to individually analyze, summarize, and discuss, their own work and findings in formal lab reports.

Potential Topics:
- Sampling strategies - Lagrangian vs. Eulerian methods, vertical profiles, horizontal transects, moored instruments, drifters, remote sensing, basic statistics, and error analysis.
- Introduction to modern methods of data analysis and visualization (we will mostly use freely available software as well as Matlab, a technical computing language which is ubiquitous in the oceanographic community).
- Profiling instruments: CTD, ADCP, turbulence profilers, others.
- Moored instruments: CT, pressure sensors, current meters, meteorological sensors.
- Drifters (surface and deep), AUVs, remote sensing.
Towed/shipboard instruments (ADCP, CTD, meteorological, sea-catch, others).
- Meteorological (shore and ocean based) and sea level stations.
- Oceanic forcing (surface waves, tides, bathymetry) and atmospheric forcing and air-sea interactions (surface wind stress and heat fluxes).

**Activities:**
1. Theoretical and practical considerations of topics above during frontal class sessions.
2. Hands on lab sessions of physical oceanographic instrumentation (CTD, ADCP, other). We will learn the principles on which these instruments are based (e.g. sound waves and the Doppler effect to measure water currents, conductivity and temperature to compute salinity and density of seawater). The software required for planning the deployment of the instruments will be discussed and practiced.
3. Deployments of a CTD sensor package (and possibly an ADCP current profiler) to collect detailed time series in order to elucidate physical processes.
4. CTD transects in Galveston Bay.
5. Discussion of scientific software packages plus hands on experience through the use of these packages for data analysis and visualization of the students' datasets (the Matlab environment will be used as our main software tool).

**Equipment:** CTD, Oxygen sensors, acoustic Doppler current profiler (ADCP), meteorological sensors, Secchi disk, Matlab analysis software.

**Weeks 6-9 Biological/Chemical Oceanography (Kaiser and Amon):**
The biological oceanography component of the course will allow the students to observe key organisms of the lower trophic levels in their environment. This would include rough species characterization, and the determination of abundance and activity — “Who is doing what?” Biological parameters to be determined include: phytoplankton biomass (chlorophyll a) and production (DO production), bacterial biomass (microscopy) and respiration (DO consumption), fluorescence (chlorophyll). The chemical oceanography component will focus on standard parameters that can be related to biological parameters and would include: pH, absorbance (CDOM), dissolved oxygen (DO), POC, PON, DOC, DON, NO3, NH4, PO4, Si(OH), DIC, with options (as time allows) for alkalinity.

**Potential Topics:**
- Distribution of organisms and their activities along a time series in the Offats Bayou – from early February to late April.
- Distribution of organisms and their activities along a depth profile in the Gulf of Mexico at several stations.
- Influence of biological activity on the chemical composition in the water (gases, organic matter).
- Compare biological activities of the benthos and the water column.

**Activities:**
From the standpoint of biological and chemical oceanography the following measurements are
of key importance for the students to learn:

1. Water sampling to look at phytoplankton and bacterial abundance in the microscope
2. Chlorophyll a concentration
3. Particulate organic carbon and nitrogen (POC/PON)
4. dissolved oxygen concentrations and BOD (biological oxygen demand)
5. DIC (CO₂)
6. Nutrients like nitrate, ammonia, silicate, and phosphate
7. Dissolved organic carbon and nitrogen (DOC/DON)
8. short term experiments to determine primary production, grazing, and bacterial/community respiration

Equipment: Most of this work requires filtration and several filtration devices, including vacuum pumps and appropriate filters. A complimentary method to determine the phytoplankton (chlorophyll) biomass is the use of fluorescence that can be determined in-situ in the field. Most analyses will be performed in the laboratory using state of the art analytical equipment.

Weeks 10-14 Geological Oceanography (Dellapenna and van Hengstum):
The geological component of this course aims to introduce the student to the basic concepts, tools, and approaches used in Coastal and Marine Geology. Focus will be placed on sampling strategies, experimental design, and development of hypotheses to address geologically oriented questions.

Potential Topics:
1. Investigation into particle dynamics of the estuarine turbidity maximum
2. Estuarine facies architecture within East Galveston Bay
3. Sediment dynamics of the Brazos River Delta
4. Investigations into facies architecture along a barrier island shoreface

Activities:
1) coring and sediment sampling techniques (gravity coring, grab samples, vibra coring, etc.)
2) sediment grain-size analyses
3) Core descriptions and x-radiography analyses
4) Integration of techniques into a geologically-based investigation.

Equipment: vibra corer, submersible vibra corer, gravity corer, boxcorer, grab sampler, CHIRP subbottom profiler, Geophysics workstation, echosounder, x-radiograph system, Malvern Particle Analyzer

The Americans with Disabilities Act
The Americans with Disabilities Act (ADA) is a federal non-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this law requires that all students with disabilities be guaranteed a learning environment that provides
for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Counseling Office, Seibel Student Center, or call (409)740-4587. For additional information visit http://www.tamug.edu/counsel/services/dssprocedures.htm.

**Academic Integrity**

Aggie Honor Code: "An Aggie does not lie, cheat, or steal or tolerate those who do." Upon accepting admission to Texas A&M University at Galveston, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMUG community from the requirements or the processes of the TAMUG Honor System. For additional information please visit: http://www.tamug.edu/HonorSystem

**Absences**

Information concerning absences are contained in the University Student Rules Section 7. The University views class attendance as an individual student responsibility. All students are expected to attend class and to complete all assignments. Please consult the University Student Rules for reasons for excused absences, detailed procedures and deadlines as well as student grievance procedures (Part III, Section 45; http://www.tamug.edu/stulife/Academic%20Rules/Rule%207.pdf.).

**Family Educational and Rights to Privacy Act (FERPA)**

FERPA is a federal law designed to protect the privacy of educational records by limiting access to these records, to establish the right of students to inspect and review their educational records and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings. To obtain a listing of directory information or to place a hold on any or all of this information, please consult the Admissions & Records Office. Items that can never be identified as public information are a student's social security number or institutional identification number, citizenship, gender, grades, GPR or class schedule. All efforts will be made in this class to protect your privacy and to ensure confidential treatment of information associated with or generated by your participation in the class.
Texas A&M University

Departmental Request for a New Course
Undergraduate • Graduate • Professional

• Submit original form and attach a course syllabus.

Form Instructions

1. Course request type:
   - ☑ Undergraduate
   - ☐ Graduate
   - ☐ First Professional (MD, JD, PharmD, DPA)

2. Request submitted by (Department or Program Name):
   - Marine Sciences

3. Course prefix, number and complete title of course:
   - MARS 461 Capstone Undergraduate Research Experience II

4. Catalog course description (not to exceed 50 words):
   Research and scientific communications; development of a scientific abstract, poster presentation, oral presentation, or written scientific paper. Concurrent enrollment in MARS 491, senior standing or permission of the instructor (note: additional prerequisites may be required by faculty mentors, as related to the nature of their 491 projects)

5. Prerequisite(s):
   - Concurrent enrollment in MARS 491, or class or approval of instructor

6. Is this a variable credit course?
   - ☑ Yes
   - ☑ No
   - If yes, from _____ to _____

7. Is this a repeatable course?
   - ☑ Yes
   - ☐ No
   - If yes, this course may be taken _____ times.
   - Will this course be repeated within the same semester?
     - ☑ Yes
     - ☐ No
   - Will this course be submitted to the Core Curriculum Council?
     - ☑ Yes
     - ☐ No

9. How will this course be graded?
   - ☑ Grade
   - ☐ S/U
   - ☐ IVF (CLAG)

10. This course will be:
    a. required for students enrolled in the following degree program(s) (e.g., B.A. in History)
       - Marine Sciences
    b. an elective for students enrolled in the following degree program(s) (e.g., M.S. Ph.D. in Geography)

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. ☑ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://eim.tamu.edu/resources/export-control-basics-for-distance-education)

13. Prefix Course # Title (Excluding punctuation)
    - MARS 461 Capstone Undergraduate Research Experience II

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Approval recommended by:

Department Head or Program Chair (Type Name & Sign) Date

Department Chair (Type Name & Sign) Date

Submitted to Coordinating Board by:

Chair, GC or UCC Date

Associate Director, Curricular Services Date

Effective Date

Questions regarding this form should be directed to Sanden Williams at 945-8301 or sanden.williams@tamu.edu.
Curricular Services – 07/14
MARS 461 – Spring 2017
Capstone Undergraduate Research Experience-II (MARS-CURE-2)
Lecture: TBA (time and place)
Professor: Dr. Tim Dellapenna, dellapet@tamug.edu
Office: OSCB 341
Telephone: 409-740-4952
Office Hours: by appointment

This course is part of the MARS Capstone Undergraduate Research Experience (MARS-CURE). The MARS-CURE includes MARS 460, 461 and two semesters of MARS 491. This class focuses on

Learning Outcomes:
- Conduct and manage and extended (two semester-long) research project
- Design and execute research experiments
- Develop scientific communications skills
- Interpret results, develop scientific discussion and conclusions
- Abstract writing and revising
- Preparation and presentation of research Poster
- Preparation and presentation of a scientific talk based on research conducted
- Preparation and writing of scientific research paper.

Course Description and Prerequisite – Research and scientific communications; development of a scientific abstract, poster presentation, oral presentation, or written scientific paper.
Concurrent enrollment in MARS 491, senior standing or permission of the instructor (note, additional prerequisites may be required by faculty mentors, as related to the nature of their 491 projects)

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<th>Week</th>
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<td>1</td>
<td>Project updates and plans for the semester</td>
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<td>2</td>
<td>Project updates continued</td>
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<td>3</td>
<td>Scientific communications and abstract writing</td>
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<td>4</td>
<td>Scientific communications- Poster development</td>
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<td>5</td>
<td>Project updates</td>
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<td>6</td>
<td>Project updates continued</td>
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<td>7</td>
<td>Scientific communications- final paper write up</td>
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<td>8</td>
<td>First draft of research abstract due</td>
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<td>TBA</td>
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<td>Abstracts Due for TAMUG Research Symposium</td>
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<td>11</td>
<td>Posters Due</td>
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<td>Guest Faculty Lecture</td>
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<td>13</td>
<td>Guest Faculty Lecture</td>
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<td>14</td>
<td>TAMUG Research Symposium</td>
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<tr>
<td>15</td>
<td>Final project update for semester and project plans for following semester</td>
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</tbody>
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Supplemental readings will be posted on the class website
Because this is a field class, the schedule is very fluid and will be changed according to a variety of factors, including weather, availability of vessels and equipment, and class progress.

Research Projects:
Each member of the class will work on an individual research project. Some of you will be working on related projects and if this is the case, all project data will be made available to each participant via Blackboard or other electronic resources. Each student will be responsible for writing their own proposal and each individual member will be responsible for writing their own final paper (based off of community data sets as well as their own data, depending on the project). In addition, each student will be responsible for writing an abstract and presenting a poster at the TAMUG Research Symposium in late April.

Each project will be a major undertaking but will be designed to be something that can be accomplished in two semesters. Please note, unlike other classes, many of these projects are a component of an on-going research project in your mentor’s research lab and may become part of a peer reviewed publication. As such, we are depending on you to provide professional work and will not tolerate anything less in both your final product and your effort. Depending on your contribution and how your effort fits into the larger project, you may be included as a co-author of the papers and abstracts.

Class design- the majority of this class will focus on your projects and the lab will be open for you to work during non-class hours. Your projects will take up more than the allotted class time slots and you will need to allot additional time for your lab work on your own. Note, for each 491 credit hour, you will be expected to work a minimum of 3 hours per week on your project; that means at least 6 hours per week on your own. You will be responsible for scheduling the work on your project and negotiating this schedule with your research mentor and their respective lab members. NOTE- WE ARE ALL BUSY PEOPLE AND WILL NOT TOLERATE NO-SHOWS OR OTHER UNPROFESSIONAL BEHAVIOR.

Grading
Abstract 25%
Poster 25%
Class Presentation 25%
Participation 25%
Grade Distribution: A=90-100%, B=80-89.9%, C=70-79.9%, D=60-69.9%, F=<60%

EXPECTATIONS OF THE PROFESSOR
This course is not an introductory marine science class, it is an advanced, 400 level Marine Sciences class. As such, I have the expectation that upon entering my class the student have a basic understanding of marine science. The instructor will not be providing a review of this material. This class is a professional research class. The professor expects students to be on-time with assignments and for assignments to be presented in an organized and professional format and manner and that when you make presentations you are dressed professionally.
THE AMERICANS WITH DISABILITIES ACT
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Counseling Office, Seibel Student Center, or call (409)740-4587. For additional information visit http://www.tamug.edu/counsel/Disabilities.html.

ACADEMIC DISHONESTY
For many years Aggies have followed a Code of Honor, which is stated in this very simple verse: "Aggies do not lie, cheat, or steal, nor do they tolerate those who do." As such, it is the responsibility of students and faculty members to help maintain scholastic integrity at the University by refusing to participate in or tolerate scholastic dishonesty. The Aggie Honor and the Scholastic Dishonesty sections in the TAMUG University Rules handbook will be the standard upon which scholastic integrity is maintained in this course. For additional information: http://www.tamug.edu/honorsystem/. In this class there will be zero tolerance for cheating or dishonesty.

STATEMENT ON ABSENCES
Information concerning absences is contained in the University Student Rules Section 7, http://www.tamug.edu/stulife/Academic%20Rules/Rule%2007.pdf. The University views class attendance as an individual student responsibility. All students are expected to attend class and to complete all assignments. Please consult the University Student Rules for reasons for excused absences, detailed procedures and deadlines as well as student grievance procedures (Part III, Section 45). An excused absence does not obviate the need to learn the material missed.
Memo to students on the mechanics and structure of the MARS 460-461 and linked 491 MARS Capstone Undergraduate Research Experience.

The Marine Science-Capstone Undergraduate Research Experience (MARS-CURE) is required of all Marine Science (MARS) majors. The MARS-CURE consists of a two semester, research-based sequence of classes, consisting of MARS 460, 461 and enrollment during both Fall and Spring of MARS 491 (2-credits each). In the Fall the students will register for MARS 460. In addition, the student will select a faculty mentor and register with their respective mentor or two credits each for Fall and Spring in MARS 491. Currently, the Marine Science Research Faculty are: Drs. Amon, Anis, Dellapenna, Kaiser, Santschi, van Hengstum, Park, Wang. In addition, if there is a different mentor that wishes to work with the student, for example from the MARB Department, then, with permission of the MARS 460 instructor, they may select this mentor for the entire sequence.

During the Fall semester, the focus will be on developing a research project, research proposal, and beginning the research. The Spring Semester will focus on completing the research projects and presenting their research at the TAMUG Research Symposium as a poster, as well as giving an oral presentation at the Annual MARS Dept. Retreat, as well as writing a final paper.
Texas A&M University
Departmental Request for a New Course
Undergraduate + Graduate + Professional
* Submit original form and attach a course syllabus.*

Form Instructions
1. Course request type: ☒ Undergraduate  ☐ Graduate  ☐ First Professional (DMD, MD, JD, PharmD, DPA)
2. Request submitted by (Department or Program Name): Department of Liberal Studies/Maritime Studies Program
3. Course prefix, number and complete title of course: MAST 336, MARITIME FOREIGN POLICY
4. Catalog course description (not to exceed 50 words): Strategies used by governments to guide international actions; objectives of state leaders in decision making; sources, processes, objectives and outcomes of maritime foreign policy choices.

5. Prerequisite(s): Junior or senior classification or permission of the instructor.

Cross-listed with: Stacked with:

Cross-listed courses require the signature of both department heads.

6. Is this a variable credit course? ☐ Yes  ☒ No
7. Is this a repeatable course? ☐ Yes  ☒ No

If yes, from _______ to _______

If yes, this course may be taken _______ times.

Will this course be repeated within the same semester?  ☐ Yes  ☒ No

Will this course be submitted to the Core Curriculum Council?  ☐ Yes  ☒ No

9. How will this course be graded? ☒ Grade  ☐ S/U  ☐ P/F (CLMD)

10. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

   b. an elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

   B.A., Maritime Studies

11. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with these departments. Attach approval letters.

12. ☒ I verify that I have reviewed the PAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-control/export-control-basics-for-distance-education).

13. Prefix  Course #  Title (excluding punctuation)

| MAST | 336 | MARITIME FOREIGN POLICY |

Approval recommended by:
JoAnn DoGeorgio-Latz
Department Head or Program Chair (Type Name & Sign)
Date: 10/22/15

Chair, College Review Committee
Date: 10/22/15

Delphi of College
Date: 10/22/15

Submitted to Coordinating Board by:
Chair, GC or UCC
Date:

Associate Director, Curricular Services
Date: 

Effective Date:

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 01/14
MAST 336 MARITIME FOREIGN POLICY
Spring 2017
Meeting times and location TBD

Course Description and Prerequisites

Course Objectives: Foreign Policy is generally defined as the strategies used by governments to guide their actions in the international arena. Foreign policy spells out the objectives that state leaders decide to pursue in a given situation or relationship, as well as the means by which they intend to pursue those objectives. The purpose of this course is to gain a greater understanding of how states formulate their maritime foreign policy and the sources, processes, objectives and outcomes of maritime foreign policy choices.

Course Prerequisites: No course prerequisites required. Students must be junior or senior classification; freshman and sophomores may enroll with permission of the instructor.

Learning Outcomes

Learning Outcomes: This is a lecture-discussion class. At the end of the course you will
1. Identify and explain the determinants of foreign policy within a maritime context;
2. Analyze conflicting maritime national security and territorial claims; and
3. Employ theoretical approaches to explain maritime foreign policy events.

Instructor Information

Name: Dr. DiGeorgeio-Lutz
Telephone number: 409 740-4463
Email address: dgeorgj@tamug.edu
Office hours: TBA
Office location: CLB 130

Textbook and/or Resource Material

Required Texts:
Additional reading material will be handed out by the instructor.
You must purchase the following four case studies in diplomacy directly from the Institute for
Grading Policies

Assignments and Grades:

1. Case Studies in Diplomacy: There will be four short papers on the case studies in diplomacy topics. Each case study paper is worth 10 points for a total of 40 points. Instructions for each case study paper are included in the syllabus.

2. Final Examination: The final examination is take home and will consist of a hypothetical case that you must analyze and make a foreign policy recommendation. The final is worth 20 points.

3. Participation: 15 points. Do not underestimate the significance of this portion of your grade for it represents one letter grade. Participation means that you have read assigned cases and other readings and that participate in the analysis and discussion of the materials. The level and quality of participation, as well as attendance, will be grounds for the distribution of participation points. Participation is important for the discussion of our books on the Mayaguez and the USS Pueblo. See also http://www.tamug.edu/stulife/Academic%20Rules/Rule%2027.pdf.

4. Research Power Point Presentation: You are required to pick a research topic on some area/issue of maritime foreign policy/national security in consultation with me and display your research in the form of a power point presentation. I will provide you with specific details about the contents of the posters and the range of maritime topics in a separate handout. The power point presentation is worth 25 points.

Grading Scale: 100-90=A; 89-80=B; 79-70=C; 69-60=D; below 60=F.

Attendance and Make-up Policies

Attendance Policy: Attendance is required. If you are not in class, you cannot earn participation credit. As a member of this class and the university I expect you to take your education seriously. A university education is something that you earn and in order to respect the integrity of that education you are expected to come to class prepared. This means that you have read the assigned material prior to coming to class. You are required to take an active role in the learning process as well as responsibility for your learning. I do not give extra credit. Absences will only be accepted for University excused absences as outlined in Student Rule 7 http://www.tamug.edu/stulife/Academic%20Rules/Rule%2027.pdf. The fact that these are university-excused absences does not relieve the student of responsibility for prior notification and documentation. Failure to notify and/or document properly may result in an unexcused absence. Falsification of documentation is a violation of the Honor Code.

1) Participation in an activity that is required for a class for which a University excused absence has been issued by the Vice President for Academic Affairs.
2) Death or major illness in a student's immediate family.
3) Illness of a dependent family member.
4) Participation in legal proceedings or administrative procedures that require a student's presence.
5) Religious holy day. NOTE: Prior notification is NOT required.
6) Injury or illness that is too severe or contagious for the student to attend class.
   a) Injury or illness of three or more class days:
      Student will provide a medical confirmation note from his or her medical provider within one week of the last date of the absence (see Student Rules 7.1.6.1)
   b) Injury or illness of less than three class days:
      Student will provide one or both of these (at instructor’s discretion), within one week of the last date of the absence:
      (i) Texas A&M University Explanatory Statement for Absence from Class form available at http://www.tamu.edu/stulife/Absence%20Statement.pdf or (ii) Confirmation of visit to a health care professional affirming date and time of visit.
7) Required participation in military duties.
8) Mandatory admission interviews for professional or graduate school that cannot be rescheduled.
   Other absences may be excused at the discretion of the instructor with prior notification and proper documentation. In cases where prior notification is not possible (e.g., accident or emergency) the student must provide notification by the end of the second working day after the absence, including an explanation of why notice could not be sent prior to the class.

Students with Disabilities:
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Counseling Office, Seibel Student Center, or call (409)740-4587. For additional information visit http://www.tamu.edu/counsel/Disabilities.html.

Academic Integrity:
“An Aggie does not lie, cheat, or steal or tolerate those who do.” I will not tolerate cheating on exams or plagiarism on assignments. If you cheat or plagiarize you will not receive any credit for the exam or assignment. For further information please see the Honor Council Rules and Procedures at http://www.tamu.edu/HonorSystem
cell phones, I-pods, blackberries, and other such devices must be turned off and put away during class.

Statement on the Family Educational Rights and Privacy Act (FERPA)
FERPA is a federal law designed to protect the privacy of educational records by limiting access to these records, to establish the rights of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings. To obtain a listing of directory information or to place a hold on any or all of this information, please consult the Admissions and Records Office.
Items that can never be identified as public information are a student’s social security number or institutional identification number, citizenship, gender, grades, GPR or class schedule. All efforts will be made in this class to protect your privacy and to insure confidential treatment of information associated with or generated by your participation in this class.
In order to insure compliance, I will not discuss your grade with you via the Internet.
Course Evaluations:
The PICA (Personalized Instructor/Course Appraisal) is an online course evaluation for Texas A&M. We highly encourage you to complete an evaluation for each course on your schedule. Student input is a critical component used to improve curriculum and teaching. Each faculty member values your input to improve his/her methodology. Your comments can also significantly impact the mix and membership of faculty. The PICA website is available at http://pica.tamu.edu, your Howdy portal, or by scanning

Tentative Reading and Course Outline:

Week 1: Introduction to the course, What is foreign policy?  
How do states define their national interests?

Week 2: Geopolitics—MacKinder versus Mahan/Determinants of Foreign Policy  
Robert D. Kaplan and the Indian Ocean

Week 3: U.S. Maritime interests

Week 4: Piracy. Read Garofano and Dew chapters 2 and 3

Week 5: India. Read Garofano and Dew chapters 5 and 11

Week 6: China. Read Garofano and Dew chapter 7 and additional readings provided by the instructor

Week 7: Case Study 246. Mischief on Mischief Reef: Chinese Adventures in the Spratly Islands  
Case study paper due.

Week 8: The Arabian/Persian Gulf  
Case 275: A Question of Sovereignty: Bahrain, Qatar, and International Court of Justice  
Case study paper due.

Week 9: The Taiwan Straits  
Case 231: The 1996 Taiwan Strait Crisis: The United States and China at the Precipice of War?  
Case study paper due

Week 10: Resource wars  
Case 226: The Turbot War: Canada, Spain and Conflict over the North Atlantic Fishery  
Case study paper due


Week 12: Read: The Pueblo Incident: A Spy Ship and the Failure of American Foreign Policy

Week 13: Power point presentations

Week 14: Power point presentations
Week 15: Take home final examinations due by 5pm.

As instructor, I reserve the right to amend, modify, or adjust this syllabus as needed.

Questions and Instructions for Case Studies

Formatting: Case studies must be typed, double-spaced, 1 inch margins, 12 point Times New Roman fonts, page numbering on bottom right-hand corner, name on separate cover sheet, stapled. Separate each question by number. You do not need to research these cases—all the information you need to write your short papers is contained within the case study narrative. Please do not use excessive quotes to respond to the questions. You should assume that the reader (me) has no background knowledge of the case.

Case Study 275: A Question of Sovereignty: Bahrain, Qatar, and the International Court of Justice.
Part A
1. Why was the border dispute between Qatar and Bahrain so contentious and difficult to resolve? What issues were at stake? Was one party more responsible for the continuing conflict or were both “at fault”?
2. How might this case have been different without the possible presence of petroleum and natural gas in disputed territories?
3. Bahraini officials consistently argued that, as the Bahraini newspaper Al-Ayyam put it, “the stance announced by Qatar’s foreign minister...of adopting two mechanisms to solve the dispute—through court and mediation—is illogical and cannot be implemented practically.” Do you agree or disagree? Are there advantages to pursuing two tracks simultaneously, or does the use of one approach undercut the other?

Part B
4. Did the decision of the International Court of Justice surprise you? What was the reasoning of the ICJ in making its ruling? What principles of international law were most relevant?

Case Study 231. The 1996 Taiwan Strait Crisis: The United States and China at the Precipice of War?
1. Pre-crisis questions:

a. Was President Lee Teng-hui’s visit to the United States “unofficial” or “official”? Why was China so upset at Lee’s visit? Why had the United States initially denied a visa only to subsequently reverse its decision?

b. What is the central disputed issue in the conflict between China and Taiwan? What is Taiwan’s policy toward China and reunification? What is China’s policy toward Taiwan and reunification? Why is Taiwan so important to China?

c. What are the American national interests at play in the relations with China and Taiwan? How do China and Taiwan view their national interests in the triangular relationship?

2. Crisis questions:
a. What impact did domestic American politics have on the Clinton administration’s policy? What roles did domestic American institutions such as the State Department, the National Security Council and Congress play in the policy formulation process? Who were the most influential American policymakers during the crisis? Do the Chinese and Taiwanese understand the dynamics of American policy-making?

b. What were the Chinese political and military responses to U.S. policy? Were China’s political and military reactions appropriate, or did they only threaten to escalate the crisis?

3. Post-Crisis questions:

a. Did the United States advance its national interests with the use of its military in the crisis? How high were the risks of U.S. and Chinese forces clashing during the crisis? Were these risks acceptable or too high for U.S. interests in the region?

b. What were the most significant steps taken by Taiwan, China and the United States that helped diffuse the crisis? Alternatively, what actions might each of the countries have taken that could have led to an escalation in the crisis and to war?

c. What are the implications of the lessons of the crisis for the future of U.S.-Taiwan-China relations? In the future, should the United States openly declare a commitment to defend Taiwan in the event of a Chinese attack, or would a policy of ambiguity be a better deterrent? Could Chinese nuclear weapons ever be used as an instrument of policy vis-à-vis Taiwan?

Case Study 246: Mischief on Mischief Reef: Chinese Adventures in the Spratly Islands
1. From the perspective of Roberto Romulo, what is the best approach to resolving the issue since both China and the Philippines claim sovereignty over the Spratly’s?
2. What are China’s long-term intentions in the region? Are their intentions purely economic?
3. How is this territorial dispute viewed by other states in the region?
4. Does the United States have an interest in this dispute? What role could the U.S. play?

Case Study 226: The Turbot War: Canada, Spain and Conflict over the North Atlantic Fishery
1. Tragedy of the Commons and Environmental Management
   a. What environmental factors make management of turbot stocks difficult? What political factors contribute to this difficulty? If turbot stocks only existed within Canada’s 200 mile EEZ would conservation have been easier? What options are there for management of a resource when its different users value it differently?

2. International Environmental Law
   a. Why was the regulatory treaty negotiated to manage fishery resources in this case? Do the consequences of allowing states to “opt out” of provisions outweigh the advantages of allowing for quick changes in regulations to reflect environmental conditions? Does the suspicion that a ship is not complying justify taking actions, against the wishes of that ship’s crew to find out?

3. Relationship between domestic politics and international politics
   a. To what extent were both governments in the crisis playing to domestic audiences rather than maximizing their broader national interests? Was this crisis driven by the political issues involved, or the personal characteristics and agendas of national leaders?
Topics for Research/Power Point Presentations

You are required to select a topic for research throughout the semester. Only 1 topic per student and you must sign up for a topic with me no later than the second week of class. You will present your research in a power point presentation. You must also submit a separate annotated bibliography that should contain a minimum of 8 journals articles. It is advisable that you meet with me to determine the format of your presentation depending on your topic—I will also give you guidance on finding appropriate scholarly resources.

UNCLOS
Paracel Islands (China and Vietnam)
Hydrocarbons and their energy significance
The Codfish Wars (Iceland and U.K.)
U.S. and Canada Salmon Dispute
Canada and U.S Northwest Passage
Iran and United Arab Emirates (Greater and Lesser Tunbs)
Falklands/Malvinas War
Terrorism in Indian Ocean
Chilean-Peruvian Maritime dispute 2006
Panama Canal Treaties
U.S. Cooperative Strategy for 21st Century Seapower
Diaoyu/Senkaku Island Dispute (China and Japan)
India-Bangladesh maritime border dispute
China and the Nine-Dash Line
Bangladesh and Mynmar and Permanent Court of Arbitration
Texas A&M University
Departmental Request for a New Course
Undergraduate • Graduate • Professional
Submit original form and attach a course syllabus.

Form Instructions
1. Course request type: ☑ Undergraduate  ☐ Graduate  ☐ First Professional (DVM, MD, JD, PharmD, DMD)
2. Request submitted by (Department or Program Name): Department of Liberal Studies / Maritime Studies Program
3. Course prefix, number and complete title of course: MAST 493 Maritime Studies Travel Experience
4. Catalog course description (not to exceed 50 words): Combination of classroom and travel emphasizing cultural, archaeological, political, and/or historical aspects of maritime humanities related topics.

5. Prerequisite(s): Junior or Senior classification and permission of the instructor.
   Cross-listed with: 
   Stacked with: 
   Cross-listed course requires the signature of both department heads.

6. Is this a variable credit course? ☑ Yes  ☐ No 
   If yes, from ___ to ___

7. Is this a repeatable course? ☑ Yes  ☐ No 
   If yes, this course may be taken ___ times.
   Will this course be repeatable within the same semester? ☑ Yes  ☐ No 
   Will this course be submitted to the Core Curriculum Council? ☑ Yes  ☐ No 

8. How will this course be graded? ☑ Grade  ☐ S/U  ☑ P/F (c/o Department)

9. This course will be:
   a. required for students enrolled in the following degree program(s) (e.g., B.A. in history)

b. elective for students enrolled in the following degree program(s) (e.g., M.S., Ph.D. in geography)

B.A., Maritime Studies

10. If other departments are teaching or are responsible for related subject matter, the course must be coordinated with those departments. Attach approval letters.

11. ☑ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpctraining.tamu.edu/resources/export-control-basics-for-distance-education).

13. Course Title (including punctuation): MAST 493 MAST Travel Experience

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Approval recommended by:

Dr. JoAnn DiGeorge-Lutz
Department Head or Program Chair (Type Name & Sign) Date

Department Head or Program Chair (Type Name & Sign) Date
(if cross-listed course)

Submitted to Coordinating Board by:

Chair, CC or UCC Date

Associate Director, Curricular Services Date

Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or: sandra.williams@tamu.edu.
Curricular Services – 07/14
MAST 493 / MARITIME STUDIES TRAVEL EXPERIENCE
Department of Liberal Studies / Maritime Studies Program

Instructor: Dr. Victor Viser
(e) Viser@tamug.edu / (t) 409.740.4556 / Office Location: CLB 128
Office Hours: M/W 9:30 – 10:30 am., W 2:30 am. – 4:00 pm. Other times by appointment.

Term: TBD  Meeting Time: TBD  Location: TBD

Required Reading: Tour Program and Policies (provided)
Various handouts and Internet links as provided

The Tour Program and Policies booklet must be read in advance of leaving and carried by the student
throughout the study abroad program.

COURSE INFO

Description of the Course: Combination of classroom and international travel emphasizing cultural,
archeological, and/or historical aspects of maritime humanities related topics.
Prerequisite: Junior or senior classification and approval of the instructor.

The Thirteen Colonies of the United States declared their independence from Great Britain in 1776.
However, nationhood for New Zealanders is a relatively recent phenomenon, having occurred for all
practical purposes in the early 1970’s. Like the United States, New Zealand has a rich social, political,
and cultural structure steeped in plurality and maritime history. From its settlement by Eastern
Polynesians in the 13th century, to colonization by Europeans in the 19th century, to an environmentally
activist citizenry with a global outlook in the 21st century, New Zealand provides an interesting
anthropological laboratory for study abroad students.

In our course, we will visit the various centers of New Zealand Māori and European settlement culture,
politics, history, art & architecture, mass communication, and nature. Of particular relevance to our study
will be New Zealand’s connections to all of these aspects to maritime life and environmental
conservation. We will engage in discussions with a variety of leaders and representatives of New Zealand
associated with these areas of study, which will then inform our own group discussions during the course
of our stay. We will start at the northern tip of the north island and make our way down (or is it up?) to
the southern tip of the south island and into Fiordland.

Learning Outcomes for the Course: At the end of the course students will be able to demonstrate the
following learning outcomes:

1) Recognize and identify the importance of cultural plurality and assimilation to the history of New
   Zealand;

2) appreciate and explain the political factors that have informed the New Zealander identity – from its
   Polynesian influenced pre-colonial period to its inclusion in a larger Australasian regionalism;

3) execute critical thinking for the analysis of modern New Zealand mass communication including the
   news industry, popular music and film, architecture, and the Internet;

4) discriminate and synthesize various social, political, geographic, and economic factors that influence
   New Zealand’s general position as an environmentally conscious nation;

5) evaluate the importance preservation of natural habitat (particularly estuaries and fiords) and
   renewable resource energy policy plays in the socio-cultural outlook of New Zealand;

6) generate comparisons of New Zealand’s maritime/sailing culture and with those of other maritime
   nations.
Format: The course is built around site visits, lectures, group participation, analysis, and writing. On site, we will meet and hear from a variety of people including organizational staff, political leaders, conservationists, artists, journalists, and educators. We will discuss many topics that inform the historical, socio-cultural, mass communication, political, policy, economic notions of New Zealand. Therefore, your active participation in each and every site visit is expected. You are also encouraged to take notes, photos, and video as appropriate to the content of the activities.

Absences: Because the world is our classroom in this study, you will only receive full credit for participation if you show up for our daily activities. If you don’t show up for a daily activity you can expect to receive a grade of zero for the participation portion of the final grade — and participation counts for 20% of your final grade. Arriving more than 10 minutes late is counted as absent. Please consult the University Student Rules online at TAMUG Student Rule: Attendance for reasons for excused absences, detailed procedures and deadlines.

I encourage and reward students who participate in the lectures and discussions. Furthermore, know that I will call on students from time to time during the course of our study to relate their thoughts. This is a critical thinking class.

Course Evaluation Criteria:

- Final Comprehensive Report of Study 60%
- Individual Site Journal Observations (4 @ 20% each) & Journal (20%)
- Site/Course Participation – Assessed by perfect activity attendance and degree of participation in discussions. 20%

Final Grade Scale:

A (100-90) / B (89-80) / C (79-70) / D (69-64) / F (63-0)

Final Comprehensive Report of Study: A 10-15 page (double-spaced with 1” margins) paper written as a research report analyzing and arguing the knowledge/concepts learned during the length of the study. This paper will be derived from notes taken during the study that may include information derived from speakers, handouts, and interviews. The report is due within three weeks of our return. Please see the assignment handout for more details.

Individual Site Journal Observations & Journal: For this assignment, you will produce a 3-5 page (double-spaced with 1” margins) observation of each of any four sites we visit. Each paper will be a product of journal entries you will make for each site visit. Choose your four favorite (the selection criteria is up to you) and write about them in the terms outlined in the assignment handout. Be sure to enter a journal observation for each of our site visits (preferably in a typed journal, though the journal can also be handwritten). The site observations will be emailed to me during the course of the study, while the journal will be turned upon landing.

Site/Course Participation: We will be traveling quite a bit and meeting on many different sites. You will need to participate in them all to get full participation credit. As well, we will be occasionally dividing into groups for a variety of projects. Your participation in these groups and their presentations will also contribute to your participation grade. It should be noted that there is also a significant amount of personal reflection time built into the course of our study in-country.
A FEW POLICY ISSUES

1) The use of mobile devices for texting or talking during site visits is strictly prohibited. It cannot be overstated: **Simply turn off the device while on site.** Checking for messages, texting messages, and so forth distracts from our mission of higher education, is unnecessary for the time we have on site, and it will severely harm your final grade.

2) This is a course conducted in the environs of higher education. It is a place of diverse ideas and opinions, and the critical analysis and discussion of those things. While we might agree on some notions, and have divergent positions on others, we will always do so with civility in this class. Insulting remarks, condescension, ridicule, or intimidation of fellow students will not be tolerated.

3) Cultural analysis is often filled with content and/or interpretations of that content that many people might consider offensive in many different ways. Thus, the notion of potential offensiveness of content in any material and/or presentations is set forth here in advance only to foster and inform our discussions of international communication—not to delimit them in any form or fashion.

4) In addition to volunteering your own thoughts regarding the material in discussion, be prepared to sharply respond to questions/comments sent your way during lecture and discussions.

COURSE SCHEDULE

(As instructor, I reserve the right to amend, modify, or adjust this syllabus as needed.)

Depart Houston May 30 / Arrive Auckland

Auckland — Pioneering, Polynesia, The Maori, and Sailing (June 1-4):
Site Visits: New Zealand Maritime Museum
Rotorua ~ Te Puia (Marae visit)
The Coromandel
Ponsonby Road ~ Colenso BBDO Agency

Napier — Art Deco & The Kiwi Biodiversity of Hawkes Bay (June 5-7)
Site Visits: Downtown Napier
Hawkes Bay
Waitangi Wetlands / Estuary

Wellington — Politics, Policy, Art (June 7-11)
Site Visits: The New Zealand Parliament (the “Beehive”)
The Museum of New Zealand
Saatchi & Saatchi Agency
Katherine Mansfield House & Garden
Downtown Stage Theatre (performance)
Weta Digital Studio

Christchurch — Old World & Antarctic Exploration History (June 11-14)
Site Visits: Christchurch Cathedral
International Antarctic Centre
Canterbury Museum and Library
Britten Motorcycle Works
Dunedin – Learning the New World (June 15-17)
  Site Visits: Larnach Castle
  Olveston Home
  Otago Peninsula
  Dunedin Railway Station

Taupo Country – Mt. Cook and The Waters of Fiordland (June 17-23)
  Site Visits: Milford Sound
  The Rob Roy Track
  Queenstown
  Mount Cook Base

Depart Christchurch June 25 / Arrive Houston

Final Exam: Final Comprehensive Report of Study due via email within two weeks of returning.

The Americans With Disabilities Act (ADA) Policy Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Office of Student Services. For additional information visit the website page Students with Disabilities.

Academic Integrity Statement

For many years Aggies have followed a Code of Honor: "Aggies do not lie, cheat, or steal, nor do they tolerate those who do." As such, it is the responsibility of students and faculty members to help maintain scholastic integrity at the University by refusing to participate in or tolerate scholastic dishonesty. The Aggie Code of Honor and the Scholastic Dishonesty sections in the TAMUG University Rules handbook will be the standard upon which scholastic integrity is maintained in this course. Visit online at The Aggie Code of Honor. Plagiarism will not be tolerated. It is an absolute that academic dishonesty infractions will result in failure of this course as a minimum sanction.

Statement on Absences

Information concerning absences is contained in the University Student Rules, Section 7. The University views class attendance as an individual student responsibility. All students are expected to attend class and to complete assignments. For a University excused absence, the student should contact the Counseling Office to request a letter for the instructor stating that the Associate Vice President for Student Affairs or his/her designee has verified the student’s absence as excused. Please consult the University Student Rules online at TAMUG Student Rule: Attendance for reasons for excused absences, detailed procedures and deadlines.

If the absence is excused per the process outlined in the University Student Rules, the student must be given the opportunity to make up work that was missed. The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unauthorized absence. See Part III, Student Grievance Procedures, Section 49, Unexcused Absences, for more information about appealing an instructor’s decision.
Statement on the Family Educational Rights and Privacy Act (FERPA)

FERPA is a federal law designed to protect the privacy of educational records by limiting access to those records, to establish the right of students to inspect and review their educational records and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings. To obtain a listing of directory information or to place a hold on any or all of this information, please consult the Admissions & Record Office.

Information that can never be identified as public information are a student’s Social Security number or institutional identification number, citizenship, gender, grades, GPR or class schedule. All efforts will be made in this class to protect your privacy and to ensure confidential treatment or information associated with or generated by your participation in the class.
TAMUG
CHANGE IN COURSES
Texas A&M University
Departmental Request for a Change in Course
Undergraduate + Graduate + Professional
Submit original form and attachments.

Form Instructions
1. Course request type:
   - Undergraduate
   - Graduate
   - First Professional (DDS, MD, JD, PharmD, DPM)
2. Request submitted by (Department or Program Name): Department of Marine Biology
3. Course prefix, number and complete title of course:
   MARB 437 PATHOLOGY OF MARINE ANIMALS

   Affidavit/Supporting Statement for changes made to title, description, and/or code
   MARB 437 PATHOLOGY OF MARINE ANIMALS
   MARB 437 PATHOLOGY OF MARINE ANIMALS

4. Change requested
   a. Prerequisite(s): From: MARB 315, 435, MOCR 351. Junior or Senior Classification or approval of instructor. To: MARB 315. Junior or Senior Classification or approval of instructor.
   b. Withdrawal (reason):
   c. Cross-list with:

   Cross-listed courses require the signature of both department heads.

   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.
5. Is this an existing core curriculum course?
   - Yes
   - No

6. If grade type is changing for existing course, indicate the new grade type:
   - Grade
   - S/U
   - P/F (CLND)

7. If this course will be stacked, please indicate the course number of the stacked course:

   I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-control-basics-for-distance-education).

8. Complete current course title and current catalog course description:
   An introduction to the structural and functional changes in cells, tissues and organ systems of marine invertebrates and vertebrates as they relate to disease and/or injury. Mechanisms of disease and identification of lesions in common diseases and human-induced injuries will be included. Laboratory will consist of gross and microscopic aspects of pathology in both invertebrate and vertebrate animals.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
   Examination of changes or loss of physiological function as related to common diseases (viral, bacterial, parasitic) or injury. Mechanisms of disease in cells, tissues and organ systems of marine vertebrates are presented. Emphasis on marine mammals, fishes and marine reptiles/birds also presented. Clinical manifestations, diagnostics and treatments are discussed.

10. a. As currently in course inventory:

    || Course #  | Title (excluding punctuation) |
    ---|---|---|
    | MARB 437 | PATHOLOGY OF MARINE ANIMALS |

    |||| |
    | Ext. | Lab. | Other | SCH | CIP and Fund Code | Admin. Unit | ECEE Code | Level |
    ---|---|---|---|---|---|---|---|---|
    | 3.00 | 3.00 | 0.00 | 4.00 | 2607010002 | 1805 | 0 1 0 2 9 8 | 4 |

    b. Change to:

    || Course #  | Title (excluding punctuation) |
    ---|---|---|
    | MARB 437 | PATHOLOGY OF MARINE ANIMALS |

    ||| | |
    | Ext. | Lab. | Other | SCH | CIP and Fund Code | Admin. Unit | ECEE Code | Level |
    ---|---|---|---|---|---|---|---|---|
    | 3.00 | 0.00 | 3.00 | 4.00 | 2607010002 | 1805 | 0 1 0 2 9 8 | 4 |

   Approval recommended by:

   Department Head or Program Chair (Type Name & Sign)  Date

   Chair, College Review Committee  Date

   Department Head or Program Chair (Type Name & Sign)  Date

   (If cross-listed course)

   Dean of College  Date

   Submitted to Coordinating Board by:

   Chair, GC or UCC  Date

   Associate Director, Curricular Services  Date

   Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 08/14
Course title and number: MARB 437 – Pathology of Marine Animals

Term: Fall 2016
Meeting times and location: TBD.

COURSE DESCRIPTION: MARB 437 (3-0). 3 Credits.
Examination of changes or loss of physiological function as related to common diseases (viral, bacterial, parasitic) or injury. Mechanisms of disease in cells, tissues and organ systems of marine vertebrates are presented. Emphasis on marine mammals. Fishes and marine reptiles/birds also presented. Clinical manifestations, diagnostics and treatments are discussed.

PREREQUISITES:
• MARB 315
• Junior and senior classification or approval by instructor.

LEARNING OUTCOMES:
After completing the course, students should be able to:

• Discriminate between different diseases affecting marine animals.
• Explain how the physiological function of different organ systems are affected by these diseases.
• Describe how these physiological changes are affecting overall health of the animal.
• Evaluate, based on symptoms, which disease the animal contracted.
• Apply knowledge of each disease to determine appropriate treatment.
• Examine how biotic and abiotic factors can increase the risk of various diseases.

INSTRUCTOR INFORMATION:
Name: Dr. Lene H. Petersen
Telephone number: 409-740-4766
Email address: petersel@tamug.edu
Office hours: by appointment
Office location: Bldg. 3029, room # 241
TEXTBOOK AND RESOURCE MATERIAL:
Textbooks are optional, but highly recommended.


GRADING:
A = 90 to 100%
B = 80 to 89%
C = 70 to 79%
D = 60 to 69%
F = 59 and below

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<td>Week 1</td>
<td>Course description, objectives, syllabus, expectations</td>
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<td>Intro to physiology of marine fishes and reptiles</td>
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*Finals Begin*

*Syllabus is subject to change*
EXAMS: There will be 4 exams each worth 100 points. All exams are in-class, closed book and must be done independently. No electronic devices will be allowed to be out during the exam. Exams 1-4 are not comprehensive, however, an understanding of all topics covered up until the exam is expected. Exams may contain true/false, multiple choice, diagrams/ graphs, short answer and short essay questions. Point totals will be on the exam. Students may ask clarification from the exam proctor but may not ask for help getting the answer. Students will have entire class time to complete the exam.

MAKE-UP POLICY
If an absence is excused, the instructor will either provide the student an opportunity to make up any quiz, exam or other work that contributes to the final grade or provide a satisfactory alternative by a date agreed upon by the student and instructor. If the instructor has a regularly scheduled make up exam, students are expected to attend unless they have a university approved excuse. The make-up work must be completed in a timeframe not to exceed 30 calendar days from the last day of the initial absence. The reasons absences are considered excused by the university are listed below. See Student Rule 7 for details (http://www.tamug.edu/stulife/Academic%20Rules/Rule%207.pdf). The fact that these are university-excused absences does not relieve the student of responsibility for prior notification and documentation. Failure to notify and/or document properly may result in an unexcused absence. Falsification of documentation is a violation of the Honor Code.

1) Participation in an activity that is required for a class for which a University excused absence has been issued by the Vice President for Academic Affairs.
2) Death or major illness in a student’s immediate family.
3) Illness of a dependent family member.
4) Participation in legal proceedings or administrative procedures that require a student’s presence.
5) Religious holy day. NOTE: Prior notification is NOT required.
6) Injury or illness that is too severe or contagious for the student to attend class.
   a) Injury or illness of three or more class days: Student will provide a medical confirmation note from
   his or her medical provider within one week of the last date of the absence (see Student Rules 7.1.6.1)
   b) Injury or illness of less than three class days:
   Student will provide one or both of these (at instructor’s discretion), within one week of the last date
   of the absence:
   (i) Texas A&M University Explanatory Statement for Absence from Class form available at
   http://www.tamug.edu/stulife/Absence%20Statement.pdf or (ii) Confirmation of visit to a health care
   professional affirming date and time of visit.
7) Required participation in military duties.
8) Mandatory admission interviews for professional or graduate school that cannot be rescheduled.

Other absences may be excused at the discretion of the instructor with prior notification and proper documentation. In cases where prior notification is not feasible (e.g., accident or emergency) the student must provide notification by the end of the second working day after the absence, including an explanation of why notice could not be sent prior to the class.

ATTENDANCE/PARTICIPATION: To successfully complete this course, you should attend all lectures. The textbook covers advanced topics and hence lectures will interpret and synthesize topics presented in the text. In order to obtain a full comprehension of fish physiology it is essential to read the material before coming to class. If a student misses a class, it is the student’s responsibility to obtain lecture notes and material from classmate.

ABSENCES: Information concerning absences is contained in the University Student Rules Section 7 (http://www.tamug.edu/stulife/Academic_Rules/7_Attendance.html). The University views class attendance as an individual student responsibility. All students are expected to attend class and to complete all assignments. Please consult the University Student Rules for reasons for excused absences, detailed procedures and deadlines as well as student grievance procedures (Part III, Section 45).

INDEPENDENCE, APPROPRIATE REFERENCES AND THEIR CITATION: All aspects of the course must be done independently and NOT as team efforts except where specifically requested by the course teachers. All perceived copying or sharing will be penalized by subtraction of that part of the assignment from the final grade. Plagiarism can include but is not limited to:
- Steal and pass off (the ideas or words of another) as one’s own.
• To use (another’s production) without crediting the source.
• To commit literary theft.
• To present as new and original an idea or product derived from an existing source.

CLASSROOM BEHAVIOR: The TAMUG Academic Rule 21 states "Texas A&M University supports the principle of freedom of expression for both instructors and students. The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions that do not impede their exercise. Classroom behavior that seriously interferes with either (1) the instructor's ability to conduct the class or (2) the ability of other students to profit from the instructional program will not be tolerated. And individual engaging in disruptive classroom behavior may be subject to disciplinary action". Limit private conversations, use of electronic devices, or anything that could distract the instructor or other students. If you have business to conduct, quietly leave the room. See [http://www.tamug.edu/stufflife/Academic%20Rules/Rule%2021.pdf](http://www.tamug.edu/stufflife/Academic%20Rules/Rule%2021.pdf) for more information.

AGGIE CODE OF HONOR AND ACADEMIC INTEGRITY: For many years Aggies have followed a code of Honor, which is stated in this very simple verse:

"An Aggie does not lie, cheat, or steal, or tolerate those who do."

The Aggie Code of Honor is an effort to purify the aims of all Texas A&M men and women toward a high code of ethics and personal dignity. This code also applies in the classroom. For most, living under this code will be no problem, as it asks nothing of a person that is beyond reason. The Aggie code of honor and the scholastic dishonesty section in the TAMUG University Rules will be the standard upon which scholastic integrity is maintained in MARB 437. Refer to the Honor Council Rules and Procedures at [http://www.tamug.edu/HonorSystem](http://www.tamug.edu/HonorSystem).

AMERICANS WITH DISABILITIES ACT (ADA) POLICY STATEMENT: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Counseling Office, Seibel Student Center, or call (409)740-4587. For additional information visit [http://www.tamug.edu/counsel/Disabilities.html](http://www.tamug.edu/counsel/Disabilities.html).

STATEMENT ON THE FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA): FERPA is a federal law designed to protect the privacy of educational records by limiting access to these records, to establish the right of students to inspect and review their educational records and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings. To obtain a listing of directory information or to place a hold on any or all of this information, please consult the Admissions & Records Office. Items that can never be identified as public information are a student’s social security number or institutional identification number, citizenship, gender, grades, GPR or class schedule. All efforts will be made in this class to protect your privacy and to ensure confidential treatment of information associated with or generated by your participation in the class.

STATEMENT ON COURSE EVALUATIONS: The PICA (Personalized Instructor/Course Appraisal) is an online course evaluation for Texas A&M. We highly encourage you to complete an evaluation for each course on your schedule. Student input is a critical component used to improve curriculum and teaching. Each faculty member values your input to improve his/her methodology. Your comments can also significantly impact the mix and membership of faculty. The PICA website is available at [http://pica.tamu.edu](http://pica.tamu.edu) or your Howdy portal, or by scanning:
Texas A&M University
Departmental Request for a Change in Course
Undergraduate + Graduate + Professional
Submit original form and attachments

Form Instructions:
1. Course request type: [ ] Undergraduate [ ] Graduate [ ] First Professional (MD, JD, PharmD, DVM)
2. Request submitted by (Department or Program Name): Marine Sciences
3. Course prefix, number and complete title of course: MARS 101 Marine Science Matters

4. Change requested:
   a. Prerequisite(s): From: ____________________________ To: ____________________________
   b. Withdrawal (reason):
   c. Cross-list with:

   Cross-listed courses require the signature of both department heads.

   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.

   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course? [ ] Yes [ ] No
6. If grade type is changing for existing course, indicate the new grade type: [ ] Grade [ ] S/U [ ] P/F (CLMU)
7. If this course will be stacked, please indicate the course number of the stacked course:
8. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-controls/export-control-basics-for-distance-education).
9. Complete current course title and current catalog course description:
   101. INTRODUCTION TO MARINE SCIENCES. (1-0). Credit 1. A non-technical introduction to the field of marine sciences, including biology, ocean activities, and marine industries. Course includes lectures, seminars, outside speakers, and industrial contacts.

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
    101. MARINE SCIENCE MATTERS. (1-0). Credit 1. A non-technical introduction to the field of marine sciences, including biology, ocean activities, and marine industries. Course includes lectures, seminars, outside speakers, and industrial contacts.

11. a. As currently in course inventory:
    Prefix: MARS
    Course # 101
    Title (excluding punctuation): INTRODUCTION TO MARINE SCIENCE
    Lect. 1.00 Lab 0.00 Other 0.00 SCHR 1.00 CIP and Fund Code 3032010002 Admin. Unit 1810 Level 0 1 0 2 9 8 1
    b. Change to:
    Prefix: MARS
    Course # 101
    Title (excluding punctuation): MARINE SCIENCE MATTERS
    Lect. 1.00 Lab 0.00 Other 0.00 SCHR 1.00 CIP and Fund Code 3032010002 Admin. Unit 1810 Level 16 - 17 0 1 0 2 9 8
    Approval recommended by: [Signature]
    Department Head or Program Chair (Type Name & Sign) Date

    Chair, College Review Committee Date

    Department Head or Program Chair (Type Name & Sign) Date:
    (If cross-listed course)

    Date of College

    Submitted to Coordinating Board by:
    Chair, GC or UCC Date

    Associate Director, Curricular Services Date

    Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services—08/14
MARS 101 Marine Science Matters

The primary change to this course is the name change with an updated description, to make it a more interesting title and to fit with the use of this course as a freshman experience for both marine science and ocean and coastal resources majors. It has not been required in either degree program in the past, but has been added to both degree programs in these changes. The addition of a vessel trip as a part of the course will enhance the opportunity to bring the students out to the environment they are studying.
Texas A&M University

Departmental Request for a Change in Course
Undergraduate + Graduate + Professional

Submit original form and attachments

1. Course request type: ☑ Undergraduate ☐ Graduate ☐ First Professional (DVM, MD, JD, Ph.D., DPA)

2. Request submitted by (Department or Program Name): Marine Sciences

3. Course prefix, number and complete title of course: MARS 303 Computing and Data Display

4. Change requested
   a. Prerequisite(s): From: To:
   b. Withdrawal (reason):
   c. Cross-list with:
   d. Change in course title and description:
      Enter current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course? ☑ Yes ☐ No

6. If grade type is changing for existing course, indicate the new grade type: ☐ Grade ☑ S/U ☐ P/F (C/H/D)

7. If this course will be stacked, please indicate the course number of the stacked course:

8. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://oer.tamu.edu/resources/export-control-export-controle-basics-for-distance-education).

9. Complete current course title and current catalog course description:
   303. INTRODUCTION TO COMPUTING AND DATA DISPLAY (2-2) Credit 3. The purpose of this course is to introduce the student to the elements of programming and data display primarily through the MATLAB computing environment. Students will also be exposed to the FORTRAN programming language and the UNIX operating system. Prerequisite: Jr or Sr classification or approval of instructor.

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words): 303. COMPUTING AND DATA DISPLAY (2-2) Credit 3. Elements of programming and data display primarily through the MATLAB computing environment; includes an introduction to statistics and hypothesis testing with MATLAB. Prerequisite: Jr or Sr classification or approval of Instructor.

11. a. As currently in course inventory:

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Approval recommended by:

[Signature]
Department Head or Program Chair (Type Name & Sign)
Date 4/27/15

Chair, College Review Committee
Date

Data of College
[Signature]
Department Head or Program Chair (Type Name & Sign)
Date

Submitted to Coordinating Board by:

[Signature]
Chair, GC or UCC
Date

Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8301 or sandra.williams@tamu.edu.
Curricular Services - 08/14
MARS 303 Computing and Data Display

The first change is to take the word introduction out of the title since this is a junior level course. Some major changes to the course include taking FORTRAN out and putting in some statistics, all in the context of programming with MATLAB, which was already a part of the course. This software is heavily utilized by scientists and is preferred by oceanographers, and still provides an opportunity to write and debug in a procedural programming language. The exposure to some statistics is desirable for the marine science majors, especially those on the geological track.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate + Graduate + Professional
Submit original form and attachments

Form Instructions

1. Course request type:
   - [ ] Undergraduate
   - [ ] Graduate
   - [ ] First Professional (DKK, HH, JD, Ph.D, DVM)

2. Request submitted by (Department or Program Name): Marine Sciences

3. Course prefix, number and complete title of course:
   MARS 410 Introduction to Physical Oceanography

4. Change requested
   - Attach a brief supporting statement for changes made to items 5-9, 11-13, and 10 below.

   a. Prerequisite(s): From: MATH 251, PHYS 208, Jr. or Sr. or approval of instructor
   - To: OCN 251, MARS 262, MATH 152, PHYS 208, Jr. or Sr. or approval of instructor
   
   b. Withdrawal (reason): 

   c. Cross-list with: 

   d. Change in course title and description. Enter complete current course title and current course description in Item 9; enter proposed course title and proposed course description in Item 10. Complete item 11a and b for a change in title.

   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course?

6. If grade type is changing for existing course, indicate the new grade type:
   - [ ] Grade
   - [ ] S/U
   - [ ] Y/F (CLAS)

7. If this course will be stacked, please indicate the course number of the stacked course:
   - [ ] I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vir.tamu.edu/resources/export-control/basics-for-distance-education).

8. Complete current course title and current catalog course description:
   MARS 410. Introduction to physical oceanography. (3-0) Credit 3. Introduction to elements of the physics of the ocean; descriptive aspects and theoretical explanations of circulation, characteristic structure, and waves.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
   MARS 410. Physical oceanography. (3-0) Credit 3. Introduction to elements of the physics of the ocean; descriptive aspects and theoretical explanations of circulation, characteristic structure, and waves.

11. a. As currently in course inventory:

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Approval recommended by

Kyeong Park

Department Head or Program Chair (Type Name & Sign) 
Date: 1/2/15

Department Chair or Program Chair (Type Name & Sign) 
Date: 10/2/15

Submitted to Coordinating Board by:

Chair, GC or UCC

Date: 

Effective Date: 

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu

Curricular Services - 08/14
MARS 410 Physical Oceanography

One change is to remove the word introduction from this senior level course. Also the prerequisites are changed to include OCNG 251, MARS 252 and to a lower math requirement, MATH 152 (from MATH 251). It is desirable to have the students take the introductory oceanography course and laboratory prior to the upper level oceanography courses. Also the Marine Science-License Option students are not required to take MATH 251 but they are required to take MARS 410. This change then improves internal consistency.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate • Graduate • Professional
• Submit original form and attachments •

Form Instructions

1. Course request type: 
   ☑ Undergraduate  ☐ Graduate  ☐ First Professional (DVM, MD, JD, Ph.D, DVM)
2. Request submitted by (Department or Program Name): 
   Marine Sciences
3. Course prefix, number and complete title of course: 
   MARS 430 Geological Oceanography-Plate Tectonics

4. Change requested
   a. Prerequisite(s): From: GEOL 104, Jr or Sr classification or approval of instructor
   To: GEOL 101, OCNG 251, Jr or Sr classification or approval of instructor
   b. Withdrawal (reason): 
   c. Cross-list with:

5. Is this an existing core curriculum course? 
   ☐ Yes  ☑ No

6. If grade type is changing for existing course, indicate the new grade type: 
   ☐ Grade  ☑ S/U  ☐ P/F (200)

7. If this course will be stacked, please indicate the course number of the stacked course:
   ☐ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (https://pr.tamu.edu/resources/export-control/FAQ-for-Distance-Education).

8. Complete current course title and current catalog course description:
   430. Geological Oceanography - Plate Tectonics (3-0) Credit 3. Understanding the complex interactions of the earth system and the critical role that geological oceanography plays in these interactions, specifically the plate tectonic aspects of geological oceanography.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

10. As currently in course inventory:

Prefix  Course #: Title (excluding punctuation)
MARS 430   GEOG OCNGL PLATE TECTONIC

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MARS 430   GEOG OCNGL PLATE TECTONIC

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Approval recommended by:
Kyeong Park

Department Head or Program Chair (Type Name & Sign) Date

Department Head or Program Chair (Type Name & Sign) (If cross-listed course) Date

Submitted to Coordinating Board by:

Chair, GC or UCCE Date

Associate Director, Curricular Services Date

Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 06/14
MARS 430 Geological Oceanography-Plate Tectonics

One change is to remove the word introduction from this senior level course. Also the prerequisites are changed to include OCNG 251. It is desirable to have the students take the introductory oceanography course prior to the upper level oceanography courses. The other prerequisite, GEOL 104, is changed to GEOL 101 to be consistent with that change in the curricula. GEOL 101 is a core science and GEOL 104 is not.
Texas A&M University  
Departmental Request for a Change in Course  
Undergraduate • Graduate • Professional  
Submit original form and attachments  

Form Instructions:  
1. Course request type:  
   ☑ Undergraduate  ☐ Graduate  ☐ First Professional (MDS, MD, JD, Ph.D., DVM)  

2. Request submitted by: (Department or Program Name):  
   Marine Sciences  

3. Course prefix, number and complete title of course:  
   MARS 431 Geological Oceanography-Earth's Climate  

4. Change requested:  
   a. Prerequisite(s):  
      From: GEOL 104, jr or sr classification or approval of instructor  
      To: GEOL 101, OCNG 251, jr or sr classification or approval of instructor  
   c. Cross-list with:  

   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete items 11a and b for a change in title.  
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.  

5. Is this an existing core curriculum course?  
   ☑ Yes  ☐ No  

6. If grade type is changing for existing course, indicate the new grade type:  
   ☑ Grade  ☐ S/U  ☐ P/F (CIPAD)  

7. If this course will be stacked, please indicate the course number of the stacked course:  
   ☑  I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://prc.tamu.edu/resource/export-control-basics-for-distance-education).  

8. Complete current course title and current catalog course description:  
   431. Geological Oceanography - Earth's Climate (3-0) Credit 3. Understanding the complex interactions of the earth system and the critical role that geological oceanography plays in these interactions, specifically the paleoceanographic/climate change aspects of geological oceanography.  

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words):  

11. a. As currently in course inventory:  

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   Approval recommended by:  
   Kyong Park  
   Date: 10/29/15  
   Department Head or Program Chair (Type Name & Sign)  
   Date: 10/30/15  
   Chair, College Review Committee  
   Date: 10/30/15  

   Submitted to Coordinating Board by:  
   Date:  
   Associate Director, Curricular Services  
   Date:  
   Effective Date:  

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.  
Curricular Services – 08/14
MARS 431 Geological Oceanography-Earth's Climate

One change is to remove the word introduction from this senior level course. Also the prerequisites are changed to include OCNG 251. It is desirable to have the students take the introductory oceanography course prior to the upper level oceanography courses. The other prerequisite, GEOL 104, is changed to GEOL 101 to be consistent with that change in the curricula. GEOL 101 is a core science and GEOL 104 is not.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate + Graduate + Professional
Submit original form and attachments.

1. Course request type:  ☑ Undergraduate  ☐ Graduate  ☐ First Professional (MD, JD, PharmD, DVI)

2. Request submitted by (Department or Program Name): Marine Sciences

3. Course prefix, number, and complete title of course: MARS 440 Chemical Oceanography

4. Change requested: CHEM 102, Jr or Sr classification or approval of
   a. Prerequisite(s): From: CHEM 102, OCNG 251, Jr or Sr classification or approval of
   b. Withdrawal (reason): 
   c. Cross-list with: 
   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course?  ☑ Yes  ☐ No

6. If grade type is changing for existing course, indicate the new grade type:  ☑ Grade  ☐ S/U  ☐ P/F "clear"

7. If this course will be stacked, please indicate the course number of the stacked course:  ☐

8. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://texas.aem.edu/resources/faq-partner-control/export-control-distance-education).

9. Complete current course title and current catalog course description:
   440. INTRODUCTION TO Chemical Oceanography. (3-0) Credit 3. Introduction to chemical processes in the marine environment. Composition of sea salt, chemical specification of dissolved material in the ocean. Biogeochemistry of oxygen, major nutrients, and trace metals in the surface and deep ocean. Formation, chemical composition, and alteration of detrital material and marine sediments. Simple models which relate ocean chemistry to the circulation of identifiable masses of water. Radioisotopes and stable isotopes in chemical

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
    440. Chemical Oceanography. (3-0) Credit 3. Composition of sea salt and dissolved material in the ocean; biogeochemistry and measurements of oxygen, nutrient and other major elements, trace metals, and radiocarbon; formation, composition, and alteration of detrital material and marine sediments and other chemical processes; simple models relating ocean chemistry to the circulation of masses of water. Prerequisites: CHEM 102, OCNG 251, Jr or Sr classification or approval of instructor.

11. a. As currently in course inventory:
    Prefix  Course #  Title (excluding punctuation)
    MARS  440  INTRO TO CHEMICAL OCEANOGRAPHY
    Lect.  Lab  Other  SCH  CIP and Fund Code  Admin. Unit  FICE Code  Level
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    b. Change to:
    Prefix  Course #  Title (excluding punctuation)
    MARS  440  CHEMICAL OCEANOGRAPHY
    Lect.  Lab  Other  SCH  CIP and Fund Code  Admin. Unit  Acad. Year  FICE Code  Level
    3.00  0.00  0.00  3.00  4006070002  1810  61 17 01 0 2 9 8

Approval recommended by:  
Department Head or Program Chair (Type Name & Sign)  Date

Date

Department Head or Program Chair (Type Name & Sign)  Date
(if cross-listed course)

Date

Submitted to Coordinating Board by:  
Chair, GC or UCC  Date

Date

Associate Director, Curricular Services  
Date

Effective Date  

Questions regarding this form should be directed to Sandra Williams at 845-2801 or sandra.williams@tamu.edu.
Curricular Services - 08/14
MARS 440 Chemical Oceanography

One change is to remove the word introduction from this senior level course. Also the prerequisites are changed to include OCNG 251. It is desirable to have the students take the introductory oceanography course prior to the upper level oceanography courses. The catalog description was changed slightly to better reflect the currently preferred style.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate + Graduate + Professional
• Submit original form and attachments •

Form Instructions

1. Course request type: □ Undergraduate □ Graduate □ First Professional (DVM, MD, DDS, PharmD, DPA)
2. Request submitted by (Department or Program Name): Select or Type Department/Program Name
3. Course prefix, number and complete title of course: MARS 460 Capstone Undergraduate Research Experience
4. Change requested
   a. Prerequisite(s): From: □ Jr or Sr class or approval of instructor To: concurrent enrollment in MARS 481, Jr or Sr class or approval of instructor
   b. Withdrawal (reason):
   c. Cross-list with:
   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b. Attach a course syllabus.
5. Is this an existing core curriculum course?
   □ Yes □ No
6. If grade type is changing for existing course, indicate the new grade type: □ Grade □ S/U □ P/F (X3.0)
7. If this course will be crossed, please indicate the course number of the crossed course:
   □ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vstf.tamu.edu/resources/exec-ports/controls/export-basics-for-distance-education).
8. Complete current course title and current catalog course description:
   460. Modern Oceanographic Methods. (3-6) Credit 5. This course will provide students with hands-on experience with modern oceanographic tools and data analysis techniques. Focus is on the four major oceanographic disciplines, i.e., geology, chemistry, physics and biology. Students will receive the necessary theoretical background, collect and analyze their own data and learn how to prepare scientific reports summarizing their work.
9. Course title and proposed catalog course description:
10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):
    a. As currently in course inventory:
       Prefix Course # Title (excluding punctuation)
       MARS 460 Modern Oceanographic Methods
       Lect. Lab Other SCH CIP and Fund Code Admin. Unit FICE Code Level
       3.00 8.00 0.00 5.00 3032010002 1810 0 1 0 2 9 8 4
   b. Change to:
       Prefix Course # Title (excluding punctuation)
       MARS 480 Capstone Undergraduate Res Exp I
       Lect. Lab Other SCH CIP and Fund Code Admin. Unit Acad. Year FICE Code
       1.00 0.00 0.00 1.00 3032010002 1810 16 - 17 0 1 0 2 9 8
       Approval recommended by:
       Department Head or Program Chair (Type Name & Sign) Date
       Chair, College Review Committee Date
       Department Head or Program Chair (Type Name & Sign) (If cross-listed course) Date
       Dean of College Date
       Submitted to Coordinating Board by:
       Chair, GC or UCC Date
       Associate Director, Curricular Services Date
       Effective Date

Questions regarding this form should be directed to Stedem Williams at 845-8201 or stedem.williams@tamu.edu. Curricular Services – 08/14
MARS 460 - Fall 2016
Capstone Undergraduate Research Experience I
Lecture: TBA (time and place)
Professor: Dr. Tim Dellapenna, dellapet@tamug.edu
Office: OCSB 341
Telephone: 409-740-4952
Office Hours: by appointment

This course is part of the MARS Capstone Undergraduate Research Experience (MARS-CURE).
The MARS-CURE includes MARS 460, 461 and two semesters of MARS 491. This class focuses on

Learning Outcomes:
- Describe the process for setting up and organizing a research project
- Design and execute research experiments
- Develop experimental methods
- Interpret and relate experimental results

Course Description and Prerequisite—Methodology for research outlines, organization and strategies; research ethics, writing and presentation of results. Concurrent enrollment in MARS 491, senior standing or permission of the instructor (note, additional prerequisites may be required by faculty mentors, as related to the nature of their 491 projects)

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<tr>
<td>1</td>
<td>Introduction- Course overview- selection of faculty mentors</td>
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<td>2</td>
<td>Research proposal development</td>
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<td>3</td>
<td>Laboratory and Field Safety</td>
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<td>4</td>
<td>Library and other digital resources</td>
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<td>5</td>
<td>Research proposal Presentation</td>
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<td>Peer Review in Science</td>
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<td>Peer Review in Science (continued)</td>
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<td>8</td>
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<td>Scientific Ethics (continued)</td>
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<td>11</td>
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<tr>
<td>14</td>
<td>Guest Faculty Lecture</td>
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<tr>
<td>15</td>
<td>Final project update for semester and project plans for following semester</td>
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</tbody>
</table>

Supplemental readings will be posted on the class website

Because this is a field class, the schedule is very fluid and will be changed according to a variety of factors, including weather, availability of vessels and equipment, and class progress.

-----------------------------
Research Projects:
Each member of the class will work on an individual research project. Some of you will be
working on related projects and if this is the case, all project data will be made available to each
participant via Blackboard or other electronic resources. Each student will be responsible for
writing their own proposal and each individual member will be responsible for writing their own
final paper (based off of community data sets as well as their own data, depending on the
project). In addition, each student will be responsible for writing an abstract and presenting a
poster at the TAMUG Research Symposium in late April.

Each project will be a major undertaking but will be designed to be something that can be
accomplished in two semesters. Please note, unlike other classes, many of these projects are a
component of an on-going research project in your mentor’s research lab and may become part
of a peer reviewed publication. As such, we are depending on you to provide professional work
and will not tolerate anything less in both your final product and your effort. Depending on your
contribution and how your effort fits into the larger project, you may be included as a co-author
of the papers and abstracts.

Class design- the majority of this class will focus on your projects and the lab will be open for
you to work during non-class hours. Your projects will take up more than the designated class
time slots and you will need to allot additional time for your lab work on your own. Note, for
each 491 credit hour, you will be expected to work a minimum of 3 hours per week on your
project; that means at least 6 hours per week on your own. You will be responsible for
scheduling the work on your project and negotiating this schedule with your research mentor and
their respective lab members. NOTE- WE ARE ALL BUSY PEOPLE AND WILL NOT
TOLERATE NO-SHOWS OR OTHER UNPROFESSIONAL BEHAVIOR.

Grading
Proposal presentation 30%
Proposal updates 40%
Participation 30%
Grade Distribution: A=90-100%, B=80-89.9%, C=70-79.9%, D=60-69.9%, F=<60%

EXPECTATIONS OF THE PROFESSOR
This course is not an introductory marine science class, it is an advanced, 400 level Marine
Sciences class. As such, I have the expectation that upon entering my class the student have a
basic understanding of marine science. The instructor will not be providing a review of this
material. This class is a professional research class. The professor expects students to be on-
time with assignments and for assignments to be presented in an organized and professional
format and manner and that when you make presentations you are dressed professionally.
THE AMERICANS WITH DISABILITIES ACT
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Counseling Office, Seibel Student Center, or call (409)740-4587. For additional information visit http://www.tamug.edu/counsel/Disabilities.html.

ACADEMIC DISHONESTY
For many years Aggies have followed a Code of Honor, which is stated in this very simple verse: "Aggies do not lie, cheat, or steal, nor do they tolerate those who do." As such, it is the responsibility of students and faculty members to help maintain scholastic integrity at the University by refusing to participate in or tolerate scholastic dishonesty. The Aggie Honor and the Scholastic Dishonesty sections in the TAMUG University Rules handbook will be the standard upon which scholastic integrity is maintained in this course. For additional information: http://www.tamug.edu/honorsystem/. In this class there will be zero tolerance for cheating or dishonesty.

STATEMENT ON ABSENCES
Information concerning absences is contained in the University Student Rules Section 7, http://www.tamug.edu/stulife/Academic%20Rules/Rule%207.pdf. The University views class attendance as an individual student responsibility. All students are expected to attend class and to complete all assignments. Please consult the University Student Rules for reasons for excused absences, detailed procedures and deadlines as well as student grievance procedures (Part III, Section 45). An excused absence does not obviate the need to learn the material missed.
Memo to students on the mechanics and structure of the MARS 460-461 and linked 491 MARS Capstone Undergraduate Research Experience.

The Marine Science-Capstone Undergraduate Research Experience (MARS-CURE) is required of all Marine Science (MARS) majors. The MARS-CURE consists of a two semester, research-based sequence of classes, consisting of MARS 460, 461 and enrollment during both Fall and Spring of MARS 491 (2-credits each). In the Fall the students will register for MARS 460. In addition, the student will select a faculty mentor and register with their respective mentor or two credits each for Fall and Spring in MARS 491. Currently, the Marine Science Research Faculty are: Drs. Amon, Anis, Dellapenna, Kaiser, Santschi, van Hengstum, Park, Wang. In addition, if there is a different mentor that wishes to work with the student, for example from the MARB Department, than, with permission of the MARS 460 instructor, they may select this mentor for the entire sequence.

During the Fall semester, the focus will be on developing a research project, research proposal, and beginning the research. The Spring Semester will focus on completing the research projects and presenting their research at the TAMUG Research Symposium as a poster, as well as giving an oral presentation at the Annual MARS Dept. Retreat, as well as writing a final paper.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate + Graduate + Professional
Submit original form and attachments

Form Instructions
1. Course request type:  ☑️ Undergraduate  ☐ Graduate  ☐ First Professional (DO, MD, JD, Ph.D., DPA)
2. Request submitted by (Department or Program Name):  Marine Transportation
3. Course prefix, number and complete title of course:  MART 202 Naval Architecture II

4. Change requested
   a. Prerequisite(s): From:  
   b. Withdrawal (reason):  
   c. Cross-list with:  

   Consolidated courses require the signature of both department heads.

d. Change in course title and description. Enter complete current course title and current course description in Item 9; enter proposed course title and proposed course description in Item 10. Complete Items 9a and 9b for a change in title.

   a. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete Items 9a and 9b. Attach a course syllabus.

5. Is this an existing core curriculum course?  ☑️ Yes  ☐ No
6. If grade type is changing for existing course, indicate the new grade type:  ☐ Grade  ☑️ S/U  ☐ E/F (CLAD)
7. If this course will be stacked, please indicate the course number of the stacked course:
   I certify that I have reviewed the FAQ for Request Control Notices for Distance Education (http://wrp.tamu.edu/resources/export control/export-control-notices-for-distance-education).

9. Complete current course title and current catalog course description:

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

11. a. As currently in course inventory:

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b. Change to:

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Approved recommended by:  
Department Chair or Program Chair (Type Name & Sign)  
Date  
Chair, College Admissions Committee  
Date  
Department Chair or Program Chair (Type Name & Sign)  
Date  
Dean of College  
Date  
Submitted to Coordinating Board by:  
Chair, GC or UCC  
Date  
Associate Director, Curricular Services  
Date  
Effective Date

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra-williams@tamu.edu
Curricular Services - 08/14
To: UCC

From: Capt. Augusta Roth, Department Head of Marine Transportation, Texas A&M Maritime Academy at Galveston

Date: October 26, 2015

RE: MART 202 Naval Architecture II 3-0 to 2-2

MART 202 Naval Architecture II is requesting a change from 3-0 to 2-2. The course is a math based course instructing future deck officers aboard waterborne vessels to determine vessel’s stability. This course requires more time to fully explain the process to work stability math problems. Changing the 3rd hour of lecture to a 2 hour lab will provide students with ample time to ask questions during explanation of problems, plus allow time for students to be tested on the more complex long forms required to be proficient in determining ship stability.
Instructor: Capt. James P. Cleary  
E-mail: clearyj@tamug.edu  
Office: KIRK Bldg.’3001’ Room 109  
Phone: 409-741-4031

Office Hours:

Lecture: Time: (2 one hour lectures)  
Lab: Time: (1 two hour lab)

Course Description: Ship’s line drawing and form calculations; principles of flotation and buoyancy; inclining experiments; free surface; transverse stability; trim and longitudinal stability; motion of ship in waves, seaway and dynamic loads; ship structure tests. Labs focus on manual and computer-based stability and trim calculations using stability calculation formulas and standard industry-based software.

Prerequisite: MART 200 or NAUT 200, MART 201.

Student Learning Outcomes: Upon completion of this course the student will demonstrate a working knowledge of stability, trim and stress tables, diagrams and stress calculating equipment. Students will find and calculate centers of gravity, metacenters, centers of buoyancy, and metacentric heights (GM) of vessels. Students will: evaluate how to safely load and unload a normal vessel as well as a vessel in a damaged condition, demonstrate the fundamental actions to be taken in the event of a partial loss of intact buoyancy and describe the importance of maintenance/restoration of watertight integrity.

In addition: all students will be assessed on their knowledge, understanding, and proficiency of the following specific STCW (Standards of Training, Certification, and Watchkeeping) tasks as per USCG NVIC 12-14:


10.1.A: Monitor the loading, stowage, securing and unloading of cargoes and their care during the voyage. Knowledge of the effect of cargo including heavy lifts on the seaworthiness and stability of the ship.

10.2.A: Monitor the loading, stowage, securing and unloading of cargoes and their care during the voyage. Knowledge of safe handling, stowage and securing of cargoes including dangerous, hazardous and harmful cargoes and their effect on the safety of life and of the ship.

(As per National Examination Topics 46 CFR 11.910 Table 2)

Text, References, & Materials – Required

- Stability and Trim for the Ship’s Officer, George (4th Edition)
- Stability Data Reference Book (Merchant Marine Deck Examination Reference Material)
- Non-programmable Calculator with Trig Functions

Reference:
Grades

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<tr>
<td>Exam 3</td>
<td>30 %</td>
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<tr>
<td>STCW Assessments (3 @ 10% each)</td>
<td>30 %</td>
</tr>
</tbody>
</table>

A = 90 – 100%, B = 80 – 89%, C = 70 – 79%, D = 60 – 69%, F = below 60%.

Students must earn a grade of C (70%) or better as per USCG/STCW License Course!

All STCW Assessments must be passed with a grade of 70% or better. If you score below 70%, you will be permitted to re-take the assessment once, but the first grade will be used as part of your class grade.

Failure to obtain 70% for the course, or assessments, will require you to re-take the class!

Electronic devices of any kind (laptops, PDAs, tape recorders, etc.) are not allowed in the classroom. All cell/smart phones are to be turned off/vibrate before entry to the classroom.

Statement on Absences: Information concerning absences is contained in the University Student Rules Section 7. The University views class attendance as an individual student responsibility. All students are expected to attend class and to complete all assignments. Please consult the University Student Rules for reasons for excused absences, detailed procedures and deadlines as well as student grievance procedures (Part III, Section 45).

ATTENDANCE (100%) IS MANDATORY FOR MART 202 due to STCW requirements.

In other words; you are expected to attend each and every class with no missed classes! Any unexcused absences may result in an “F” which will cause you to re-take the class.

In accordance to STCW, all work missed due to excused absences must be made up within one week of absence!! This includes contact hours.
http://www.tamug.edu/stulife/Academic_Rules/7_Attendance.html

If you are absent from class for any reason:

1. Send me an e-mail with a short explanation of why you are not in class. (clearyj@tamug.edu)

2. Fill out the “Explanatory Statement for Absence from Class” form completely and hand it to me the very next class after absence (or sooner). The form can be found in class materials on the e-learning site.

All students are expected to wear the proper and complete uniform for each class!

MART 202 Course Outline (Subject to Change) SPRING 2016

WK 1: Read Ch. 1 & 2 - What is stability? Introduction

WK 2: Read Ch. 2 & 3 - Hull Forms & Calculation of KG (STCW Topic)

WK 3: Read Ch. 4 - Static Equilibrium and Stability. Finding KM (STCW Topic)

WK 4: Read Ch. 5- Static Equilibrium and Stability. Finding GM (STCW Topic)

WK 5: Read Ch. 6- The Inclining Experiment & Calculating GZ for Small Angles (STCW Topic) Exam #1 (Ch. 1 – 5)

WK 6: Read Ch. 7 - Stability at Large Angles of Inclination & Corrections to Stability Curves
WK 7: Read Ch. 9 - Trim and Longitudinal Stability (STCW Topic)

WK 8: Read Ch. 9 - Trim and Longitudinal Stability (STCW Topic)
Read Ch. 8 - Flooding and Subdivision. Free Surface Effect (STCW Topic)

WK 9: Read Ch. 10 - Longitudinal Hull Strength (STCW Topic)

WK 10: Read Ch. 12 - Ship Strength and Damage Stability (STCW Topic)
Exam #2 (Ch. 6, 7, 8, & 9)

WK 11: Read Ch. 13 - Practical Stability & Trim Considerations
STCW Assessment 1 Friday

WK 12: Read Ch. 13 - Practical Stability & Trim Considerations
STCW Assessment 2 Friday

WK 13: Read Ch. 14 - Stability Requirements for Vessels Loading Bulk Grain

WK 14: Read Ch. 14 - Stability Requirements for Vessels Loading Bulk Grain
STCW Assessment 3 Friday

WK 15: Exam #3 (Ch. 10, 12, 13, & 14)

Scholastic Dishonesty: For many years Aggies have followed a Code of Honor: "Aggies do not lie, cheat, or steal, nor do they tolerate those who do." As such, it is the responsibility of students and faculty members to help maintain scholastic integrity at the University by refusing to participate in or tolerate scholastic dishonesty. The Aggie Code of Honor and the Scholastic Dishonesty sections in the TAMUG University Rules handbook will be the standard upon which scholastic integrity is maintained in this course. Academic dishonesty infractions will result in failure of this course as a minimum sanction.

Aggie Honor System: Aggie Honor Code: "An Aggie does not lie, cheat, or steal or tolerate those who do." Upon accepting admission to Texas A&M University at Galveston, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the TAMUG community from the requirements or the processes of the TAMUG Honor System. For additional information: http://www.tamu.edu/honorcode/

Americans with Disabilities Act (ADA) Policy Statement: The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Counseling Office, Seibl Student Center, or call (409)740-4587. For additional information visit http://www.tamu.edu/counsel/Disabilities.html.

Statement on the Family Educational Rights and Privacy Act (FERPA): FERPA is a federal law designed to protect the privacy of educational records by limiting access to these records, to establish the right of students to inspect and review their educational records and to provide guidelines for the correction of inaccurate and misleading data through informal and formal hearings. To obtain a listing of directory information or to place a hold on any or all of this information, please consult the Admissions & Records Office. Items that can never be identified as public information are a student's social security number or institutional identification number, citizenship, gender, grades, GPR or class schedule. All efforts will be made in this class to protect your privacy and to ensure confidential treatment of information associated with or generated by your participation in the class.

Statement on Course Evaluations
The PICA (Personalized Instructor/Course Appraisal) is an online course evaluation for Texas A&M. You are encouraged to complete an evaluation for each course on your schedule. Student input is a critical component used to improve curriculum and teaching. Each faculty member values your input to improve his/her methodology. Your comments can also significantly impact the mix and membership of faculty. The PICA website is available at http://pica.tamu.edu and the howdy portal,
Texas A&M University
Departmental Request for a Change in Course
Undergraduate + Graduate + Professional
* Submit original form and attachments *

**Form Instructions**
1. Course request type:  
   - [ ] Undergraduate
   - [ ] Graduate
   - [ ] First Professional (MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name):  
   - Marine TRANSPORTATION

3. Course prefix, number and complete title of course:  
   - MART 350 Commercial Cruise Internship

4. Change requested:
   a. Prerequisite(s): From:  
      To:  
   b. Withdrawal (reason):  
   c. Cross-list with:  
   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, credit hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course?  
   - [ ] Yes
   - [ ] No

6. If grade type is changing for existing course, indicate the new grade type:  
   - [ ] Grade
   - [ ] SU
   - [ ] P/F (CLMD)

7. If this course will be stacked, please indicate the course number of the stacked course:

8. I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.ismee.edu/resources/export-

9. Complete current course title and current catalog course description:

10. Complete proposed course title and proposed catalog course description (not to exceed 50 words):

11. a. As currently in course inventory:
   
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   b. Change to:
   
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   Approval recommended by:  
   - [signature]

   Department Head or Program Chair (Type Name & Sign)  
   - [Date]

   Chair, College Review Committee  
   - [Date]

   Department Head or Program Chair (Type Name & Sign)  
   (If cross-listed course)  
   - [Date]

   Dean of College  
   - [Date]

   Submitted to Coordinating Board by:  
   - [Chair, CC or UCC]  
   - [Date]

   Effective Date  
   - [Date]

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 08/14
To: UCC

From: Capt. Augusta Roth, Department Head of Marine Transportation, Texas A&M Maritime Academy at Galveston

Date: October 26, 2015

RE: MART 350 Grade Change to S/U

MART 350 is the Commercial Cruise Internship. This course has a written project that requires multiple tasks to be completed and written review for course completion. The project is not an exact reflection of what the student may have learned over the course. It is more reasonable to grade the course as a Satisfactory or Unsatisfactory to ensure consistency of the full evaluation.
Texas A&M University
Departmental Request for a Change in Course
Undergraduate + Graduate + Professional
Submit original form and attachments

Form Instructions

1. Course request type: ☑ Undergraduate ☐ Graduate ☐ First Professional (DOS, MD, JD, PharmD, DVM)

2. Request submitted by (Department or Program Name): Department of Liberal Studies/Maritime Studies Program

3. Course prefix, number and complete title of course: MAST 352 MARITIME CRAFTSMANSHIP

4. Change requested
   a. Prerequisite(s): From: ____________________________ To: ____________________________
   b. Withdrawal (reason): ____________________________
   c. Cross-list with: ____________________________
   d. Change in course title and description. Enter complete current course title and current course description in item 9; enter proposed course title and proposed course description in item 10. Complete item 11a and b for a change in title.
   e. Change in course number, contact hours (lab & lecture), and semester credit hours. Complete item 11a and b. Attach a course syllabus.

5. Is this an existing core curriculum course? ☐ Yes ☑ No

6. If grade type is changing for existing course, indicate the new grade type: ☐ Grade ☑ S/U ☐ P/F (CLMD)

7. If this core course will be stacked, please indicate the course number of the stacked course:
   ☑ I verify that I have reviewed the FAQ for Export Control Basics for Distance Education (http://vpr.tamu.edu/resources/export-control/basics-for-distance-education).

8. Complete current course title and current catalog course description: Maritime Craftsmanship
   An exploration of various crafts, skills and aesthetic/design used in and supporting the maritime world; hands-on activities and practical experience of various skills and processes, using traditional tools required to put a ship to sea; from carpentry to rope-making, sewing canvas sails to making blocks.

9. Complete proposed course title and proposed catalog course description (not to exceed 50 words): Crafts of the Maritime World
   An exploration of various crafts, skills and aesthetic/design used in and supporting the maritime world; hands-on activities and practical experience of various skills and processes, using traditional tools required to put a ship to sea; from carpentry to rope-making, sewing canvas sails to making blocks.

11. a. As currently in course inventory:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAST</td>
<td>352</td>
<td>MARITIME CRAFTSMANSHIP</td>
</tr>
<tr>
<td>Lect.</td>
<td>Lab</td>
<td>Other</td>
</tr>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

b. Change to:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Course #</th>
<th>Title (excluding punctuation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAST</td>
<td>352</td>
<td>CRAFTS OF MARITIME WORLD</td>
</tr>
<tr>
<td>Lect.</td>
<td>Lab</td>
<td>Other</td>
</tr>
<tr>
<td>3.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Approval recommended by:
JoAnn DiGeorgio-Lutz
Department Head or Program Chair (Type Name & Sign) Date
Chair, College Review Committee Date
Dean of College Date

Submitted to Coordinating Board by:
Chair, GC or UCC Date

Associate Director, Curricular Services

Questions regarding this form should be directed to Sandra Williams at 845-8201 or sandra.williams@tamu.edu.
Curricular Services – 08/14
Supporting Statement

CHANGES TO MAST 352

We are submitting the change of MAST 352 from the present name of "Maritime Craftsmanship" to the new name of "Crafts of the Maritime World". The reason for this change is that the new name will better reflect the redesigned curriculum for the course. In order to facilitate the addition of the course to the Core Curriculum as a Creative Arts course, the content has been broadened to include the design and production of arts and crafts associated with maritime culture. Further, the term *craftsmanship* puts the emphasis on the worker, rather than on the *craft* itself.