Course Change Request

Date Submitted: 02/05/18 4:07 pm

Viewing: MARB 617: Research Diving Methods

Last edit: 02/05/18 6:33 pm

Changes proposed by: ballr

Catalog Pages
retrieving this course

Faculty Senate Number

Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rachel Ball</td>
<td><a href="mailto:ballr@tamug.edu">ballr@tamug.edu</a></td>
<td>4097404531</td>
</tr>
</tbody>
</table>

Rationale for Course

Edit

The proposed changes are part of a routine curriculum review.

Course prefix    MARB    Course number    617
Department    Marine Biology
College/School    Galveston Campus
Academic Level    Graduate
Academic Level (alternate)    Undergraduate
Effective term    2018-2019 Galveston

Complete Course Title
Research Diving Methods

Abbreviated Course Title
RESEARCH DIVING METHODS

Catalog course description
Field experience in a wide range of research diving environments stressing dive planning and safety, buoyancy control, equipment configuration and scientific methodology in biological, physical, chemical, archaeological and geological sciences. Students will design, supervise and conduct independently developed scientific diving projects.

Prerequisites and Restrictions
MARB 616 or equivalent.

Concurrent Enrollment
No

Should catalog prerequisites / concurrent enrollment be enforced?
Yes

Enforced Prerequisites / Concurrent Enrollment

In Workflow
1. MARB Department Head
2. Curricular Services Review
3. GV Committee Preparer GR
4. GV Committee Chair GR
5. GV College Dean GR
6. GC Preparer
7. GC Chair
8. Faculty Senate Preparer
9. Faculty Senate
10. Provost II
11. President
12. Curricular Services
13. Banner

Approval Path
1. 02/05/18 4:14 pm
   Jaime Alvarado-Bremer
   (jaimab): Approved for MARB Department Head
2. 02/05/18 6:34 pm
   Sandra Williams
   (sandra-williams): Approved for Curricular Services Review
3. 02/06/18 3:48 pm
   Nicole KinSlow
   (wilkinsn): Approved for GV Committee Preparer GR
4. 02/09/18 2:46 pm
   Antonietta Quigg
   (quigg): Approved for GV Committee Chair GR
5. 02/09/18 3:30 pm
   Antonietta Quigg
   (quigg): Approved for GV College Dean GR
6. 02/16/18 12:54 pm
   Meagan Kelly
   (meagankelly): Approved for GC Preparer
7. 03/01/18 3:18 pm
   LaRhesa Johnson
   (ljohnson): Approved for GC Chair
Learning Outcomes

Meets traditional face-to-face learning outcomes.

Describe how learning outcomes are met or provide justification why they are not met.

The learning outcomes for this shortened course will be the same as for a full semester course by providing equivalent materials and rigor in a full immersion, two-week long, seven days a week field course. Methods in Scientific Diving (MARB 350/617) is a rapid, in-depth course carried out during a 15-day diving trip to north Florida. The course qualifies TAMUG Scientific Divers for a 100 ft. depth certification by completing a minimum of 16 dives and four plus hours of dive time. Students will be expected to plan and safely execute these ocean and fresh water dives under a variety of conditions including strong currents, depths approaching 100 ft., off shore boat dives in the Gulf of Mexico, drift dives in rivers, and cavern dives in the daylight illuminated portions of cave entrances. Students will be expected to conduct pre and post dive briefings as well as in-water safety checks of their own and their dive companion's gear. Dive masters and dive instructors will closely monitor students while they carry out safe diving and emergency drills involving air sharing, line following, touch contact communication and other skills. In addition, students will be responsible for the design and implement of an independent diving research project under the supervision of the course TA's and professor and will be evaluated on their resulting research paper.

Hours

Meets traditional face-to-face hours.

Describe how hours are met or provide justification why they are not met.

Course activities will begin immediately after breakfast and continue throughout the remainder of the day and often into the evening, averaging at least 8 hours per day over 15 days for a total of 120 contact hours. Per University Rule 11.03.99.M1, paragraph 2.4, the department has determined that this course as taught in a shortened form meets the same credit hour requirement as face-to-face courses taught in a long semester.
This will be a required course or an elective course for the following programs:

- Required (select program)
- Elective (select program)

## Course Syllabus

<table>
<thead>
<tr>
<th>Syllabus: Upload syllabus</th>
<th>MARB 617: Summer 18.docx</th>
</tr>
</thead>
</table>

- Letters of support or other documentation: No
- Additional information
- Reviewer Comments
- Reported to state: No
MARB 617: Methods in Research Diving Course
Syllabus

Instructor: Dr. Thomas M. Iliffe, 409 740-4454, iliffet@tamug.edu
Lab InstructorS: Lauren Ballou balloul@tamu.edu, 409 740-4875
Fernando Calderón Gutiérrez fercg12@tamu.edu, 409 740-4875

Course description: Survey of research methods and techniques using diving. Lecture and lab are designed to train students in safe, efficient use of diving to collect and record data underwater for studies primarily in biology, geology, and archaeology. Students can receive certification as NAUI Master Diver and NSS-CDS Cavern Diver. In addition, graduate student will be responsible for designing and overseeing a research project to be conducted by undergraduate students under the supervision of the course TA’s and professor.
Prerequisites: MARB 616: Introduction to Scientific Diving, completion of AAUS medical and swimming/scuba diving exams or approval of instructor and DSO.
Course venue: This intensive intersessional course will involve mandatory fieldwork in and around Panama City and Lake City, FL. Students will be required to be present for all field activities and will need to provide their own personal diving equipment in good working order. Students will check out University equipment on the first day of class and will return it on the last day. All students will utilize only University approved transportation. We expect you to behave in a professional manner at all times. The instructor will be personally responsible for grading of graduate students.
Course dates: Depart Galveston for Florida at 4:30 AM on Sun. May 13, 2018, return from Florida to Galveston on Sun. May 27 at about 8 PM.
Course Project: Students will work together in teams to design and implement a scientific diving project. The project should focus on scientific diving methodology from the fields of biological, physical, chemical, archaeological or geological sciences. Students may do their research project in freshwater, marine or cavern environments as appropriate. Students will present a final written report on this research.

Textbook: NSS Cavern Diving Workbook

Grading standards:

- Cavern diving written exam 20%
- Participation in all course activities 20%
- Diving proficiency including pre and post dive 20%
- Scientific diving project design, execution & report 40%

Americans with Disabilities Act (ADA)
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
“An Aggie does not lie, cheat, or steal, or tolerate those who do.”
For additional information please visit: http://www.tamug.edu/HonorSystem
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).

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, your Howdy portal, or by scanning:
## TENATIVE COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Th</td>
<td>10 May</td>
<td>1000</td>
<td>Dive Locker – Gear check out</td>
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<tr>
<td>Su</td>
<td>13 May</td>
<td></td>
<td>Travel Day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0430</td>
<td>Depart from Galveston</td>
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<tr>
<td></td>
<td></td>
<td>1700</td>
<td>Arrive Panama City, FL</td>
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<tr>
<td>M</td>
<td>14 May</td>
<td></td>
<td>Panama City</td>
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<tr>
<td></td>
<td></td>
<td>0800 to 1200</td>
<td>Navy Dive School Tour</td>
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<td></td>
<td></td>
<td>1300</td>
<td>Navy Experimental Diving Unit Tour</td>
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<td></td>
<td></td>
<td>1800</td>
<td>Cavern Diving Lectures</td>
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<tr>
<td>Tu</td>
<td>15 May</td>
<td></td>
<td>Panama City</td>
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<tr>
<td></td>
<td></td>
<td>0730 to 1300</td>
<td>4 hr Boat dive &gt;60’ x2</td>
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<td></td>
<td></td>
<td>1400</td>
<td>Afternoon activities</td>
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<tr>
<td></td>
<td></td>
<td>1800</td>
<td>Cavern Diving Lectures</td>
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<tr>
<td>W</td>
<td>16 May</td>
<td></td>
<td>Panama City</td>
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<tr>
<td></td>
<td></td>
<td>0730 to 1500</td>
<td>6 hr Boat dive &gt;60’ x2</td>
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<td></td>
<td></td>
<td>1600</td>
<td>Afternoon activities</td>
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<tr>
<td></td>
<td></td>
<td>1800</td>
<td>Cavern Diving Lectures</td>
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<tr>
<td>Th</td>
<td>17 May</td>
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<td>Panama City</td>
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<td></td>
<td></td>
<td>0900 to 1100</td>
<td>Man in the Sea Museum</td>
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<tr>
<td></td>
<td></td>
<td>1300 to 1500</td>
<td>Cavern Diving Lectures</td>
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<tr>
<td></td>
<td></td>
<td>1600 to 2100</td>
<td>6 hr Night Boat dive &gt;60’ x2</td>
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<td>F</td>
<td>18 May</td>
<td></td>
<td>Marianna</td>
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<tr>
<td></td>
<td></td>
<td>0800</td>
<td>St. Andrews jetties dive 30-60’ (30 min)</td>
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<td></td>
<td></td>
<td>1200</td>
<td>St. Andrews jetties dive 30-60’ (30 min)</td>
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<tr>
<td></td>
<td></td>
<td>1600</td>
<td>Drive to Marianna</td>
</tr>
<tr>
<td>Sa</td>
<td>19 May</td>
<td></td>
<td>Marianna</td>
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<tr>
<td></td>
<td></td>
<td>0800</td>
<td>NSS-CDS International Cave Diving Conference</td>
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<tr>
<td>Su</td>
<td>20 May</td>
<td></td>
<td>Marianna</td>
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<tr>
<td></td>
<td></td>
<td>0800</td>
<td>Group activities - TBD</td>
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<tr>
<td>M</td>
<td>21 May</td>
<td></td>
<td>Marianna</td>
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<tr>
<td></td>
<td></td>
<td>0730 to 1600</td>
<td>Morrison Springs – Cavern Dives x2</td>
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<td></td>
<td></td>
<td>1500</td>
<td>Afternoon activities</td>
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<td></td>
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<td>1801</td>
<td>Cavern Diving Lectures</td>
</tr>
<tr>
<td>Day</td>
<td>Date</td>
<td>Location</td>
<td>Activity</td>
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<tr>
<td>Tu</td>
<td>22 May</td>
<td>Lake City</td>
<td>0800 to 1600 Jackson Blue Spring – Cavern Dives x2, 1600 Drive to Lake City</td>
</tr>
<tr>
<td>W</td>
<td>23 May</td>
<td>Lake City</td>
<td>0800 Depart for cavern diving (Orange Grove Springs), 1300 Cavern Dive (Orange Grove Springs), 1600 Tank Fills</td>
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<tr>
<td>Th</td>
<td>24 May</td>
<td>Lake City</td>
<td>0800 Depart for cavern diving (Peacock Springs), 1300 Cavern Dive (Peacock Springs), 1600 Tank Fills</td>
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<tr>
<td>F</td>
<td>25 May</td>
<td>Lake City</td>
<td>0700 Depart for cavern diving (Ginnie Springs)</td>
</tr>
<tr>
<td>Sa</td>
<td>26 May</td>
<td>Lake City</td>
<td>0800 Swim Ichetucknee River</td>
</tr>
<tr>
<td>Su</td>
<td>27 May</td>
<td>Travel Day</td>
<td>0600 Depart for Galveston, 1800 Arrive Galveston, 1800-1900 UNPACK EVERYTHING, CLEAN EVERYTHING, WASH VEHICLES, CHECK-IN GEAR</td>
</tr>
</tbody>
</table>