SURVEY OF FORENSIC SCIENCE
BIMS 3320.001/BIMS 3320.101

Fall 2015

A. COURSE INFORMATION

B. Course number/section: BIMS 3320.001/BIMS 3320.101
   Class meeting time: T: 5:30-7:10 pm Th: 5:30-7:20pm (Lab)
   Class location: CI 122  Lab: CS 231
   Course Website:

C. INSTRUCTOR INFORMATION
   Instructor: John A. Graham
   Office location: No Office Location
   Office hours: No Office Hours
   Telephone: 361-946-7628
   e-mail: jgraham@delmar.edu
   Appointments: Students can call or email to make appointments

D. COURSE DESCRIPTION
   Catalog Course Description
   A survey of the methods and materials used to gather and process evidence at
   potential crime scenes. Students are introduced to the legal rules of evidence and
   their practical ramifications during scientific criminal investigations. In laboratory,
   students use commonly available processing items and tools to investigate a
   simulated crime scene. SMTE 0092 Biomedical Laboratory Safety Seminar is a co-
   requisite for this course. Documented completion of this safety training is required early in the semester for continued participation in this course. Safety training given during a laboratory meeting early in the semester is required for continued participation in this course.

E. PREREQUISITES AND COREQUISITES
   Prerequisites
   Noprerequisites for this course
   No corequisites for this course

F. REQUIRED TEXTBOOK(S), READINGS AND SUPPLIES
   Required Text: Criminalities: An Introduction to Forensic Science, Richard Saferstein, Ph.D.,
   Supplies: High top rubber boots
G. STUDENT LEARNING OUTCOMES AND ASSESSMENT

Assessment is a process used by instructors to help improve learning. Assessment is essential for effective learning because it provides feedback to both students and instructors. A critical step in this process is making clear the course’s student learning outcomes that describe what students are expected to learn to be successful in the course. The student learning outcomes for this course are listed below. By collecting data and sharing it with students on how well they are accomplishing these learning outcomes students can more efficiently and effectively focus their learning efforts. This information can also help instructors identify challenging areas for students and adjust their teaching approach to facilitate learning.

By the time a student graduates from Texas A&M University Corpus Christi with a Bachelor’s Degree in Forensic Science, you will be able to:

1. Use algebraic, trigonometric, and statistical methods to solve problems in the sciences and to communicate scientific information,

2. Read, write and speak clearly to peers and to the faculty (including those who are unfamiliar with the profession) about the topics in the sciences and in criminal justice that relate to forensic science,

3. Use library resource materials to learn techniques as the need arises and to keep up with new developments in the profession, and

4. Work comfortably in a forensic laboratory setting having become familiar with the duties and responsibilities of a laboratory employee.

By the end of this course, students should be able to:

- Demonstrate knowledge and understanding of a range of concepts and issues in Forensic science.
- Show proficiency in assessing, evaluating, analyzing, and synthesizing scientific information and data interpretation from a variety of sample sources.
- Demonstrate knowledge and techniques fundamental to the practice of forensic science.
- Demonstrate an understanding of ethical standards in the forensic science profession.
o Work cooperatively with others, while demonstrating an increasing understanding of how to be an independent learner.
o Communicate forensics knowledge in written and oral forms.

H. INSTRUCTIONAL METHODS AND ACTIVITIES

Lecture: Instructor in a lecture format will present text material.

Audio/Visual: Video material and PowerPoint presentations make up a portion of the presentations.

Written: Students will be required to conduct a full-field background investigation on themselves.

Group Work: Students will be broken up into teams to complete class projects.

Reteaching/Check for Understanding: Each class segment will culminate in a review of the course objectives for that particular class.

I. MAJOR COURSE REQUIREMENTS AND GRADING

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>% of FINAL GRADE</th>
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<tbody>
<tr>
<td>Exams</td>
<td>25%</td>
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<tr>
<td>Quizzes</td>
<td>10%</td>
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<tr>
<td>Homework</td>
<td>5%</td>
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<tr>
<td>Presentations</td>
<td>10%</td>
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<tr>
<td>Lab Reports</td>
<td>5%</td>
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<tr>
<td>Papers</td>
<td>35%</td>
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<tr>
<td>Other activities . . .</td>
<td>5%</td>
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J. COURSE CONTENT/SCHEDULE

[Delete and insert a list of topics (by day or week) including dates, reading assignments, homework problems, or other activities. Indicate exam dates, holidays, and any other important dates for students such as the last day to drop the class.]
| Week One          | Topic 1       | Topic 1:  
Course Overview  
Establish a Contract for Learning  
Introduction to the Criminalistics Laboratory & Equipment  
The Stereo-Master Zoom Microscope Introduction, Definition, and Scope of Forensic Science (Chapter 1)  
The Crime Scene (Chapter 2) Processing the Crime Scene Crime Scene Management and Analysis |
|-------------------|---------------|----------------------------------------------------------|
| Week Two          | Topic 2       | Topic 2:  
Physical Evidence (Chapter 3)  
Trace Evidence - Fibrous Substances and Particulate Matter Examination of Glass and Soil Evidence (Chapter 4)  
Exercise to Determine Density |
| Week Three        | Topic 3       | Topic 3:  
Organic and Inorganic Analysis (Chapters 5 & 6)  
Elements and Compounds Introduction to Forensic Instrumentation |
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<tr>
<th>Week Four</th>
<th>Topic 4</th>
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<td></td>
<td>Topic 4: Fingerprints as a Source of Identification (Chapter 14) Lab Experiments and Practical Exercise Forensic Aspects of Arson and Explosives (Chapter 11) Firearms, Tool Marks, and Other Impressions (Chapter 15) Morphology and Tool Marks 4 Tool mark Laboratory Experiments Ballistics for Firearms Crime Scene Analysis Presentations -</td>
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<tr>
<td>Exam 1</td>
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<td></td>
<td>(Chromatography, Spectrophotometry, and Neutron Activation Analysis) The Microscope (Chapter 7) Lecture/Crime Scene Reconstruction in Laboratory Microscopes and Forensic Investigations Hair, Fibers, and Paint (Chapter 8) Lab Experiments and Practical Exercise</td>
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<td>Week 5</td>
<td>Topic 5</td>
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<td>Topic 5: Lecture and Lab Experiments Research Projects Due</td>
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<td>The remaining portion of the semester will be spent applying the concepts learned in the classroom this includes crime scene search techniques, diagramming, collection and preservation of evidence and trace evidence collection</td>
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<td>Application/Synthesis</td>
<td>Topic 6</td>
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<tr>
<td>Holiday – No classes</td>
<td>Final Exam</td>
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Note: Changes in this course schedule may be necessary and will be announced to the class by the Instructor. The assignments and exams shown are directly related to the Student Learning Outcomes described in Section F.

K. COURSE POLICIES

**Attendance/Tardiness**
Please come to class on time. If you are late, enter quietly

**Late Work and Make-up Exams**
Late work will be assessed a 10% penalty if no reasonable excuse for the lateness can be provided. Make-up exams are allowed if the student has suffered any family tragedy or personal tragedy which prevents them from completing the assignments on time.

**Extra Credit**
The industry does not allow for “extra-credit” that is. Neither do I.
Cell Phone Use
Keep your texting to a minimum. No audible phone calling allowed in the classroom.

Laptop Use
Feel free to use laptops for any educational endeavor.

Food in Class
No messy food in the classroom allowed. Drinks must have caps.

Missed Exam
Exams missed may be made up with arrangement.

Participation
You are expected to participate in any group work assigned.

Others
None

L. COLLEGE AND UNIVERSITY POLICIES

- Academic Integrity (University)
  It is expected that university students will demonstrate a high level of maturity, self-direction, and ability to manage their own affairs. Students are viewed as individuals who possess the qualities of worth, dignity, and the capacity for self-direction in personal behavior.
  See Full University Policy at http://catalog.tamucc.edu/content.php?catoid=10&navoid=313#Academic_Integrity

- Classroom/Professional Behavior

- Deadline for Dropping a Course with a Grade of W (University)
  The grade of W will be assigned to any student officially dropping a course by Friday, November 6, 2015. No student is eligible to receive a W without completing the official drop process by this deadline. Visit the Office of the University Registrar for the Course Drop Form that must submitted. After November 6, 2015 a student will not be allowed to drop a course.

- Grade Appeals (College of Science and Engineering)
  As stated in University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures, a student who believes that he or she has not been held to appropriate academic standards as outlined in the class syllabus, equitable evaluation procedures, or appropriate grading, may appeal the final grade given in the course. The burden of proof is upon the student to demonstrate the appropriateness of the appeal. A student with a complaint about a grade
is encouraged to first discuss the matter with the instructor. For complete details, including the responsibilities of the parties involved in the process and the number of days allowed for completing the steps in the process, see University Procedure 13.02.99.C2.01, Student Grade Appeal Procedures. These documents are accessible through the University Rules website at http://www.tamucc.edu/provost/university_rules/index.html, and the College of Science and Engineering Grade Appeals webpage at http://sci.tamucc.edu/students/GradeAppeal.html. For assistance and/or guidance in the grade appeal process, students may contact the chair or director of the appropriate department or school, the Office of the College of Science and Engineering Dean, or the Office of the Provost.

- **Disability Services**
  Disability Services (DS) is the hub for coordinating services and accommodations to ensure accessibility and utilization of all programs for all Texas A&M University-Corpus Christi students with disabilities. Our services are designed to meet the unique educational needs of enrolled students with documented permanent or temporary disabilities. DS provides intake and consultation services to students seeking to register with our office. DS reviews an individual’s documentation of disability and assesses eligibility for services and the determination of reasonable accommodations. For more information visit the Disability Services Office at 116 Corpus Christi Hall or go to http://disabilityservices.tamucc.edu/

M. **OTHER INFORMATION**

  Be polite and respect each other.

**GENERAL DISCLAIMER**

I reserve the right to modify the information, schedule, assignments, deadlines, and course policies in this syllabus if and when necessary. I will announce such changes in a timely manner during regularly scheduled lecture periods.