

GENERAL INFORMATION			
Name: Rosa M. Fernandez/Michael Boulos	Phone #: 305-237-8451		
Course Prefix/Number: CHS-1XXX	Course Title: Forensic Science I		
Number of Credits: 4C			
Degree Type	<input type="checkbox"/> B.A. <input type="checkbox"/> B.S. <input type="checkbox"/> B.A.S <input checked="" type="checkbox"/> A.A. <input checked="" type="checkbox"/> A.S. <input type="checkbox"/> A.A.S. <input checked="" type="checkbox"/> C.C.C. <input type="checkbox"/> A.T.C. <input type="checkbox"/> C.T.C.(V.C.C.)		
Date Submitted/Revised:	Effective Year/Term:		
<input checked="" type="checkbox"/> New Course Competency <input type="checkbox"/> Revised Course Competency			
Course to be designated as a General Education course (part of the 36 hours of A.A. Gen. Ed. coursework): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
The above course links to the following Learning Outcomes: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Numbers / Data <input checked="" type="checkbox"/> Critical thinking <input type="checkbox"/> Information Literacy <input type="checkbox"/> Cultural / Global Perspective </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Social Responsibility <input type="checkbox"/> Ethical Issues <input checked="" type="checkbox"/> Computer / Technology Usage <input type="checkbox"/> Aesthetic / Creative Activities <input type="checkbox"/> Environmental Responsibility </td> </tr> </table>		<input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Numbers / Data <input checked="" type="checkbox"/> Critical thinking <input type="checkbox"/> Information Literacy <input type="checkbox"/> Cultural / Global Perspective	<input type="checkbox"/> Social Responsibility <input type="checkbox"/> Ethical Issues <input checked="" type="checkbox"/> Computer / Technology Usage <input type="checkbox"/> Aesthetic / Creative Activities <input type="checkbox"/> Environmental Responsibility
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Course Description (limit to 50 words or less, must correspond with course description on Form 102): This 4 credit introductory course addresses the basic principles and techniques of forensic science as they pertain to crime scene investigations and laboratory analysis. Students will learn about the proper use of hair, fibers, textiles, pollen, spores, DNA fingerprinting and blood analysis as evidence in forensic investigations.			
Prerequisite(s): None	Co requisite(s): None		

Course Competencies: (for further instruction/guidelines go to: <http://www.mdc.edu/asa/curriculum.asp>)

Competency 1: The student will demonstrate knowledge of observation skills used in forensic science by:

1. Defining observation in the context of forensic science.
2. Evaluating the mechanics of eyewitness testimony.
3. Differentiating between eyewitness testimony and what actually happened.
4. Practicing observation skills.

Competency 2: The student will demonstrate knowledge of how a crime scene investigation is conducted by:

1. Distinguishing between direct and circumstantial evidence.
2. Identifying the type of professionals who are involved in a crime scene investigation.
3. Demonstrating the proper technique in securing, collecting, and packaging trace evidence.

Competency 3: The student will demonstrate knowledge of how hair is used in forensic analysis by:

1. Identifying the structure of a hair.
2. Distinguishing between human and nonhuman hair.
3. Differentiating between hairs from different genetic origin.

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Reviewed By Director of Academic Programs Date: _____

Competency 4: The student will demonstrate knowledge of the proper use of fibers and textiles in a forensic investigation by:

1. Identifying and describing weave patterns of textile samples.
2. Comparing the physical characteristics of common fibers for the purposes of identification.
3. Describing the chemical characteristics of common fibers.

Competency 5: The student will demonstrate how pollen and spore evidence can be used to help solve criminal cases by:

1. Distinguishing between pollen and spores.
2. Defining a pollen “fingerprint”.
3. Identifying the different mechanisms of pollination in plants.
4. Explaining how pollen and spore evidence is collected at a crime scene.
5. Describing how pollen and spore samples are analyzed and evaluated.

Competency 6: The student will demonstrate the use of fingerprints in a forensic investigation by:

1. Reviewing the history of fingerprinting.
2. Identifying the basic types of fingerprints.
3. Determining the reliability of fingerprint identification.
4. Explaining how fingerprint evidence is collected.

Competency 7: The student will demonstrate the relevance of DNA fingerprinting by:

1. Processing crime scene evidence for DNA analysis.
2. Analyzing DNA fragments isolated by gel electrophoresis.
3. Describing DNA analysis techniques.
4. Defining VNTR (*variable number of tandem repeats*) sequence.
5. Describing how DNA fingerprinting results can be used in an investigation.

Competency 8: The student will demonstrate the relevance of blood and blood spatter analysis in a forensic investigation by:

1. Describing the composition of blood evidence.
2. Determining the blood type of a sample of blood.
3. Analyzing blood spatter.
4. Describing how blood evidence is used in forensics.

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