MASTER COURSE OUTLINE

A. CPRO 2010 Computer Forensics and Investigations

B. COURSE DESCRIPTION:

This course is an introduction to one of the newest and fastest growing fields in computer technology. Computer Forensics and Investigations presents methods required to properly conduct a computer forensics investigation. This introductory course aligns with the objectives of the International Association of Computer Investigative Specialists (IACIS) certification and provides a range of laboratory and hands-on assignments that teach the theory as well as the practical application of computer forensic investigation. This course prepares students for the industry standard CompTIA Security + and IACIS certificates. **(3 Cr – 3 lect, 0 lab)**

C. **Core Theme: Critical Thinking

D. MAJOR CONTENT AREAS:

- History of computer forensics
- Computer forensics technology
- Computer forensics investigative techniques
- E-mail auditing and recovery
- Disk-based analysis methods
- Data recovery methods
- Evidence collection and data seizure
- Duplication and preservation of digital evidence
- Defensive security strategies for governments and industry groups
- Laws and regulations pertaining to computer forensics and investigations
- Legal system and acting as an expert witness

E. GOAL TYPES, OBJECTIVES, AND OUTCOMES:

GOAL	**OBJECTIVES** **Students will be able to**	**OUTCOMES** **The student will successfully**
**Critical Thinking	imagine and seek out a variety of possible goals, assumptions, interpretations, or perspectives which can give alternative meanings or solutions to given situations or problems.	1. define the various types of forensic investigations and the methods, laws, procedures, and skills that are unique to each type of forensic investigations.
CS	describe the chain of custody as it relates to forensic evidence, the methods, policies, and procedures used to preserve the chain of	1. demonstrate an understanding of chain of custody principles and requirements.

	custody and its importance to the admissibility of evidence in criminal and civil cases.	
CS	describe the different data acquisition tools and methods, their advantages and disadvantages, and their role in preservation of digital evidence.	1. demonstrate an understanding of data acquisition by choosing the correct method depending upon unique forensic requirements.
CS	describe the difference between collecting evidence and private sector incident scenes vs. law enforcement crime scenes.	1. demonstrate an understanding of the difference between civil incidents and criminal prosecutions, and how those differences require using different procedures and methods of data acquisition and preservation.
CS	describe the importance of data validation, acquisition methods used to ensure data validation, and tools used to preserve data validation.	1. demonstrate an understanding of how data validation affects the admissibility of evidence, and how to acquire the data correctly to ensure it is not compromised.
CS	explain the guidelines for giving testimony as a technical or scientific expert witness in court.	1. demonstrate an understanding of different types of cases and how to document and prepare the evidence before giving testimony.

F. SPECIAL INFORMATION:

This course may require use of the Internet, the submission of electronically prepared documents and the use of a course management software program. Students who have a disability and need accommodations should contact the instructor or the Student Success Center at the beginning of the semester. This information will be made available in alternative format, such as Braille, large print, or current media, upon request.

G. COURSE CODING INFORMATION:

Course Code T/Class Maximum 30; Letter Grade

Revision date: 12/01/16
AASC Approval date: 1/17/17

***Riverland Community College Disciplines**	**MnTC Goal Number**
Communication (CM)	**1**
Natural Sciences (NS)	**3**
Mathematics/Logical Reasoning (MA)	**4**
History and the Social & Behavioral Sciences (SS)	**5**
Humanities and Fine Arts (HU)	**6**

**Riverland Community College Core Themes	MnTC Goal Number
Critical Thinking (CT)	**2**
Human Diversity (HD)	**7**
Global Perspective (GP)	**8**
Ethical and Civic Responsibility (EC)	**9**
People and the Environment (PE)	**10**

*These five MnTC Goals have been identified as Riverland Community College Disciplines.
** These five MnTC Goals have been identified as Riverland Community College Core Themes.
NOTE: The Minnesota Transfer Curriculum "10 Goal Areas of Emphasis" are reflected in the five required discipline areas and five core themes noted in the Riverland Community College program of study guide and/or college catalog.