

Dixie State College
St. George, Utah
CJ 4780 Digital Forensics Capstone
Spring 2015 (January 12th - May 8th)

Class Details

Credit Hours: 3.00
Location: UNV PLZ D 201 B

Class Hours: MWF 10:00 - 10:50
Prerequisite: Instructor Permission

Instructor

Gary Cantrell
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Office: UNV PLZ D 201 A
Office Hours: TR 10:30 - 3:00
(or by appointment)

Course Description

Capstone course for students seeking the digital forensics emphasis in the bachelor's degree in Criminal Justice with an emphasis in Digital Forensics or the Certificate of Completion in Computer Forensics. Involves a semester-long project overseen by a member of the faculty. Course fee required. This course does not hold GE status.

Course Materials

Various articles and white papers as chosen by the student and approved by the instructor.

Program Goals

The Criminal Justice Program helps students who are seeking a career in law/law enforcement develop the skills and motivation necessary to succeed in a career in law enforcement. Students seeking a degree(s) in Criminal Justice/Integrated Studies will receive an education in the following areas, which include, but are not limited to the following: how to examine procedural requirements for the judicial processing of criminal offenders; rights of the accused; general court procedures, trial preparation; laws of evidence; crime scene investigation; corrections; juvenile delinquency/justice; ethical decision making; how to develop writing/problem solving skills through oral argument and writing; how to develop critical thinking skills; and a general understanding of constitutional law.

Disclosure - (VERY IMPORTANT)

This course attempts to model the real world as closely as possible. In so doing, we often use real data sets obtained from cell phones, hard drives, and other digital devices. These data sets are typically obtained through donations or online through sites like EBay or Shop Goodwill. We use these datasets either by themselves or as a base for creating training sets.

Since these data sets are obtained from “the wild,” it is extremely likely they will contain explicit adult content in the form of adult pornographic materials, and explicit language. We do not have any desire to expose our students to such materials. Therefore, we attempt to perform some filtering, but it is impossible to completely eliminate all offensive material without destroying its real world aspect.

If you are not willing to view such material, we advise you not to take this course. This is a digital forensics course, and outside academics you will be repeatedly exposed to such materials.

Course Objectives

Objectives are for student to demonstrate their mastery of digital forensics at the appropriate level of someone who has completed the certificate of completion or program emphasis. Student must demonstrate they can successfully complete a project of their own design and interest, and report the results in a clear professional manner.

Submissables

Contract:

Student will present a contract within the first three weeks of the course. This contract will describe in detail the project to be carried out by the student. A project can consist of research, real case evaluation, real case re-evaluation, coding or scripting, or any other project approved by the instructor. A contract is not valid until signed by both the student and the instructor. If complications occur during the semester, a contract can be resubmitted, but may be refused. Contract details will be discussed in class.

On completion of the course instructor will compare the results of what was done with what was agreed on in the contract.

Final Paper:

Student will be required to turn a paper at the end of the semester in the form of a project report, white paper, or research paper. There will be milestones throughout the semester requiring the student to submit sections of this work. Failing to meet these milestones will effect the final grade. The format of this paper will be discussed in further detail in class.

Grading Scheme

		<u>Points</u>	<u>Grade</u>
Contract (Required)	20 pts	372 >=	A
Intro, Res, Lit Review	15 pts	360 – 371	A -
Methods	15 pts	344 – 359	B+
Timeline	10 pts	332 – 343	B
One-on-one Eval1	5 pts	320 – 331	B-
One-on-one Eval2	15 pts	303 – 319	C+
One-on-one Eval3	20 pts	292 – 302	C
Final Report	300 pts	280 – 291	C-
		< 240	F

Final Report grading will be as following (additional points can be deducted for grammar and general quality):

300	student far exceeded the instructor's expectations and contract parameters
280	student exceeded the instructor's expectations and contract parameters
260	student met 100% of the requirements of his/her contract
240	student met 90% of the requirements of his/her contract
220	student met 80% of the requirements of his/her contract
200	student met 75% of the requirements of his/her contract
180	student met 70% of the requirements of his/her contract
0	student met less than 70% of the requirements of his/her contract

Note: a requirement is not fully met until it is well and clearly documented

Note: 10% point deduction per work day for late submissions maximum deduction 50%

DSU Policies, Procedures, & Semester Dates

Click on this link - <http://www.dixie.edu/reg/syllabus/> - for comprehensive information on the Semester Dates, the Final Exam Schedule, University resources such as the library, Disability Resource Center, IT Student Help Desk, Online Writing Lab, Testing Center, Tutoring Center, and Writing Center. In addition, please review DSU policies and statements with regards to Academic Integrity, Disruptive Behavior and Absences related to university functions.

If you are a student with a medical, psychological, or learning disability or think you might have a disability and would like accommodations, contact the Disability Resource Center (652-7516) in the North Plaza. The Disability Resource Center (<http://dixie.edu/drcenter/>) will determine eligibility of the student requesting special services and determine the appropriate accommodations related to their disability.

Class Room Etiquette

As your professor, I try to maintain a comfortable and positive learning environment for each student. I do not discriminate based on age, class, sex, religion, sexuality, race or any other category, and I will not tolerate discrimination or negativity toward any group. Come and speak to me immediately if you feel there is anything I can do to better establish a positive learning environment in my classroom.

Course Outline:

Week of	Topic
Jan 12, 14, 16	Syllabus Review and Contract Discussion
Jan 21, 23	Project Descriptions and Help
Jan 26, 28, 30	Contract Draft 1 Due
Feb 2, 4, 6	Final Contract Due, Timeline Due
Feb 9, 11, 13	Lab Work
Feb 18, 20	Introduction, Research Questions, and Literary Review Draft 1 Due
Feb 23, 25, 27	Methods Due
Mar 2, 4, 6	One-on-one Progress and Timeline Evaluation 1
Mar 9-13	Spring Break
Mar 16, 18, 20	Lab Work
Mar 23, 25, 27	One-on-one Progress and Timeline Evaluation 2
Mar 30, Apr 1, 3	Lab Work
Apr 6, 8, 10	One-on-one Progress and Timeline Evaluation 3
Apr 13, 15, 17	Lab Work
Apr 20, 22, 24	Report Draft 1 Due
Apr 27, 29	Final Report Due
May 1	Final Exam 9:30 - 11:30

For other important dates including withdrawal dates and holidays see the school calendar at: <http://dixie.edu/reg/?page=calendar>