WASHTENAW COMMUNITY COLLEGE

MASTER SYLLABUS

Course Discipline Code & No: CSS 270 Title: Computer Security VII Effective Term 200901

Division Code: BCT Department Code: CISD Org #: 13400

Don't publish: ☐ College Catalog ☐ Time Schedule ☐ Web Page

Reason for Submission. Check all that apply.

- ☐ New course approval
- ■ Three-year syllabus review/Assessment report
- ■ Course change
- ☐ Reactivation of inactive course
- ☐ Inactivation (Submit this page only.)

Change information: Note all changes that are being made. Form applies only to changes noted.

- ☐ Consultation with all departments affected by this course is required.
- ☐ Course discipline code & number (was _____)*
  *Must submit inactivation form for previous course.
- ■ Course title (was Computer Forensics I)
- ■ Course description
- ■ Course objectives (minor changes)
- ☐ Credit hours (credits were: _____)
- ☐ Total Contact Hours (total contact hours were: _____)
- ☒ Distribution of contact hours (contact hours were: lecture: 40 lab 20 clinical _____ other _____)
- ■ Pre-requisite, co-requisite, or enrollment restrictions
- ☐ Change in Grading Method
- ■ Outcomes/Assessment
- ■ Objectives/Evaluation
- ☐ Other _____

Rationale for course or course change. Attach course assessment report for existing courses that are being changed.

The old course name inaccurately described the sequencing of this course. The new course name more accurately reflects the sequencing of the course in the computer security program. The prerequisites are being changed to require a more rigorous background in computer hardware repair and configuration.

Approvals Department and divisional signatures indicate that all departments affected by the course have been consulted.

Department Review by Chairperson ☐ New resources needed ☐ All relevant departments consulted

Print: James Lewis/ Neil Gudsen Faculty/Preparer Signature [signature] Date: 3-2-09

Print: Clarence Hasselbach Department Chair Signature [signature] Date: 3-3-09

Division Review by Dean

☐ Request for conditional approval

Recommendation ■ Yes ☐ No [signature] Dean's/Administrator's Signature Date 3/4/09

Curriculum Committee Review

Recommendation ☐ Tabled ☒ Yes ☐ No [signature] Curriculum Committee Chair's Signature Date 2/9/10

Vice President for Instruction Approval

[signature] Vice President's Signature Date 2-16-10

Approval ☒ Yes ☐ No ☐ Conditional

Do not write in shaded area.
Log File 3/5/09 ✓ Ecopy ☐ Banner _____ C&A Database _____ C&A Log File _____ Basic skills ☐ Contact fee ☐

Please return completed form to the Office of Curriculum & Assessment and email an electronic copy to sjohn@wccnet.edu for posting on the website.

***Complete ALL sections which apply to the course, even if changes are not being made.**

Course:	**Course title:**
CSS 270	Computer Security VII

Credit hours: 4

If variable credit, give range:

_____ to _____ credits

Contact hours per semester:

	Student	Instructor
Lecture:	60	60
Lab:	—	—
Clinical:	—	—
Practicum:	—	—
Other:	—	—
Totals:	60	60

Are lectures, labs, or clinicals offered as separate sections?

☐ Yes - lectures, labs, or clinicals are offered in separate sections

■ No - lectures, labs, or clinicals are offered in the same section

Grading options:

☐ P/NP (limited to clinical & practica)

☐ S/U (for courses numbered below 100)

■ Letter grades

Prerequisites. Select one:

■ College-level Reading & Writing

☐ Reduced Reading/Writing Scores
(Add information at Level I prerequisite)

☐ No Basic Skills Prerequisite
(College-level Reading and Writing is not required.)

In addition to Basic Skills in Reading/Writing:
Level I (enforced in Banner)

	Course	Grade	Test	Min. Score	Concurrent Enrollment (Can be taken together)	Corequisites (Must be enrolled in this class also during the same semester)
	CST 155	C			☐	
☒ and ☐ or	CSS 200	C			☐	
☒ and ☐ or	CIS 121	C			☐	
☒ and ☐ or	CNT 201	C			☐	
☒ and ☐ or	CNT 211	C			☐	

Level II (enforced by instructor on first day of class)

	Course	Grade	Test	Min. Score
☐ and ☐ or				
☐ and ☐ or				
☐ and ☐ or				

Enrollment restrictions (In addition to prerequisites, if applicable.)

☐ and ☐ or Consent required

☐ and ☐ or Admission to program required
Program: _____

☐ and ☐ or Other (please specify):
_____

Please send syllabus for transfer evaluation to:
Conditionally approved courses are not sent for evaluation.
Insert course number and title you wish the course to transfer as.

■ E.M.U. as _____

☐ U of M as _____

☐ _____ as _____

☐ _____ as _____

☐ _____ as _____

☐ _____ as _____

Course	Course title
CSS 270	Computer Security VII

Course description State the purpose and content of the course. Please limit to 500 characters.	This introductory data recovery and analysis course is the first of two courses dedicated to training individuals to conduct corporate computer incident examinations. Students will be introduced to proper procedures for the preservation, identification, extraction, documentation, reporting, acquisition, analysis and interpretation of computer data. Topics covered include evidence handling, chain of custody, collection, preservation, identification and recovery of computer data. **Important Note:** Students should be able to pass a criminal background check before taking this course. In order to practice Computer Forensics in the State of Michigan, individuals must be licensed as Private Investigators or qualify for an exemption under statutes pertaining to the licensure of Private Investigators.

Course outcomes

List skills and knowledge students will have after taking the course.

Assessment method

Indicate how student achievement in each outcome will be assessed to determine student achievement for purposes of course improvement.

Outcomes (applicable in all sections)	Assessment Methods for determining course effectiveness
1. Recognize the concepts and essential techniques used by digital recovery experts.	1. Department created final exam – short answer/multiple choice questions.
2. Conduct an examination of a computer hard drive for digital evidence.	2. Sample of laboratory reports.
3. Conduct an examination of a computer hard drive for evidence of unauthorized use of corporate computing resources.	3. Sample of laboratory reports.

Course Objectives

Indicate the objectives that support the course outcomes given above.

Course Evaluations

Indicate how instructors will determine the degree to which each objective is met for each student.

Objectives (applicable in all sections)	Evaluation Methods for determining level of student performance of objectives
Describe the handling process of a forensic analysis of a hard disk or floppy disk to include: • Securing the data without contamination or compromising the integrity • Creating a bit stream image of the original data	Short answer/multiple choice test.
Demonstrate how to acquire evidence while adhering to reasonable practices of: • Handling Chain of custody • Collection Identification Transportation Storage • Documentation of the investigation	Laboratory exercise/report.
Describe and demonstrate how to authenticate forensic evidence to include: • Documenting the scene using pictures • Creating an electronic fingerprint of acquired data using hashing techniques	Laboratory exercise/report.
Describe how and why it is necessary to create a copy of evidence data: • Forensic backup • Preservation of the original data	Short answer/multiple choice test
Describe and demonstrate how to recover data in a forensic evaluation of a hard or floppy disk to include: • Slack data • Recycle bin • Deleted data • Unallocated data	Laboratory exercise/report.

	• Swap data Describe the physical and logical disk structure: • Disk volumes • Data area Cluster size • FAT entries • Slack Provide written reports for each case image file	Short answer/multiple choice test Laboratory exercise/report.

List all new resources needed for course, including library materials.
None

Student Materials:

List examples of types		**Estimated costs**
Texts Supplemental reading Supplies Uniforms Equipment Tools Software	Corporate Computer Forensics, Power Point Manual I Huron Valley Publishing Corporate Computer Forensic and Computer Examiner Training System, Exercises and Laboratory Manual I, Huron Valley Publishing.	$ 80

Equipment/Facilities: Check all that apply. (All classrooms have overhead projectors and permanent screens.)

Check level only if the specified equipment is needed for all sections of a course.

☐ Level I classroom
Permanent screen & overhead projector

☐ Level II classroom
Level I equipment plus TV/VCR

☐ Level III classroom
Level II equipment plus data projector, computer, faculty workstation

☐ Off-Campus Sites
☐ Testing Center
☐ Computer workstations/lab
☐ ITV
☐ TV/VCR
☐ Data projector/computer
■ Other TI 241

Assessment plan:

Learning outcomes to be assessed (list from Page 3)	**Assessment tool**	**When assessment will take place (semester & year)**	**Course section(s)/other population**	**Number students to be assessed**
Recognize the concepts and essential techniques used by digital recovery experts.	Department created final exam – short answer /multiple choice questions.	First assessment in Fall of 2009. Every three years thereafter.	Minimum of two sections of CSS 270 over the three-year period.	All students in selected sections.
Conduct an examination of a computer hard drive for digital evidence	Sample of laboratory reports.	First assessment in Fall of 2009. Every three years thereafter.	Minimum of two sections of CSS 270 over the three-year period.	All students in selected sections.
Conduct an examination of a computer hard drive for evidence of unauthorized use of corporate computing resources.	Sample of laboratory reports.	First assessment in Fall of 2009. Every three years thereafter.	Minimum of two sections of CSS 270 over the three-year period.	All students in selected sections.

Scoring and analysis of assessment:

1. Indicate how the above assessment(s) will be scored and evaluated (e.g. departmentally developed rubric, external evaluation, other). Attach the rubric/scoring guide.

   Outcome 1: Scored using an answer sheet. Perform item analysis on assessment questions.
   Outcomes 2 and 3: Laboratory reports will be scored using a departmentally developed rubric.

2. Indicate the standard of success to be used for this assessment.

   At least 80% of students must score 75% or higher on the written exam.
   At least 80% of students shall have a score of 4 (of 5) or higher on laboratory reports.

3. Indicate who will score and analyze the data (data must be blind-scored).

   Assessment materials will be evaluated by the CIS Department. (Blind-scoring of all assessment).

4. Explain the process for using assessment data to improve the course.

   If the standard of success is not achieved, then the course will be evaluated.