Department Master Syllabus
Camden County College
Blackwood, New Jersey

Course Number:	**Course Title:**
CSC-106	Data Security, Privacy, and Ethics

Department/Program: Computer Science

Date of Review: December   2019

(This Department Master Syllabus has been examined by the program/department faculty members and it is decided that no revision is necessary at this time.)

Date of Revision: New Course, December   2019

(This Department Master Syllabus has been examined by the program/department faculty members and it is decided a change requiring a revision is necessary at this time.)

N.B. A change to the course materials alone (textbooks and/or supplementary materials) may not constitute a revision. Any other change to the items listed below on this form is considered a revision and requires approval by the department/program faculty at a department/program meeting and by the division at a Chairs and Coordinator meeting.

Credits: 3

Contact Hours Lecture: 3	**Lab:** 0	**Other:** 0

Prerequisites: None

Co-requisites: None

Course Description: This course is designed to fulfill the suggested guidelines for instruction by the Association of Computing Machinery (ACM) in terms of the social and professional issues relating to computing professionals. Topics covered include the history and social context of computing, professional and ethical responsibilities of workers in computing environments, risks and reliabilities of digital systems, intellectual property, computer crime, privacy, and securing information and systems, as well as economic and cultural issues created by technological advances.

Student Learning Outcomes (SLOs)

Course specific student learning outcomes
Upon completion of this course the student will be able to:

Practice ethical computing professional conduct that respects diversity, adheres to socially responsible behavior, and promotes the positive societal and cultural impacts of computing as assed by written homework reports and projects.

Explain basic security principles including general security concepts, communication security, confidentiality, authentication and other cryptography concepts, and operational and organizational security as assed by quizzes and homework projects.

Analyze risks, benefits, and costs associated with securing data in the context of individual privacy and rights as assessed by quizzes, homework papers, and projects.

Adhere to and promote security methodologies as they relate to data protection and availability as assessed by homework papers and projects.

Discuss both US and international laws surrounding information ownership, government surveillance, and public vs. private records as assessed by tests and homework papers.

As assessed by:
Tests, quizzes, homework, papers, and projects.

General Education Student Learning Outcomes

If this course has applied for General Education Elective Status the general education student learning outcomes listed below must exactly match those the sponsor has identified on the General Education Request form.
General Education SLOs:
N/A
As assessed by:
N/A

Program Learning Outcomes

List all course level student learning outcomes that interconnect to a particular program learning outcome.
Demonstrate social awareness and analyze the global impact of computing on individuals, organizations and society.

Describe the assessment of the interconnected program learning outcome(s).
Program review by department faculty

Course Outline:

I.   History and Social Context of Computing
   A. Historical perspective
   B. Networking
   C. Current computing
   D. Future trends

II. Ethical and Professional behavior of computing specialists
   A. Overview of ethical theories
   B. Comparing workable ethical theories
   C. Evaluating scenarios
   D. Professionalism in the computing field
   E. ACM Professional Code of Ethics
   F. Case studies

G. whistleblowing

III. Intellectual Property and Plagiarism

    A. Types and consequences of Plagiarism
    B. Misuse of Sources and Guidelines for proper attribution of sources
    C. Intellectual Property Rights
    D. Protection and Fair Use
    E. Restrictions
    F. Open-Source Software and Protection of Original Software

IV. Computer Reliability
    A. data entry and retrieval errors
    B. software and billing errors
    C. Major software failures – what we have learned from them
    D. Software Warranties
    E. Simulations and Software Engineering

V. Securing Digital Information Storage and Retrieval
    A. Viruses, worms, and trojan horses
    B. Hacking: destructive v. ethical
    C. Ransom ware
    D. Denial of service
    E. Current events; bitcoin and online voting

VI. Privacy
    A. Perspectives
    B. Public Information and Records
    C. Current Laws
    D. Government Surveillance and authorized (computer) wiretapping
    E. Encryption
    F. Identity Theft
    G. Data Ownership and Data Mining

VII. Economic and Cultural Issues; The Digital Divide and Net Neutrality
    A. Evidence of the Digital Divide; Nationally and Internationally
    B. Is it a problem? Why?
    C. Critiques of the Digital Divide
    D. Net Neutrality

Course Activities:

The classroom activities will include formal and informal lectures and discussion sessions. During lectures, new material, assigned readings and case studies will be examined. Students are encouraged to contribute to the discussion and to ask questions about the material.

Course Materials:

    Textbook(s):   TBD

    Supplemental Materials: TBD

    Software Licenses: NA

    Computers: will be needed by online students and used for instruction and student homework in face-to-face courses.

Course Assessment Plan

How often and by what means will the effectiveness of this course as part of the curriculum be assessed?

This course will be assessed on a set schedule determined by the CS department.