

Course Syllabus

Course Prefix, Number, and Title:

CSC 145 Information Security Fundamentals

Credits:

3 Credit Hours

University Name:

Dakota State University

Academic Term/Year:

Spring 2020

Last date to Drop and receive 100% refund:

January 22, 2020

Last date to Withdraw and earn a grade of 'W':

April 6, 2020

Course Meeting Time and Location:

D01 MWF 9:00-9:50 EH 105

Instructor Information:**Name:**

Rob Richardson

Office:

330 East Hall

Phone Number(s):

(605) 256-5099

Email Address:

Robert.Richardson@dsu.edu

Office Hours:

All held in 330 EH:

Monday 10am-12pm

Tuesday 8:15am -9:15am

Wednesday 10am-12pm

Thursday 8:15am-9:15am

Friday 10am-12pm

Other Times Available by Appointment

Approved Course Description:

Catalog Description:

Introductory course in which students explore the principles of information assurance, with emphasis on current threats and vulnerabilities to develop an information security plan to mitigate risk. Information security and assurance issues are explored, and a multidisciplinary approach is discussed that examines security policies, models, and mechanisms for confidentiality, integrity, and availability. Theory/Lab..

Additional Course Information:

Students are expected to attend and participate in all scheduled classes. In some cases discussions and hands-on activities are available only during the scheduled class period. In all cases, students are expected act ethically and to follow all applicable laws, regulations, terms of service, and license agreements. In addition, students will be expected to follow all applicable DSU and SDBOR policies.

Prerequisites:

Course Prerequisite(s):

None

Technology Skills:

Ability to navigate a personal computer operating system, word processing, Desire2Learn (D2L), and email. Students will be downloading and installing software, manipulating files and other basic tasks. Some class activities will be done at the Windows and Linux command lines. Students using Macintosh computers will need access to a Windows environment; a virtual machine will be sufficient. Students will be using the IALab and desktop virtualization. Students will need to word process most assignments. This course will be “web enhanced”; D2L will be used to deliver course materials, and assignments and tests will be submitted using it. Students will be required to use email for communication.

Course Materials:

Required Textbook(s):

Whitman, M. E. & Mattord, H.J., Principles of Information Security, © 2003 Course Technology, Boston, MA, ISBN-13: 978-1337102063

Required Supplementary Materials:

None

Optional Materials:

None

Student Support:

DSU Knowledge Base:

The DSU Knowledge Base contains links and resources to help students by providing information about the following topics: User Accounts & Passwords, Academic Tools & Resources, Software & Apps Support, WiFi & Network Access, Campus Emergency Alert System, Campus Printing, IT

Security & Safe Computing, and the Support Desk (which is there to help both on and off-campus students). The Knowledge Base can be accessed through the link below:

- [DSU Knowledge Base](#)

D2L Support for Students:

The D2L Support for Students site is designed to provide DSU students a D2L support resource center that contains user guides, tutorials, and tips for using the D2L learning environment. The D2L Support for Students site can be accessed through the link below:

- [DSU D2L Support Resources for Students](#)
- Student Success Center - <https://dsu.edu/student-life/student-success-center>
- IT Help Desk - <https://support.dsu.edu/TDClient/Home/>

Course Delivery and Instructional Methods:

This course is delivered in the classroom. Students are expected to attend class meetings; when necessary, they can attend one of the other CSC 234 sections listed on page one. This course will depend heavily on the associated D2L site. Students will access course materials, participate in discussions, access resources, and submit assignments using D2L.

Classroom Policies:

Attendance and Make-up Policy:

Regular classroom attendance and interaction through the Desire2Learn course site is required. You will have ample time to complete all deliverables, including at least one weekend. **No late work or make-up work will be accepted.** If you know in advance that you will miss class, please contact the instructor to make arrangements for submitting work early.

The final exam for this course is schedule for 8:00am-10:00am on Wednesday May 6, 2020. You must take the final during at this time or receive a score of 0. No early or late finals will be given.

Accessibility Statement:

Dakota State University strives to ensure that physical resources, as well as information and communication technologies, are accessible to users in order to provide equal access to all. If you encounter any accessibility issues, you are encouraged to immediately contact the instructor of the course and Dakota State University's ADA Office, which will work to resolve the issue as quickly as possible.

DSU's ADA Office is located in the Learning Engagement Center and can be contacted by calling 605-256-5121 or emailing dsu-ada@dsu.edu. Students seeking ADA accommodations (such as non-standard note taking or extended time and/or a quiet space taking exams and quizzes) can log into the DSU portal to access <https://portal.sdbor.edu/dsu-student/student-resources/disability-services/Pages/default.aspx/> for additional information and the link to the Disability Services Request Form. You will need to provide documentation of your disability and the ADA Coordinator must confirm the need before officially authorizing accommodations.

Academic Honesty Statement:

Cheating and other forms of academic dishonesty run contrary to the purpose of higher education and will not be tolerated in this course. Please be advised that, when the instructor suspects plagiarism, the Internet and other standard means of plagiarism detection will be used

to resolve the instructor's concerns. The South Dakota Board of Regents Student Academic Misconduct Policy can be found here: [SDBOR Policy 2.33](#).

All forms of academic dishonesty will result in in failure of the course.

Communication and Feedback:

Preferred Email Contact Method:

Please use Robert.Richardson@dsu.edu for all email communication. Do **not** use D2L email to contact the instructor.

Email Response Time:

Email response time will be 24 hours on weekdays, extending to 48 hours on weekends. Students will be notified in advance if the instructors travel schedule may add additional delays.

Feedback on Assignments:

Students will have a minimum of 7 full days to complete class activities. The instructor will provide feedback within 7 days of the due date for the activity.

Requirements for Course Interaction:

Students are expected to be polite and respectful in all communications with the instructor and with other students. Students are expected to respect the views, beliefs, and ideas of others, even when they do not personally agree with them. When differences of opinion arise, students are expected to express them in ways that do not slander, belittle, or bully others.

Guidelines of effective electronic communication (netiquette) can be found in DSU's online handbook at: https://dsu.edu/assets/uploads/resources/DSU_OnlineHandbook-2018.pdf

Students who are having difficulties with classmates are encouraged to contact the instructor.

Student Learning Outcomes:

Students who complete this course will be able to:

- Identify the role of the CIA triangle in information security.
- Use appropriate terminology accurately.
- Identify various controls that are used in information security.
- Discuss current threats, threat actors, attack vectors and attacks.
- Identify the proper role of security-related policies, procedures and guidelines.
- Discuss tradeoffs between security, cost, functionality and response time.
- Discuss risk as it applies to information security.

Evaluation Procedures:

Assessments:

| Type | Number | Total Points |
|--------------|--------|--------------|
| Labs | 12 | 600 |
| Midterm | 1 | 100 |
| Discussions | 10 | 20 |
| Final Exam | 1 | 100 |
| Total Points | | 1000 |

Final Examination:

Final Examinations for this course are held on the following dates
D01 May 6 8:00-10:00

Performance Standards and Grading Policy:

At the end of the Semester, the total points will be converted to a letter grade according to the following chart:

| % of Points | Letter Grade |
|-------------|--------------|
| 90-100 | A |
| 80-89 | B |
| 70-79 | C |
| 60-69 | D |
| 0-59 | F |

Unsubmitted or late work will be assigned a score of "0".

Student Verification Statement and Proctoring Policy:

Federal law requires that universities verify the identity of students when course materials and/or course assessment activities are conducted either partially or entirely online. A student's Desire2Learn (D2L) login and password are intended to provide the student with secure access to course materials and are also intended to help the university meet this federal mandate. Some DSU Faculty also require the use of a proctor for exams in distance-delivered (Internet) courses and this requirement provides a second level of student identity verification. Students are responsible for any proctoring fees, if applicable. Finally, an instructor who uses web conferencing technology may require students to use a webcam during exams, as another means of student identity verification through voice and visual recognition.

Tentative Course Outline and Schedule:

| Week | Date | Topics, Assignments, Quizzes, Tests, Deadlines |
|------|----------------------------|--|
| 1 | Week Beginning January 13 | Introductions Course Overview Fundamental Concepts Lab 1 |
| 2 | Week Beginning January 20 | InfoSec History Discussion 1, Lab 2 |
| 3 | Week Beginning January 27 | Need for Security Discussion 2, Lab 3 |
| 4 | Week Beginning February 3 | Ethical Issues Discussion 3 |
| 5 | Week Beginning February 10 | Planning and Governance Discussion 4, Lab 4 |
| 6 | Week Beginning February 17 | Planning and Governance Lab 5 |
| 7 | Week Beginning February 24 | Risk Discussion 5, Lab 6 |
| 8 | Week Beginning March 2 | Risk Discussion 6, Midterm -March 6th |
| 9 | Week Beginning March 16 | Access Controls Discussion 6, Lab 7 |
| 10 | Week Beginning March 23 | Detection Lab 8 |
| 11 | Week Beginning March 30 | Crypto Discussion 7, Lab 9 |
| 12 | Week Beginning April 6 | Physical Security Lab 10 |
| 13 | Week Beginning April 13 | Implementing Security Discussion 8 |
| 14 | Week Beginning April 20 | Information Security Management Discussion 9 |
| 15 | Week Beginning April 27 | Information Security Management Review for Final – May 1 Discussion 10 |
| 16 | Week Beginning May 4 | Final Exam – May 6, 8am-10am |

Freedom in Learning Statement:

Students are responsible for learning the content of any course of study in which they are enrolled. Under Board of Regents and University policy, student academic performance shall be evaluated solely on an academic basis and students should be free to take reasoned exception to the data or views offered in any course of study. It has always been the policy of Dakota State University to allow students to appeal the decisions of faculty, administrative, and staff members and the decisions of institutional committees. Students who believe that an academic evaluation is unrelated to academic standards but is related instead to judgment of their personal opinion or conduct should contact the dean of the college which offers the class to initiate a review of the evaluation.