Bergen Community College Division of Business, Math & Social Science INF-273 Intrusion Detection and Prevention Information Technology

Course Title: INF-273 Intrusion Detection and Prevention

Credits/Hours:

3 credits/2 hours lecture, 2-hour lab.

Course Description:

INF-273 Intrusion Detection and Prevention introduces the tools, methods and resources to help identify, assess and report unauthorized or unapproved network activity. Students will learn to analyze packets to find special patterns in network traffic to detect and prevent intrusions, monitor network traffic and take action when an intrusion occurs based on prescribed rules. Students will configure Intrusion Prevention Systems / Intrusion Detection Systems, analyze results and prevent network intrusions. 2 lecture, 2 lab, 3 credits

Prerequisites:

INF-160 and INF-267 OR INF-170 OR permission of Department Chair

Student Learning Objectives	Assessment Measures
Recognize unauthorized activity on the network	Lab activity/exam
Configure IDS/IPS to protect the network	Lab activity/exam
Use tools to detect network anomalies	Lab activity/exam
Respond to incidents of unauthorized intrusion	Lab activity/exam

Textbooks and Supplies:

See course outline

Course Content:

See course outline

Assessment:

An average of 60% from combined assessment measures is required to demonstrate proficiency in course material.

Exam 1 25% Exam 2 25% Exam 3 25% Labs 25%

Laboratory Work:

Laboratory assignments are hands-on productions that show the instructor that the student can competently use specified software. It is important that the student attend all lab sessions. The student should read the scheduled assignment in the text prior to coming to lab class.

It is anticipated that students will spend at least 4-hours per week in the free-time computer room perfecting their skills and completing their lab assignments. The lab assignments are required for grading. They must be submitted as the student enters the lab on the assignment due date, and *cannot be handed in late*. Certain lab assignments will be given and completed during one lab session. In this case, the student must submit the assignment upon exiting the lab. Laboratory assignments that were not collected before the end of lab must be completed during free time.

Lab assignments cannot be done any time other than when they are scheduled; therefore, the lowest lab grade will be dropped when calculating the student's final average. The student will not be permitted to pick up where he/she left off during the prior session when entering the next scheduled lab.

Homework:

In addition to any homework assignment given during class, it is a **standing assignment** that the student read each chapter of the book prior to its discussion. Following the class discussion, the student should reread the material and work with the exercises throughout the text. It is anticipated that students will spend at least 4-hours per week reading the text and working with the exercises and supplemental resources.

Policies:

- Lateness The roll will be taken at the beginning of class. If the student is not in attendance at that time, he/she will be carried in the roll book as being absent unless the instructor is notified immediately after class. Attendance sheets cannot be adjusted at following class meetings.
- The student must adhere to all college polices. Due to the nature of this course, it is recommended that the student review the policy titled "Acceptable Information Technology Use at Bergen Community College".
- The use of portable electronic devices such as pagers and cell phones is not permitted while class is in session. Please be sure to silence electronic devices before entering class.
- The use of audio CD or tape players, radios, and college computers to play music during class is prohibited.
- Students are expected to demonstrate listening, reading, note taking, and writing skills. The student will need to take notes during class discussions and understand and follow verbal and written directions. All assignments and correspondence with the instructor (including e-mail) must be well written in full sentence format. Proper paragraph format must be used for all postings to the student bulletin board (if applicable).
- The subject line of all e-mail correspondence to the instructor must contain the course number and section and student's name. Any e-mail received without this information will not be opened.
- Plagiarism in any form will be treated as a failure to complete an assignment. All
 work submitted should reflect individual effort by the student.
- In borderline cases that arise in almost every class each semester a student's attendance, class participation, attitude, and observed effort will be considered in helping to determine the student's final grade.

If the instructor does not appear after 20 minutes following the scheduled time, students should generate an attendance list. One volunteer member need deliver the list, containing the course title, date, and instructor's name, to the Evening Office L-113 or to the Divisional Office (during the day) A-306C.

Additional policy and assessment information may be distributed by individual instructors.