I. CATALOG INFORMATION

A. Discipline: COMPUTER NETWORKING SYSTEMS ENGINEERING (CNSE)

B. Subject Code and Number: CNSE M88

C. Course Title: Cisco Secure Intrusion Detection System

D. Credit Course units:

Units: 1.5

Lecture Hours per week: 1

Lab Hours per week : 1.5

Variable Units : No

E. Student Learning Hours:

Lecture Hours:

Classroom hours: 17.5

Laboratory/Activity Hours:

Laboratory/Activity Hours 26.25

Total Combined Hours in a 17.5 week term: 43.75 - 0

F. Non-Credit Course hours per week

G. May be taken a total of: [X] 1 [ ] 2 [ ] 3 [ ] 4 time(s) for credit

H. Is the course co-designated (same as) another course: No [X] Yes [ ]
If YES, designate course Subject Code & Number:

I. Course Description:

Provides comprehensive knowledge to design, deploy, and manage the Cisco Secure Intrusion Detection System (CSIDS). Explains why network security is crucial in today's converged networking environment, how CSIDS improves the security on a network, and how to install and configure CSIDS. Also prepares students for Cisco CCIP/Security certification exam.

Field trips are not required for this course.

J. Entrance Skills

*Prerequisite: No [ ] Yes [X] Course(s)
CNSE M18

*Corequisite: No [X] Yes [ ] Course(s)

Limitation on Enrollment: No [X] Yes [ ]

Recommended Preparation: No [ ] Yes [X] Course(s)
CNSE M85

Other: No [X] Yes [ ]

K. Other Catalog Information:

II. COURSE OBJECTIVES

Upon successful completion of the course, a student will be able to:

		Methods of evaluation will be consistent with, but not limited by, the following types or examples.
1	Describe the need for network security.	
2	Discuss the procedures to compose the security policy.	
3	Describe the benefits that an Intrusion Detection System provides.	
4	Describe the two major components of Cisco Secure IDS.	
5	Discuss how to examine the network topology.	
6	Describe how to install a Cisco Secure Policy Manager.	
7	Explain the steps necessary to add a 4200 Series Sensor.	
8	Describe how to manage a Cisco Secure IDS alarm.	
9	Describe the two characteristics that define a Cisco Secure IDS signature.	
10	Identify Cisco Secure IDS signature series.	
11	Describe the Sensor configuration within Cisco Secure Policy Manager.	
12	Describe how to correctly configure Cisco sensor with respect to different operational environments.	
13	Explain IP blocking.	
14	Describe the basic configuration of Cisco Catalyst 6000 IDS module.	
15	Describe the procedures to install Cisco Secure Intrusion Detection Director.	
16	Explain how to use nrConfigure to manage the configuration of the Director.	
17	Describe how to configure the Cisco IOS Firewall IDS on a router.	
18	Discuss some of the new features planned for Cisco Secure IDS in the immediate future.	

III. COURSE CONTENT

Estimated %	Topic	Learning Outcomes
Lecture (must total 100%)		
5.00%	Need for Network Security	1
5.00%	Cisco Security Wheel	2
6.00%	Intrusion Detection System (IDS)	3
5.00%	Cisco Secure IDS Overview	4
6.00%	Cisco Secure IDS Sensor Deployment	5
6.00%	Cisco Secure Policy Manager Installation (CSPM)	6
5.00%	4200 Series Sensor Installation Within CSPM	7
5.00%	Working with Cisco Secure IDS Alarms in CSPM	8
6.00%	Understanding Cisco Secure IDS Signatures	9
5.00%	Signature Series	10
6.00%	Sensor Configuration Within CSPM	11
5.00%	Signature and Intrusion Detection Configuration	12
6.00%	IP (internet Protocol) Blocking Configurations	13
6.00%	Catalyst 6000 IDS Module Configuration	14
6.00%	Cisco Secure ID Director Installation	15
6.00%	The Configuration Management Utility	16
6.00%	Cisco IOS Firewall Intrusion Detection System	17
5.00%	Planned Cisco Secure IDS Enhancements	18

IV. TYPICAL ASSIGNMENTS

A. Writing assignments

Writing assignments are required. Possible assignments may include, but are not limited to:	
1	1. Short answer class assignments. 2. Term paper on course-related topics.

B. Appropriate outside assignments

Appropriate outside assignments are required. Possible assignments may include, but are not limited to:	
1	1. Assigned readings from text and other sources. 2. Assigned writings (see above section). 3. Field observations of network administration. 4. Assigned simulation from text.

V. METHODS OF INSTRUCTION

Methods of instruction may include, but are not limited to:

☐ Distance Education – When any portion of class contact hours is replaced by distance education delivery mode (Complete DE Addendum, Section XV)

[X] Lecture/Discussion

[X] Laboratory/Activity

[X] Other (Specify)
Online materials, assigned Internet research, and computer simulations.

[ ] Optional Field Trips

[ ] Required Field Trips

VI. METHODS OF EVALUATION

Methods of evaluation may include, but are not limited to:

[ ] Essay Exam	[X] Classroom Discussion	[X] Skill Demonstration
[X] Problem Solving Exam	[X] Reports/Papers/ Journals	[ ] Participation
[X] Objective Exams	[X] Projects	[X] Other (specify)

Assess troubleshooting skills in a Lab environment

VII. REPRESENTATIVE TEXTS AND OTHER COURSE MATERIALS

Earl Carter – Editor. Cisco Secure Intrusion Detection System. Cisco Press, 2002.

VIII. STUDENT MATERIALS FEES

[X] No [ ] Yes

IX. PARALLEL COURSES

College	*Course Number*	*Course Title*	*Units*

X. MINIMUM QUALIFICATIONS

Courses Requiring a Masters Degree:
Associate Degree + 6 years networking experience + CCNA or MCSA certificate.

XI. ARTICULATION INFORMATION

A. Title V Course Classification:

1. This course is designed to be taken either:

   [ ] Pass/No Pass only (no letter grade possible); or
   [ ] Letter grade (P/NP possible at student option)

2. Degree status:
   Either [X] Associate Degree Applicable; or [ ] Non-associate Degree Applicable

B. Moorpark College General Education:

1. Do you recommend this course for inclusion on the Associate Degree General Education list?

Yes: ☐ No: ☒ If YES, what section(s)?

☐ A1 - Natural Sciences - Biological Science
☐ A2 - Natural Sciences - Physical Science
☐ B1 - Social and Behavioral Sciences - American History/Institutions
☐ B2 - Social and Behavioral Sciences - Other Social Behavioral Science
☐ C1 - Humanities - Fine or Performing Arts
☐ C2 - Humanities - Other Humanities
☐ D1 - Language and Rationality - English Composition
☐ D2 - Language and Rationality - Communication and Analytical Thinking
☐ E1 - Health/Physical Education
☐ E2 - PE or Dance
☐ F - Ethnic/Gender Studies

C. California State University(CSU) Articulation:

1. Do you recommend this course for transfer credit to CSU? Yes: ☒ No: ☐
2. If YES do you recommend this course for inclusion on the CSU General Education list?
   Yes: ☐ No: ☒ If YES, which area(s)?

A1 ☐ A2 ☐ A3 ☐ B1 ☐ B2 ☐ B3 ☐ B4 ☐

C1 ☐ C2 ☐ D1 ☐ D2 ☐ D3 ☐ D4 ☐ D5 ☐

D6 ☐ D7 ☐ D8 ☐ D9 ☐ D10 ☐ E ☐

D. University of California (UC) Articulation:

1. Do you recommend this course for transfer to the UC? Yes: ☐ No: ☒
2. If YES do you recommend this course for the Intersegmental General Education Transfer Curriculum (IGETC)? Yes: ☐ No: ☒

IGETC Area 1: English Communication

☐ English Composition
☐ Critical Thinking-English Composition
☐ Oral Communication

IGETC Area 2: Mathematical Concepts and Quantitative Reasoning

☐ Mathematical Concepts

IGETC Area 3: Arts and Humanities

☐ Arts
☐ Humanities

IGETC Area 4: Social and Behavioral Sciences

- [ ] Anthropology and Archaeology
- [ ] Economics
- [ ] Ethnic Studies
- [ ] Gender Studies
- [ ] Geography
- [ ] History
- [ ] Interdisciplinary, Social & Behavioral Sciences
- [ ] Political Science, Government & Legal Institutions
- [ ] Psychology
- [ ] Sociology & Criminology

IGETC Area 5: Physical and Biological Sciences (mark all that apply)

- [ ] Physical Science Lab or Physical Science Lab only (none-sequence)
- [ ] Physical Science Lecture only (non-sequence)
- [ ] Biological Science
- [ ] Physical Science Courses
- [ ] Physical Science Lab or Biological Science Lab Only (non-sequence)
- [ ] Biological Science Courses
- [ ] Biological Science Lab course
- [ ] First Science course in a Special sequence
- [ ] Second Science course in a Special Sequence
- [ ] Laboratory Activity
- [ ] Physical Sciences

IGETC Area 6: Language other than English

- [ ] Languages other than English (UC Requirement Only)
- [ ] U.S. History, Constitution, and American Ideals (CSU Requirement ONLY)
- [ ] U.S. History, Constitution, and American Ideals (CSU Requirement ONLY)

XII. REVIEW OF LIBRARY RESOURCES

A. What planned assignment(s) will require library resources and use?

No library resources have been specified for this course

B. Are the currently held library resources sufficient to support the course assignment?

YES: [ ] NO: [X]

If NO, please list additional library resources needed to support this course.

XIII. PREREQUISITE AND/OR COREQUISITE JUSTIFICATION

CNSE M88: Not Applicable

XIV. WORKPLACE PREPARATION

CNSE M88: Not Applicable

XV. DISTANCE LEARNING COURSE OUTLINE ADDENDUM

CNSE M88: Not Applicable

XVI. GENERAL EDUCATION COURSE OUTLINE ADDENDUM

CNSE M88: Not Applicable

XVII. STUDENT MATERIALS FEE ADDENDUM

CNSE M88: Not Applicable

XVIII. REPEATABILITY JUSTIFICATION TITLE 5, SECTION 55041

CNSE M88: Not Applicable

XIX. CURRICULUM APPROVAL

Course Information:

Discipline:
COMPUTER NETWORKING SYSTEMS ENGINEERING (CNSE)

Discipline Code and Number: CNSE M88

Course Revision Category: New Course

Course Proposed By:

Originating Faculty _____

Faculty Peer: _____

Curriculum Rep: _____

Department Chair: _____

Division Dean: _____

Approved By:

Curriculum Chair: _____

Executive Vice President: _____

Articulation Officer: _____

Librarian: _____

Implementation Term and Year: _____

Approval Dates:

Approved by Moorpark College Curriculum Committee: 11/11/2003

Approved by Board of Trustees (if applicable): _____

Approved by State (if applicable): _____