

# Course: CSM: Security+

## Cyber Pathways Across Maryland SME Rubric

**Reviewer Name: Robert Cordery**

**Date: 9/25/18**

This course is offered by the College of Southern Maryland (<https://www.csmd.edu/programs-courses/cyber-center/index.html>). The goal for this review is to validate that the curriculum is complete, current, and relevant to industry cybersecurity needs. Please use the comments sections for each category to explain your overall impressions, whether positive or negative.

<b>COURSE STRUCTURE AND SYLLABUS</b>	<b>Y</b>	<b>N</b>	<b>N/A</b>
Course description is factually complete and accurate	X		
Course structure includes major lessons and assignments	X		
Prerequisite requirements are included and appropriate		X	
Required facilities and equipment are included and appropriate	X		
Required course texts are listed	X		
Appropriate supplementary materials and resources are provided	X		
Course organization and design is clear, coherent, and appropriately structured	X		
Concepts and skills build logically, with appropriate transitions between course sections	X		
Learning outcomes are clearly stated, measurable, and appropriate for the level of the course	X		
Learning outcomes emphasize application of knowledge and skills	X		

### **Comments about the course structure and syllabus:**

Summarize your impressions of the syllabus and course structure including errors, suggestions for revisions, or gaps in the curriculum in regard to industry standards and needs:

- Include Bloom Taxonomy Learning Objectives in each Module Overview. The Module Objectives sections could be turned into Learning Objectives by adding Bloom Taxonomy verbs.
- The textbook is exactly what the title claims: "CompTIA Security+: Get Certified Get Ahead: SYO-401 Study Guide." That said, it provides excellent coverage of the range of materials needed by a practitioner.

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LECTURE MATERIALS: INSTRUCTOR SLIDES OR AUDIO/VIDEO PRESENTATIONS	Y	N	N/A
Content is accurate.			X
Materials accurately reflect course content.			X
Materials are presented in a logical order.			X
Materials reflect the major learning points and objectives for the related lesson.			X

<p><b>Comments about the instructor slides or video presentations:</b> Summarize your impressions of the instructor slides including errors or suggestions for revisions:</p> <ul style="list-style-type: none"> <li>· Slides and instructor videos were not provided.</li> <li>· External videos and materials provided are good.</li> <li>· Some of the resources (SANS publications) are huge and require more guidance than pointing the student to the site.</li> <li>· The lesson outlines are provided (Modules 3, 7), and two for Module 10</li> <li>· Module 3 and 7 lesson outlines are very high level summaries with mostly information known by the educated public. They include links to more thorough information.</li> <li>· The Module 10 lesson outlines are quite good.</li> </ul>
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STUDENT ACTIVITIES: LABS/EXERCISES/HOMEWORK			
Activities as a whole:	Y	N	N/A
<ul style="list-style-type: none"> <li>• Contribute to the achievement of the stated course objectives.</li> </ul>	Y		
<ul style="list-style-type: none"> <li>• Are comprehensive enough to reinforce course objectives.</li> </ul>	Y		
<ul style="list-style-type: none"> <li>• Are current.</li> </ul>	Y		
Individual activities:	Y	N	N/A
<ul style="list-style-type: none"> <li>• Have a clearly explained purpose and learning goals.</li> </ul>		N	
<ul style="list-style-type: none"> <li>• Promote the achievement of their stated learning goals.</li> </ul>	Y		
<ul style="list-style-type: none"> <li>• Include access to all necessary resources.</li> </ul>	Y		

**Comments about student activities:**

Please summarize your impressions of the student activities including errors or suggestions for revisions:

- The exercises from NetLab and LabSim have a good reputation. I don't have access to evaluate them in detail
- The Discussion exercises provide options for each module. Although students are only required to post on one of the options, they should read posts and provide feedback on all options.
- There doesn't appear to be a process to assure that all discussion options are addressed.
- The NetLab and LabSim exercises cover appropriate material.
- The activities for cryptography do not sound sufficient.
- Steganography (Cryptography Module) is an interesting topic, but without seeing details of the assignment, I don't see it as a good introduction to cryptographic concepts outlined in the NetLab exercise.

EXAMS AND ASSESSMENTS	Y	N	N/A
Assessments measure the stated learning objectives.	X		
Assessments are consistent with module activities and resources.			X
Assessments are varied			X
Assessments are appropriate to the student work being assessed.			X

**Comments about exams and assessments:**

Please summarize your impressions of the assessments and any suggestions including errors or suggestions for revisions:

- Final exam is a practice exam for the certification exam. That seems OK.
- Practice tests on groups of subjects would be good.
- Module 5 assessment is simply a multiple choice on port assignments
- More Module assessments would be appropriate.
- Discussions, NetLab and LabSim provide assessments which I assume are good, but I have no access.

**Overall Summary:**

Based on your expertise and knowledge of the course, please write a summary of your overall impressions, the strengths of the material, and your recommendations for future iterations. Please keep in mind suggestions for revisions or gaps in the curriculum in regard to industry standards and needs. If your course is meant to prepare students for a certification exam, please indicate whether or not you feel the course will do so.

- Overall, the course provides the material needed.
- The text exactly addresses the course goals.
- The cryptography section needs more depth based on the information provided. The text has the necessary information.
- Module 1 exercise calls for the student to use best practices. The students need resources (the text?) to know best practices, for example some of the documents at <https://csrc.nist.gov/publications>
- Module 5: Secured remote access is a subtle subject with many issues that the student should know e.g.,  
<https://searchsecurity.techtarget.com/opinion/Secure-remote-access-Security-related-remote-access-problems-abound>
- A student who completes this course and pays close attention to the text should be well prepared.

Some minor edits:

- Missing figure after contents in COURSE\_ CSM\_ Security+\CSM - Security+ - 0 READ ME FIRST
- Missing page number reference at the end of Introduction section
- Module 3 Grammar: Throughout not through out; management's not managements;  
Replace "valid" with validate under Verification and Accountability