

# Course: Harford: Intro to Cybersecurity

## Cyber Pathways Across Maryland SME Rubric

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This course is offered by the Harford Community College (<http://www.harford.edu/cyberdefense>). 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>	Y	N	N/A
Course description is factually complete and accurate		N	
Course structure includes major lessons and assignments		N	
Prerequisite requirements are included and appropriate	Y		
Required facilities and equipment are included and appropriate		N	
Required course texts are listed	Y		
Appropriate supplementary materials and resources are provided	Y		
Course organization and design is clear, coherent, and appropriately structured		N	
Concepts and skills build logically, with appropriate transitions between course sections	Y		
Learning outcomes are clearly stated, measurable, and appropriate for the level of the course	Y	N	
Learning outcomes emphasize application of knowledge and skills	Y		

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

The syllabus is very general and lacks detail about the nature of assignments. The full context and most of what you need to know should be in the Syllabus beyond a high level summary. Is there an online component? If so what technology is involved? Any any of the activities developed? Do they/will they relate to the objectives with clear links? Why not list the Lesson objectives from the book chapters? Are the unnamed Assignments the Projects in the back of the text or will they be newly made? How do the videos fit in? (They appear to have been reasonably well selected). Should there be an Assignment Rubric? The rubric for the few Discussion seems good. Will the online portion be facilitated by a Learning Mgt System (e.g. Blackboard).

The points and % are correlated.

The Learning Outcomes are mixed:

“Develop problem solving skills and work team to solve problems.” Awkward, recursive and hard to measure.

Develop the flow of a mitigating solution in a logical step-by-step manner. “Flow confuses me here but I understand the intent.

“Prepare filters using a wire shark and snort language” Clear, measurable and skill oriented.

“Solve a variety of problems using cyber security methodology.” Too broad to be measurable. Again how do these **each** tie to Chapter Objectives in the text and all assessments?

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

**Comments about the instructor slides or video presentations:**

Mixed results.

Youtube material seem good. Didn't like quick cartoon-like What is VULNERABILITY SCANNER?, but did like many others. Are these just available as options? Do students do anything or apply these in any way to get at skills? Where is that made clear?

The text is fine. The youtube seems to tie to the text. That is good. Materials in text tie to the text itself which has its order. Text chapter objectives don't tie to course objectives

<b>STUDENT ACTIVITIES: LABS/EXERCISES/HOMEWORK</b>			
Activities as a whole:	Y	N	N/A

• Contribute to the achievement of the stated course objectives.		N	
• Are comprehensive enough to reinforce course objectives.		N	
• Are current.		?	
Individual activities:	Y	N	N/A
• Have a clearly explained purpose and learning goals.		N	
• Promote the achievement of their stated learning goals.		N	
• Include access to all necessary resources.		N	

**Comments about student activities:**

None of this is made clear at this time. “

“Activities, assignments, and assessments will be explained in detail throughout the course. Please contact the instructor with questions.”

(I'd never get away with “See me later” in my courses)

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

**Comments about exams and assessments:**

I can't tell about how Assignments are assessed since they don't exist although they seem to be linked to each chapter (which is good). That should tie them to Chapter objectives **which could** be tied to course objectives.

Are the quizzes from the publisher? If so they are likely tied to the text and chapter objectives (but not course ones). If they are homegrown, they may be tied to chapter objectives but still not course ones.

### **Overall Summary:**

This is a brief and bare overview of a course. The selection of youtube content has taken some work to cull the many topics but it's not clear how it will be used. Are "Written Assignments" identical to Assignments worth 40%? Are they like the textbook Projects or Exercises at end of each chapter or to be made up? Use consistent labelling throughout. How will class participation be handled online for 10%.

Since this is designed around the text, that gives a beginning content anchor. The Table of Contents appear reasonable

The best thing would be for all assignments to be articulated up-front and each quiz and assignment linked to a Chapter Objective and the Chapter Objectives linked to the Course Objectives. Students typically aren't looking for this to be done, but it ensures that activities, assessment and grades come together. Maryland is famous for Quality Matters!

Any community college course with no re-req has students that need clear onboarding context. What students need is clarity of what is due when and how it comes together. A student on the first day with only this doesn't have much orientation? Can they work ahead on Assignments to work around a schedule conflict.

I'd like to see if some lab simulation work might be fit in somewhere. Pearson publishing might offer something that is tied to the book. Some of the assignments might include students doing hands-on exercises and writing up a Lab Report using a pre-set structure of their experience. Security by content knowledge review alone doesn't stick well.

Students would want a calendar with the detail. Even before linking to real dates, an instructor can articulate "week 1 and week 2" to activities.