

# Course: Allegany: Intro to Cybersecurity

## Cyber Pathways Across Maryland SME Rubric

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This course is offered by Allegany College of Maryland (<https://www.allegany.edu/x3313.xml>). 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	Y		
Course structure includes major lessons and assignments	Y		
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		N	
Course organization and design is clear, coherent, and appropriately structured	Y		
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		N	
Learning outcomes emphasize application of knowledge and skills		N	

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

There is little information about Blackboard (Bb). Even if the students have used it before, some info should be available. I like the Collaboration policy. If group work is encouraged online in Bb, will there be a facility for special small group discussions? Bb Accessibility information should be spelled out specifically.

I'm somewhat concerned about just referring to Google and Wikipedia. While I respect Wikipedia (after being extensively vetted for an entry), it seems that instructors can help demonstrate best resources rather than available resources.

Are used books acceptable? Are all formats of the text acceptable? Then list all ISBNs. Are you using any Pearson materials (tests, videos, simulators etc.) that may link to their text? Simulators are good for online course without any labs. If so these may often be linked

directly to Bb for face-to-face (F2F) and online students but then codes from the publisher might be needed.

I'm somewhat confused by the Learning Outcomes in the Syllabus. They are very low level which one could argue may be appropriate for a community college. Where on Maslow's new hierarchy would they fall? There is no "applying" of knowledge. There are no skills learned from the conducting the procedures in the "Discussions (see below) or Homework.

Some are too general and may just relate to the book.

- "Define the fundamental concepts of cybersecurity" seems to related just to the text. Easttom reviews what I think the industry considers "principles" more than concepts like "least privilege". Maybe it's best to have an outcome of "List the fundamental principles (or concepts) of cybersecurity widely referenced in the industry (and mentioned by Easttam). Without the right context I wouldn't know where to begin otherwise.

Some of the others might benefit from a number, like list or describe top ten.

- "Describe web security issues and how to mitigate the risk for each issue". One could spend forever identifying issues. Are these categories? Common Weakness Emnumerations (CWEs) or just those mentioned in the book?

All physical security practices? Name 10?

Purpose and characteristics of crypto? Seems too broad. Tie to book?

When one looks at the slides/videos the confusion sets in.

If the Syllabus is for COMP 107 then why are the objectives in the PowerPoints/Videos different from the ones in the Syllabus. The slide/video ones are actually better.

The Grading Breakdown focuses on points but doesn't make it clear how points and % come together. Homework is 10% of grade but has no point value?

References should be more than a URL. Is there a citation style like APA in effect? 15% of research paper rubric requires citations.

Shouldn't the Syllabus reference the "Detailed Course Organization"?

Where do "class assignments" fit? How are they figured into grades?

Why isn't there more on the videos as a method in the syllabus?

Where is the rubric for Discussions?

<b>LECTURE MATERIALS: INSTRUCTOR SLIDES OR AUDIO/VIDEO PRESENTATIONS</b>	<b>Y</b>	<b>N</b>	<b>N/A</b>
Content is accurate.			
Materials accurately reflect course content.			

Materials are presented in a logical order.			
Materials reflect the major learning points and objectives for the related lesson.			

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

The Readme First mentions the Youtube videos but the syllabus doesn't. Is that because one syllabus is generic and the videos reflect one instructor's implementation?

The Intro to Course video should be more dedicated to setting the context for the course and its elements. Describe the assignments and quizzes and how things are linked. How does online differ from F2F?

<b>STUDENT ACTIVITIES: LABS/EXERCISES/HOMEWORK</b>			
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>		N	
<ul style="list-style-type: none"> <li>Are comprehensive enough to reinforce course objectives.</li> </ul>		N	
<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>	Y		
<ul style="list-style-type: none"> <li>Promote the achievement of their stated learning goals.</li> </ul>		?	
<ul style="list-style-type: none"> <li>Include access to all necessary resources.</li> </ul>			N/A

**Comments about student activities:**

I'm uncomfortable with all of the Discussion Questions. I'm fine with discussions covering topics like privacy and a recent terrorism or virus case that students bring to the table. The procedural work like with browser tasks or configuration utilities could be made into Lab Reports with a pre-defined template that covers items like: scope, procedure, outcomes, evidence (screenshots) and conclusions. These would have to be graded but with a template that is easier. There could be a discussion around conclusions. In any case, the syllabus should offer some indication as to how they will be handled. How will it be F2F vs online?  
The F2F

The In Class F2F Joint work, the Labs and even the Homework Questions could also benefit from a use of the above template or else the responses may be all over the map.

It is hard to tell how the quizzes, papers or discussions relate to the objectives. Quality Matters usually wants each assessment to tie to specific course and perhaps Chapter outcomes. Are all these from the book or publisher and tied or not?

There are many “Foundational Figures” assignments yet not a single one is clearly tied to a course objective. Chapter objectives should be linked to each assessment and each assignment. Linking each chapter objectives to course objectives will tighten this.

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

**Comments about exams and assessments:**

Again, one can't tell how Assessments are tied to Course or Chapter outcomes. Is the end of course “quiz” really a quiz and not an exam of final exam? Are the quizzes from Pearson and designed to be linked to Chapter Objectives?

**Overall Summary:**

I support the actual content detail from the text and its reflection in the course. The instructor;s perspective in the video can be a helpful addition to what it in the book. My concern is around the course elements and how they are reflected in the Syllabus and other detail. They don't

quite hang together with consistent descriptions among activities and assessments and their linking to Chapter objectives and course objectives. (I noted example of Foundational Figures that are not tied to learning outcomes in pptx or Syllabus.) Therefore why do them? (I get that they are interesting and can add value). The Chapter objectives are in the slides but not in Syllabus. How do they **each** relate to course objectives?