

## CompTIA Security X (CAS-005) Study Plan

This study plan contains general study tips, an overview of how to create and use flash cards effectively, other study tools, a suggested XX day study plan, and a suggested XX day study plan. The purpose is to provide students with some general information and a general plan that they can adapt to fit their own learning goals.

### General Study Tips

- Studying and learning are very individualistic. Not everything works for everybody. Find the tools, methods, and strategies that work for you.
- The average person has an attention span of 20-30 minutes.
  - o Once you have reached the limit of your attention on a task you should do something else for a while.
  - o Any time you spend studying beyond your attention span is generally wasted time because you the studying will become increasingly inefficient.
  - o The key to maintaining attention is to divide work into different tasks and alternate types of tasks. For example, you can watch videos for 20 minutes, then review notes for 10 minutes, then work on learning tools for 15 minutes, then get up and move around for 15 minutes before returning to videos. You can also alternate watching videos with another task like working on learning tools.
- Be realistic and learn how you learn. If you have a shorter attention span, then set your study time accordingly. Try some different time spans and activities and see what works. If, for example, sitting still makes you lose focus quickly, try to engage in some activity such as following along with the closed captions, taking notes, or even walking around as you watch the video.
  - o If a strategy or tool isn't working after a few days of trying it, change to it. Learning how you learn is mainly the result of trial and error.
- Once you have the plan set, establish small rewards for following the plan. This could be 30 minutes of uninterrupted video game time, a food or drink treat, or anything else that will motivate you to stick to the plan. The reward is just for following through on the plan for that day, not for getting a particular score on a practice exam or a quiz.
- Find the balance between strictly following the plan you created and extreme flexibility.
  - o Strictly following a plan that isn't working or is too ambitious will create anxiety and you will lose motivation. If the 30 day plan is creating too much anxiety, you can switch to the 60 day plan, or modify it so it fits with your learning style.
  - o Being extremely flexible, for example, constantly changing the plan, will cause you to lose focus and lose motivation.
- Don't beat yourself up over a perceived failure. This includes not sticking to the plan, failing a quiz, or failing a practice exam. Instead think about the factors that may have led to the perceived failure.
  - o If the factor is something in your control, change it. For example, if you planned on studying for an hour and lost focus after 30 minutes, change up the plan to make it work for your attention span. If studying during your lunch break was

interrupted by people talking in your lunch space, change the lunch space or schedule your studying for another time.

- If the factor is not in your control, ignore it. Life happens and feeling badly about things beyond your control isn't helpful.

### **How to Use the Videos Effectively**

- As you watch the videos
  - Add notes to the study guide
  - Highlight terms and concepts you want to make flashcards for
  - Mark terms or sections based on how well you understand them
  - Put question marks next to any concepts you want to do more research on
- After you watch a section
  - Reread the study guide and the notes you have made to ensure you understand what you wrote while the material is still fresh in your mind
  - Create flashcards or study tools
  - Review the previous day's flashcards or study tools

### **How to Use the Practice Exams Effectively**

- While taking the practice exams
  - Follow the tips from the Conclusion
    - Do a brain dump when you begin the exam to practice the process and to see whether it will be helpful to you
- After you take a practice exam
  - Review the questions that you got incorrect
    - Read the explanation
    - Add to your flashcards or study tools and to your study guide
  - Review the brain dump you created and evaluate whether you should make changes to it
  - Make a list of the objectives for the questions that you got correct and those you got incorrect. Using a tracking chart like the one below will help you see trends

Practice Exam number	Objectives of correct answers	Objectives of incorrect answers
#1		

### **How to Make Retaking the Exam an Effective Learning Tool**

- When you retake the exam
  - When you read a question that you remember, take a moment and think through why the correct answer is correct instead of just clicking on the remembered correct answer
- After you retake the exam

- Review the questions that you got incorrect
  - Read the explanation
  - Add to your flashcards or study tools and to your study guide
- Review the brain dump you created and evaluate whether you should make changes to it
- Add the retake to the tracking chart

### **How to Use Flash Cards Effectively**

Flash Cards can be a very effective learning tool if they are set up correctly and used correctly and consistently. In general, there are two types of flash cards: Written and Apps. Each has its advantages and disadvantages.

#### **Written Flash Cards**

- Writing is an effective way to create memories, so writing your own flash cards will help you to remember material even if you don't use the flash cards later.
- Set up your flash cards consistently. For example, use the lined side of the card for definitions and the blank side for terms. Visual clues (like lines) often work in our subconscious to help us remember.
- Use colored flash cards to distinguish different parts of content. For example, use pink cards for learning ports and protocols. This creates a visual clue and helps you associate the term with the content that it falls under.
- Consider drawing pictures and diagrams on the cards.
- When you go through the flash cards, sort them into stacks based on how confident you are that you know the material or how much time it takes you to think of the answer. See if you can get all of the cards into the stack that represents that you know the answers.
  - Examples stacks for how long it took you to think of the answer
    - Knew it right away
    - Had to think for a moment
    - Had to think for a while
    - Had to look at the answer

#### **Flash Card Apps**

- There are many flash card apps available. Most are free or low cost. They often contain games or methods of going through the cards that are designed specifically to make your studying more efficient. They also prevent you from just thinking "I know that" and moving on by requiring you to perform a task to prove you know it.
- Some apps offer ready made stacks that have been created by other students. While this may seem like a quick alternative, many of these stacks are not set up well and may contain errors. Making your own is a more reliable way to ensure the quality of the set up and content.
- The most important part of the set up for flash card apps is consistency. Generally, you should have short answers and longer definitions, descriptions, or questions. Be sure that the answers are consistently on one side of the card.

- This becomes important when using apps that have you type the answer, which is the best way to determine if you know the correct answer. Shorter answers will allow you to type the answer more effectively and quickly. If the answer is a sentence or longer phrase you won't be able to remember the exact words in the answer and you will be marked wrong even when your answer was really correct.
- Flash card apps like Quizlet and Anki have modes that help you learn content by first setting up multiple choice questions and then fill in the blank questions. This is based on research into memory and how to create it.
- Brainscape uses a confidence measure to sort cards into stacks similar to how you would use written flash cards. This can be very effective as long as you are honest in your confidence ranking.
- Some apps allow you to create lists in word processing programs and then importing them into the program. This is very handy and makes creating the cards faster and more consistent. Normally you type the answer, then tab and write the question. You copy and paste the whole page of answers and questions into the app.

### **Other Study Tools/Methods**

- Using the exam objectives and turning them into questions can be a powerful way to figure out what areas you need to work harder on.
  - Objective 5.5: Explain types and purposes of audits and assessments.
  - Term: Attestation
  - Question: What is the purpose of attestation?
- ChatGPT offers a way to check your learning. Enter a question into ChatGPT. Before you look at the ChatGPT answer, write an answer of your own. Compare your answer to ChatGPT's answer.

### 30 Day Study Plan – Best for people with some experience

Day 1	Day 2	Day 3	Day 4	Day 5
Watch sections 1 and 2	Watch sections 3 and 4	Watch sections 5 and 6	Watch section 7	Watch sections 8 and 9
Day 6	Day 7	Day 8	Day 9	Day 10
Watch sections 10 and 11	Watch section 12	Watch section 13	Watch sections 14 and 15	Watch section 16
Day 11	Day 12	Day 13	Day 14	Day 15
Watch section 17	Watch section 18	Watch section 19	Watch sections 20 and 21	Rest day/catch up day
Day 16	Day 17	Day 18	Day 19	Day 20
Watch section 22	Watch section 23	Watch section 24	Watch section 25	Watch sections 26 and 27
Day 21	Day 22	Day 23	Day 24	Day 25
Watch section 28	Watch section 29	Watch sections 29, 30, and 31	Take 1 Practice Exam	Take 2 Practice Exams
Day 26	Day 27	Day 28	Day 29	Day 30
Take 2 Practice Exams	Take 2 Practice Exams	Retake 3 Practice Exams	Retake 3 Practice Exams	Retake 3 Practice Exams

### 60 Day Study Plan – Best for people with little experience

<b>Day 1</b>	<b>Day 2</b>	<b>Day 3</b>	<b>Day 4</b>	<b>Day 5</b>
Watch sections 1 and download pdfs.	Watch section 2	Watch section 3	Watch section 4	Watch section 5
<b>Day 6</b>	<b>Day 7</b>	<b>Day 8</b>	<b>Day 9</b>	<b>Day 10</b>
Watch section 6	Watch section 7 videos 1-8	Watch section 7 videos 9-10 and section 8	Watch section 9	Rest day/catch-up day
<b>Day 11</b>	<b>Day 12</b>	<b>Day 13</b>	<b>Day 14</b>	<b>Day 15</b>
Watch section 10	Watch section 11	Watch section 12 videos 1-6	Watch section 12 videos 7-8; section 13 videos 1-3	Watch section 13 videos 4-8
<b>Day 16</b>	<b>Day 17</b>	<b>Day 18</b>	<b>Day 19</b>	<b>Day 20</b>
Watch section 14	Watch section 15	Watch section 16 videos 1-6	Watch section 16 videos 7-11	Rest day/catch-up day
<b>Day 21</b>	<b>Day 22</b>	<b>Day 23</b>	<b>Day 24</b>	<b>Day 25</b>
Watch section 17 videos 1-6	Watch section 17 videos 7-11	Watch section 18 videos 1-6	Watch section 18 videos 7-11	Watch section 19 videos 1-7
<b>Day 26</b>	<b>Day 27</b>	<b>Day 28</b>	<b>Day 29</b>	<b>Day 30</b>
Watch section 19 videos 8-9; section 20 videos 1-3	Watch section 20 videos 4-8	Watch section 21 videos 1-6	Watch section 21 videos 7-9; section 22 videos 1-4	Watch section 22 videos 5-9
<b>Day 31</b>	<b>Day 32</b>	<b>Day 33</b>	<b>Day 34</b>	<b>Day 35</b>
Rest day/catch-up day	Watch section 26	Watch section 23 videos 5-9	Watch section 24 videos 1-7	Watch section 24 videos 8-9; section 25 videos 1-3
<b>Day 36</b>	<b>Day 37</b>	<b>Day 38</b>	<b>Day 39</b>	<b>Day 40</b>
Watch section 25 videos 4-8	Watch section 26	Watch section 27	Watch section 28 videos 1-6	Watch section 28 videos 7-11
<b>Day 41</b>	<b>Day 42</b>	<b>Day 43</b>	<b>Day 44</b>	<b>Day 45</b>
Rest day/catch-up day	Watch section 29 videos 1-7	Watch section 29 videos 8-10; section 25 videos 1-2	Watch section 29 videos 3-8	Watch section 30
<b>Day 46</b>	<b>Day 47</b>	<b>Day 48</b>	<b>Day 49</b>	<b>Day 50</b>
Watch section 31	Watch section 32	Rest day/catch-up day	Take 1 Practice Exam	Take 1 Practice Exam
<b>Day 51</b>	<b>Day 52</b>	<b>Day 53</b>	<b>Day 54</b>	<b>Day 55</b>
Take 1 Practice Exam	Take 1 Practice Exam	Take 1 Practice Exam	Take 1 Practice Exam	Take 1 Practice Exam
<b>Day 56</b>	<b>Day 57</b>	<b>Day 58</b>	<b>Day 59</b>	<b>Day 60</b>
Retake 2 Practice Exams	Retake 2 Practice Exams	Retake 2 Practice Exams	Retake 2 Practice Exams	Retake 2 Practice Exams