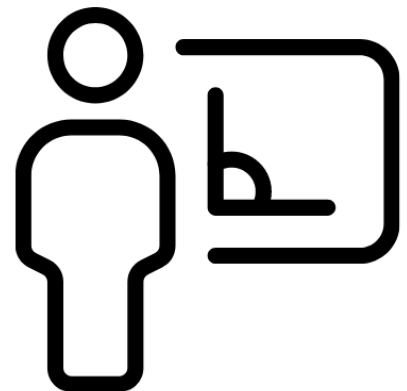


# Instructors Guide



On the following pages is a sample module from our Instructor Guide. It provides the instructor with a copy of the material and a Lesson Plans box.

The key benefit for the trainer is the Lesson Plan box. It provides a standardized set of tools to assist the instructor for each lesson. The Lesson Plan box gives an estimated time to complete the lesson, any materials that are needed for the lesson, recommended activities, and additional points to assist in delivering the lessons such as Stories to Share and Delivery Tips.



*Thinking is the talking of the soul with itself.*

*Anonymous*

## Module Two: Understanding Critical Thinking



Critical thinking skills are valuable for *everyone*- they help guide us through a world of information. While we are consistently thinking throughout the day, our critical thinking skills may provide us with the greatest value. Critical thinking is all about ensuring people make the best choices based on the best information. It involves the consideration of reasoning, logic and reflective thinking to form sound arguments and decisions. Whether in your personal life, or in your professional career, it is important to be able to form rational arguments that support your beliefs.

## Defining Critical Thinking



Critical thinking is more than just thinking. It involves a deeper level of thinking that goes beyond our everyday basic thoughts. To think critically means to question ideas and conclusions, by analyzing, assessing and reconstructing concepts. Critical thinking helps you to determine which actions are necessary to create the best solution to your problems. A critical thinker does not accept facts at face value; instead, they analyze these facts to gain a thorough understanding of the topic at hand. As a result, critical thinking can encourage individuals to be open-minded, and gain better control over their own learning.

Thinking critically includes asking questions, including:

- What is happening?
- Why is this important?
- Who is saying this?
- How do I know?
- What other possibilities exist?

<b>Estimated Time</b>	7 minutes
<b>Topic Objective</b>	To define <i>critical thinking</i> and determine relevant questions to thinking critically.
<b>Topic Summary</b>	Critical thinking involves questioning ideas and conclusions, by analyzing, assessing and reconstructing concepts.
<b>Materials Required</b>	Flipchart/board, markers
<b>Planning Checklist</b>	None
<b>Recommended Activity</b>	Have participants discuss the definition of critical thinking. What words can be associated with this process? Write answers on the flipchart/board.
<b>Stories to Share</b>	<p><b>Brief History of Critical Thinking</b>, excerpt by the Critical Thinking Community</p> <p>“Socrates set the agenda for the tradition of critical thinking, namely, to reflectively question common beliefs and explanations, carefully distinguishing those beliefs that are reasonable and logical from those which — however appealing they may be to our native egocentrism, however much they serve our vested interests, however comfortable or comforting they may be — lack adequate evidence or rational foundation to warrant our belief.</p> <p>Socrates’ practice was followed by the critical thinking of Plato (who recorded Socrates’ thought), Aristotle, and the Greek skeptics, all of whom emphasized that things are often very different from what they appear to be and that only the trained mind is prepared to see through the way things look to us on the surface (delusive appearances) to the way they really are beneath the surface (the deeper realities of life). From this ancient Greek tradition emerged the need, for anyone who aspired to understand the deeper realities, to think systematically, to trace implications broadly and deeply, for only thinking that is comprehensive, well-reasoned, and responsive to objections can take us beyond the surface.”</p> <p>Source: <a href="http://www.criticalthinking.org/pages/a-brief-history-of-the-idea-of-critical-thinking/408">http://www.criticalthinking.org/pages/a-brief-history-of-the-idea-of-critical-thinking/408</a></p>
<b>Delivery Tips</b>	Encourage everyone to participate.

<b>Review Questions</b>	What is critical thinking?
	What is an example of a question that will promote critical thinking?

## Importance of a Critical Approach



Everyday decisions have a significant impact on our quality of life. In order to make good decisions, it is essential to have good critical thinking skills. Critical thinking can help to ensure that you will live your best, most successful life. It enables you to better express your beliefs and ideas, while also improving your communication skills with others. As a result of improved communication, there will be fewer misunderstandings and frustrations.

No matter your path or profession, critical thinking skills will always be relevant and favorable to your success. Our economy depends on information and innovation, in which strong thinking skills are required to build these strategies. Although we often fail to notice the importance of these skills in our everyday life, they are one of the most desirable skills for the workplace. Employers will often look for candidates who evaluate problems using logical thoughts, since they are more likely to offer the best solutions to these problems. A critical thinker is trusted to make independent decisions, as well as work with others to solve problems quickly and efficiently.

<b>Estimated Time</b>	10 minutes
<b>Topic Objective</b>	To determine the importance of using a critical approach in your decision-making process.
<b>Topic Summary</b>	Critical thinking can help to ensure that you will live your best, most successful life- no matter your path or profession.
<b>Materials Required</b>	<a href="#">Worksheet 1: What If?</a>
<b>Planning Checklist</b>	Provide enough worksheet printouts for all participants.
<b>Recommended Activity</b>	Have participants complete Worksheet 1: What If? Allow time to discuss worksheet responses.
<b>Stories to Share</b>	Share any personal, relevant stories.
<b>Delivery Tips</b>	Encourage everyone to participate.

<b>Review Questions</b>	Why is critical thinking important for the economy?
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## When to Think Critically



Although critical thinking is necessary in today's world, it is not necessary to think critically *all* of the time. Opportunities arise in our daily lives in which we need to face problems and decisions using powerful critical thinking abilities. When the outcome of the situation or problem will make a significant difference to you, a critical approach should be applied to the situation. Think about whether it may be life altering or if it will matter to you in the future. If critical thinking is not applied to important situations, it can result in a loss of financial resources, opportunities, relationships, or various other aspects in life.

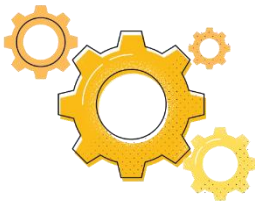
There are many instances in life in which critical thinking should be applied. Examples of when to think critically include:

- **Choosing your career path-** Weighing out the pros and cons of your career options.
- **Evaluating specific online information-** Assessing sources and publications.
- **Risk Assessment-** Considering legal consequences, profits, or injuries.
- **Talent hiring-** Using objectivity, and avoiding biases, such as age or gender.
- **Purchasing decisions-** Considering your money budget or reading reviews.

<b>Estimated Time</b>	8 minutes
<b>Topic Objective</b>	To recognize opportunities of when to apply your critical thinking skills.
<b>Topic Summary</b>	A critical approach should be applied to any situation in which the outcome of the problem will make a significant difference to you.
<b>Materials Required</b>	Flipchart/board, markers
<b>Planning Checklist</b>	On the flipchart/board, draw a T chart with the headings <i>Critical Thinking</i> and <i>Non-Critical Thinking</i> .
<b>Recommended Activity</b>	Have participants review the examples of when to think critically. Ask participants to identify when it is necessary to use these skills, and when it is not necessary. List these responses on the T-Chart.

<b>Stories to Share</b>	Share any personal, relevant stories.
<b>Delivery Tips</b>	Encourage everyone to participate.
<b>Review Questions</b>	What can happen if critical thinking is not applied to important situations?

## The Role of Logic



Logical skills are significant for rationalizing important decisions. There is a strong relationship between logic and critical thinking; Logic is applied to a critical thinking situation, in which logic helps to separate truth from falsehood. Logic is the branch of philosophy that gives the rules for deriving valid conclusions. A conclusion is valid if it results from statements that are accepted as facts. For example, a logical statement might be  $1+1 = 2$ . If a statement does not follow the rules, it is said to be illogical.

Logic can be applied to critical thinking to distinguish between good or bad reasoning. Logical thinking is a process which involves steps. In general, logical thinking involves checking the components of the argument and making connections between them, which is what we call *reasoning*.

The four major steps of logical thinking are:

- **Asking the Right Questions:** The logical thinker should begin reasoning by asking many questions, such as “*What are the premises?*” If we are confused about the premises, we may make mistakes further down the line in the logic process. It’s important to check to see if any premises or vital information is missing. No conclusions can be made without premises.
- **Organizing Data:** We can organize the information by making connections. An effective method of organizing data includes breaking up the information and diagramming, or laying out the premises.
- **Evaluating the Information:** After organizing the information, the logical thinker can proceed with evaluating it. Evaluating information involves determining whether the information is valid. Conclusions cannot be made until a distinction is made between truth and validity.
- **Drawing Conclusions:** Once the data has been collected, organized, and evaluated, we can then draw conclusions. The logical thinker should infer only what the data implies, check to ensure inferences are consistent, and identify underlying assumptions.

<b>Estimated Time</b>	10 minutes
<b>Topic Objective</b>	To identify the relationship between logic and critical thinking, and determine the four major steps of logical thinking.
<b>Topic Summary</b>	There is a strong relationship between logic and critical thinking; Logic can be applied to critical thinking to distinguish between good or bad reasoning.
<b>Materials Required</b>	Flipchart/board, markers
<b>Planning Checklist</b>	None
<b>Recommended Activity</b>	<p>Have participants work alone to complete the logic problem. Then, reconvene as a group.</p> <p>State: "Jerry is taller than Charles, but not as tall as Bob. Bob is taller than Jerry, but not as tall as Daniel. Who is the tallest and the second tallest?"</p> <p>Give the participants 2 minutes to work out this problem. Then, have a learner come up and solve it (2 minutes). Discuss the problem as a group and methods used to solve the logic problem.</p> <p>Now, ask the participants to come up with their own logic problem. Have someone volunteer to come up to the flip chart and write their logic problem down.</p> <p><b>Answer:</b> Order of tallest to shortest: Daniel, Bob, Jerry, and Charles.</p>
<b>Stories to Share</b>	Share any personal, relevant stories.
<b>Delivery Tips</b>	Encourage everyone to participate.
<b>Review Questions</b>	What are the four major steps of critical thinking?

## Applying Reason



An individual's ability to reason well is considered a critical thinking skill. Many of the definitions of critical thinking tend to focus on a person's ability to reason. Reasoning occurs when we use our knowledge of one thing, process, or statement, to determine if another thing, process, or statement is true. Reasoning will help to strengthen your ability to draw logical, sensible conclusions. When we apply reasoning, we use logic to determine "what follows what." Human reasoning does not always follow logic and can often be based on emotional bias.

The two main forms of reasoning include:

- **Deductive Reasoning:** When we use our prior knowledge of two or more premises to infer a valid conclusion.
- **Inductive Reasoning:** When we gather data or make observations that lead to a hypothesis or conclusion (much like the scientific method).

<b>Estimated Time</b>	10 minutes
<b>Topic Objective</b>	To define <i>reasoning</i> in relation to critical thinking.
<b>Topic Summary</b>	Reasoning occurs when we use our knowledge of one thing, process, or statement, to determine if another thing, process, or statement is true.
<b>Materials Required</b>	<a href="#">Worksheet 2: Logical Reasoning</a>
<b>Planning Checklist</b>	Provide enough worksheet printouts for all participants.
<b>Recommended Activity</b>	Have participants work in partners to complete Worksheet 2: Logical Reasoning. Share worksheet responses.
<b>Stories to Share</b>	Much of the reasoning we do is of the probability sort. Think about when we get up in the morning and decide what to wear. We do so based on the weather. We often check the forecast and see what the probability is for rain, snow, or sunshine.
<b>Delivery Tips</b>	Encourage everyone to participate.
<b>Review Questions</b>	What are the two main forms of reasoning?



## Practical Illustration



Jim and Betsy, who work in HR, were asked to complete and evaluate interviews for a new hire with the company. After the interviews were completed, Jim suggested that they should hire his close friend, however Betsy did not agree with Jim. Betsy told Jim that they should use critical thinking and proper reasoning to determine who would be the best candidate for the job. She reminded Jim of the importance of being objective and avoiding any biases when making this decision. After all, this would be an important decision that would make a significant difference to the company.

The two sat down and began analyzing their notes from the interviews. With careful consideration and evaluation, Jim and Betsy were able to conclude that Mark would be the best candidate for the position. He approached the interview with professionalism, confidence, and displayed excellent critical thinking skills with the interview questions.

## Module Two: Review Questions

- 1) What is the goal of critical thinking?
  - a) To ensure that your voice is heard
  - b) To reflect on your mistakes so that they don't happen again
  - c) To ensure that people make the best choices based on the best information
  - d) To make decisions based solely on what you already know

Critical thinking is all about ensuring people make the best choices based on the best information.

- 2) A critical thinker will accept facts at face value.
  - a) True
  - b) False

A critical thinker does not accept facts at face value; instead, they analyze these facts to gain a thorough understanding of the topic at hand.

- 3) What is critical thinking?
  - a) The process of forming decisions based on our biases
  - b) The act of finding faults in another person's argument
  - c) The act of formulating a response while listening to a speaker
  - d) The process of questioning ideas and conclusions, by analyzing, assessing and reconstructing concepts

Critical thinking is the process of questioning ideas and conclusions, by analyzing, assessing and reconstructing concepts.

- 4) When should a critical approach be applied to a situation?
  - a) All of the time
  - b) When you are looking for facts
  - c) When you are in an argument
  - d) When the outcome will make a significant difference to you

A critical approach should be applied to the situation when the outcome of the situation or problem will make a significant difference to you.

5) What can result without the use of critical thinking?

- a) Loss of financial resources
- b) Loss of relationships
- c) Loss of opportunities
- d) All of the above

If critical thinking is not applied to important situations, it can result in a loss of financial resources, opportunities, relationships, or various other aspects in life.

6) What is logic?

- a) The ability to see things from another person's perspective
- b) The act of being able to challenge your sources
- c) The branch of philosophy that gives the rules for deriving valid conclusions
- d) None of the above

Logic is the branch of philosophy that gives the rules for deriving valid conclusions.

7) Logical thinking involves checking the components of the argument and making connections between them, which is what we call \_\_\_\_\_.

- a) Analysis
- b) Non-linear thinking
- c) Thinking in reverse
- d) Reasoning

Logical thinking involves checking the components of the argument and making connections between them, which is what we call *reasoning*.

8) Which of the following is *not* a major step for logical thinking?

- a) Asking the right questions
- b) Making assumptions
- c) Organizing the data
- d) Drawing conclusions

The four major steps to logical thinking include asking the right questions, organizing the data, evaluating the information, and drawing conclusions.

9) \_\_\_\_\_ reasoning is when we gather data or make observations that lead to a hypothesis or conclusion (much like the scientific method).

- a) Deductive
- b) Abductive
- c) Analogical
- d) Inductive

Inductive reasoning is when we gather data or make observations that lead to a hypothesis or conclusion (much like the scientific method).

10) \_\_\_\_\_ reasoning is when we use our prior knowledge of two or more premises to infer a valid conclusion.

- a) Deductive
- b) Abductive
- c) Analogical
- d) Inductive

Deductive reasoning is when we use our prior knowledge of two or more premises to infer a valid conclusion.

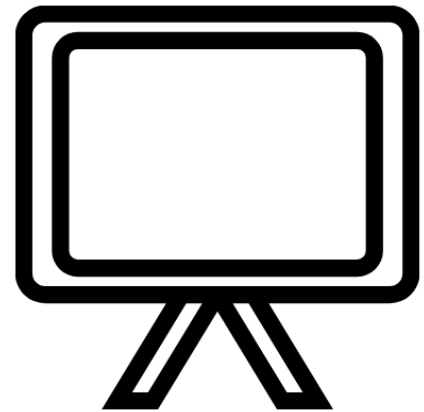
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# PowerPoint Slides



Below you will find the PowerPoint sample. The slides are based on and created from the Instructor Guide.

PowerPoint slides are a great tool to use during the facilitation of the material; they help to focus on the important points of information presented during the training.





“

*Thinking is the talking of the soul with itself.*

*Anonymous*

## MODULE TWO

# Understanding Critical Thinking

While we are consistently thinking throughout the day, our critical thinking skills may provide us with the greatest value.



## Defining Critical Thinking

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- What is happening?
- Why is this important?
- Who is saying this?
- How do I know?
- What other possibilities exist?

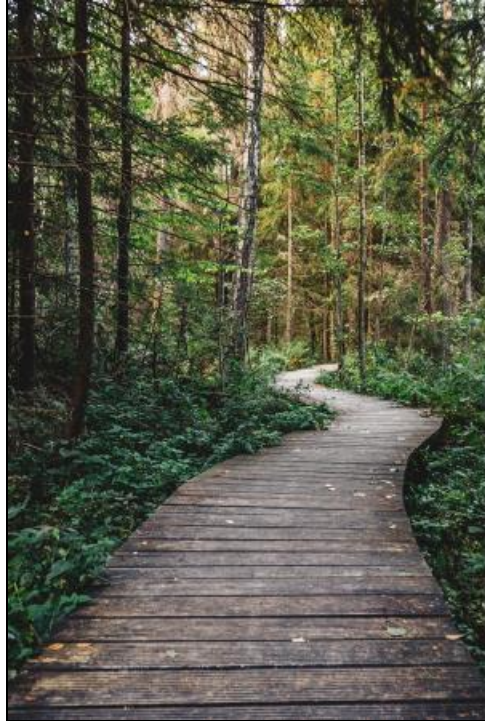
## Importance of a Critical Approach

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A critical thinker is trusted to make independent decisions.







## When to Think Critically

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- Choosing your career
- Evaluating specific online
- Risk Assessment
- Talent hiring
- Purchasing decisions

## The Role of Logic

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There is a strong relationship between logic and critical thinking.







## Applying Reason

---

Human reasoning does not always follow logic and can often be based on emotional bias.

## Practical Illustration



- Defining Critical Thinking
- Importance of a Critical Approach
- When to Think Critically
- The Role of Logic
- Applying Reason

## Module Two: Review Questions

1. What is the goal of critical thinking?

A. To ensure that your voice is heard

B. To reflect on your mistakes so that they don't happen again

C. To ensure that people make the best choices based on the best information

D. To make decisions based solely on what you already know

# Quick Reference Sheets



Below is an example of our Quick Reference Sheets. They are used to provide the participants with a quick way to reference the material after the course has been completed. They can be customized by the trainer to provide the material deemed the most important. They are a way the participants can look back and reference the material at a later date. They are also very useful as a take-away from the workshop when branded. When a participant leaves with a Quick Reference Sheet it provides a great way to promote future business.



# Critical Thinking

## Quick Reference Sheet



### Defining Critical Thinking

Critical thinking is more than just thinking. It involves a deeper level of thinking that goes beyond our everyday basic thoughts. To think critically means to question ideas and conclusions, by analyzing, assessing and reconstructing concepts. Critical thinking helps you to determine which actions are necessary to create the best solution to your problems. A critical thinker does not accept facts at face value; instead, they analyze these facts to gain a thorough understanding of the topic at hand. As a result, critical thinking can encourage individuals to be open-minded, and gain better control over their own learning.

Thinking critically includes asking questions, including:

- What is happening?
- Why is this important?
- Who is saying this?
- How do I know?
- What other possibilities exist?



### Observation

As humans, we are constantly observing the world around us. Observation provides us with a clearer vision, and can direct us to the right path to identify and solve problems. To begin an analytical process, it is necessary to observe your surroundings. A great critical thinker will have a keen sense of observation; they will listen attentively, and notice minute details in both verbal and nonverbal communication cues. Observation begins the critical thinking process by identifying the problem, its significance, and who might be involved. A critical thinker will ask questions to acquire a deeper understanding of a problem or argument, including "What is the problem?" and "Why do we need to solve it?"

Great observation skills can help to:

- Foresee problems before they occur
- Detect fallacies others may have ignored
- Recognize opportunities for growth and improvement
- Create solutions that had otherwise gone unnoticed



## Curiosity

A core trait of critical thinkers, as well as many successful leaders is *curiosity*. A critical thinker will be curious about the world and their surroundings. This includes maintaining an open mind and continuously gaining a deeper knowledge. Curiosity is a driving force of critical thinking and the unlocking of possible solutions. It encourages us to ask questions such as “*Why is it that way?*”, or “*How does that work?*” A curious individual will have a question for almost anything, as a means of seeking truth.

A curious mind will examine situations from various perspectives. Curiosity is all about wondering about alternatives, which involves appreciating other beliefs, viewpoints or cultures that are not the same as their own. In general, a critical thinker will have broad interests and be curious about diverse topics.



### Consider Clarifying Questions

If you're looking to get the right answers, it's important to ask the right questions. Clarifying questions are thought-provoking questions that will help the thinker acquire more information and get a better understanding of the overall problem. Although these questions can be simple questions of fact, they help to obtain valuable knowledge that will eliminate any confusions or misunderstandings. With clarifying questions, you can expect other questions to arise out of the answers you receive. Consider asking the speaker to elaborate on a message, or confirm or deny what was understood by the information. Clarifying questions can help one another truly listen to what is being said.

Examples of clarifying questions include:

- Could you elaborate on this?
- What would be another way that you could do this?
- What resources did you use?
- What was meant when you said this?



### Review All Possibilities

Once a possible solution has been derived, problem solvers may feel they can proceed with the solution. However, they should not overlook the all-important step of evaluating all possible solutions. Sometimes one problem has more than one solution, and taking the time to evaluate the efficacy of each alternative is a critical thinking skill. The critical thinker should evaluate each alternative and judge which one is the best.

The following steps are an effective evaluation technique:

1. Make a T-chart to weigh the pros and cons of each possible solution.
2. Develop criteria (or requirements) and assign weights to each criterion.
3. Prioritize the criteria.
4. Rate the proposed solutions using the criteria.



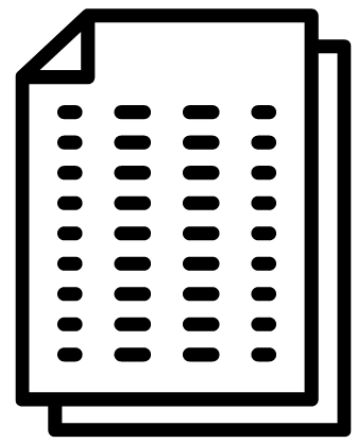
# Handouts



Each course is provided with a wide range of worksheets.

Worksheets help check your participants' understanding. If a lesson calls for a worksheet, it will be listed in the Lesson Plan box under Materials Required. All worksheets are customizable and can be found in the Appendix of the Instructor Guide and the Training Manual.

As a trainer, icebreakers give your participants the opportunity to get to know each other better or simply begin the training session on a positive note. Icebreakers promote collaboration, increase engagement, and make your training more light-hearted and fun. Below is an example from the Icebreakers folder.



## Sample Worksheet 1

### ***What if?***

Choose one of the following ***What If*** scenarios and use critical thinking to form a response.

1. *What if* you could say one thing to the whole world. What would it be?
2. *What if* you could travel back in time. What would you change?
3. *What if* you had to leave your house forever and could only take three things. What would they be?

## **Icebreaker: A New Leader**

### **PURPOSE**

To help participants get acquainted and start talking to each other.

### **MATERIALS REQUIRED**

1. Index cards

### **PREPARATION**

Write the name of a different famous person on five or six index cards. Some examples: Madonna, Tiger Woods, Lance Armstrong, Nelson Mandela, Bill Gates, Angelina Jolie.

Divide participants into groups of four to six. Give each group one of the cards.

### **ACTIVITY**

Tell participants that the president of their company (or the head of their department) has resigned and the position is now being taken over by the person on their index card. Ask each group to think of one characteristic of this person that will help him or her do well in this new role.

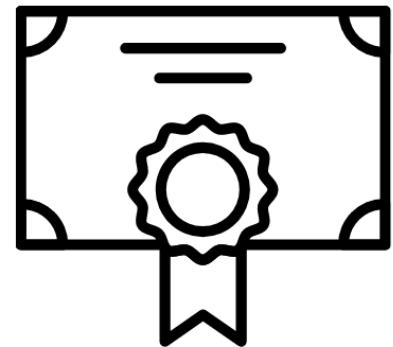
After a few minutes, ask the groups to report on what they decided.



# Certificate of Completion



Every course comes with a Certificate of Completion where the participants can be recognized for completing the course. It provides a record of their attendance and to be recognized for their participation in the workshop.



CERTIFICATE OF COMPLETION

**[Name]**

*Has mastered the course  
Critical Thinking*

Awarded this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

Presenter Name and Title

\_\_\_\_\_