

Institutional Learning Outcome (ILO) Foci: Critical Thinking & Investigation

A TRU graduate should be able to construct meaning from information by applying creative and critical thinking through research.

Through design, imagination, and creativity, graduates discover knowledge and produce new knowledge. They use sound research methodologies to navigate obstacles and solve problems. Using reliable assessment methods and analyzing relevant data, they reach meaningful conclusions. They have the tools to evaluate arguments and change rhetoric, and to envision scenarios that divert from the familiar.

	1 Beginning	2 Approaching	3 Meeting	4 Exceeding
Foci	(entry level, insufficient at the end of first ILO course)	(minimally sufficient after first ILO course)	(well-developed, sufficient at graduation)	(Exceptional at end of undergraduate degree)
Critical and Creative Exploration: Students investigate a topic, issue, or assumption (for example, formulate a position, topic, question, perspective, thesis, hypothesis)	Identify a broad problem or topic to explore, describes a problem in broad terms, to broadly define a question or issue.	Articulates a perspective, position, question, or hypothesis based on research and/or theory.	Formulates a nuanced question, position, framed from a particular perspective, using appropriate methodology of investigation. Typically, occurs through a refinement process (e.g., feedback loop, considering literature, drafts)	Investigates a novel question that could contribute to the interpretative or professional community. (Plus all of Meeting).
Critical Evaluation: Students assess, organize, and synthesize existing knowledge	Locates and identifies broadly relevant information. Creates descriptive summaries that may include some irrelevant information.	Analyzes information with tools provided with some initial selective screening, to decide if information aligns with the topic or question.	Synthesizes concisely, bringing multiple papers together with specific uses and insights. Speaks to themes and weakness across sources & integrating a variety of perspectives.	Critical engages beyond application of taught ideas, critiques, and interrogates. Evaluates the material that contributes new insights to the interpretative or professional community. (plus all of Meeting).

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Development: Students generate information, data, products, and/or designs (for example: students problem solve by combining, adapting, and/or expanding on existing knowledge and practice resilience through adaption to challenging situations).	Identify simple, broadly relevant data, source, or tool. Often not the best tool or source.	Selects more specific information judges the value of the knowledge generation approach. In basic ways, combines existing knowledge.	Collects or generates relevant information, data, products, and/or designs. In depth, not superficial. Demonstrates persistence and adaptation to challenging situations. Adapts existing knowledge	Develops a information, data, products, and/or designs independently with minimal instruction that is highly relevant and effective for adapting or expanding on existing knowledge. (plus all of Meeting).
Critical Interpretation: Students analyze quantitative and/or qualitative data, make evidence-based arguments, and draw disciplinary-informed conclusions using appropriate methodologies.	Mechanically applies simple analysis but not able to adapt or connect with research questions. Uses pre-prepared data or information. Often the conclusion repeats the question.	Uses prepared data and analysis to find basic arguments or evidence. Complete basic analyses as planned. Draws simple conclusions that respond to the question.	Analyzes data to make accurate, precise evidence-based arguments (often an iterative analytical process). Draws disciplinary-informed and conclusions.	Draw conclusions that are novel or original that contribute to and expand disciplinary or professional fields. (plus all of Meeting).
Critical and Creative Engagement: Students disseminate information; communicate knowledge and the processes used to generate it; use effective formats to communicate quantitative and/or qualitative information.	States the full description point by point that is Organized within pre-set structure and format (e.g., one mode of communication. One familiar audience. No engagement).	Shows increased dynamism in structure and delivery. Highlights key points through emphasis (voice intonation, additional mode of communication). Organizes the structure with guidance and within context/requirements.	Selects, combines, and uses effective formats to communicate quantitative and/or qualitative information. Shows selective inclusion of information to emphasize highlights. Generates or appropriately adapts a relevant format. Appropriate to specified audience and requirements. Any multi-modal components are effectively created, conveyed, and aligned.	Adapts to specific and/or multiple stakeholder audiences, compelling means of conveying. Selects tools specifically relevant to the type of information they are sharing. (plus all of Meeting). Disseminates processes, information, and communicate in ways that expands disciplinary or professional dialogues.

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<p>Creative Innovation: Students synthesize and apply knowledge in a novel or creative way (for example, use appropriate approaches in the creation and/or application of knowledge to address an issue or answer a question through critical and/or creative thinking).</p>	Reuses an existing and established approach in the creation or application of knowledge.	Adapts an existing or established approach	Experiments with existing approaches to attempting something new. Identifies implications and application for disciplinary field or professional practice, community.	Create novel or original synthesis of approach to or application of knowledge to address an issue or question. (plus all of Meeting).
<p>Critical Reflection: Students acknowledge context and assumptions (for example, critically reflect on assumptions, including one's own, and analyze the complexity of a problem or issue; critically account for the impact of assumptions and biases on knowledge generation processes).</p>	Provides a basic description of the existence of gaps and differing perspectives exist in their knowledge generation processes. No or limited consideration of multiple perspectives or assumptions.	Provide some reasons, connections, and implications. Identify some gaps in their knowledge generation processes including how some of the perspectives that would differ and their own assumptions. Begin to acknowledge the impact of those perspectives, gaps, and assumptions,	Critically describe how own assumptions and thinking impacts their knowledge generation processes. Critically reflect on assumptions, including one's own assumptions, to account for the impact of assumptions and biases on knowledge generation processes.	Informed critical reflection that connects the individual knowledge generation process with the wider context and existing disciplinary and professional fields. Considers the wider complexity of the issue, and accounting for the broader impact. (plus all of Meeting).