

CRITICAL AND CREATIVE THINKING RUBRIC – GRADUATE PROGRAMS

Adapted from the AACU LEAP rubrics, the Bases of Competence skills, Ontario Council of Academic Vice-Presidents' Graduate Degree Level Expectations, and the University of Guelph Learning Outcomes

Definition

Critical and creative thinking is a concept that refers to the application of logical principles, after much inquiry and analysis, to solve problems with a high degree of innovation, divergent thinking and risk taking. Those mastering this outcome show evidence of integrating knowledge and applying this knowledge across disciplinary boundaries. Depth and breadth of understanding of disciplines is essential to this outcome. At the graduate level, originality in the application of knowledge (master's) and undertaking of research (doctoral) is expected.

	Introduce 1	Reinforce 2	Master 3
Independent Inquiry and Analysis <i>A systematic process of exploring issues, objects and works through the collection and analysis of evidence that result in informed conclusions or judgments</i>	Asks appropriate questions and finds evidence related to inquiry of material with a critical eye. Comprehends how the methods of research and inquiry are used to create and interpret knowledge in the discipline.	Critically evaluates research and scholarship in the discipline. Appreciates and addresses complex issues using established principles and techniques, and potential contributions of other interpretations or disciplines. Develops and supports a sustained written argument or shows originality in knowledge application (master's).	Designs and performs original research to answer questions and / or test hypotheses, or other scholarship, of quality sufficient to satisfy peer review. Undertakes pure and / or applied independent research to an advanced level (doctoral). Appreciates the limits of their work and discipline.
Problem Solving <i>Is a process in which one works through a series of operations to come to a conclusion</i>	Identifies issues and creates a plan to manage the problem.	Identifies and solve issues in a creative manner. Considers and rejects less acceptable approaches to solving the problem and creates and follows a plan.	Sets out to solve issues in creative ways that will not only solve a current issue, but also looks to the future to prevent similar problems. Evaluates the appropriateness of different approaches to solving problems; devises arguments using these methods and articulates reasons for choosing the solution
Creativity <i>Involves the ability to adapt to situations of change, to initiate change and to take intellectual risks</i>	Recognizes creative solutions to problems and seeks for beneficial future changes.	Shows a creative mind that is also able to look at long-terms goals. Considers change in an innovative way.	Exemplifies the capacity to think in untested and innovative directions and take intellectual risks. Contributes to development and / or innovation in their academic or professional field (e.g. skills, techniques, ideas) (doctoral).
Depth and Breadth of Understanding	Applies basic concepts to specific	Extracts and integrates information	Gathers, reviews, evaluates and

<i>Demonstrates detailed knowledge in one or more disciplines and integrates knowledge across disciplinary boundaries</i>	disciplines.	and perspectives from a variety of disciplines. Has a critical awareness of current problems and new insights in the academic discipline, area of study or professional practice.	interprets information; compares the merits of alternate hypotheses in many different disciplines. Demonstrates mastery of a body of knowledge and critically evaluates the limits of their own knowledge and how these limits influence analyses. Thoroughly understands an appropriate body of knowledge that is at the forefront of the academic discipline, area of study or professional practice.
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LITERACY RUBRIC – GRADUATE PROGRAMS

Adapted from the AACU LEAP rubrics, the Bases of Competence skills, and the University of Guelph Learning Outcomes, and the ARCL Competency Standards

Definition

Literacy is the ability to extract material from a variety of resources, assess the quality and validity of the material, and use it to discover new knowledge. This definition also includes the ability to use quantitative data, effective use of technology and the development of visual literacy.

	Introduce 1	Reinforce 2	Master 3
Information Literacy <i>The ability to know when there is a need for information, where to locate it and the ability to identify the value and differences of potential resources in a variety of formats</i>	Locates and uses information from a variety of resources and formats including visual representations.	Locates information and is also able to understand when more information is needed and how to evaluate its relevance and quality.	Easily identifies, locates, and critically evaluates information from a variety of disciplines. Identifies gaps in the information retrieved related to their field of study. Effectively, responsibly and ethically uses this information to make new discoveries, knowledge, or practices.
Quantitative Literacy <i>Includes numeracy, and a comfort in working with numerical data</i>	Understands the need for evidence and use of numerical data, and is able to generally interpret this data.	Collects and uses quantitative data as evidence for graduate projects. Identifies appropriate experimental design and statistical methods to analyze the data as required. Demonstrates competence in situations involving numeracy.	Reasons and solves quantitative problems from a wide array of authentic contexts and everyday life situations. Develops sophisticated arguments supported by quantitative evidence. Creates and communicates numerical data effectively.

			When necessary, effectively uses, interprets and conducts appropriate statistical analyses.
Technological Literacy <i>The ability to select and use appropriate technology</i>	Uses technology to research and support the discovery and communication of knowledge.	Uses technology to complement knowledge and understanding; demonstrates a large skill set in contemporary programs and technological formats.	Demonstrates a breadth of knowledge in computer and technology skills and uses them to manage and enhance the communication of knowledge arising from research. Selects or creates appropriate technologies for the task at hand.
Visual Literacy <i>The ability to effectively find, interpret, evaluate, use, and create images and visual media and content.</i>	Determines the nature and extent of the visual materials needed. Finds, accesses and uses needed images and visual media effectively.	Evaluates images and their sources; situates image and media in cultural, social, historical and disciplinary contexts.	Creates meaningful images and visual media, uses these effectively, and critically analyses their content. Accesses and uses visual materials ethically and legally.

GLOBAL UNDERSTANDING RUBRIC – GRADUATE PROGRAMS

Adapted from the AACU LEAP rubrics, the Bases of Competence skills, and the University of Guelph Learning Outcomes

Definition

Global understanding encompasses the knowledge of cultural similarities and differences, the context (historical, geographical, political and environmental) from which these arise, and how they are manifest in modern society. Global understanding is exercised as civic engagement, intercultural competence and the ability to understand an academic discipline outside of the domestic context.

	Introduce 1	Reinforce 2	Master 3
Global Understanding <i>Comprehension of the variety of political, religious, cultural, geographical, biological, environmental and historical forces in cultures</i>	Demonstrates interest in global culture and expresses this in writing.	Identifies differences and similarities in approaches to various issues among countries and explores this within one's own discipline.	Integrates different materials that show an interest in global activities from perspectives of different disciplines. Able to critically assess and integrate or compare diverse content to further understanding and communication.

<p>Sense of Historical Development <i>Understanding of disciplines in a modern society; its limitations and developments</i></p>	<p>Illustrates that different disciplines have formed and that this history affects current knowledge of the area.</p>	<p>Shows evidence that one discipline may not be a sufficient singular point of view on a topic. Distinguishes that disciplines have histories and are dynamically changing.</p>	<p>Explains the historical and contextual factors that affect disciplinary perspectives and articulates the relativity of knowledge and understanding at a given time.</p>
<p>Civic Knowledge and Engagement <i>Local and global working to make a difference in the civic life of communities and to be conscious of different perspectives (generational and gender)</i></p>	<p>Shows interest in learning about engagement and community involvement.</p>	<p>Evidences a degree of involvement in the community; demonstrates interest in expanding endeavors to work within community contexts.</p>	<p>Provides evidence of experience in civic engagement activities. Connects disciplinary knowledge to civic engagement and participation in civic life. Demonstrates reflective insights or analysis about the aims and accomplishments of one's or a group's actions</p>
<p>Intercultural Competence <i>A set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts</i></p>	<p>Identifies differences and similarities among people of different cultures.</p>	<p>Demonstrates a degree of sensitivity to different cultures and knowledge of what makes them unique. Demonstrates the ability for empathy and shows evidence of intercultural knowledge.</p>	<p>Demonstrates mature sense of openness, empathy, and knowledge of different cultures. Evidence of interaction and intercultural knowledge are apparent. Articulates a complex and reflective understanding of difference and negotiates a shared understanding based on those differences</p>

COMMUNICATING RUBRIC – GRADUATE PROGRAMS

Adapted from the AACU LEAP rubrics, the Bases of Competence skills, and the University of Guelph Learning Outcomes

Definition

Communicating is the ability to interact effectively with a variety of individuals and groups, and convey information successfully in a variety of formats including oral and written communication. Communicating also comprises attentiveness and listening, as well as reading comprehension. It is the ability to communicate and synthesize information, arguments, and analyses accurately and reliably.

	Introduce 1	Reinforce 2	Master 3
<p>Oral Communication <i>Includes interpersonal skills, oral speaking and active listening</i></p>	<p>Demonstrates the ability to present information in a comprehensive manner, clearly and effectively.</p>	<p>Demonstrates oral communication skills that are organized and presented in a creative and interesting manner. The student speaks clearly and accurately.</p>	<p>Demonstrates the ability to present information in ways that the receiving party can easily understand and actively listens and responds effectively to questions. The speaker is clear and shows confidence as a public presenter.</p>

<p>Written Communication <i>The ability to express one's ideas through a variety of writing styles</i></p>	Writes clearly and demonstrates general knowledge when describing an idea.	Writes a clear message with good vocabulary and little grammatical, spelling or functional errors.	Uses a breadth of vocabulary appropriate to discipline or context and writes in a sophisticated manner clearly conveying the message of the speaker. Rarely makes errors in grammar, spelling, and other aspects of writing and referencing.
<p>Reading Comprehension <i>The understanding of writing</i></p>	Reads at an academic level internalizing most information.	Evidences the ability to read a wide vocabulary and understand more sophisticated writing.	Demonstrates a substantial grasp of the language including a well-developed ability to extract information from complex texts, in particular an ability to draw on material from other disciplines. Shows a high degree of skill in answering questions, and generating ideas from the written text.
<p>Integrative Communication <i>A mental process that integrates existing knowledge to develop and communicate new knowledge across the curriculum</i></p>	Relies on experience perceived as similar and related to one's own interests to aid in the learning process.	Adapts previous knowledge and experience gained in one situation to new situations to solve problems or explore issues. Independently connects examples, facts or theories from more than one discipline or perspective.	Uses experience, disciplinary and interdisciplinary knowledge, and adapts this to solve increasingly difficult problems or explore complex issues in an original way. Integrates knowledge and communicates this effectively to a broad array of audiences (e.g. academic and non-academic).

PROFESSIONAL AND ETHICAL BEHAVIOUR RUBRIC – GRADUATE PROGRAMS

Adapted from the AACU LEAP rubrics, the Bases of Competence skills, Ontario Council of Academic Vice-Presidents' Graduate Degree Level Expectations, and the University of Guelph Learning Outcomes

Definition

Professional and ethical behaviour requires the ability to accomplish the tasks at hand with proficient skills in teamwork and leadership, while remembering ethical reasoning behind all decisions. Organizational and time management skills are essential in bringing together all aspects of managing self and others. Academic integrity is central to mastery in this outcome. At the graduate level, intellectual independence is needed for professional and academic development and engagement.

	Introduce 1	Reinforce 2	Master 3
<p>Teamwork <i>Working together in a respectful and collaborative manner to complete</i></p>	Works with others in a respectful manner.	Works in a team with professionalism, and is aware of each member's	Engages fully in team tasks, interacts with integrity and respect, contributes quality work, and excels in their personal contributions.

<i>tasks</i>		contributions to the team.	Demonstrates personal responsibility and accountability to the group.
Ethical Reasoning <i>Includes moral maturity; a moral sense of mind behind decision-making</i>	Recognizes when something is ethically right or wrong.	Reflects on personal or others' judgment and analyzes ethical reasoning or lack of reasoning. Analyzes problems with ethical reasoning in mind.	Applies depth and consistency of moral judgment. Shows knowledge that the solution to a problem is complex and requires thought and time to consider all involved. Examines problems from a moral perspective. Demonstrates behaviour consistent with academic integrity and social responsibility. Applies these understandings and processes to disciplinary research (masters) and their own research (doctoral)
Leadership <i>Involves having a vision of where the organization is headed and the ability to give direction and guidance to others</i>	Has a positive effect on others when in a leadership role and realizes a long-term plan is needed.	Delegates work to others and has the sense to follow-up and encourage others. Develops plans for the future mindful of a final vision.	Designates tasks and influences and guides others to work in a manner which is effective, organized, and motivates others to do their best. Produces a strategic vision that is accurately planned.
Personal Organization/Time Management <i>An ability to manage several tasks at once and prioritize</i>	Completes important or urgent tasks, and has a mind for organization.	Plans for completion of many tasks, and prioritizes them for ease of accomplishment.	Prioritizes events based on importance and urgency in a manner where tasks are organized and everything is accomplished. Is able to multi-task effectively. Clearly demonstrates personal accountability and responsibility.
Intellectual Independence <i>The ability to think for oneself and to review information, make judgments and take action autonomously</i>	Performs basic professional tasks without needing to refer to others.	Shows initiative and takes personal responsibility. Appreciates broader implications of knowledge application in specific contexts (master's).	Makes informed decisions in complex situations and justifies them when challenged. Ability to reason and debate information independently and develop creative and novel research questions, theses or recommendations. Evaluates the broader implications of knowledge application in specific contexts (doctoral). Demonstrates sufficient intellectual independence for continuing professional development (master's) and to be engaged and current in academic and professional matters (doctoral).