University of Guelph Learning Outcomes
Dr. Serge Desmarais, Associate Vice-President (Academic)

Board of Undergraduate Studies – November 16, 2012
Senate – December 5, 2012

Introduction

Since Senate's adoption in 1987 of the ten Learning Objectives, the University of Guelph has been a leader in outcomes-based pedagogy. The Provost's Whitepaper, "The Lighting of a Fire" (2005), and the Final Report of the 21st Century Curriculum Committee (2007); Integrated Plan I (2006-2011) and Integrated Plan II (2012-2017); the articulation of the alignment of the University Learning Objectives with OCAV's University Degree Level Expectations in 2008; the University's Institutional Quality Assurance Process (2011) and the Strategic Mandate Agreement (2012) all expand on the original commitment made to our students in 1987. Each document articulates in one way or another continued support for and emphasis on establishing learning outcomes for all degree programs and specializations.

In 2011-12, the Board of Undergraduate Studies and Senate also expressed their support for learning outcomes initiatives. At their most recent meetings on October 3, 2012 and on October 22, 2012, respectively, each reaffirmed the importance of learning outcomes at the University by identifying as one of the key priorities in educational policy, the "continued support for curriculum reform and educational innovation, including the integration of learning outcomes in the undergraduate curriculum."

The significance the University places on the importance of learning outcomes at the institutional, degree, major and course level cannot be understated. It is widely accepted that key to ensuring clearly articulated outcomes, their development must be faculty-driven, they should be measurable and inform a process for assessing student achievement, and, finally, must be part of a culture of continuous improvement and evaluated through program quality reviews.   Above all, learning outcomes must first and foremost make clear to students what they are expected to learn and must also support student achievement of the expressed learning outcomes by ensuring a curriculum that is increasingly coherent, aligned and integrated (Kenny & Desmarais, 2012).   Established outcomes allow faculty, departments, programs and the University to both demonstrate and account for student achievement.

Almost in lock-step with the University community's interest in learning outcomes, the provincial government has expressed a strong concern for increased accountability in the post-secondary system and particularly the accountability of universities to the public purse: the taxpayers, students and their parents. How do we know students are achieving what we say they are? How do we know our programs are of high quality? How do we know what we want them to achieve is relevant to their engaged participation as full citizens in the 21st century, whether in their careers, further study or other endeavors?

Development and Study of Five University-wide Learning Outcomes

Given the strong campus support for learning outcomes and increased calls for accountability to the province, Provost Maureen Mancuso made their study a University-wide priority. She engaged Dr. Fred Evers, professor emeritus in the department of Sociology and Anthropology, and Dr. Serge Desmarais, Associate Vice-President (Academic), to develop and design university-level learning outcomes and to

determine whether they might be assessed and measurable across degree-programs. Beginning in 2010 with a comparison and categorization of the 1987 Learning Objectives, Dr. Evers's highly regarded *Bases of Competence: Skills for Lifelong Learning and Employability* (co-authored with James C. Rush and Iris Bedrow)*,* and the AACU Leap Learning Outcomes (http://www.aacu.org/leap/vision.cfm), this two-year, consultative process led to the development of five learning outcomes (below), their associated skills and detailed rubrics (appendix 1).

University of Guelph 2012 Learning Outcomes

Critical and Creative Thinking
(Inquiry and Analysis, Problem Solving, Creativity, Depth and Breadth of Understanding)
Critical and creative thinking is a concept in which one applies logical principles, after much inquiry and analysis, to solve problems in 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.

Literacy
(Information Literacy, Quantitative Literacy, Technological Literacy, Visual Literacy)
Literacy is the ability to extract information from a variety of resources, assess the quality and validity of the material, and use it to discover new knowledge. The comfort in using quantitative literacy also exists in this definition, as does using technology effectively and developing visual literacy.

Global Understanding
(Global Understanding, Sense of Historical Development, Civic Knowledge and Engagement, Intercultural Competence)
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.

Communicating
(Oral Communication, Written Communication, Reading Comprehension, Integrative Communication)
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 includes the ability to communicate and synthesize information, arguments, and analyses accurately and reliably.

Professional and Ethical Behaviour
(Teamwork, Ethical Reasoning, Leadership, Personal Organization and Time Management)
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. The ability for organizational and time management skills is essential in bringing together all aspects of managing self and others. Academic integrity is central to mastery in this outcome.

Those who have worked with the University's 1987 Learning Objectives, the *Bases of Competence* or the AAUC LEAP outcomes will see many familiar themes in the proposed learning outcomes. During the course of the review process (appendix 4), consultation with faculty, staff, and students suggested that all of the University's programs emphasize the five outcomes presented in this document, albeit to varying degrees. Dr. Evers's work (documenting skills through ePortfolios in the Bachelor of Arts and Sciences and Bachelor of Commerce programs) revealed these outcomes and skills to be measurable even without making them explicit to students. A comparison of the final five 2012 Learning Outcomes against the 1987 Learning Objectives and the UUDLEs demonstrates close alignment (appendix 2). Indeed, much of what is retained and the concepts which seem new have come to the fore precisely because our programs already provide learning environments in which our students achieve this body of knowledge, skills and values. This two-year study serves to reinforce that as a university we must make clear to students what we expect them to achieve upon graduation from a baccalaureate and these new outcomes make this explicit. We must also critically, and arguably across the entire post-secondary system, provide a framework within which to measure whether our students have met these benchmarks while also allowing curriculum and program committees to further develop, define and even redefine their outcomes at the degree and major level in order that we do not lose sight of the disciplinary context within which our students learn.

Next Steps – The Future of Outcomes Assessment at the University of Guelph

The adoption of these five proposed outcomes begins the process of embedding a culture of outcomes assessment and cycle of continuous improvement at the University of Guelph. To that end, there are a number of support measures already in place. Earlier this year, the Office of the Associate Vice-President (Academic) released the "Guide to Developing and Assessing Learning Outcomes" (Kenny & Desmarais), http://www.uoguelph.ca/vpacademic/avpa/pdf/LearningOutcomes.pdf, and with this document also launches a Learning Outcomes website: http://www.uoguelph.ca/vpacademic/avpa/outcomes/. Open Learning and Educational Support staff members continue to provide their expertise to departments and programs on a consultative basis as well as build capacity within colleges and departments.

Perhaps the most significant measure is in the area of technological support for the assessment of outcomes at the university and degree program level. Since last year, the University has been engaged in such a project wherein members of Open Learning and Educational Support, along with faculty colleagues, have been exploring ways to enhance the capacity of our curriculum mapping software (Currickit) to identify and assess learning outcomes. This initiative is now in further development as part of a collaborative project with Desire2Learn. This project will explore ways to create a systematic approach to the identification and assessment of students' improvement in achieving the proposed University learning outcomes. It is our goal to design a tool that enables an appropriate feedback loop for students – a way by which we can help students document and understand their own learning – while enabling majors, departments and programs to use this tool for their own purposes, such as the evaluation of student progress, which is not only a requirement of the quality assurance review but can also be used as a means of program appraisal and refinement. It is also our hope that this project will allow students to demonstrate their learning externally as they prepare for the transition from their undergraduate program to further study or the workforce.

Across the University, a number of programs and departments continue working toward establishing learning outcomes at the degree and major level. It is important to note that adoption of these

proposed University learning outcomes does not diminish those efforts. On the contrary, our review over the last two years indicates these proposed outcomes should serve to inform, reinforce, and support the progress made by the University of Guelph community to date. For those programs and departments struggling with the "how to" of this work, for example, how to identify their learning outcomes for a quality assurance review, the proposed learning outcomes and associated rubrics should allow for a reframing of the conversation; a starting point from which begins a robust discussion about what knowledge and skills we want students to achieve upon completion of a major and/or degree program and what values we expect they will carry with them. As for program and curriculum committees that have been fully engaged in the development of their own learning outcomes and are concerned that this current proposal will restrict their choice to include other program or discipline-specific learning outcomes, we can assure you that this is not the intent. Discussions with many individuals currently engaged in the development of program-level learning outcomes suggest that aligning the proposed University learning outcomes with those relevant to disciplines or programs should not constitute a serious challenge. Instead, we expect that efforts to align the various outcomes will assist in bringing clarity to the process of defining and refining measurable outcomes at the program and major level and have included a template to aid with this work (appendix 3). Adoption of these five proposed outcomes and associated skills – *Critical and Creative Thinking, Literacy, Global Understanding, Communicating, Professional and Ethical Behaviour* – brings the university community to the next crucially important steps in outcomes-based pedagogy and, equally importantly, continues our long tradition of putting students – the learner – at the centre of all we do.

Recommendations

1. That Senate adopt the proposed 2012 University of Guelph Learning Outcomes, their associated skills and detailed rubrics and recognize these as the basis from which to guide the development and quality review of programs. The 1987 Learning Objectives will remain in the calendar as they represent an important historic and inspirational document in the development of outcomes pedagogy at the University. However, the proposed outcomes will now serve as the primary basis for new program and course development.

2. That, as identified in IP2, by 2016 all majors and programs will establish learning outcomes based, in part, on those adopted here and clearly articulate these to students, the government and the broader public through curriculum mapping and other online tools.

3. That by the end of the 2013-2014 Senate cycle, the AVPA's office will report to Senate on the progress of the pilot to assess student achievement of outcomes at the University (degree) level.

Resources

1987 University of Guelph Learning Objectives
http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c02/c02-learningobjectives.shtml

AAUC Leap Project http://www.aacu.org/leap/

ARCL Information Literacy Competency Standards for Higher Education
http://www.ala.org/acrl/standards/informationliteracycompetency

ARCL Visual Literacy Competency Standards for Higher Education
http://www.ala.org/acrl/standards/visualliteracy

Evers, F., Rush, J. and Bedrow, I. *Bases of Competence: Skills for Lifelong Learning and Employability.* San Francisco: Jossey-Bass Publishers, 1998.

Guide to Developing and Assessing Learning Outcomes
http://www.uoguelph.ca/vpacademic/avpa/pdf/LearningOutcomes.pdf

Institutional Quality Assurance Process
http://www.uoguelph.ca/vpacademic/documents/UniversityofGuelphIQAPApprovedJun32011.pdf

Integrated Planning http://www.uoguelph.ca/vpacademic/planning/

OCAV's Degree Level Expectations
http://www.uoguelph.ca/vpacademic/avpa/pdf/ConsonanceChart-UUDLEs-LOs.pdf

University of Guelph Learning Outcomes website
http://www.uoguelph.ca/vpacademic/avpa/outcomes/

The University of Guelph Strategic Mandate Agreement
http://www.uoguelph.ca/vpacademic/planning/pdf/SMA%20University%20of%20Guelph.pdf

The 21st Century Curriculum Committee http://www.21c.uoguelph.ca/

The Provost's Whitepaper, Lighting of a Fire: Re-imagining the Undergraduate Learning Experiences
http://www.uoguelph.ca/vpacademic/whitepaper/lightingofafire/

UNIVERSITY OF GUELPH – LEARNING OUTCOMES
NOVEMBER, 2012

CRITICAL AND CREATIVE THINKING RUBRIC

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

Definition

Critical and creative thinking is a concept in which one applies logical principles, after much inquiry and analysis, to solve problems in with a high degree of innovation, divergent thinking and risk taking. Those mastering this outcome show evidence of integrating knowledge across disciplinary boundaries. Depth and breadth of understanding of disciplines is essential to this outcome.

	Introduce 1	Reinforce 2	Master 3
Inquiry and Analysis *A systematic process of exploring issues, objects and works through the collection and analysis of evidence that result in informed conclusions or judgments*	Asks appropriate questions and finds evidence related to inquiry of material with a critical eye.	Asks in-depth and specific questions regarding the material, including reliability of the source, and evaluates it critically. Includes evidence to back up statements.	Not only asks specific and in-depth questions, but also explores further possibilities with the aid of quality research. Asks and attempts to answer many questions from a critical perspective.
Problem Solving *Is a process in which one works through a series of operations to come to a conclusion*	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 *Involves the ability to adapt to situations of change, to initiate change and to take intellectual risks*	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.
Depth and Breadth of Understanding *Demonstrates detailed knowledge in one or more disciplines and integrates knowledge across disciplinary boundaries*	Applies basic concepts to specific disciplines.	Extracts and integrates information and perspectives from a variety of disciplines.	Gathers, reviews, evaluates and 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.

LITERACY RUBRIC

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 information from a variety of resources, assess the quality and validity of the material, and use it to discover new knowledge. The comfort in using quantitative literacy also exists in this definition, as does using technology effectively and developing visual literacy.

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CHANGING LIVES IMPROVING LIFE

	Introduce 1	Reinforce 2	Master 3
Information Literacy *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*	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. Identifies gaps in the information retrieved. Effectively, responsibly and ethically uses this information to discover new knowledge.
Quantitative Literacy *Includes numeracy, and a comfort in working with numerical data*	Understands the need for evidence and use of numerical data, and is able to generally interpret this data.	Uses quantitative data to one's advantage by using it as evidence for a claim. Demonstrates comfort with 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.
Technological Literacy *The ability to select and use appropriate technology*	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 these to enhance and manage the communication of knowledge. Selects or creates appropriate technologies for the task at hand.
Visual Literacy *The ability to effectively find, interpret, evaluate, use, and create images and visual media and content.*	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

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

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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 *Comprehension of the variety of political, religious, cultural, geographical, biological, environmental and historical forces in cultures*	Demonstrates interest in global culture and expresses this in writing.	Identifies differences and similarities of 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.
Sense of Historical Development *Understanding of disciplines in a modern society; its limitations and developments*	Illustrates that different disciplines have formed and that this history affects current knowledge of the area.	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.	Explains the historical and contextual factors that affect disciplinary perspectives and articulates the relativity of knowledge and understanding at a given time.
Civic Knowledge and Engagement *Local and global working to make a difference in the civic life of communities and to be conscious of different perspectives (generational and gender)*	Shows interest in learning about engagement and community involvement.	Evidences a degree of involvement in the community; demonstrates interest in expanding endeavors to work within community contexts.	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 groups actions
Intercultural Competence *A set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts*	Identifies differences and similarities among people of different cultures.	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.	Demonstrates mature sense of openness, empathy, and knowledge of different cultures. Evidence of interaction and intercultural knowledge are apparent. Articulates a complex understanding of difference and negotiates a shared understanding based on those differences

COMMUNICATING RUBRIC

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

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CHANGING LIVES IMPROVING LIFE

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 includes the ability to communicate and synthesize information, arguments, and analyses accurately and reliably.

	Introduce 1	Reinforce 2	Master 3
Oral Communication *Includes interpersonal skills, oral speaking and active listening*	Demonstrates the ability to present information in a comprehensive manner, clearly and effectively.	Demonstrates oral communication skills that are organized and presented in a creative and interesting manner. The student speaks clearly and accurately.	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 speaker.
Written Communication *The ability to express one's ideas through a variety of writing styles*	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. Grammar, spelling, and functional errors are almost non-existent.
Reading Comprehension *The understanding of writing*	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. Shows a high degree of skill in answering questions, and generating ideas from the written text.
Integrative Communication *A mental process that integrates existing knowledge to develop and communicate new knowledge across the curriculum*	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 solve increasingly difficult problems or explore complex issues in an original way. Integrates knowledge and communicates this effectively

PROFESSIONAL AND ETHICAL BEHAVIOUR RUBRIC

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

UNIVERSITY of GUELPH

CHANGING LIVES
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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. The ability for organizational and time management skills is essential in bringing together all aspects of managing self and others. Academic integrity is central to mastery in this outcome.

	Introduce 1	Reinforce 2	Master 3
Teamwork *Working together in a respectful and collaborative manner to complete tasks*	Works with others in a respectful manner.	Works in a team with professionalism, and is aware of each member's contributions to the team.	Engages fully in team tasks, interacts with integrity and respect, contributes quality work, and excels in their personal contributions. Demonstrates personal responsibility and accountability to the group.
Ethical Reasoning *Includes moral maturity; a moral sense of mind behind decision-making*	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.
Leadership *Involves having a vision of where the organization is headed and the ability to give direction and guidance to others*	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 *An ability to manage several tasks at once and prioritize*	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.

**Alignment of the 2012 University of Guelph Learning Outcomes and Associated Skills
with the 1987 Learning Outcomes and OCAV Undergraduate Degree Level Expectations (UUDLEs)
November, 2012**

Critical and Creative Thinking

Critical and creative thinking is a concept in which one applies 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 shows evidence of integrating knowledge and applying this knowledge across disciplinary boundaries. Depth and breadth of understanding of disciplines is essential to this outcome.

	University of Guelph Learning Outcomes and Associated SKills (2012)	University of Guelph Learning Objectives (1987)	OCAV UUDLEs
	1. Inquiry and Analysis	7. Understanding Forms of Inquiry 10. Love of Learning	2. Knowledge of Methodologies
	2. Problem Solving	5. Understanding Forms of Inquiry 9. Independence of Thought	3. Application of Knowledge
	3. Creativity	5. Understanding Forms of Inquiry 8. Depth and Breadth of Understanding 9. Independence of Thought	1. Depth and Breadth of Knowledge 5. Awareness of Limits of Knowledge
	4. Depth and Breadth of Understanding	8. Depth and Breadth of Understanding 10. Love of Learning	1. Depth and Breadth of Knowledge

Literacy

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. The comfort in using quantitative literacy also exists in this definition, as does using technology effectively and developing visual literacy.

	University of Guelph Learning Outcomes and Associated SKills (2012)	University of Guelph Learning Objectives (1987)	OCAV UUDLEs
	1. Information Literacy	3. Literacy 7. Understanding Forms of Inquiry	4. Communication Skills
	2. Quantitative Literacy	2. Numeracy 1. Literacy	4. Communication Skills
	3. Technological Literacy	1. Literacy 2. Numeracy	4. Communication Skills
	4. Visual Literacy	3. Literacy 7. Understanding Forms of Inquiry	4. Communication skills

Alignment Chart - 2012 Learning Outcomes, 1987 Learning Objectives and Degree Level Expectations (November 2012)

Global Understanding

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.

	University of Guelph Learning Outcomes and Associated SKills (2012)	University of Guelph Learning Objectives (1987)	OCAV UUDLEs
	1. Global Understanding	4. Global Understanding 10. Love of Learning	5. Awareness of Limits of Knowledge
	2. Sense of Historical Development	3. Sense of Historical Development 8. Depth and Breadth of Knowledge	1. Depth and Breadth of Knowledge
	3. Civic Knowledge and Engagement	5. Moral Maturity	6. Autonomy and Professional Capacity
	4. Intercultural Knowledge and Competence	4. Global Understanding 5. Moral Maturity 6. Aesthetic Maturity	6. Autonomy and Professional Capacity

Communication

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 includes the ability to communicate and synthesize information, arguments, and analyses accurately and reliably.

	University of Guelph Learning Outcomes and Associated SKills (2012)	University of Guelph Learning Objectives (1987)	OCAV UUDLEs
	1. Oral Communication	1. Literacy 5. Moral Maturity 9. Independence of Thought	4. Communication Skills
	2. Written Communication	1. Literacy 5. Moral Maturity 9. Independence of Thought	4. Communication Skills
	3. Reading Comprehension	1. Literacy 5. Moral Maturity 9. Independence of Thought	4. Communication Skills
	4. Integrative Communication	1. Literacy 8. Depth and Breadth of Understanding 9. Independence of Thought	1. Depth and Breadth of Knowledge 4. Communication Skills

Alignment Chart - 2012 Learning Outcomes, 1987 Learning Objectives and Degree Level Expectations (November 2012)

Professional and Ethical Behaviour *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. The ability for organizational and time management skills is essential in bringing together all aspects of managing self and others. Academic integrity is central to mastery in this outcome.*			
	University of Guelph Learning Outcomes and Associated SKills (2012)	**University of Guelph Learning Objectives (1987)**	**OCAV UUDLEs**
	1. Teamwork	5. Moral Maturity 9. Independence of Thought	6. Autonomy and Professional Capacity
	2. Ethical Reasoning	5. Moral Maturity 9. Independence of Thought	6. Autonomy and Professional Capacity
	3. Leadership	5. Moral Maturity 9. Independence of Thought 10. Love of Learning	6. Autonomy and Professional Capacity
	4. Personal Organization/ Time Management	5. Moral Maturity 9. Independence of Thought	6. Autonomy and Professional Capacity

Alignment Chart - 2012 Learning Outcomes, 1987 Learning Objectives and Degree Level Expectations (November 2012)

Learning Outcomes Alignment Template
2012 University of Guelph Learning Outcomes and Associated Skills
reviewed for alignment with Degree Program and/or Specialization Outcomes (insert name of degree/program/major)

Critical and Creative Thinking	*Critical and creative thinking is a concept in which one applies 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 disciplines is essential to this outcome.*		
	University of Guelph Learning Outcomes and Associated Skills (2012)	**Degree Program Outcomes**	**Specialization (Major/Minor) Outcomes**
	1. Inquiry and Analysis		
	2. Problem Solving		
	3. Creativity		
	4. Depth and Breadth of Understanding		
Literacy	*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. The comfort in using quantitative literacy also exists in this definition, as does using technology effectively and developing visual literacy.*		
	University of Guelph Learning Outcomes and Associated Skills (2012)	**Degree Program Outcomes**	**Specialization (Major/Minor) Outcomes**
	1. InformationLiteracy		
	2. Quantitative Literacy		
	3. Technological Aptitude		
	4. Visual Literacy		

Appendix 3

Global Understanding	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.		
	University of Guelph Learning Outcomes and Associated Skills (2012)	**Degree Program Outcomes**	**Specialization (Major/Minor) Outcomes**
	1. Global Understanding		
	2. Sense of Historical Development		
	3. Civic Knowledge and Engagement		
	4. Intercultural Competence		

Communicating	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.		
	University of Guelph Learning Outcomes and Associated Skills (2012)	**Degree Program Outcomes**	**Specialization (Major/Minor) Outcomes**
	1. Oral Communication		
	2. Written Communication		
	3. Reading Comprehension		
	4. Integrative Communication		

Professional and Ethical Behaviour	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. The ability for organizational and time management skills is essential in bringing together all aspects of managing self and others. Academic integrity is central to mastery in this outcome.		
	University of Guelph Learning Outcomes and Associated Skills (2012)	**Degree Program Outcomes**	**Specialization (Major/Minor) Outcomes**
	1. Teamwork		
	2. Ethical Reasoning		
	3. Leadership		
	4. Personal Organization/ Time Management		

Alignment Template 2012 UG Learning Outcomes and Associated Skills with Degree Program and Specialization Outcomes

Appendix 4

Consultation and review process

In 2010, Provost Maureen Mancuso engaged Dr. Fred Evers, professor emeritus in the Department of Sociology and Anthropology, and Dr. Serge Desmarais, Associate Vice-President (Academic), to develop and design university-level learning outcomes and to determine whether they might be assessed and measurable across degree-programs. During the course of this study, a number of consultative events were held and the authors benefitted from suggestions for revision and contextual discussion.

September 24, 2010 - Roundtable 1 with faculty, students and staff

February 9, 2011 - Roundtable 2 with faculty, students and staff

May 11, 2011 - Conference Presentation – University of Guelph Teaching and Learning Innovations Conference

June 1 and June 2, 2011 – Employer Focus Groups

2010-2011 – review of ePortfolios as an assessment tool in the Bachelor of Arts and Sciences program and the Bachelor of Commerce program, (majors in HTM)

Fall 2012 – Draft outcomes and rubrics reviewed by the Council of Associate Deans (Academic)

November, 2012 – Draft outcomes and rubrics reviewed by VPAC (Vice-President's Advisory Council)

November 16, 2012 – At its meeting on November 16, 2012, members of the Board of Undergraduate Studies reviewed, discussed and provided critically useful feedback on the outcomes, skills and associated rubrics, much of which was subsequently incorporated into the final document.

December 5, 2012 – University of Guelph Senate