

**UNIVERSITY OF WINDSOR
PROGRAM DEVELOPMENT COMMITTEE
COURSE LEARNING OUTCOMES FORM**

COURSE NUMBER AND TITLE: 0360-256: Systems Programming

Please complete the following table. State the specific learning outcomes that make up the goal of the course (what will students know and be able to do at the end of this course?) and link the learning outcomes to the Characteristics of a University of Windsor Graduate outlined in "To Greater Heights" by listing them in the appropriate rows.

Please note that a learning outcome may link to more than one of the specified Characteristics of a University of Windsor Graduate, and that a single course may not touch on each of the Characteristics.

Each University of Windsor program should produce graduates that are able to demonstrate each of the nine characteristics approved in To Greater Heights.

Information on learning outcomes is appended to this form (Appendix A) or may be accessed by clicking [here](#). The information is also available in the "Instructions and Approval Process Manual" available on the PDC Website or through the Senate Office. Proposers are also strongly encouraged to contact the Office of the Vice-Provost, Teaching and Learning for assistance with the articulation of learning outcomes.

Course Learning Outcomes (see Appendix A for more on learning outcomes) At the end of the course, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate A U of Windsor graduate will have the ability to demonstrate:
<ul style="list-style-type: none"> Describe the components of the operating system Describe and understand the role of different components of the operating system. Explain the interactions between all operating system's components. 	A. the acquisition, application and integration of knowledge
	B. research skills, including the ability to define problems and access, retrieve and evaluate information (information literacy)
<ul style="list-style-type: none"> Solve complex problems involving system calls in the UNIX environment. Select and use various mechanisms for inter-process communication Apply the client/server paradigm to real problems. 	C. critical thinking and problem-solving skills
<ul style="list-style-type: none"> Use the C programming language with UNIX utilities for solving system related problems. Use a scripting language to create solutions with calls to other programs and utilities. Use appropriately system calls to manage computer processes. 	D. literacy and numeracy skills
	E. responsible behaviour to self, others and society
	F. interpersonal and communications skills

Course Learning Outcomes (see Appendix A for more on learning outcomes) At the end of the course, the successful student will know and be able to:	Characteristics of a University of Windsor Graduate A U of Windsor graduate will have the ability to demonstrate:
	G. teamwork, and personal and group leadership skills
	H. creativity and aesthetic appreciation
<ul style="list-style-type: none"> Recognize the importance of the Unix system in the IT industry Prepare for upper level courses on operating systems 	I. the ability and desire for continuous learning

Verbs to Write Learning Outcomes

Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
define	describe	apply	analyze	arrange	appraise
list	discuss	demonstrate	appraise	assemble	assess
name	explain	dramatize	calculate	collect	choose
recall	express	employ	categorize	compose	compare
record	depict	illustrate	criticize	construct	estimate
relate	locate	interpret	debate	create	evaluate
underline	recognize	operate	diagram	design	judge
label	report	practice	differentiate	formulate	measure
quote	restate	schedule	distinguish	manage	rate
locate	review	sketch	examine	organize	revise
match	translate	use	experiment	plan	score
cite			inspect	prepare	select
reproduce			question	propose	value
identify			relate	combine	defend
state			solve	integrate	justify
			test		
			classify		