UCFV
UNIVERSITY COLLEGE of the FRASER VALLEY

OFFICIAL UNDERGRADUATE COURSE OUTLINE (page 1)

COURSE IMPLEMENTATION DATE: January 2004
COURSE REVISED IMPLEMENTATION DATE: September 2008
COURSE TO BE REVIEWED: February 2012
(four years after UPAC approval) *(month, year)*

OFFICIAL UNDERGRADUATE COURSE OUTLINE INFORMATION

Students are advised to keep course outlines in personal files for future use.
Shaded headings are subject to change at the discretion of the department – see course syllabus available from instructor

CIS 371	CIS	3
COURSE NAME/NUMBER	FACULTY/DEPARTMENT	UCFV CREDITS

Object Oriented Modeling and Design
COURSE DESCRIPTIVE TITLE

CALENDAR DESCRIPTION:

Using object-oriented techniques, students will learn how to design and implement high quality computer systems. Emphasis is placed on creating a requirements model and using design principles to create a working system (user interface, application, and database). The unified modeling language (UML) is used extensively throughout this course.

PREREQUISITES: CIS 270. Acceptance to the CIS degree program. (Students accepted to a CIS or Computing Science minor may register with permission of the department.)
COREQUISITES:
PRE or COREQUISITES:

SYNONYMOUS COURSE(S):
(a) Replaces:
(b) Cross-listed with:
(c) Cannot take: for further credit.

SERVICE COURSE TO: *(department/program)*

TOTAL HOURS PER TERM: 45

STRUCTURE OF HOURS:

Lectures:	45	Hrs
Seminar:		Hrs
Laboratory:		Hrs
Field experience:		Hrs
Student directed learning:		Hrs
Other (specify):		Hrs

TRAINING DAY-BASED INSTRUCTION:
Length of course:
Hours per day:

OTHER:
Maximum enrolment: 35
Expected frequency of course offerings: Once a year
(every semester, annually, every other year, etc.)

WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only)	☐ Yes	☒ No
WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department)	☐ Yes	☒ No
TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE:	☐ Yes	☒ No

Course designer(s): **Paul Rushton**
Department Head: **Ora Steyn** Date approved: **January 11, 2008**
Supporting area consultation (UPACA1) Date of meeting: **February 1, 2008**
Curriculum Committee chair: **Edward Lo** Date approved: **January 10, 2008**
Dean/Associate VP: **Ian McAskill** Date approved: **January 23, 2008**
Undergraduate Program Advisory Committee (UPAC) approval Date of meeting: **February 29, 2008**

LEARNING OUTCOMES:

Upon successful completion of this course, students will be able to:

- Explain what constitutes a good requirement
- Use UML to model system requirements
- Use UML to model system design
- Apply design principles
- Translate requirements and design into good quality programs

METHODS: *(Guest lecturers, presentations, online instruction, field trips, etc.)*

- Lectures
- Review of case studies
- Programming assignments
- Formal examinations
- Student presentations

METHODS OF OBTAINING PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):

☒ Examination(s) ☒ Portfolio assessment ☒ Interview(s)

☐ Other (specify):

☐ PLAR cannot be awarded for this course for the following reason(s):

TEXTBOOKS, REFERENCES, MATERIALS:

[Textbook selection varies by instructor. An example of texts for this course might be:]

Larman, Craig. Applying UML and Patterns (3rd edition), Prentice Hall, 2005

SUPPLIES / MATERIALS:

None

STUDENT EVALUATION:

[An example of student evaluation for this course might be:]

Assignments	70%
Examinations	30%

COURSE CONTENT:

[Course content varies by instructor. An example of course content might be:]

- Object-oriented review
- Developing requirements
- Modeling with classes
- User centric design
- Modeling interactions and behaviours
- Architecting and designing software
- Testing and inspecting to ensure high quality