



UNIVERSITY OF CALGARY
FACULTY OF SCIENCE
DEPARTMENT OF COMPUTER SCIENCE
COURSE OUTLINE

1. **Course:** CPSC 617, Category Theory For Cpsc -- Fall 2017

Lecture 01: (MW, 14:00-15:15 in SA249)

Instructor Name	Email	Phone	Office	Hours
Robin Cockett	robin@ucalgary.ca	403 220 5106	ICT652	After class

Course Site:

D2L: CPSC 617 L01-(Fall 2017)-Category Theory For Computer Science

Department of Computer Science: ICT 602, 403 220-6015, cpsc@cpsc.ucalgary.ca

2. **Prerequisites:**

See section [3.5.C](#) in the Faculty of Science section of the online Calendar.

Computer Science 417, 513[CPSC513], 521[CPSC521] or equivalent is recommended as preparation for this course.

Mathematical maturity and an appreciation of algebra.

3. **Grading:**

The University policy on grading and related matters is described in [F.1](#) and [F.2](#) of the online University Calendar. In determining the overall grade in the course the following weights will be used:

Component(s)	Weighting %
Assignment 1	15
Assignment 2	20
Assignment 3	20
Assignment 4	20
Project	25

Each of the above components will be given a letter grade using the official University grading system. The final grade will be calculated using the grade point equivalents weighted by the percentages given above and then converted to a final letter grade using the official University grade point equivalents.

The grade D+ will not be used

4. **Missed Components of Term Work:**

The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in [Section 3.6](#). It is the student's responsibility to familiarize himself/herself with these regulations. See also [Section E.3](#) of the University Calendar

5. **Scheduled out-of-class activities:**

There are no out-of-class activities scheduled for this course.

6. **Course Materials:**

There are fairly complete notes on Dr. Cockett's website:
(<http://pages.cpsc.ucalgary.ca/~robin/class/617/webnotes.html>).

Some texts which cover the same material as the course:

1. *Category for Computer Science*, Micheal Barr and Charles Wells (available on line) 1999
2. *Category Theory*, Steve Awodey, Oxford University Press 2006.
3. *Categories for the working mathematician* Saunders Mac Lane, Springer Verlag 2000.
4. *Introduction to higher-order categorical logic*, Joachim Lambek and Phil Scott 1988.
5. *Basic Category Theory for computer scientists* Benjamin Pierce, MIT press, 1991.
6. *Categories for Types*, Roy Crole, Cambridge University Press, 1993.
7. *Practical Foundations of Mathematics*, Paul Taylor, Cambridge University Press, 1999

7. Examination Policy:

No aids are allowed on tests or examinations (closed book exams!)

Students should also read the Calendar, [Section G](#), on Examinations.

8. Approved Mandatory and Optional Course Supplemental Fees:

There are no mandatory or optional course supplemental fees for this course

9. Writing across the Curriculum Statement:

In this course, the quality of the student's writing in assignments and exams will be a factor in the evaluation of these units.. See also Section E.2 of the University Calendar.

10. Human studies statement:

Students will not participate as subjects or researchers in human studies.

11. OTHER IMPORTANT INFORMATION FOR STUDENTS:

- a. **Misconduct:** Academic misconduct (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under [Section K](#). Student Misconduct to inform yourself of definitions, processes and penalties.
- b. **Assembly Points:** In case of emergency during class time, be sure to FAMILIARIZE YOURSELF with the information on [assembly points](#).
- c. **Academic Accommodation Policy:** Students needing an Accommodation because of a Disability or medical condition should contact Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities available at [procedure-for-accomodations-for-students-with-disabilities_0.pdf](#).

Students needing an Accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the Associate Head of Undergraduate Affairs of the Department of Computer Science, Nathaly Verwaal by email nmverwaa@ucalgary.ca or phone 403-220-8485.

- d. **Safewalk:** Campus Security will escort individuals day or night (www.ucalgary.ca/security/safewalk/). Call [403-220-5333](tel:403-220-5333) for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- e. **Freedom of Information and Privacy:** This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPPA). As one consequence, students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information, see also www.ucalgary.ca/legalservices/foip.
- f. **Student Union Information:** [VP Academic](#), Phone: [403-220-3911](tel:403-220-3911) Email: suvcaca@ucalgary.ca. SU Faculty Rep. Phone: [403-220-3913](tel:403-220-3913) Email: sciencerep@su.ucalgary.ca; Student Ombudsman, Email: suvcaca@ucalgary.ca
- g. **Internet and Electronic Device Information:** You can assume that in all classes that you attend, your cell phone should be turned off unless instructed otherwise. Also, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor. If you violate this policy, you may be asked to leave the

classroom. Repeated abuse may result in a charge of misconduct.

- h. **Surveys:** At the University of Calgary, feedback through the Universal Student Ratings of Instruction ([USRI](#)) survey and the Faculty of Science Teaching Feedback form provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses. Your responses make a difference - please participate in these Surveys.
- i. **SU Wellness Center:** The Students Union Wellness Centre provides health and wellness support for students including information and counselling on physical health, mental health and nutrition. For more information, see www.ucalgary.ca/wellnesscentre or call [403-210-9355](tel:403-210-9355).

Department Approval:

Electronically Approved

Date: 2017-09-10 20:09