



# THE UNIVERSITY OF WINNIPEG

## SCIENTIFIC COMPUTING

PHYS-2102-052 · ACS-2102-052 · PHYS-2102-470

Winter 2019

### Course Information

Meeting time: Thursdays, 6:00 PM – 9:00 PM

Room number: 2L14

Website: [www.scicomp.ca](http://www.scicomp.ca)

#### Contact information:

Instructor Dave Ostapchuk

Office 2C32

Phone 204-786-9183

Email [instructor@scicomp.ca](mailto:instructor@scicomp.ca)

Office hours Wednesdays, 12:30 PM – 1:30 PM

#### Important dates:

10 Jan. 2019 First class

TBD Feb. 2019 Midterm test

21 Feb. 2019 No class (reading week)

15 Mar. 2019 Final day to withdraw  
without academic penalty

4 Apr. 2019 Last class

18 Apr. 2019 Final exam (6:00 PM)

Please note that withdrawing before the VW date does not necessarily result in a fee refund.

### Course Material

#### Required textbook/reading:

- K. N. King. *C Programming: A Modern Approach*, second edition. W. W. Norton, 2008. ISBN 978-0-393-97950-3.

### Evaluation Criteria

Your final grade will be composed of the following components:

- Assignments 30%
  - Approximately one assignment per week.
  - Assignments must be submitted by the indicated due date.
  - Late assignments will not be accepted.
  - Assignments must be typed.
- Midterm test 30%
  - Calculators will not be permitted.
  - Photo-identification will not be asked for.
- Final exam 40%
  - Calculators will not be permitted.
  - Photo-identification will not be asked for.

The guidelines for conversion from numerical (percentage) grades to letter grades are as follows:

Letter Grade	Percentage
A+	95–100
A	87–94
A–	80–86
B+	74–79
B	67–73
C+	61–66
C	53–60
D	50–52
F	0–49

Note that the above are guidelines and that final grades shall be approved by the Department Review Committee and may be subject to change.

## Topics to be Covered

This course will introduce the C programming language and cover the following topics:

- C fundamentals
- Formatted input and output
- Operators and expressions
- Selection statements
- Loops
- Basic types
- Arrays
- Functions
- Program organization
- Pointers
- Strings
- The preprocessor
- Structures, unions, and enumerations
- The Standard Library
- File input and output
- Numerical analysis techniques

Not all topics will necessarily be covered.

## University of Winnipeg Regulations and Policies

- Class cancellation
  - When it is necessary to cancel a class due to exceptional circumstances, instructors will make every effort to inform students via uwinnipeg email, as well as the Departmental Assistant and Chair/Dean so that class cancellation forms can be posted outside classrooms.
- Communication
  - Students are reminded that they have a responsibility to regularly check their uwinnipeg e-mail addresses to ensure timely receipt of correspondence from the university and/or their course instructors.
- Respectful Working and Learning Environment Policy
  - All students, faculty and staff have the right to participate, learn, and work in an environment that is free of harassment and discrimination. The UW Respectful Working and Learning Environment Policy may be found online at <http://www.uwinnipeg.ca/respect/>
- Religious holidays
  - Students may choose not to attend classes or write examinations on holy days of their religion, but they must notify their instructors at least two weeks in advance. Instructors will then provide opportunity for students to make up work examinations without penalty. A list of religious holidays can be found in the [2018-19 Undergraduate Academic Calendar](#).
- Appeals and misconduct
  - Sections 8 and 9 of the [Regulations and Policies](#) section of the [Academic Calendar](#) describe the procedures and polices related to student discipline and senate appeals.

## Accessibility Services

Students with documented disabilities, temporary or chronic medical conditions, requiring academic accommodations for tests/exams (e.g., private space) or during lectures/laboratories (e.g., note-takers) are encouraged to contact [Accessibility Services](#) at 204-786-9771 or [accessibilityservices@uwinnipeg.ca](mailto:accessibilityservices@uwinnipeg.ca) to discuss appropriate options. All information about a student's disability or medical condition remains confidential.

More information about Accessibility Services can be found online at <http://www.uwinnipeg.ca/accessibility/>