# THE UNIVERSITY OF WINNIPEG

## SCIENTIFIC COMPUTING
### PHYS-2102-051 · ACS-2102-051
Winter 2018

### Course Information

Meeting time: Tuesdays, 6:00 PM – 9:00 PM
Room number: 2L14
Website: www.scicomp.ca

Contact information:

| | |
|---|---|
| Instructor | David Ostapchuk |
| Office | 2C32 |
| Phone | 204-786-9183 |
| Email | instructor@scicomp.ca |
| Office hours | Wednesdays, 12:30 PM – 1:30 PM |

Important dates:

| | |
|---|---|
| 9 Jan. 2018 | First class |
| TBD Feb. 2018 | Midterm test |
| 20 Feb. 2018 | No class (reading week) |
| 14 Mar. 2018 | Final day to withdraw without academic penalty |
| 3 Apr. 2018 | Last class |
| 10 Apr. 2018 | Final exam (6:00 PM) |

### 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.
- 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

Not all topics will necessarily be covered.

**University of Winnipeg Regulations and Policies**

- 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 can be found online at www.uwinnipeg.ca/respect.

- Sections 8 and 9 of the Regulations and Policies part of the Course Calendar describe the procedures and policies related to student discipline and senate appeals.

- Uploading essays and other assignments to essay vendor or essay trader sites (filesharing sites that are known providers of essays for use by others who submit them to instructors as their own work) involves "aiding and abetting" plagiarism. Students who do this can be charged with Academic Misconduct.

- Course materials are owned by the instructor who developed them. Examples of such materials are course outlines, assignment descriptions, lecture notes, test questions, and presentation slides. Students who upload these materials to filesharing sites, or in any other way share these materials with others outside the same class without prior permission of the instructor/presenter, are in violation of copyright law and University policy. Students must also obtain instructor/presenter permission before photographing or recording slides, presentations, lectures, and notes on the board.

- 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 or examinations without penalty. A list of religious holidays can be found at www.uwinnipeg.ca/calendar/docs/important-notes.pdf.

- When it is necessary to cancel a class due to exceptional circumstances, instructors will make every effort to inform you via uwinnipeg email, as well as the departmental assistant and Chair/Dean so that class cancellation forms can be posted outside classrooms.

- Class make-up days are scheduled at the end of the term for courses that conflict with holidays.

- Your uwinnipeg email address will normally be used for course related correspondence.

- Please note that withdrawing before the voluntary withdrawal date does not result in a fee refund.

**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 to discuss appropriate options. All information about a student's disability or medical condition remains confidential.