

IT502-OL Programming
Spring, 2018
Syllabus

Instructor: Polly Wainwright

Phone: Please email me.

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Office: GEM 219 Tuesday, Thursday, 12:00 – 1:30, or by appointment

**Lecture/
Lab** Asynchronous, online

Class Dates: January 10 – May 8, 2018

Textbook: Recommended but not required. An older edition is fine.

Building Java Programs: A Back to Basics Approach (4th Edition), by
Stuart Reges and Martin Stepp

ISBN: 0134322762

Additional materials, online tutorials, and videos will be posted in
Blackboard.

Software: NetBeans Java IDE (open source)
Available for free download at <https://netbeans.org/>
Available for use in any campus lab

Notepad++
Available for free download at <https://notepad-plus-plus.org>

Course Information: This course is an introduction to computer science and programming for graduate IT students and assumes no previous experience with programming, although you should know the basics of using a computer (web browser, word processing program). A basic background in college level algebra is required. This is a first course in problem solving through algorithm development and analysis, with an introduction to software design. You will design algorithms for the solution of elementary problems and write, document, and debug programs for the implementation of those algorithms.

Course Objectives: IT502 Programming

- Solve problems through algorithm development
- Understand the basics of software design
- Write, document, and debug programs for the implementation of algorithms
- Implement algorithms in Java.
- Understand basic computer logic and binary math.

Student Learning Objectives: Information Technology Program

1. To understand and practice methods of inquiry and strategies of interpretation within the student's field of study.
 - a. Students will master several programming environments.
 - b. Students will learn to identify and isolate problems.
2. To master the knowledge and skills pertinent to the student's field of study.
 - a. Students will acquire an extensive technological vocabulary.
 - b. Students will become comfortable with a wide range of technology environments.
3. To effectively articulate the ideas, concepts, and methods through written and oral presentation.
 - a. Students will be taught how to make formal oral presentations and be required to give 6 such presentations during their program.
 - b. Students will write numerous thorough papers requiring extensive research. They will be required to use the services of the writing center.
4. To understand the connection between their knowledge and skills on one hand and their professional identity, responsibilities, and demands on the other.
 - a. Students will understand the implications of legal and professional regulations as they relate to information technology.
 - b. Students will study how technology can be made available to people that are traditionally less advantaged.
5. To integrate knowledge and methods of their study with cognates and other disciplines.
 - a. Students will learn techniques of modeling data from other disciplines.
 - b. Students will study human factors in IT.
6. To practice ethical and cultural sensitivity as it relates to professional and personal responsibility.
 - a. Students will examine a wide range of ethical issues related to technology and the potential side effects on people and the environment.
 - b. Students will explore the relationship between IT and ethnic and cultural diversity.

Course Policies and Expectations: My expectations for your work and participation in this course are very high! You should plan to spend 15 - 20 hours per week on course preparation. Preparation time will be used to read and watch course materials, prepare for quizzes, programming assignments, and other assignments.

Attendance Policy: This is an asynchronous course. There is no set time during which you must be online to attend class. You will work at your own pace within a weekly structure. Due dates for assignments, quizzes, and tests must be observed.

Homework: Your homework will be in the form of assignments completed in interactive online tutorials, small programs in NetBeans, and short check-in assignments.

Assignments are expected to be turned in on time. Generally, late assignments will not be accepted. A penalty of up to 20% per day will be applied to accepted late assignments.

All assignments are submitted in Blackboard.

Each student is responsible for verifying that the correct assignment, in the correct format, has been submitted in Blackboard.

Technology difficulties, including those in VU computing labs, are not considered reason for being late with assignments!

Please plan for potential technology difficulties. Where else can you access the Internet? What other computer can you use? And of course, work well ahead of schedule.

Please remember that the submission of someone else's work as your own constitutes plagiarism, which is a serious academic offense. Submitting code that is not your own or that is not part of accepted course resources is also plagiarism. Plagiarized work will not be accepted for credit, and may result in additional disciplinary actions. We will be discussing in class how to document code as well as other guidelines for avoiding plagiarism.

You may work together on assignments. In fact, I encourage it. However, each person must type his or her own code. It is quite easy for me to spot code that has been copied and pasted from another source. Code that is copied and pasted will not receive credit and will likely result in an Honor Code violation.

Please remember that programming can be time consuming. Waiting until the night before the due date is a bad idea. Start as soon as you receive the assignment.

Tests: Tests and quizzes must be taken online before the stated deadlines. The VU Honor Code applies to all tests and quizzes. Missed tests and quizzes may not be made up. If you believe your situation warrants an exception, please email me.

Class Schedule: There will be a short weekly quiz beginning in Week 2.
Midterm Exam will be due Monday, March 19, 2018
Final Exam will be due Monday, May 14, 2018

Grading System: Your grade will be based upon the following;

| | | |
|-----------------------|---------------------|------------|
| Quizzes | as scheduled | 20% |
| Labs & Assignments | | 30% |
| Midterm Exam | as scheduled | 25% |
| <u>Final Exam</u> | <u>as scheduled</u> | <u>25%</u> |
| Total | | 100% |

Grading Scale:

| | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|-----|
| A | A- | B+ | B | B- | C+ | C | C- | D+ | D | D- | F |
| 93 | 90 | 88 | 84 | 80 | 79 | 76 | 72 | 70 | 68 | 65 | 65> |

Honor Code: You must adhere to the University's Honor Code on all of your work.

Valparaiso University operates under a student initiated Honor Code. Each student studying at Valparaiso University agrees to conform to that Code. All new students should read the following explanation, since they must sign their registration form indicating that they will abide by the Honor Code. The Honor Code is an integral part of VU and permits students to do their academic work in an atmosphere of responsible freedom. The Honor Code is based on the highest principles of Christian ethics and morality and presumes every student is willing to maintain honesty in all academic work, as well as other phases of university living. Students are required to sign the pledge, indicating that they have submitted honest work and have not allowed the dishonesty of others to erode the integrity of the Honor System:

**I have neither given nor received
nor have I tolerated others' used of unauthorized aid.**

The Honor Code applies to all students registered for academic credit at Valparaiso University. Students have the responsibility for not using, giving, or tolerating unauthorized aid. When the definition of unauthorized aid is in question, students should as the instructor to interpret the application of the Honor Code. In case of further doubt, students share the responsibility of clarifying the definition of unauthorized aid. Ignorance is not acceptable as a valid excuse for violations of the Honor Code. Students should report suspected violations to the Honor Council.

Support Services

Disability Support Services

Please contact the Director of Disability Support Services, at x6956, if you believe you have a disability that might require a reasonable accommodation in order for you to perform as expected in class. DSS will work with you and me to make sure you receive any reasonable accommodations needed as a result of a disability.

Academic Support

To get help with this course, the best place to start is to work with your professor during office hours and to ask your professor if there are any Help Sessions or department-level tutoring offered for this course. Another step is to use the Academic Success Center (ASC) online directory (www.valpo.edu/academicsuccess) or contact the ASC (academic.success@valpo.edu) to help point you in the right direction for academic support resources for this course. Valpo's learning centers offer a variety of programs and services that provide group and individual learning assistance for many subject areas. These learning centers include:

- Graduate Tutoring Lab: Serves the academic needs of graduate students – tutors offer suggestions on organization of papers, assist in research and citations, and help in understanding difficult assignments. Additional one to one tutoring is also available.
- Writing Center: Primarily serves the needs of undergraduate students, but is also available for graduate students. Writing consultants provide proofreading and editing assistance for papers and assignments.
- Language Resource Center: Provides tutoring and other resources for language study as well as opportunities for authentic language use through conversation programs, enrichment activities and other exchanges.
- Academic Success Center: Provides referral service to help connect students with appropriate resources on campus to support their academic achievements.

Class Cancellations and Other Announcements

DIVERSITY AND INCLUSION

In this class we are committed to creating and fostering a positive learning environment based on mutual respect and inclusion.