

Syllabus

Course Title: Programming Logic

Course Number: DWD 145

Course Prerequisite: none

Date: June 27-Sept 11, 2016

Quarter: Summer 2016

Credit Hours: 3

Instructional Contact Hours Lecture/Lab: 50% lecture and 50% lab

Course Length: 11 weeks

Course Schedule: Monday 6:00-9:55pm

Instructor: Nicholaus Lawson

Textbook(s):

Title: Prelude to Programming 6th

ISBN: 9780133741636

Author: Stuart Venit, Elizabeth Drake

Publisher: Pearson

Instructional Materials and References: Thumb drive and One Drive

Course Description: This course introduces you to critical thinking and problem solving, and to the design and use of programming techniques, including variables, data types, modules, logic structures, arrays, data structures and object-oriented design. You will apply these concepts using problem solving tools, including algorithms, flowcharts, pseudocode, structure charts and IPO charts. Prerequisite: None

Course Objectives: After completion of this course, the student will be able to:

- Define general problem-solving concepts: understanding the business problem and how to diagram out a potential programmatic solution
- Discuss structured programming principles that are applicable to different programming languages
- Recall the program development life cycle
- Distinguish between various data types, objects, selection structures
- Use flowcharts and pseudo-code to document a proposed programmatic solution

Topical Outline/Schedule (by week – subject to change – notice will be given):

| Week | In Class | Assignments/Lab | Homework Reading and completing questions |
|------|-----------------------------|---------------------|--|
| 1 | Chapters 0-1 | Chapters 0-1 | Read Ch. 0-1 Answer Review Exercises Pages 20-23, 61-65, |
| 2 | Chapter 2 | Chapter 2 | Programming challenges on pages 112 |
| 3 | Chapter 3 working with kits | Chapter 3 | Programming challenges on pages 177 |
| 4 | Chapter 4 working with kits | Chapter 4 | Programming challenges on pages 253 |
| 5 | Chapter 5 | Ch 5 & Midterm Exam | Programming challenges on pages 327 |
| 6 | Chapter 6 | Chapter 6 | Programming challenges on pages 404 |
| 7 | Chapter 7 | Chapter 7 | Programming challenges on pages 462 |
| 8 | Chapter 8 | Chapter 8 | Programming challenges on pages 522 |
| 9 | Chapter 9 | Chapter 9 | Programming challenges on pages 597 |
| 10 | Chapter 10 | Chapter 10 | Programming challenges on pages 652 |
| 11 | Chapter 11 | Chapter 11 & Final | |

This is a 3 credit hour lecture/lab course. You should plan on spending a minimum of 3 hours per week on out of class work (homework). This will assist in ensuring course content understanding, meeting learning objectives and help with the successful completion of the class. Out of class work will consist of, but not limited to, completing weekly assignments, and/or projects pertaining to the lesson(s) being covered. All out of class work should be neatly completed, turned in on time, and of a professional standard. See grading criteria percentage breakdown for the overall out of class work weighted percentage.

Grading Scale:

| | |
|-----------|---|
| 93 – 100% | A |
| 85 – 92% | B |
| 76 – 84% | C |
| 70 – 75% | D |
| 0 – 69% | F |

Grading Policy:

| | |
|-----------|-----|
| Midterm | 20% |
| Final | 20% |
| Homework | 25% |
| Classwork | 35% |

All work will be turned in on the One Drive to your shared folder. Work will be labeled and organized. No late work will be accepted unless you have seen a dean and have extenuating circumstances.

Teaching Strategies: The use of lectures and labs, with guest speakers, and some outside time spent on projects. Homework will be completed outside of class hours.

Course requirements for success: All projects will be turned in on time, or a letter grade is deducted for each day it is late. This means Sunday through Saturday, not just the class times.

Portfolio Work: Not all projects in class will be portfolio quality. Some projects are used for training purposes and graded based on demonstration of content learned.

Attendance: Due to the amount of material covered, students are expected to attend all classes, take all exams and quizzes, and participate in all labs. The student will be charged with one-half of a day's absence if the student is tardy but misses less than half of the class period.

Two tardies equal one absence. If the student misses more than one half of the class period, the student will

be charged with a full absence.

Day class, which meets a total of 22 times during the quarter, more than four (4) absences will result in a grade of "WF" unless serious extenuating circumstances can be documented and the instructor believes the student can still achieve the course's learning objectives satisfactorily.

Night class, which meets a total of 11 times during the quarter, more than two (2) absences will result in a grade of "WF" unless serious extenuating circumstances can be documented and the instructor believes the student can still achieve the course's learning objectives satisfactorily.

Academic Dishonesty/Plagiarism/Cheating Policy:

A student suspected of academic dishonesty may face disciplinary action by the course instructor, departmental chairperson, or an appropriate administration staff member. Disciplinary action may include, but is not limited to an oral warning followed by a written agreement to discontinue the behavior, receiving a failing grade in the project and/or assignment, receiving a failing grade in the course, and/or termination from the institution.

Examples of such behavior include, but are not limited to:

- 1.) Claiming credit for the work or efforts of another without instructor approval and/or proper citation,
 - a.) Plagiarism,
 - b.) Work previously submitted in the course, or another course, by the student or others;
- 2.) Use of the unauthorized or fabricated data;
- 3.) Submitting and/or creating forged or falsified academic records, documents, letters, etc.;
- 4.) Making false representation of academic performance;
- 5.) Assisting other students in any of these acts.

Such behavior may also disqualify a student from co-op opportunities, awards and similar distinctions that require the school to endorse the student's character as well as ability.

Class Policies:

- 1.) There will be **NO** food or drink in the classroom at any time.
- 2.) No children will be permitted in class.
- 3.) If you are **disrupting the class**, you will be asked to leave.
- 4.) If you are **sleeping in class**, you will be sent home and be counted absent.
- 5.) If you want to talk to me about your grade, please approach me before or after class.
- 6.) No incompletes will be given in this course. If you have not submitted work or taken a test, a zero will be calculated for that grade.
- 7.) **No surfing the Internet/Texting** during class. This includes no Facebook.

Course Accommodations: If you need course adaptations or accommodations because of a disability: if you have emergency medical information; or if you need special arrangements in case the building must be evacuated, please make an appointment with the Academic Dean within the first week of the quarter.