

WAYLAND BAPTIST UNIVERSITY
WBUOnline
SCHOOL OF MATHEMATICS AND SCIENCES

Wayland Mission Statement:

Wayland Baptist University exists to educate students in an academically challenging, learning-focused, and distinctively Christian environment for professional success and service to God and humankind.

Course Title and Number:

CSCI 3361-VC01; PROGRAMMING LANGUAGE SURVEY AND CONCEPTS

Term:

SPRING-2 2024 – 8 Week Term

Name of Instructor:

Dr. Scott R. Franklin, Professor of Mathematics and Computer Science

Office Phone Number and WBU Email Address:

806-291-1130; franklins@wbu.edu; Cell/Text: 806-252-3855

Office Hours, Building, and Location:

TBD

Class Meeting Time and Location:

Online (Asynchronous)

Catalog Description:

Survey of distinctively-varied programming languages, including investigation and comparison of different programming language paradigms and programming language concepts. **Prerequisites:** CSCI 2313.

Required Textbook and Resources:

The C Programming Language, Kernighan and Ritchie, Prentice Hall, 1988

Think Python (2nd Ed.) by Allen B. Downey

The Racket Guide by Matthew Flatt, Robert Bruce Findler

(made available through Blackboard)

All other required reading assignments will be provided through Blackboard at no additional cost.

You must have access to a computer on which you can install the development software, including both the Python, the Racket flavor of Scheme, and a standards-compliant C environment. Specific recommendations will be provided in the course in Blackboard.

Course Outcome Competencies:

Upon completion of this course the student should be able to:

- Explain basics of parsing
- Write simple programs in C
- Write simple programs in a scripting language such as Python or R
- Write simple programs in Racket Scheme
- Discuss major factors that might make one language more suitable than another for a given project

Attendance Requirements:

Students are expected to participate in all required instructional activities in their courses. In this course, your weekly assignments will be the measure of attendance. Any week in which a student does not complete any work, the student will be considered "absent." Any student absent 25% or more (i.e., non-participatory during 3 or more weeks of the term) will receive an F for the course.

Statement on Plagiarism and Academic Dishonesty**Disability Statement:**

In compliance with the Americans with Disabilities Act of 1990 (ADA), it is the policy of Wayland Baptist University that no otherwise qualified person with a disability be excluded from participation in, be denied the benefits of, or be subject to discrimination under any educational program or activity in the university. The Disability Services Coordinator and Academic Coach serves as the coordinator of students with disabilities and must be contacted concerning accommodation requests (office (806) 291-1057. Documentation of a disability must accompany any request for accommodations.

Course Requirements and Grading Criteria:

- 20% Quizzes: Quizzes are used to measure student comprehension of material and encourage you to absorb your reading.
 - 40% Labs: Submit via Blackboard. 10% reduction per day for late. For the labs, you may refer to your book and discuss difficulties with your classmates but may not use code from anyone nor from the Internet.
 - 10% Content Creation: The details and rubric for these will be found on Blackboard. This is your opportunity to create material that other students can learn from. Some content creation assignments may be writing prospective quiz questions for future students.
 - 30% Programming Projects (10% each: C; Python or R; and Racket)
- A: 90 – 100 B: 80 – 89 C: 70 – 79 D: 60 – 69 F: Below 60
- NOTE: There are no exams in this course.

Students shall have protection through orderly procedures against prejudices or capricious academic evaluation. A student who believes that he or she has not been held to realistic academic standards, just evaluation procedures, or appropriate grading, may appeal the final grade given in the course by using the student grade appeal process described in the Academic Catalog. Appeals may not be made for advanced placement examinations or course bypass examinations. Appeals are limited to the final course grade, which may be upheld, raised, or lowered at any stage of the appeal process. Any recommendation to lower a course grade must be submitted through the vice president of academic affairs to the Faculty Assembly Grade Appeals Committee for review and approval. The Faculty Assembly Grade Appeals Committee may instruct that the course grade be upheld, raised, or lowered to a more proper evaluation.

Tentative Schedule

Weeks 1-2: C Programming
Weeks 3-4: Thinking Python
Week 5-7: Functional Programming (Racket/Scheme)

Academic Honesty:

Disciplinary action for academic misconduct is the responsibility of the faculty member assigned to this course. The faculty member is charged with assessing the gravity of any case of academic dishonesty, and with giving sanctions to any student involved.

Important Dates:

TBD

This syllabus is only a plan. The teacher may modify the plan during the course. The requirements and grading criteria may be changed during the course if necessary.