Instructor: Dr. Mircea Nicolescu
E-mail: mircea@cse.unr.edu
Phone: (775) 784-4356
Office: WPEB 413
Office hours: Thursday: 10:30am-1:30pm (Zoom, after email request)

Class webpage: http://www.cse.unr.edu/~mircea/Teaching/cs326/

Teaching Assistant: TBA
E-mail: TBA
Office: TBA
Office hours: TBA

Lectures:
Tuesday, Thursday: 9am-10:15am, Zoom

Labs:
none

Required Textbooks and Course Materials:
- Software: Scheme, Prolog, Java
- Access to a computer with microphone and camera is required.

Class Procedures:
- This course will be delivered entirely online. Students will be required to access materials and complete activities and assignments online via WebCampus.

Course Description:
Catalog:
An overview of programming languages; features, structures, and implementation; examples taken from various programming paradigms. Introduction to formal specifications of languages.

Prerequisites:
Courses:
- CS 302 (Data Structures) with a “C” or better.

Topics:
- Good knowledge of at least one programming language (such as C++)
- Familiarity with data structures (such as linked lists and trees)
**Course Objective:**
Students will demonstrate an understanding of the fundamental principles underlying programming languages and demonstrate an ability to design and implement applications in a variety of language paradigms.

**Student Outcomes:**
The student outcomes are skills and abilities students should have acquired by the end of the course.

<table>
<thead>
<tr>
<th>Student Outcome Number</th>
<th>Student Outcome</th>
<th>Course-Specific</th>
<th>Assessment Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Identify, formulate, analyze, and solve complex computing or engineering problems by applying principles of computing, engineering, science, and mathematics.</td>
<td>Students are able to make use of the fundamental concepts learned in this course in order to design and implement a software project using one of the new languages learned.</td>
<td>Homework assignments.</td>
</tr>
<tr>
<td>8</td>
<td>Acquire and apply new knowledge as needed, using appropriate learning strategies.</td>
<td>Students are able to investigate/discover how the historical evolution of programming languages has been driven by the tradeoffs involved in language design and implementation, as illustrated by case studies from various programming languages.</td>
<td>Exam questions.</td>
</tr>
</tbody>
</table>

**Course Topics:**
- Introduction – The Study of Programming Languages
- Programming Language Syntax
- Names, Scopes and Bindings
- Control Flow
- Data Types
- Subroutines and Control Abstraction
- Data Abstraction and Object Orientation
- Functional and Logic Languages
- Concurrency

**Important Dates:**
- **Midterm Exam:** March 18
- **Final Exam:** May 11
- **Homework assignments:** about every 2 weeks
Course Policies:
- Students are expected to attend, and be on time, for every class. Students who miss class and/or are late for class may experience an impact on their grade by missing classroom activities.
- Students are expected to demonstrate professionalism and courtesy by either silencing or turning off all cell phones and/or other alarm or audible indicator devices.
- The instructor reserves the right to add to, and/or modify any of the above policies as needed to maintain an appropriate and effective educational atmosphere in the classroom. In the case that this occurs, all students will be notified in advance of the implementation of the new and/or modified policy.
- If you are involved with any university-sponsored athletic activities that will have an impact on your attendance, please provide your instructor with a letter from your coach and/or the UNR Athletic Department as soon as possible, but no later than the end of the second week of classes. This should include the official schedule of your activities which will impact your attendance throughout the semester.

Assignments, Examinations and Grading:

Homework Assignments:
- There will be a number of homework assignments, some of which will include programming. The homework assignments and their due dates will be posted on the course web page. Homework assignments are due on the specified date at the beginning of the class.

Exams:
- There will be one midterm exam and one final exam. Both exams will be closed books, closed notes.
- Exams will require an identity-verification process and a remote proctoring service, according to UNR guidelines. Students will be required to show identification in order to enter the exam, and allow for the recording of the testing area via camera and microphone.

Class Participation:
- The student grade includes a component for participation in class discussions. This will be evaluated according to the instructor’s observations during the semester.

Grading Structure:
- The final score will be computed as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework assignments</td>
<td>40%</td>
</tr>
<tr>
<td>Midterm exam</td>
<td>25%</td>
</tr>
<tr>
<td>Final exam</td>
<td>30%</td>
</tr>
<tr>
<td>Class participation</td>
<td>5%</td>
</tr>
</tbody>
</table>

Letter Grades:
- The letter grade will be computed as follows. Some upward adjustment may occur, but do not count on it.
latesubmissionsandmake-upexamspolicy:
• no latetransmissions will be accepted. permissions to take exams on other dates than scheduled will not be given, except for extreme medical emergencies.

academidishonesty:
The university academic standards policy defines academic dishonesty, and mandates
specific sanctions for violations. See the university academic standards policy: UAM 6,502.

Disability Services:
Any student with a disability needing academic adjustments or accommodations is
requested to speak with the disability resource center (pennington student achievement
center, suite 230) as soon as possible to arrange for appropriate accommodations.

Content Accessibility:
This course may leverage 3rd party web/multimedia content, if you experience any issues
accessing this content, please notify your instructor.

Audio and Video Recording:
Surreptitious or covert video-taping of class or unauthorized audio recording of class is
prohibited by law and by board of regents policy. This class may be videotaped or audio
recorded only with the written permission of the instructor. In order to accommodate
students with disabilities, some students may be given permission to record class lectures
and discussions. Therefore, students should understand that their comments during class
may be recorded.

Safe Learning:
The university of nevada, reno is committed to providing a safe learning and work
environment for all. If you believe you have experienced discrimination, sexual harassment,
sexual assault, domestic/dating violence, or stalking, whether on or off campus, or need
information related to immigration concerns, please contact the university's equal
opportunity & title IX office at 775-784-1547. Resources and interim measures are
available to assist you. For more information, please visit: https://www.unr.edu/equal-
opportunity-title-IX.

COVID-19 Training Policies:
Students must complete and follow all guidelines as stated in the student COVID-19
Training modules, or any other trainings or directives provided by the University.
**COVID-19 Face Coverings:**
In response to COVID-19, and in alignment with State of Nevada Governor Executive Orders, Roadmap to Recovery for Nevada plans, Nevada System of Higher Education directives, the University of Nevada President directives, and local, state, and national health official guidelines face coverings are required at all times while on campus, except when alone in a private office. This includes the classroom, laboratory, studio, creative space, or any type of in-person instructional activity, and public spaces.
A “face covering” is defined as a “covering that fully covers a person’s nose and mouth, including without limitation, cloth face mask, surgical mask, towels, scarves, and bandanas” (State of Nevada Emergency Directive 024).
Students that cannot wear a face covering due to a medical condition or disability, or who are unable to remove a mask without assistance may seek an accommodation through the Disability Resource Center.

**COVID-19 Social Distancing:**
Face coverings are not a substitute for social distancing. Students shall observe current social distancing guidelines where possible in accordance with the Phase we are in while in the classroom, laboratory, studio, creative space (hereafter referred to as instructional space) setting and in public spaces. Students should avoid congregating around instructional space entrances before or after class sessions. If the instructional space has designated entrance and exit doors students are required to use them. Students should exit the instructional space immediately after the end of instruction to help ensure social distancing and allow for the persons attending the next scheduled class session to enter.

**COVID-19 Disinfecting Your Learning Space:**
Disinfecting supplies are provided for you to disinfect your learning space. You may also use your own disinfecting supplies.

**COVID-19, COVID-19 Like Symptoms, and Contact with Someone Testing Positive for COVID-19:**
Students must conduct daily health checks in accordance with CDC guidelines. Students testing positive for COVID 19, exhibiting COVID 19 symptoms or who have been in direct contact with someone testing positive for COVID 19 will not be allowed to attend in-person instructional activities and must leave the venue immediately. Students should contact the Student Health Center or their health care provider to receive care and who can provide the latest direction on quarantine and self-isolation. Contact your instructor immediately to make instructional and learning arrangements.

**Failure to Comply with Policy (including as outlined in this Syllabus) or Directives of a University Employee:**
In accordance with section 6,502 of the University Administrative Manual, a student may receive academic and disciplinary sanctions for failure to comply with policy, including this syllabus, for failure to comply with the directions of a University Official, for disruptive behavior in the classroom, or any other prohibited action. “Disruptive behavior” is defined in part as behavior, including but not limited to failure to follow course, laboratory or safety rules, or endangering the health of others. A student may be dropped from class at any time for misconduct or disruptive behavior in the classroom upon recommendation of the instructor and with approval of the college dean. A student may also receive disciplinary sanctions through the Office of Student Conduct for misconduct or disruptive behavior, including endangering the health of others, in the classroom. The student shall not receive a refund for course fees or tuition.
Academic Success Services:
Your student fees cover usage of the University Math Center (775) 784-4433, University Tutoring Center (775) 784-6801, and University Writing Center (775) 784-6030. These centers support your classroom learning; it is your responsibility to take advantage of their services. Keep in mind that seeking help outside of class is the sign of a responsible and successful student.

University Math Center:
The University Math Center (UMC) is focused on helping students with mathematical and statistical concepts. While mathematics is used extensively in engineering, the UMC does not have the resources to help students with engineering courses. Engineering students are encouraged to use the UMC for help in their math classes, and they are welcome to use its computer lab and study area any time – regardless of course. However, UMC tutors cannot answer questions regarding engineering courses.