University of Nevada, Las Vegas

2021

Summer Online Program

Summer

Official Summer Program

Program Overview

To give foreign university students an opportunity to experience the classroom atmosphere, this program will give students the opportunity to study online at the University of Nevada, Las Vegas (UNLV) for engineering/business focused English knowledge. Courses will be taught by professional professors or lecturers in their corresponding fields. The program includes UNLV courses, group discussions, online tutoring, final report, and more. This maximizes student' s ability to experience the distinguishing academics of UNLV in a short time period and improve individual knowledge。 A certificate of completion and performance report will be awarded upon completion of the program.

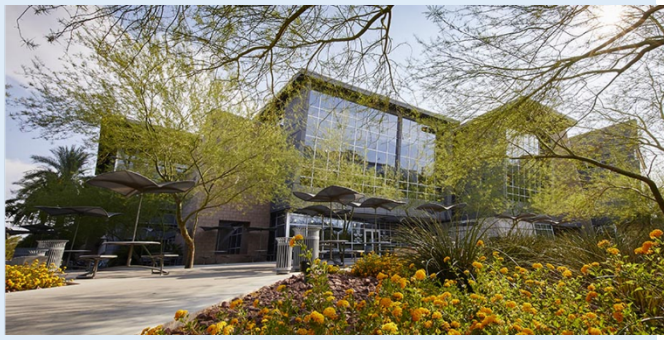
List of Course Option in Summer 2021:

- Computer Programming – Introduction & Application Course

Program Theme

Number	Course theme	Start date	End date	Duration	Cost	Course information
UVO1	Online Program	07/19	08/13	4 weeks	$1,500	Appendix 1

University Introduction



University of Nevada, Las Vegasis a long-established public coeducational university, founded in 1957. UNLV is famous for areas of study such as history, engineering, environmental studies, hotel management, fine arts, and management information systems.

The university is ranked in the category of "high research activity" by the Carnegie Foundation. According to the Atlantic Monthly, UNLV has the most innovated MFA course in the United States and is ranked in the top 5 schools for Creative Writing PhD. Additionally, UNLV is famous for basketball, including training of stars such as Armon Gilliam, Reggie Theus, and Larry Johnson.

Top Research University Status：

According to the Carnegie Foundation for the Advancement of Teaching, UNLV has achieved "very high research activity" status and is moving towards the top tier. This elite category contains only 120 universities nationwide. UNLV is the first university in Nevada to achieve this distinguishment.

ABET Accreditated Programs：

- 1987：Civil Engineering
- 1987：Mechanical Engineering
- 1988：Electrical Engineering
- 1993：Computer Science
- 2003：Computer Engineering

Program Results

Program Completion Certificate

Students who successfully complete the program will receive a certificate of completion issued by the College of Engineering at University of Nevada, Las Vegas.

Performance report

Depending on the attendance rate of student, the completion of course work, and the completion of the program, students will receive a performance report. The performance report reflects the grade, course time, length of course, and so forth.

Program completion certificate

Performance report

Registration Instructions

Teaching Method

- Real time online teaching at the University of Nevada, Las Vegas
- Professors will register students to the online platform, students can log in using a unique student identification number

Application Materials

- Proof of enrollment

Enrollment Limits

Each course will not exceed 30-40 students. Classes are filled on a first-come-first-served basis.

Deadline

The deadline to register is June 1, 2021 (Summer).

Course Options

Computer Programming – Introduction & Application Course

Course Description:

The purpose of this course is to introduce the principles of programming that are widely used in various programming languages, and use them for practical applications – realized in this course as hands-on assignments. The *Python* language is used as the teaching tool to demonstrate the operation of programming methods and principles. Publicly available libraries are used for hands-on applications.

List of Main Topics:

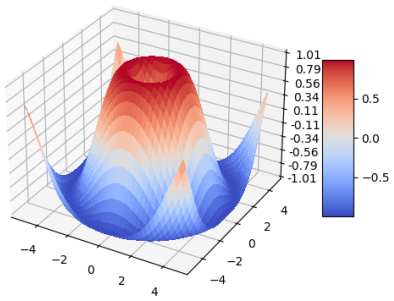
The lectures will start with introduction and basic concepts and constructions that also exist in most modern programming languages.

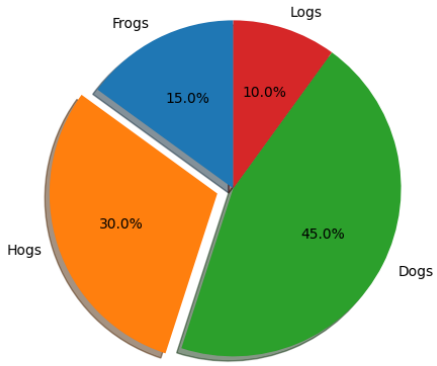
List of Topics – Elements of Python Language

1. Overview computers, programming languages and relations between them
2. Introduction to programming concepts
3. Characterization of Python programming language
4. Python programming environment / block programming tool
5. Data types, basic operations
6. Variables and basic operations
7. Interaction with the user
8. Control structures – conditional
9. Control structures – repetitions
10. Functions
11. Data structures (incl. lists, tuples, hashes)
12. Networking in Python
13. GUI

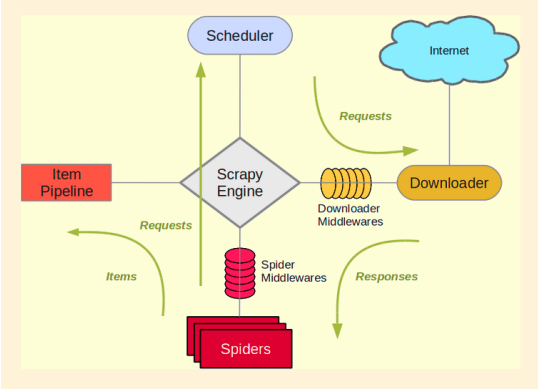
List of topics – applications

Matplotlib – Plotting, visualizations, animations, 3D, charts

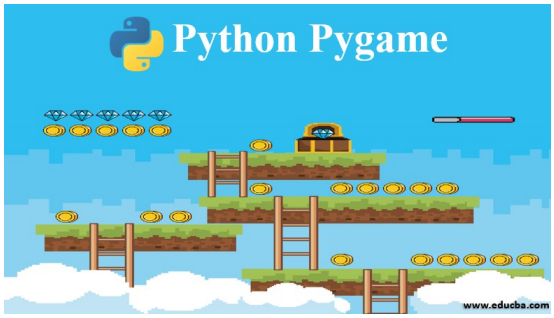


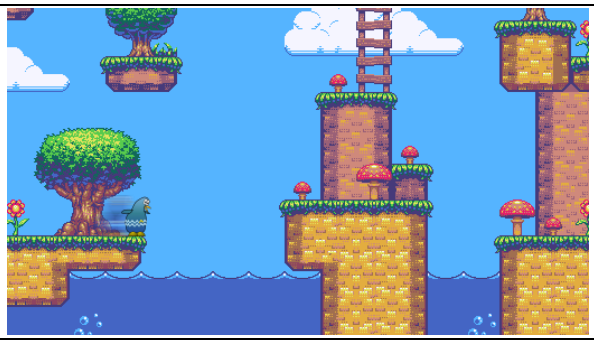


Scrapy – website scrapping and monitoring

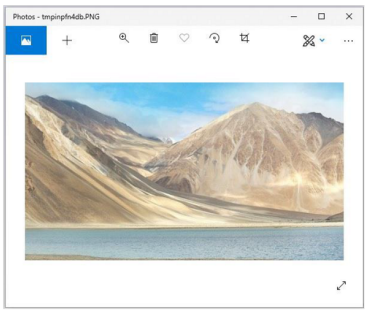


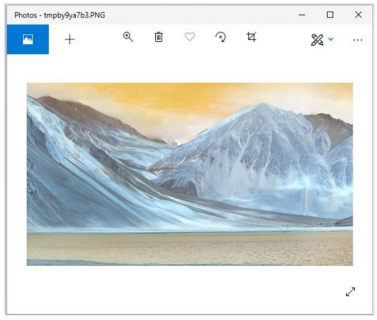
PyGame – creating games in Python



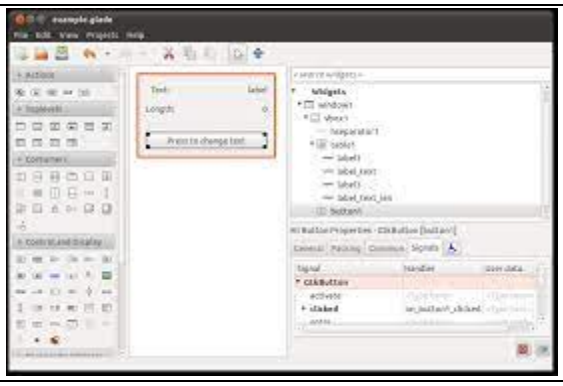


Pillow – image manipulation

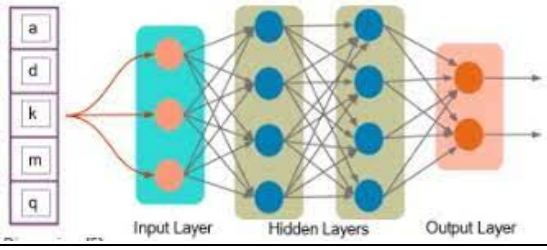




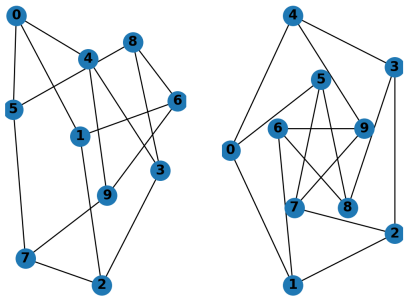
PyGTK – Graphical User Interface

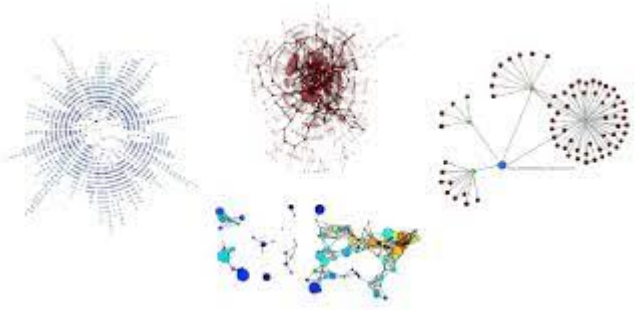


Keras / TensorFlow – Artificial Intelligence

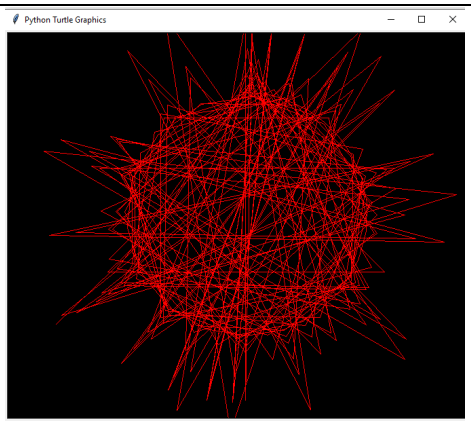


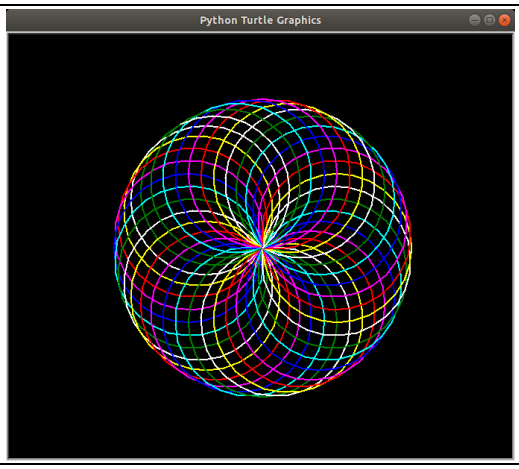
NetworkX – diagrams and graphs





Turtle – drawing library





Wikipedia – interfacing with wikipedia.org

Note: The course description is subject to change due to the selection and the instruction style of faculty.

Course Structure

Week	Day	Time	Description
0	-	-	Prep week: program overview (scheduled Friday or Saturday prior to the program start week)
Week 1-4	Tue	13:00 – 15:00	**Computer Programming – Introduction & Application Course**
	Thu	13:00 – 15:00	**Computer Programming – Introduction & Application Course**

Note：

1. The program online course times may be adjusted according to the schedule of the teaching faculty, subject to notice before the start of the course.
2. Depending on the different contents of the course, the schedule and form of assignments may vary, subject to notice before the start of the course.

Course

Each course includes:

- 4 hours online course per week
- 8 hours independent study time per week
- 4 weeks total study time

48 hours total study related time.