ПРИВАТНИЙ ВИЩИЙ НАВЧАЛЬНИЙ ЗАКЛАД-ІНСТИТУТ
"УКРАЇНСЬКО-АМЕРИКАНСЬКИЙ УНІВЕРСИТЕТ КОНКОРДІЯ"
(УАУК)

PRIVATE HIGHER EDUCATIONAL ESTABLISHMENT-INSTITUTE
"UKRAINIAN-AMERICAN CONCORDIA UNIVERSITY"
(UACU)

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INTRODUCTION TO PROGRAMMING
Syllabus
BOK 2.19
CSCI-231

Quarter/Year: Fall/2025 ECTS Credits: 6
Instructor: Ruslana Seleznova, PhD Vladyslav Nadtochii US Credits: 3
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Prerequisites: Computer Science

Course Description

In this course you'll learn how to make basic web pages using HyperText Markup Language (HTML) and how to add style to your pages with Cascading Style Sheets (CSS). At the end of the course, you'll demonstrate your new skills by completing a project in which you create a web page that replicates a given design. Also in this course you will earn basic programming with Python, one of the most versatile and widely used programming languages. You'll first learn core programming concepts and fundamental Python syntax by writing code to make a virtual "turtle" robot draw colorful shapes on the screen.

Course Outcomes

PH3. Demonstrate knowledge of theories, methods and functions of management, modern concepts of leadership.
PH4. Demonstrate skills to identify problems and justify management decisions.
PH6. Identify skills of search , collection and analysis of information , calculation of indicators to justify management decisions.
PH7. Demonstrate organizational design skills.
PH8. Apply management methods to ensure the effectiveness of the organization.
PH9. Demonstrate skills of interaction, leadership, teamwork.
PH11. Demonstrate skills of situation analysis and communication in various areas of the organization.
PH17. Perform research individually and/or in a group under the guidance of a leader.

Competencies

ЗК3. Ability to abstract thinking, analysis, synthesis.
ЗК5. Knowledge and understanding of the subject area and understanding of professional activity.
ЗК8. Skills in the use of information and communication technologies.

CK2. Ability to analyze the results of the organization, to compare them with the factors of external and internal environment.
CK10. Ability to evaluate the work performed, ensure their quality and motivate the staff of the organization.
CK12. Ability to analyze and structure the problems of the organization, to form sound decisions.

Internationality: The international aspect of the course includes international software and international textbooks.

Communications
For individual issues, students should contact the professor ONLY by given e-mail or by Moodle. In the Subject line they should put: UACUFirstNameLastName. E-mail messages will normally be answered within 24 hours.
Note! Only emails sent from the student's corporate email address will be answered.

Attention! Official and only language used for assessment activities is English. Official and only languages used for communication within the University are Ukrainian and English.

Student Responsibilities

Time Commitment
The study of technical courses is cumulative (i.e., an understanding of earlier material is necessary to grasp concepts covered later). Past experience has shown a high correlation between procrastination and low grades. Students must be committed to completing tasks on time.
Students are responsible for following the schedule, attending classes, completing assignments on time and to the required standards, and maintaining academic integrity. These responsibilities are not open for discussion with instructors or the dean's office.

Technical Aspects
The student is obliged to provide himself/herself with all the necessary technical equipment for the educational process (laptop or computer, webcam, headsets or headphones and microphone), as well as access to the Internet.
Only students signed-in with their own first and last name are allowed into video lectures in Zoom.

Grading Policy
The course is based on mastery of course outcomes. Student grades for this course will be calculated based on performance.
Note: the minimal grade to pass a subject is 60% (70% for Master courses).

Graduate Grading Guidelines
The assignment of a letter grade for a course is an indication of the student's overall success in achieving the learning outcomes for the course. The course letter grade may be viewed as

a summary statement of the student's achievement in individual assessments (assignments & activities). These assessments are intended to identify for students their strengths as well as those areas in need of improvement. Student work is assessed according to the guidelines below.

Course-level Grading guidelines:

Bachelor

Grade	ECTS Grade	International Grade
90% - 100%	A	5 (Excellent)
83% - 89%	B	4 (Very Good)
75% - 82%	C	4 (Good)
70% - 74%	D	3 (Good)
60% - 69%	E	3 (Acceptable)
35% - 59%	FX	Not acceptable, possible repetition of course

Master

Grade	ECTS Grade	International Grade
90% - 100%	A	5 (Excellent)
83% - 89%	B	4 (Very Good)
75% - 82%	C	4 (Good)
70% - 74%	D	3 (Good)
35% - 69%	FX	Not acceptable, possible repetition of course

Criteria for grading:

ECTS grade	Requirements for the student
A	The student demonstrated a comprehensive systemic and in-depth knowledge of program material; processed basic and additional literature; obtained a solid grasp of the conceptual apparatus, methods, techniques and tools provided by the program; found creative abilities in the presentation of the educational program material both on this issue and on related modules of the course and related courses, or the student had a current control of 90-100 points
B	The student demonstrated good knowledge of program material; processed the basic literature, mastered the conceptual apparatus, methods, techniques and tools provided by the program, but with some inaccuracies
C	
D	The student showed mediocre knowledge of the core program material; learned information mainly from a lecture course or just one textbook; mastered only certain methods, techniques and tools provided by the program
E	

FX	The student has significant gaps in knowledge of the main program material; fragmentary mastered the basic concepts, techniques and tools; significant mistakes are made when using them

Maximum total possible points – 180 points incl. (Midterm and Final exam are 50% of overall evaluation, where Midterm – 20% and Final – 30%)
Test / Assignment / Project – _3/3/3/ points (35-40% of the total for the course are tasks taken or presented exceptionally during the class)
Midterm exam – 36 points
Final exam – 54 points

Student Workload

It is assumed that for each out of 17 class sessions a student spends about 10.5 academic hours of work. This includes 3.5 academic hours of lectures with the instructor and 7 academic hours of personal work. Personal work includes working on lecture materials. Please pay attention that 1 academic hour equals to 40 minutes.

Assignment Format

• All work should be shown in time. If the student misses the deadline – the task is failed.
• Midterm covered topics from previous lectures (weeks 1-7). It included multiple choice questions and cases (essays) and took about 45 min.
• The Final exam covered all course material and included multiple choice questions and cases (essays). It lasts for 1.5 hours. Admission to the Final exam is possible only if all the tasks of the curriculum are covered.
• After the Midterm and Final is graded a student has access to the grade only. Access to the attempt, corrects answers and information whether the answer is correct cannot be granted.

Academic dishonesty

Academic integrity is submitting one's own work and properly acknowledging the contributions of others. Forms of academic dishonesty include:

1. Plagiarism – submitting all or part of another's work as one's own in an academic exercise such as an examination, a computer program, or written assignment.
2. Cheating – using or attempting to use unauthorized materials on an examination or assignment, such as using unauthorized texts or notes or improperly obtaining (or attempting to obtain) copies of an examination or answers to an examination. Including the use of artificial intelligence and pre-prepared answers to the questions of tasks is prohibited (unless otherwise specified in the task itself or allowed by the instructor).
3. Facilitating Academic Dishonesty – helping another commit an act of dishonesty, such as substituting for an examination or completing an assignment for someone else.
4. Fabrication – altering or transmitting, without authorization, academic information or records.

Any violation of these rules constitutes academic dishonesty and is liable to result in a failing grade and disciplinary action. In case of any academic dishonesty a student is not allowed

to continue or retake the assessment activity and for the Final the unsatisfactory grade ("0") is assigned for the course total. Cases of the academic dishonesty are not considered by the Academic Council.

Midterm and Final are valid only if they are taken on-campus (room defined by the dean's office) and on UACU's computer/laptop or online on the student's computer/laptop using Zoom and other conditions defined by the dean's office to avoid the cases of academic dishonesty. Students who will not meet this requirement will be expelled from the course with grade "0".

In case of missed Midterm or Final exam (for a valid reason like sickness or an emergency) a request to repeat the exam is possible. Permit to repeat a midterm or final exam is done through a letter to the dean's office with request and approval of subject lecturer.

Submission or retaking of any assessment activities after deadlines are forbidden.

Submission & Return Policy

Assignments must be submitted to the professor on or before the due date indicated in the Course Schedule. The assignments submitted after the due dates receive zero points.

****** NO MAKE –UP QUIZZES AND EXAMS ******

Schedule

Lecture	Research Projects	Assignments Due	Points
1	What is Programming	Lecture/Assignments/Test	3/3
2	Algorithms. Blocks of algorithms. Types of algorithms	Lecture/Assignments/Test	3/3
3	System of calculus. Binary, decimal, hexadecimal system	Lecture/Assignments/Test	3/3
4	Type of variables. Variable eclaration. Basic Syntax. Data Type and Structures.·	Lecture/Assignments/Test	3/3
5	Types of operators. Arithmetic operators. Relational operators. Logical operators.	Lecture/Assignments/Test	3/3
6	Programming languages review. Report and presentation	Lecture/Assignments/Test	3/3
7	Programming technologies review. Report and presentation	Lecture/Assignments/Test	3/3
	Midterm (8th class)	Test	34

	20% out of total amount of points for the course		
8	Project. Types of IT jobs and projects	Lecture/Assignments/Test	3/3
9	Web site programming. HTLM editors	Lecture/Assignments/Test	3/3
10	HTML language. Examples of web sites codes	Lecture/Assignments/Test	3/3
11	HTML operators. Internet marketing	Lecture/Assignments/Test	3/3
12	Project. Develop web site	Lecture/Assignments/Test	3/3
13	Apps programming. Mobile apps developing technologies	Lecture/Assignments/Test	3/3
14	Basis of Python. Operators. Python on line coding	Lecture/Assignments/Test	3/3
15	Basis of C++. Operators. C++ on line coding	Lecture/Assignments/Test	3/3
	Final (17th class) 30% out of total amount of points for the course	Test	56

Recommended Materials

Introductory Computer Science: Bits of Theory and Bytes of Practice.
A. K. Dewdney.
Computer Science Press, 2016.
A. K. Dewdney.
Computer Science Press, 2016.
Programming Challenges: The Programming Contest Training Manual.
Steven Skiena and Miguel Revilla.
Springer-Verlag, 2003.
Steven Skiena and Miguel Revilla.
Springer-Verlag, 2003.
Problems in Programming: Experience through Practice.
Andrej Vitek, Iztok Tvrdy, Robert Reinhardt, Bojan Mohar, Marc Martinec, Tomi Dolenc and Vladimir Batagelj.
Andrej Vitek, Iztok Tvrdy, Robert Reinhardt, Bojan Mohar, Marc Martinec, Tomi
A. K. Dewdney.
Computer Science Press, 2016.
A. K. Dewdney.
Computer Science Press, 2016.
Programming Challenges: The Programming Contest Training Manual.
Steven Skiena and Miguel Revilla.
Springer-Verlag, 2003.

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Problems in Programming: Experience through Practice.
Andrej Vitek, Iztok Tvrdy, Robert Reinhardt, Bojan Mohar, Marc Martinec, Tomi Dolenc and Vladimir Batagelj.
Andrej Vitek, Iztok Tvrdy, Robert Reinhardt, Bojan Mohar, Marc Martinec, Tomi Dolenc and Vladimir Batagelj.
John Wiley & Sons, 2015.
Problems on Algorithms (2nd Edition). [Available on-line]
Ian Parberry and William Gasarch.
Ian Parberry, 2020.
Ian Parberry and William Gasarch.
Ian Parberry, 2020.
Introduction to Algorithms (2nd Edition).
Thomas H. Cormen, Charles E. Leiserson, and Ronald L. Rivest, Clifford Stein.
The MIT Press / McGraw-Hill, 2021.
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** The above schedule and procedures are subject to change in the event of extenuating circumstances.*

Протокол засідання кафедр № 4 від 26.08.2025 року

Проректор з навчально-методичної роботи Л.І.Кондратенко

Завідувач кафедри А.В.Кінаш

Викладач Р.В.Селезньова