CSC 28: DISCRETE STRUCTURES FOR COMPUTER SCIENCE

In Workflow

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Approval Path

1. Tue, 07 Dec 2021 06:19:10 GMT
   Anna Baynes (shaverdian): Approved for CSC Committee Chair
2. Tue, 14 Dec 2021 20:38:37 GMT
   Nikrouz Faroughi (faroughi): Approved for CSC Chair
3. Fri, 28 Jan 2022 17:57:22 GMT
   Mohammed Eltayeb (mohammed.eltayeb): Approved for ECS College Committee Chair
4. Fri, 28 Jan 2022 18:22:48 GMT
   Behnam Arad (arad): Approved for ECS Dean

Date Submitted: Tue, 07 Dec 2021 06:18:21 GMT

Viewing: CSC 28 : Discrete Structures for Computer Science

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Changes proposed by: Anna Baynes (219700742)

Contact(s):

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Catalog Title:
Discrete Structures for Computer Science

Class Schedule Title:
Discrete Structures

Academic Group: (College)
ECS - Engineering & Computer Science

Academic Organization: (Department)
Computer Science

Will this course be offered through the College of Continuing Education (CCE)?
No

Catalog Year Effective:
Fall 2022 (2022/2023 Catalog)

Subject Area: (prefix)
CSC - Computer Science

Catalog Number: (course number)
28

Course ID: (For administrative use only.)
111691

Units:
3

Is the primary purpose of this change to update the term typically offered or the enforcement of requisites at registration?
No

In what term(s) will this course typically be offered?
Fall, Spring

Does this course require a room for its final exam?
Yes, final exam requires a room

Does this course replace an existing experimental course?
No

This course complies with the credit hour policy:
Yes

Justification for course proposal:
This is an existing course. We are updating the prerequisites because the current wording interferes with the registration of students who completed precalculus in high school.

Course Description: (Not to exceed 80 words and language should conform to catalog copy.)
Introduction to the essential discrete structures used in Computer Science, with emphasis on their applications. Topics include: counting methods, elementary formal logic and set theory, recursive programming, digital logic and combinational circuits, real number representation, regular expressions, finite automata.

Are one or more field trips required with this course?
No

Fee Course?
No

Is this course designated as Service Learning?
No

Does this course require safety training?
No

Does this course require personal protective equipment (PPE)?
No

Does this course have prerequisites?
Yes

Prerequisite:
Score of 76 or higher on ALEKS PPL exam or MATH 26A or MATH 29 or MATH 29B or MATH 30; and CSC 20. CSC 20 and MATH 30 may be taken concurrently.

Prerequisites Enforced at Registration?
Yes

Does this course have corequisites?
No

Graded:
Letter

Approval required for enrollment?
No Approval Required

Course Component(s) and Classification(s):
Discussion

Discussion Classification
CS#04 - Lecture /Recitation (K-factor=1 WTU per unit)
Discussion Units
3

Is this a paired course?
No

Is this course crosslisted?
No

Can this course be repeated for credit?
No

Can the course be taken for credit more than once during the same term?
No

Description of the Expected Learning Outcomes: Describe outcomes using the following format: "Students will be able to: 1), 2), etc."
Students completing this course will be able to
1. Define, manipulate and interpret sets, functions and relations;
2. Evaluate and construct propositional logic statements, arguments and proofs;
3. Apply the sum and product rules of counting;
4. Define finite automata and regular expressions for simple languages; and
5. Write recursive definitions and comprehend inductive proofs of correctness

Assessment Strategies: A description of the assessment strategies (e.g., portfolios, examinations, performances, pre-and post-tests, conferences with students, student papers) which will be used by the instructor to determine the extent to which students have achieved the learning outcomes noted above.
examinations (ELO 1-5), homework assignments (ELO 1-5).

Is this course required in a degree program (major, minor, graduate degree, certificate?)
Yes

Has a corresponding Program Change been submitted to Workflow?
No

Identify the program(s) in which this course is required:

Programs:
BS in Computer Science
BS in Computer Engineering

Does the proposed change or addition cause a significant increase in the use of College or University resources (lab room, computer)?
No

Will there be any departments affected by this proposed course?
No

I/we as the author(s) of this course proposal agree to provide a new or updated accessibility checklist to the Dean's office prior to the semester when this course is taught utilizing the changes proposed here.
I/we agree

University Learning Goals

Undergraduate Learning Goals:
Intellectual and practical skills

Is this course required as part of a teaching credential program, a single subject, or multiple subject waiver program (e.g., Liberal Studies, Biology) or other school personnel preparation program (e.g., School of Nursing)?
No

GE Course and GE Goal(s)

Is this a General Education (GE) course or is it being considered for GE?
No

Key: 1109