[Syllabus Last Revised: 8/7/24]

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DEPARTMENT OF MATHEMATICS
School of Natural Science, Business, and Mathematics
Fisk University
Math 125 01, 3 Cr. Hours
Fall 2024

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Class key: fisk 3894 7753
Instructor: Dr. Zia Haque

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Instructor Contact Info

M. Zia Haque, Ph.D.
209 Dubois Hall
Fisk University
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Office Hours: TR: 9:30-12:00 in Dubois 209

Course Overview

A non-calculus-based course designed for students interested in computer science. No previous experience is required. The course will provide the mathematical foundations necessary for other computer science courses. Topics covered include introduction to formal logic, sets, techniques of proofs, recursion and recurrence relations, counting principles, relations and functions, graphs, and trees.

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Course Prerequisites

Grade of C or better in MATH 101 or permission of instructor.

Required Software: Access to WebAssign, A Cengage product

Cengage's WebAssign access is **required** to complete online assignments (HW, Quizzes, Tests/Exams)
WebAssign Registration Instructions (Please see it in CANVAS)
Make sure you note the class key **fisk 3894 7753**

Textbook: *Discrete Mathematics with Applications, 5th Edition, by Susanna S. Epp* Published By Cengage Learning (Hard copy is optional as it costs additional money **Note**: Since built-in eText comes with WebAssign Access Code, you may not purchase the hard copy unless you really want to have it)

Mode of Delivery of lectures: in-class, TR 8-9:15 AM, Library 316

Attendance Policies

Attendance will be recorded each class meeting. Coming late or leaving early may not be counted a full attendance but will be estimated based on how much time you stay in class. Your attendance is very important as it affects your learning as well as your financial aids requirements. Your attendance record will be provided with the office of the Registrar several times during the semester for financial aid purpose. Attendance in class is strictly required by University policy (see Student Handbook or Bulletin). Generally, a student may claim excused absence if s/he provides documentations of hospitalization, doctor's note, university-related extra-curricular activities (sports, choir, etc.), or extreme family emergency.

Course Goals
- Develop reasoning skills to be used in logic and proofs of mathematical induction
- Introduce elementary number theory, sequences, and indexing
- Build foundation for Trees and Algorithms

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Assignments [all in WebAssign]
The major assignments that support the above learning goals include:
- **HW**: Weekly homework assignments are under "HW Category" in WebAssign.
- **Quizzes**: There are 8 online quizzes under "Quiz Category" in WebAssign. The lowest quiz grade will be dropped.
- **Midterm Exam** and **Final Exam** (Comprehensive). They are in-class proctored tests and are under "Test Category" in WebAssign.

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Assessment
Here is the breakdown of the types of assignments in this course and how much they are worth in relation to total points available in class. Assignments and points are subject to change depending on the pace of the class.

Assignment Category	weight
Homework	25%
Quizzes	25%
Midterm Exam	20%
Final Exam	30%
Total	100%

Grade conversion
Final grades will be calculated from the percentage earned in class as follows:

Percentage	Grade
90-100%	A
80-89%	B
70-79%	C
60-69%	D
<60%	F

Instructor has discretion to round off the decimal score and add + or – grades

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Late Assignment Policy

To avoid technological issues, you should start early instead of waiting for the very last minute. There will be a 10% late penalty for assignments turned in after due dates. The Final Exam can only be made up with the permission of Provost Office. A student who missed assignment due to excused absence (as defined earlier) may be given extension provided student submits appropriate documentation and get instructor's approval before it's due. The instructor has the final decision.

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ADA and Students with Disabilities

Pursuant to the Americans with Disabilities Act (ADA) Amendments Act of 2008 (ADAAA), Titles I and II of the ADA of 1990, and Sections 503 & 504 of the Rehabilitation Act of 1973 Fisk University will not discriminate against any employee, applicant for employment, or student, because of a physical or mental impairment with regard to any position or program for which that person is qualified. Through the University Academic Success Center (ASC) and the Provost's Office, students who may need special accommodations in the learning process may receive services including assessment and identification of tutorial support and other services from individual faculty, instructors and staff. Please contact ASC at (615) 329-8776 or Provost's Office at (615) 329-8681.

Any request for special accommodations due to a student's disability must be made in writing to the instructor within the first two weeks of class.

Class and assignment Schedule (Tentative)   Math 125 01 Dr. Haque   Fall 2024

Tuesday	Thursday	Assignments Due
8/13 Syllabus; WebAssign	8/15 Sec. 1.1, 1.2	
8/20 Sec 1.2, 1.3	8/22 Sec. 1.4	Sat, 8/24/24 HW Sec. 1.1-1.4 Due in WebAssign
		Mon, 8/26/24 CH1 Quiz due in WebAssign
8/27 Sec. 2.1, 2.2	8/29 Sec. 2.2, 2.3	Sat, 8/31/24 HW 2.1, 2.2, 2.3 Due in WebAssign
9/3 Sec. 2.5	9/5 Sec. 3.1, 3.2	Sat, 9/7/24 HW 2.1, 3.1 Due in WebAssign
		Mon, 9/9/24 CH2 Quiz due in WebAssign
9/10 Sec. 3.2, 3.3	9/12 Sec. 4.1, 4.2	Sat, 9/14/24 HW 3.2, 3.3, 4.1 Due in WebAssign Mon, 9/16/24

				CH3 Quiz due in WebAssign
9/17 Sec. 4.2, 4.3		9/19 Sec. 4.4, 4.5		Sat, 9/21/24 HW 4.2, 4.3, 4.4 Due in WebAssign
9/24 Sec. 4.5, 4.6		9/26 Sec 4.7		Sat, 9/28/24 HW 4.5, 4.6, 4.7 Due in WebAssign Mon, 9/30/24 CH4 Quiz due in WebAssign
10/1 Review for Midterm		10/3 **Midterm Exam** in class (Ch1-Ch4)		
10/8 Fall Break, no class		10/10 Sec 5.1, 5.2		Sat, 10/12/24 HW 5.1 Due in WebAssign
10/15 Sec 5.2, 5.3		10/17 Sec 5.4, 5.6		Sat, 10/19/24 HW 5.2-5.4 Due in WebAssign
10/22 Sec 5.6, 5.7		10/24 Sec 6.1, 6.2		Sat, 10/26/24 HW 5.6, 5.7, 6.1 Due in WebAssign Mon, 10/28/24 CH5 Quiz due in WebAssign
10/29 Sec 6.2, 6.3		10/31 Sec 8.1, 8.2		Sat, 11/2/24 HW 6.2, 6.3, 8.1 Due in WebAssign
11/5 Sec 8.2, 8.3		11/7 Sec 8.4		Sat, 11/9/24 HW 8.2, 8.3, 8.4 Due in WebAssign
11/12 Sec 8.5		11/14 Sec 10.1, 10.2		Sat, 11/16/24 HW 8.5, 10.1 Due in WebAssign Mon, 11/18/24 CH8 Quiz due in WebAssign
11/19 Sec 10.2, 10.3		11/21 Sec 10.4		Sat, 11/23/24 HW 10.2, 10.3, 10.4 Due in WebAssign Mon, 11/25/24 CH10 Quiz due in WebAssign
11/26		11/28 No class-Thanksgiving		
12/3 Review for Final		12/5 ??Final exam??		**Final Exam in-class TBA**

Instructor reserves the right to change the schedule due to unavoidable circumstances