Course Syllabus

020ASSGS4 Wastewater Distribution Networks

1. **Course number and name:** 020ASSGS4 Wastewater Distribution Networks
2. **Credits and contact hours:** 2 credits, 1x1:15 course hours
3. **Instructor's or course coordinator's name:** Roger RAKWEH
4. **Textbook and other supplemental material:**
    - **a.** Water Supply and Sewerage, McGraw-hill International Editions – Civil Engineering Series6th edition
    - **b.** Applied Hydrology, Ven Te Chow, David R. Maidment and Lawrence W. Mays.
    - **c.** Hydraulics of Open Channel flow, Richard H. French.
    - **d.** Instructor's Class Notes
5. **Specific course information**
    - **a. Catalog description:** Design and sizing of urban wastewater collection system.
    - **b. Prerequisites:** None.
    - **c. Required/Elective/Selected Elective:** Required major course for Water and Environment Specialty students
6. **Specific goals for the course:**
    - **a. Specific outcomes of instruction:**
        - Introduce the students to the storm and sewer collection system.
        - Assessment of existing collection system and proposing upgrades where needed.
        - Phasing the project according to estimated construction cost/budget.
    - **b. KPIs addressed by the course:**

KPI	a1	a2	c1	c2	e1	e2	g2	k3
Covered	x	x	x	x	x	x	x	x
Assessed								
Give Feedback								

7. **Brief list of topics to be covered and approximate number of lectures:**
    1. Introduction (1.25 hours)
    2. Open Channel Flow - Manning-Strickler (3.75 hours)
    3. Sewer collection system – Sewer production (1.25 hours)
    4. Sewer collection system – Sizing of the network (2.5 hours)
    5. Storm water collection system - Rational method - Time of concentration - IDF curve (6.25 hours)
    6. Storm water collection system - Sizing of the network (2.5 hours)