

## CE 323

# Water Engineering for Surveying

### Course Outline:

#### 1. Fluid Mechanics and Hydraulics

1. Fluid Properties.
2. Fluid Statics.
  - Pressures at points.
  - Forces on surfaces.
3. Fluid Dynamics.
  - Continuity.
  - Momentum.
  - Energy.
4. Open Channel and Closed Conduit.

#### 2. Hydrology:

5. Hydrologic cycle and budget.
6. Weather.
7. Precipitation.
8. Evaporation.
9. Stream flow.
10. Ground water.

#### Text Books:

1. "Fluid Mechanics", By V.L. Streeter and E.B. Wylie.
2. "Hydrology for Engineers", By R. Linsley, M. Kohier and J. Pauthus.

#### Grading:

|       |                  |
|-------|------------------|
| 40%   | 2 Midterm Exams. |
| 10%   | Quizzes          |
| 10%   | Tutorial         |
| 40%   | Final Exam.      |
| <hr/> |                  |
| 100   | Total            |