Assistant Prof. Nidaa Adil Jasim

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| **Week** | **Subject** | **Notes** |
| 1 | Fluid in motion-continuity equation |  |
| 2 | Bernoulli equation |  |
| 3 | Torricillis theorem+ siphon | Quiz |
| 4 | Pitot tube+ Verturi, nozzle and orifice flow meters |  |
| 5+6 | Momentum equation | Quiz |
| 7+8 | Laminar and turbulent flow+ Reynolds number+ Type of losses+ Darcy-Weisbach equation | Report presentation |
| 9 | Series&parallel pipe system | Quiz |
| 10 | network pipe system |  |
| 11 | Pipes in branching | Quiz |
| 12 | Open channel flow(definition) |  |
| 13 | Open channel formula for uniform flow(Chezy & Manning eq.) |  |
| 14 | Specific energy and specific energy curve(Froude number) | Report presentation |
| 15 |  | Monthly exam |

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| **References** |
| 1- Fluid Mechanics” by Victor L. Streeter and E. Benjamin Wylie, 1979. |
| 2- Elementary Fluid Mechanics”, by John K. Vennard, and Robert L. Street. |
| 3- Fluid Mechanics with Engineering Applications” by Robert L. Daugherty, Joseph B. Franzini, and E. John Finnemore.1998. |
| 4-A text book of fluid mechanics & hydraulic mechanics. By:R.K. RAJPUTS.CHAND & COMPANY LTD(2008) |