| Date: | Examination No.: 15367 | Version:1/9/2019 | Start: 1/9/2022 |
| :---: | :---: | :---: | :---: |
| Module Name - Code | Water Supply and Sewerage - 6127 |  |  |
| Module Language: | English |  |  |
| Responsible: | Lecturer Dr. Reem AbdulHakim Alrawi |  |  |
| Lecture (s): | Dr. Reem AbdulHakim Alrawi <br> M. Enas Saad |  |  |
| College: | College of Engineering - Salahaddin University |  |  |
| Duration: | 15 week - 1 semester |  |  |
| Course outcomes: | At the end of the semester, students would be able to understand: Water supply system and forecasting population, Pipes and pipe stresses, Quantity and quality of water and wastewater, Collection system and distribution system of water |  |  |
| Course Content: | Fundamental consideration of water supply source, Quantity of water demand and Fire demand, Population forecasting, Introduction to Pipes,Pipe fittings, Stresses in Pipes, Water Hammer in pipes \& Capacity of pipes, Water quality and analysis |  |  |
| Literature: | - Steel \& McGhee, "Water Supply and Sewerage", McGraw Hill International Edition, 5th Edition 1979. <br> - McGhee, Terence J., "Water Supply and Sewerage", McGraw Hill International Edition, 6th Edition 1991. <br> - B.C. Punmia, Ashok Kr. Jain, Arun Kr. Jain. "Water Supply Engineering". 2005. <br> - Harry E. Hickey. "Water Supply Systems \& Evaluation Methods. Volume I: Water Supply System Concepts". 2008 |  |  |
| Type of Teaching: | 2 hrs in lectures <br> 2 hrs laboratory working. |  |  |
| Pre-requisites: |  |  |  |
| Frequency: | Yearly in fall semester |  |  |
| Requirements for credit points: | For the award of credit points it is necessary to pass the module exam. <br> The module exam (practical and theoretical) contains: <br> [Written 120 min for theoretical] <br> [Written 45 min for practical] <br> Student's attendance is required in all classes. |  |  |
| Credit point: | 5 |  |  |
| Grade Distribution: | The Grade is generated from the examination result(s) with the following <br> 10\% Activities (class work, quizzes, assignments) <br> 20\% Theocratical Exams <br> 20\% Practical <br> 20\% Final practical exam <br> 30\% Final theoretical Exam |  |  |
| Work load: | The workload is 150 h . It is the result of 60h attendance and 90 h self studies. |  |  |

