

**Lawrence Technological University**  
**EME 3123 Fluid Mechanics**  
**Design Project Evaluation**

The following survey is used purely for assessment. The goal of this survey is to assess the project activities. It will remain confidential and will not contribute to your grade. Please answer the statements below as honestly and fairly as you can. There are no right or wrong answers, only honest ones.

Circle your response for each statement.

My project design satisfied the customer's needs and goals.

strongly disagree	disagree	no opinion	agree	strongly agree
1	2	3	4	5

I consider the results of my project successful.

strongly disagree	disagree	no opinion	agree	strongly agree
1	2	3	4	5

I found my work on the project to be satisfying.

strongly disagree	disagree	no opinion	agree	strongly agree
1	2	3	4	5

The real-world application of the project motivated me to do my best work.

strongly disagree	disagree	no opinion	agree	strongly agree
1	2	3	4	5

The open-ended nature of the project motivated me to do my best work.

strongly disagree	disagree	no opinion	agree	strongly agree
1	2	3	4	5

**During the course of this project, to what extent did you:**

Explore a contrarian view of accepted (i.e., typical) solutions.

None at all	slightly	on some occasions	many times	throughout most of the project
1	2	3	4	5

Identify an unexpected opportunity for your design.

None at all	slightly	on some occasions	many times	throughout most of the project
1	2	3	4	5

Create extraordinary value for a customer or stakeholder.

None at all	slightly	on some occasions	many times	throughout most of the project
1	2	3	4	5

Integrate information from many sources to gain insight.

None at all	slightly	on some occasions	many times	throughout most of the project
1	2	3	4	5

Assess and manage risk (i.e., include contingency plans due to unforeseen design flaws).

None at all	slightly	on some occasions	many times	throughout most of the project
1	2	3	4	5

Persist through failure.

None at all	slightly	on some occasions	many times	throughout most of the project
1	2	3	4	5

Apply creative thinking to ambiguous problems.

None at all	slightly	on some occasions	many times	throughout most of the project
1	2	3	4	5

Apply systems thinking to complex problems.

None at all	slightly	on some occasions	many times	throughout most of the project
1	2	3	4	5

Evaluate economic drivers.

None at all	slightly	on some occasions	many times	throughout most of the project
1	2	3	4	5

Examine a customer's or stakeholder's needs.

None at all	slightly	on some occasions	many times	throughout most of the project
1	2	3	4	5

Understand the motivations and perspectives of others.

None at all	slightly	on some occasions	many times	throughout most of the project
1	2	3	4	5

Convey engineering solutions in economic terms.

None at all	slightly	on some occasions	many times	throughout most of the project
1	2	3	4	5

Substantiate claims with data and facts.

None at all	slightly	on some occasions	many times	throughout most of the project
1	2	3	4	5

**To what extent did you work with your team:**

almost never	rarely	sometimes	often	almost always
1	2	3	4	5

**This project improved my technical skills in:**

Identifying the components and functions of a large-scale potable water supply piping system.

strongly disagree	disagree	no opinion	agree	strongly agree
1	2	3	4	5

Making reasonable simplifying assumptions.

strongly disagree	disagree	no opinion	agree	strongly agree
1	2	3	4	5

Analyzing the functions of various flow components (pumps, valves, etc.)

strongly disagree	disagree	no opinion	agree	strongly agree
1	2	3	4	5

Identifying and determining major and minor losses in a flow system.

strongly disagree	disagree	no opinion	agree	strongly agree
1	2	3	4	5

Predicting pressure and pipe size for series piping systems.

strongly disagree	disagree	no opinion	agree	strongly agree
1	2	3	4	5

Determining the required pumping power according to flow requirements.

strongly disagree	disagree	no opinion	agree	strongly agree
1	2	3	4	5

Choosing an actual pump that meets the flow requirements.

strongly disagree	disagree	no opinion	agree	strongly agree
1	2	3	4	5

Designing a real-world fluid mechanics system.

strongly disagree	disagree	no opinion	agree	strongly agree
1	2	3	4	5

Reporting the solution to a customer.

strongly disagree	disagree	no opinion	agree	strongly agree
1	2	3	4	5

**What did you like (or appreciate) about the project?**

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**What should be changed?**

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**Additional comments/observations**

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