

MAJMAAH UNIVERSITY  
COLLEGE OF ENGINEERING  
**Student Learning Outcomes Survey**

The below information should be filled by the instructor

Department:	<b>Civil and Environmental Eng.</b>	Academic Year:	<b>2018-19-F</b>
Course Title:	<b>Senior Design 2</b>	Course ID:	<b>CE499</b>
Number of students:	<b>2/2</b>	Section Number:	<b>Surveying Project</b>
Instructor Name:	<b>Dr. SaMeH S Ahmed</b>		
<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>
<b>4.6</b>	<b>4.6</b>	<b>4.8</b>	<b>4.8</b>
<b>e</b>	<b>f</b>	<b>g</b>	<b>h</b>
<b>4.8</b>	<b>4.7</b>	<b>4.6</b>	<b>4.5</b>
<b>i</b>	<b>j</b>	<b>k</b>	
<b>5.0</b>	<b>4.4</b>	<b>4.8</b>	

2018-19F	Fall Semester		Civil and Environmental Engineering																																
	a					b					c					d					e					f									
Student	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5
1	5	4	4	5	5	5	5	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4
2	5	4	5	5	4	5	4	5	4	5	5	5	4	5	4	5	4	5	4	5	5	4	5	5	4	5	4	5	5	4	5	4	5	5	5
Avr.	<b>4.60</b>					<b>4.60</b>					<b>4.80</b>					<b>4.80</b>					<b>4.80</b>					<b>4.70</b>									
%eg	<b>92.00</b>					<b>92.00</b>					<b>96.00</b>					<b>96.00</b>					<b>96.00</b>					<b>94.00</b>									
2018-19F	Fall Semester		Civil and Environmental Engineering																																
	g					h					i					j					k														
Student	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5	Q1	Q2	Q3	Q4	Q5					
1	5	5	5	4	5	5	5	4	4	4	5	5	5	5	5	5	4	4	4	4	5	5	5	5	5	5	5	5	5	5					
2	4	4	5	5	4	4	5	4	5	5	5	5	5	5	5	5	4	5	4	5	5	4	5	4	5	5	4	5	4	5					
Avr.	<b>4.60</b>					<b>4.50</b>					<b>5.00</b>					<b>4.40</b>					<b>4.80</b>														
%eg	<b>92.00</b>					<b>90.00</b>					<b>100.00</b>					<b>88.00</b>					<b>96.00</b>														

**Outcome a:** An ability to apply knowledge of mathematics, science, and engineering

	1	2	3	4	5
To what degree do you use mathematical and/or scientific principles to model the behavior of engineering systems					
To what degree do you translate academic theory into engineering applications					
To what degree do you accept limitations of mathematical models of physical reality					
To what degree do you execute calculations correctly either by hand or by mathematical software					
To what degree do you correctly analyze data sets using statistical concepts					

**Outcome b:** An ability to design and conduct experiments, as well as to analyse and interpret data

	1	2	3	4	5
To what degree do you observe good laboratory safety procedures					
To what degree do you formulate an experimental plan of data gathering and saving					
To what degree are you able to select and operate experimental equipment					
To what degree are you able to analyze and interpret data					
To what degree do you accept measurement errors					

**Outcome c:** An ability to design a system, component, or process to meet desired needs within realistic constraints

	1	2	3	4	5
To what degree do you develop a design strategy					
To what degree do you use computer tools and engineering resources effectively					
To what degree do you develop a solution that includes economic, safety and other realistic constraints					
To what degree do you apply scientific principles correctly to design practical processes					
To what degree do you recognize how accurate is your design answer					

**Outcome d:** An ability to function on multidisciplinary teams

	1	2	3	4	5
To what degree do you Routinely present at team meetings or work sessions. Is prepared for group meeting with some ideas.					
To what degree do you Perform duties that are assigned					
To what degree do you listen and involve others in the team decisions and actions. Values individual differences and talents					
To what degree do you Contribute to establishing team goals. Has plan to accomplish the set goals					
To what degree do you distinguish Values individual differences and talents					

**Outcome e:**An ability to identify, formulate, and solve engineering problems

	1	2	3	4	5
To what degree do you relate theoretical concepts to practical problem solving					
To what degree do you predict and defend problem outcomes					
To what degree do you use appropriate resources to locate information needed to solve problems					
To what degree do you take new information and effectively integrates it with previous knowledge					
To what degree do you formulate strategies for solving problems					

**Outcome f:** An understanding of professional and ethical responsibility

	1	2	3	4	5
To what degree do you understand and abide by the Code of Ethics and the Code of Conduct					
To what degree do you participate in class discussions and exercises on ethics and professionalism					
To what degree do you take personal responsibility for your actions					
To what degree are you attend classes regularly					
To what degree do you use personal value system to support actions					

**Outcome g:** An ability to communicate effectively

	1	2	3	4	5
To what degree do you routinely present at team meetings or work sessions					
To what degree do you contribute a fair share to the project workload					
To what degree are you prepared for the group meeting with clearly formulated ideas					
To what degree do you cooperate with others					
To what degree do you share credit for success with others and accountability					

for team errors					
<b>Outcome h:</b> The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.					

	1	2	3	4	5
To what degree are you familiar with the current trends in the engineering and technology disciplines					
To what degree do you respect the historical aspects of engineering solutions and their impacts					
To what degree do you value the importance of engineering in today's world					
To what degree do you follow the needs of the current job market					
To what degree do you able to discuss major political and economic issues at national and local levels					

<b>Outcome i:</b> Recognition of the need for and an ability to engage in life-long learning.
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	1	2	3	4	5
To what degree are you able to learn independently					
To what degree do you go beyond what is required in completing an assignment					
To what degree do you learn from mistakes					
To what degree do you demonstrate capability to think for your self					
To what degree do you participate in professional and technical gatherings					

<b>Outcome j:</b> Knowledge of contemporary issues
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	1	2	3	4	5
To what degree do you Identify and describe multiple current topics relevant to your major field of study.					
To what degree do you Identify and describe a contemporary issue from multiple perspectives.					
To what degree do you Read technology news sources on a regular basis and contributes their content in class or other meetings					
To what degree do you Broadly comprehend technology evolution and can integrate into career plan.					
To what degree do you can discriminate between hyperbole and true change to understand potential impacts					

**Outcome k:** An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

	1	2	3	4	5
To what degree do you adequate knowledge to complete the project					
To what degree do you able to select and use tools and standards that may fit the project, with occasional guidance					
To what degree do you give enough time and able to learn new tools and skills					
To what degree do you Gives 2 or more discussions that reference the use of standard equipment for engineering system design, control, or analysis					
To what degree can you discuss and demonstrate aware of the importance of specific design techniques or analysis approaches					