

# SLO Performance Report (2019-20)

Program: Engineering

Date: 08-17-2020

Terms: Spring 2020, Fall 2019, Summer 2019

## ENGRB40: Surveying

**1. Upon successful completion of the course, the student will perform office computations and design for differential leveling; traversing; area calculations; property/boundary surveys; topographic surveys/mapping; volume/earthwork; horizontal and vertical curves; and error analysis.**

CSLO not included in any Assessment Rubric

**2. Upon successful completion of the course, the student will operate survey equipment: tape, level, transit, theodolite, compass, total station, GPS.**

CSLO not included in any Assessment Rubric

**3. Upon successful completion of the course, the student will reduce field notes using various mathematical techniques to generate meaningful records describing horizontal and vertical control of landforms.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**4. Upon successful completion of the course, the student will plot plans and maps from field work data using manual and computer-aided drafting.**

CSLO not included in any Assessment Rubric

**5. Upon successful completion of the course, the student will work effectively in groups during field surveying and engineering design project which involve problem solving, report writing, and oral presentations.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Totals for CSLOs**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**ENGRB24: Engineering Graphics and Descriptive Geometry**

**1. Upon successful completion of the course, the student will calculate precision fit tolerances**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**2. Upon successful completion of the course, the student will demonstrate use of extrusion process for solid modeling.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**3. Upon successful completion of the course, the student will prepare detailed and assembly drawings for the portfolio**

CSLO not included in any Assessment Rubric

**4. Upon successful completion of the course, the student will be able to insert text and data in drawings**

CSLO not included in any Assessment Rubric

**5. Upon successful completion of the course, the student will be apply good dimensioning techniques using CA**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Totals for CSLOs**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**ENGRB19C: Introduction to Programming Concepts and Methodologies for Engineers**

**1. Upon successful completion of the course, the student will be able to apply the principles of structured programming.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**2. Upon successful completion of the course, the student will be able to apply numerical techniques to analyze and solve engineering-related problems**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	39	88.64%	0	0.00%	5	11.36%	44	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>39</b>	<b>88.64%</b>	<b>0</b>	<b>0.00%</b>	<b>5</b>	<b>11.36%</b>	<b>44</b>	<b>100.00%</b>

**3. Upon successful completion of the course, the student will be able to compare computer algorithms and software/hardware interfaces in developing efficient programming code**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Totals for CSLOs**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	39	88.64%	0	0.00%	5	11.36%	44	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	39	88.64%	0	0.00%	5	11.36%	44	100.00%

**ENGRB20: Programming and Problem-Solving in MATLAB**

Upon completion the student will be able to: Demonstrate the ability to apply a top down design methodology to develop computer algorithms.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

Upon completion the student will be able to: Demonstrate the ability to create, test, and debug sequential MATLAB programs, as well as programs that use object-orientated techniques, in order to achieve computational objectives.

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

**Upon completion the student will be able to: Explain and apply numeric techniques and computer simulations to analyze and solve engineering related problems.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Upon completion the student will be able to: Demonstrate the ability to use MATLAB effectively to analyze and visualize data.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Upon completion the student will be able to: Demonstrate knowledge, understanding, and the ability to use standard data structures.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	3	100.00%	0	0.00%	0	0.00%	3	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>3</b>	<b>100.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>3</b>	<b>100.00%</b>

**Totals for CSLOs**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	3	100.00%	0	0.00%	0	0.00%	3	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>3</b>	<b>100.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>3</b>	<b>100.00%</b>

**ENGRB17: Introduction to Electric Circuits**

**Upon completion the student will be able to: Formulate efficient strategies to find unknown voltage, current and power values through circuits based on component arrangement.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	17	43.59%	8	20.51%	14	35.90%	39	100.00%
Fall 2019	7	100.00%	0	0.00%	0	0.00%	0	0.00%	7	100.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	7	15.22%	17	36.96%	8	17.39%	14	30.43%	46	100.00%

**Upon completion the student will be able to: Calculate voltage, current and power values at any part of a circuit through simplification and application of basic laws.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

**Upon completion the student will be able to: Design circuits for desired output values based on selection of components selection.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

**Totals for CSLOs**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	17	43.59%	8	20.51%	14	35.90%	39	100.00%
Fall 2019	7	100.00%	0	0.00%	0	0.00%	0	0.00%	7	100.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	7	15.22%	17	36.96%	8	17.39%	14	30.43%	46	100.00%

**ENGRB24: Engineering Graphics and Descriptive Geometry**

**1. Upon successful completion of the course, the student will be able to calculate precision fit tolerances**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	13	76.47%	4	23.53%	0	0.00%	17	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	13	76.47%	4	23.53%	0	0.00%	17	100.00%

**2. Upon successful completion of the course, the student will be able to develop processed for creating 3-dimensional part models and assembly models.**

CSLO not included in any Assessment Rubric



**3. Upon successful completion of the course, the student will prepare detailed and assembly drawings for the portfolio**

CSLO not included in any Assessment Rubric

**4. Upon successful completion of the course, the student will be able to revise 3-dimensional models based on engineering change orders.**

CSLO not included in any Assessment Rubric

**5. Upon successful completion of the course, the student will be able to interpret industrial drawing dimensions and symbols according to the ASME industry standard.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	13	76.47%	4	23.53%	0	0.00%	17	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>13</b>	<b>76.47%</b>	<b>4</b>	<b>23.53%</b>	<b>0</b>	<b>0.00%</b>	<b>17</b>	<b>100.00%</b>

**Totals for CSLOs**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	26	76.47%	8	23.53%	0	0.00%	34	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>26</b>	<b>76.47%</b>	<b>8</b>	<b>23.53%</b>	<b>0</b>	<b>0.00%</b>	<b>34</b>	<b>100.00%</b>

**ENGRB17L: Electric Circuit Laboratory**

**Upon completion the student will be able to: use the most basic functions of electrical test and measurement equipment including oscilloscopes, multimeters, function generators and power supplies.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Read circuit schematics and construct linear circuits using resistors, capacitors, inductors, and op amps.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Measure resistance, DC and AC voltages, current, and power, and experimentally verify the results for a variety of electrical circuits.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Test circuits, critically analyze data and compare measured performance to theory.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Use a circuit simulation program and other computer applications to predict or describe circuit behavior.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Using critical and logical methods, troubleshoot and repair simple electric circuits.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	1	3.70%	23	85.19%	2	7.41%	1	3.70%	27	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>1</b>	<b>3.70%</b>	<b>23</b>	<b>85.19%</b>	<b>2</b>	<b>7.41%</b>	<b>1</b>	<b>3.70%</b>	<b>27</b>	<b>100.00%</b>

**Record and document results of lab work using text and graphs.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	1	3.70%	24	88.89%	1	3.70%	1	3.70%	27	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	1	3.70%	24	88.89%	1	3.70%	1	3.70%	27	100.00%

**Totals for CSLOs**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	2	3.70%	47	87.04%	3	5.56%	2	3.70%	54	100.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	2	3.70%	47	87.04%	3	5.56%	2	3.70%	54	100.00%

**ENGRB37: Engineering Mechanics-Dynamics**

**Upon completion the student will be able to: Derive and apply the relationships between position, velocity, and acceleration of a particle in motion.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%

**Upon completion the student will be able to: Derive relations defining the velocity and acceleration of a particle on a rigid body for translation, rotation, and general plane motion.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Upon completion the student will be able to: Apply Newton's second law to analyze the motion of a particle acted upon by forces or a rigid body acted upon by forces and moments..**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Upon completion the student will be able to: Apply the method of work and energy to problems modeled as a single particle, system of particles, or a rigid body.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Upon completion the student will be able to: Apply the method of impulse and momentum to problems modeled as a single particle, system of particles, or a rigid body.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Upon completion the student will be able to: Describe and analyze the motion of a particle relative to a rotating frame.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Upon completion the student will be able to: Apply the principle of impulse and momentum to impact problems.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Upon completion the student will be able to: Communicate legible and understandable engineering solutions.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Totals for CSLOs**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**ENGRB70: Surveying for Professionals**

**1. Upon successful completion of the course, the student will be able to perform office computations and design for differential leveling; traversing; area calculations; property/boundary surveys; topographic surveys/mapping; volume/earthwork; horizontal and vertical curves; and error analysis.**

CSLO not included in any Assessment Rubric

**2. Upon successful completion of the course, the student will be able to operate survey equipment: tape, level, transit, theodolite, compass, total station, GPS.**

CSLO not included in any Assessment Rubric

**3. Upon successful completion of the course, the student will be able to reduce field notes using various mathematical techniques to generate meaningful records describing horizontal and vertical control of landforms.**

CSLO not included in any Assessment Rubric

**4. Upon successful completion of the course, the student will be able to plot plans and maps from field work data using manual and computer-aided drafting.**

CSLO not included in any Assessment Rubric

**5. Upon successful completion of the course, the student will be able to work effectively in groups during field surveying and engineering design project which involve problem solving, report writing, and oral presentations.**

CSLO not included in any Assessment Rubric

**Totals for CSLOs**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**ENGRB36: Engineering Mechanics-Statics**



**1. Upon completion the student will be able to: Analyze two- and three-dimensional force systems on rigid bodies in static equilibrium.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Spring 2020	0	0.00%	7	33.33%	4	19.05%	10	47.62%	21	100.00%
Fall 2019	0	0.00%	11	37.93%	5	17.24%	13	44.83%	29	100.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	18	36.00%	9	18.00%	23	46.00%	50	100.00%

**2. Upon completion of the course the student will be able to: Solve for unknown force or moment reactions on a single, rigid body in equilibrium.**

CSLO not included in any Assessment Rubric

**3. Upon completion of the course a student will be able to: Solve for the centroid of a uniform area or volume.**

CSLO not included in any Assessment Rubric

**4. Upon completion of the course a student will be able to: Solve for unknown forces in a system containing multiple rigid bodies (such as trusses).**

CSLO not included in any Assessment Rubric

**Totals for CSLOs**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Spring 2020	0	0.00%	7	33.33%	4	19.05%	10	47.62%	21	100.00%
Fall 2019	0	0.00%	11	37.93%	5	17.24%	13	44.83%	29	100.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	0	0.00%	18	36.00%	9	18.00%	23	46.00%	50	100.00%

**ENGRB45: Properties of Materials**

**1. Upon successful completion of the course the student will be able to analyze the connection between atomic structure and macroscopic behavior in materials.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	6	30.00%	6	30.00%	8	40.00%	20	100.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>6</b>	<b>30.00%</b>	<b>6</b>	<b>30.00%</b>	<b>8</b>	<b>40.00%</b>	<b>20</b>	<b>100.00%</b>

**2. Upon successful completion of the course the student will be able to evaluate stress-strain data, appraise mechanical properties of a material and apply these findings to engineering design.**

CSLO not included in any Assessment Rubric

**3. Upon successful completion of the course the student will be able to relate the principles of material processing to measured properties.**

CSLO not included in any Assessment Rubric

**Totals for CSLOs**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	6	30.00%	6	30.00%	8	40.00%	20	100.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>6</b>	<b>30.00%</b>	<b>6</b>	<b>30.00%</b>	<b>8</b>	<b>40.00%</b>	<b>20</b>	<b>100.00%</b>

**ENGRB47: Introduction to Engineering and Design**

**1. Upon successful completion of this course the student will be able to leverage software assets to solve engineering problems and formulate engineering designs.**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Spring 2020	13	13.13%	85	85.86%	0	0.00%	1	1.01%	99	100.00%
Fall 2019	32	27.83%	70	60.87%	2	1.74%	11	9.57%	115	100.00%
Summer 2019	8	30.77%	10	38.46%	6	23.08%	2	7.69%	26	100.00%
Totals	<b>53</b>	<b>22.08%</b>	<b>165</b>	<b>68.75%</b>	<b>8</b>	<b>3.33%</b>	<b>14</b>	<b>5.83%</b>	<b>240</b>	<b>100.00%</b>

**2. Upon successful completion of this course the student will be able to design and construct a physical device as part of a team.**

CSLO not included in any Assessment Rubric

**3. Upon successful completion of this course the student will be able execute each of the steps necessary to complete a BS degree in engineering and apply for an entry-level engineering position.**

CSLO not included in any Assessment Rubric

**4. Upon completion of this course a student will be able to demonstrate the oral and written communication skills that are critical for practicing engineers.**

CSLO not included in any Assessment Rubric

**Totals for CSLOs**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
Spring 2020	13	13.13%	85	85.86%	0	0.00%	1	1.01%	99	100.00%
Fall 2019	32	27.83%	70	60.87%	2	1.74%	11	9.57%	115	100.00%
Summer 2019	8	30.77%	10	38.46%	6	23.08%	2	7.69%	26	100.00%
Totals	<b>53</b>	<b>22.08%</b>	<b>165</b>	<b>68.75%</b>	<b>8</b>	<b>3.33%</b>	<b>14</b>	<b>5.83%</b>	<b>240</b>	<b>100.00%</b>

**ENGRB38: Strength of Materials**

**1. Upon successful completion of the course, the student will be able to calculate internal stress and maximum displacement of a structural element.**

CSLO not included in any Assessment Rubric

**2. Upon successful completion of the course, the student will be able to determine failure modes from a given structural system loading condition.**

CSLO not included in any Assessment Rubric

**3. Upon successful completion of the course, the student will be able to calculate internal forces and couples throughout a structural system given loading conditions.**

CSLO not included in any Assessment Rubric

**Totals for CSLOs**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Fall 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Summer 2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
Totals	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>

**Report Totals:**

	N/A		Exceeds expectations		Meets expectations		Does not meet expectations		Total	
Spring 2020	15	5.10%	224	76.19%	23	7.82%	32	10.88%	294	100.00%
Fall 2019	39	22.81%	87	50.88%	13	7.60%	32	18.71%	171	100.00%
Summer 2019	8	30.77%	10	38.46%	6	23.08%	2	7.69%	26	100.00%
Totals	<b>62</b>	<b>12.63%</b>	<b>321</b>	<b>65.38%</b>	<b>42</b>	<b>8.55%</b>	<b>66</b>	<b>13.44%</b>	<b>491</b>	<b>100.00%</b>