

*BMEG 321 – Thermodynamics*

**Student Outcome e: an ability to identify, formulate, and solve engineering problems.**

**Performance Criterion #1:** *Apply formal problem-solving techniques that can be applied to generalized problems throughout engineering and applied science..*

**Scoring Rubric:**

Aspect	<b>1: Not proficient</b>	<b>2: Progressing to proficiency</b>	<b>3: Proficient</b>	<b>4: Superior proficiency</b>
<b>Acquisition and application of problem-solving methods</b>	Problems are solved in a haphazard manner, with little or no organization, structure, or clarity in presentation	Formal solving techniques are used partly (only some steps) or inconsistently	Formal solving techniques are regularly and correctly used, particularly on difficult problems	Formal solving techniques are regularly and correctly used on all problems, especially with clear documentation thereof

**Student Outcome g: an ability to communicate effectively.**

**Performance Criterion #1:** *Students will improve their oral and written communication skills.*

**Scoring Rubric:**

Aspect	<b>1: Not proficient</b>	<b>2: Progressing to proficiency</b>	<b>3: Proficient</b>	<b>4: Superior proficiency</b>
<b>Topics are given in a logical order</b>	totally disjointed, no organization	multiple items presented out of order	no more than 2 items presented out of order	organization logical and as per guidelines
<b>Complete "story" told through presentation</b>	story missing, no story told	story incomplete	complete story told	complete story enhanced with related extra information

<b>Presentation delivery</b>	difficult to understand, voice consistently hard to hear, voice trails off often, spoke too slow or too fast, overuse of slang and/or jargon, presentation full of hesitations, ums, ahs, etc.	generally competent delivery with fewer than 2 instances of voice hard to hear, voice trailing off, speaking too fast, use of slang and/or jargon, some ums, ahs, etc.	voice clearly heard, words clearly enunciated, did not speak too slowly or too rapidly  clear, continuous presentation, perhaps a few ums, ahs, etc.	voice projected very well, clear enunciation, did not speak too slowly or rapidly  superior presentation, free of ums, ahs, etc.
<b>Composure</b>	clearly unsure, nervous, confused	perhaps nervous at start, but composure gained as presentation progresses	composed at all times	exudes/conveys confidence
<b>Organization</b>	inappropriate content in most sections of report	no more than 2 instances of content in inappropriate section of report	content appropriate to all sections of report	organization enhances readability of the report while still following guidelines
<b>Formatting</b>	text, tables and figures are difficult to interpret and/or read;  multiple format errors that make the report difficult to read	portions are sloppy and difficult to read; no more than 2 format errors	text, tables, figures readable; format followed	text, tables, figures readable and clearly understandable; format aspects enhance report impact
<b>Complete Story Told</b>	important aspects of story missing	minor aspects of story are not included	complete story told	additional material enhances quality of report

<b>Results and Analysis</b>	text, tables and figures are difficult to interpret and/or read	portions are sloppy and difficult to read	text, tables, figures readable	text, tables, figures readable and clearly understandable
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