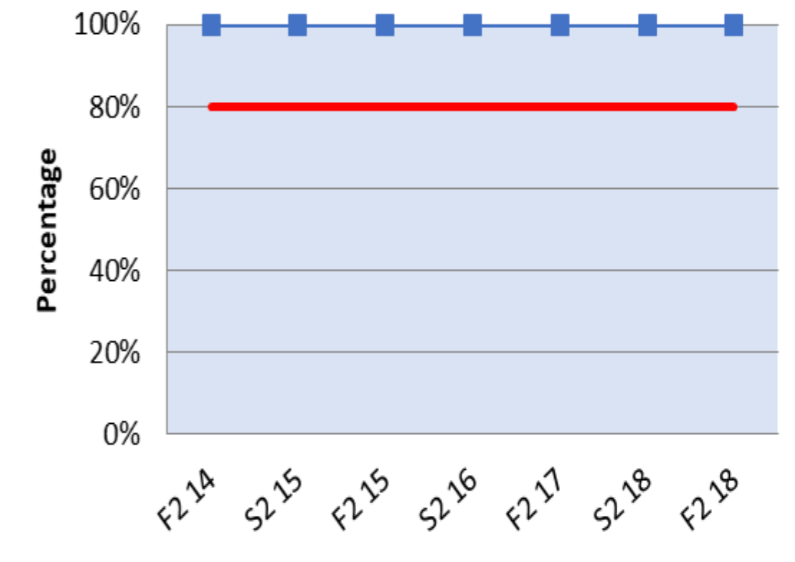
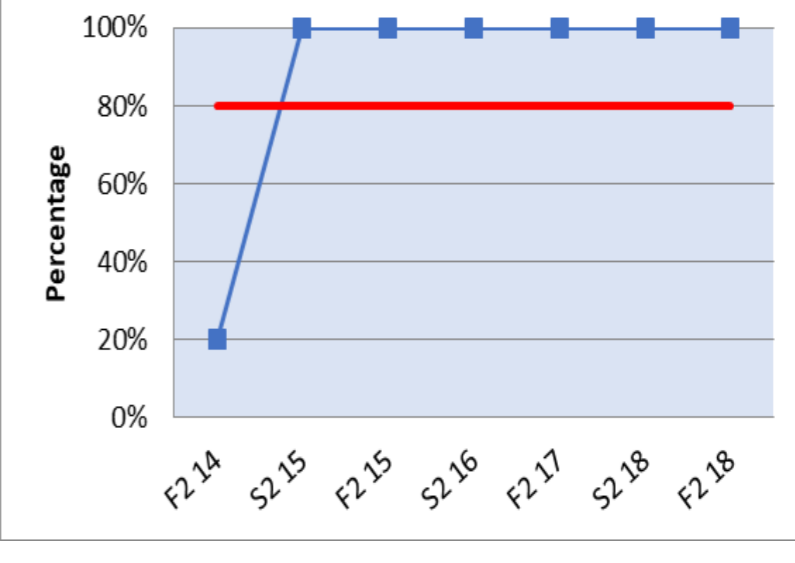


## Standard #4 Measurement and Analysis of Student Learning and Performance

Use this table to supply data for Criterion 4.2. (Figure 4.2 in self-study)

Performance Indicator	Definition																				
<b>1. Student Learning Results</b>	<p>A student learning outcome is one that measures a specific competency attainment. <i>Examples of a direct assessment (evidence) of student learning attainment that might be used include: capstone performance, third-party examination, faculty-designed examination, professional performance, licensure examination.</i> Add these to the description of the measurement instrument in column two:</p> <p>Direct - Assessing student performance by examining samples of student work                      Indirect - Assessing indicators other than student work such as getting feedback from the student or other persons who may provide relevant information.                      Formative – An assessment conducted during the student’s education.                      Summative – An assessment conducted at the end of the student’s education.                      Internal – An assessment instrument that was developed within the business unit.                      External – An assessment instrument that was developed outside the business unit.                      Comparative – Compare results between classes, between online and on ground classes, Between professors, between programs, between campuses, or compare to external results such as results from the U.S. Department of Education Research and Statistics, or results from a vendor providing comparable data.</p>																				
	<b>Analysis of Results</b>																				
Performance Measure	What is your measurement instrument or process?	Current Results	Analysis of Results	Action Taken or Improvement made	Insert Graphs or Tables of Resulting Trends data points preferred) (3-5)																
<b>Measurable goal</b>  <b>What is your goal?</b>	<b>Do not use grades.</b>  <b>(Indicate type of instrument) direct, formative, internal, comparative</b>	<b>What are your current results?</b>	<b>What did you learn from the results?</b>	<b>What did you improve or what is your next step?</b>																	
PLO 1: Students will be able to explain the important terminology, facts, concepts, principles, analytic techniques, and theories used in the field of space systems operations management.  - At least 80% of the students score in the “Moderate” or “Good” category on the multiple choice exam.	Multiple choice cumulative exam and case study in Capstone course and a case study which requires responses to an individual scenario for each of the six core course subject matter areas. Summative, internal	The goal has been reached over the last 7 assessment periods. A total of 64 students have taken the exam with a 98% achievement rate.	We are fully accomplishing our PLOs goals. But are still looking for ways to continuously improve.	We currently do not have an external comparison which is necessary in order for us to analyze how well students from our program perform compared to competitor programs.  We are also looking for possible gaps in our program where our current PLOs may not be addressing changing dynamics in the discipline. Since our current program assessment focuses on the current PLOs, we are relying on industry experts and research to identify new areas.	<table border="1" style="display: none;"> <caption>Student Performance Trends Data</caption> <thead> <tr> <th>Semester</th> <th>Percentage</th> </tr> </thead> <tbody> <tr><td>F2-14</td><td>100%</td></tr> <tr><td>S2-15</td><td>90%</td></tr> <tr><td>F2-15</td><td>100%</td></tr> <tr><td>S2-16</td><td>100%</td></tr> <tr><td>F2-17</td><td>100%</td></tr> <tr><td>S2-18</td><td>90%</td></tr> <tr><td>F2-18</td><td>100%</td></tr> </tbody> </table>	Semester	Percentage	F2-14	100%	S2-15	90%	F2-15	100%	S2-16	100%	F2-17	100%	S2-18	90%	F2-18	100%
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<p>PLO 2: Students will be able to effectively apply important terminology, facts, concepts, principles, analytic techniques, and theories used in the field of space systems operations management when analyzing complex factual situations.</p> <p>- At least 80% of the students score in the "Moderate" or "Good" category on the multiple choice exam.</p>	<p>Multiple choice cumulative exam and case study in Capstone course and a case study which requires responses to an individual scenario for each of the six core course subject matter areas. Summative, internal</p>	<p>The goal has been completely reached over the past seven assessment periods. A total of 29 students completed the PLO2 assessment over the past seven periods with an overall average of 100%.</p>	<p>We are fully accomplishing our PLOs goals. But are still looking for ways to continuously improve.</p>	<p>We currently do not have an external comparison which is necessary in order for us to analyze how well students from our program perform compared to competitor programs.</p> <p>We are also looking for possible gaps in our program where our current PLOs may not be addressing changing dynamics in the discipline. Since our current program assessment focuses on the current PLOs, we are relying on industry experts and research to identify new areas.</p>	 <p>A line graph showing the percentage of students meeting the goal for PLO 2 from Fall 2014 to Fall 2018. The y-axis is labeled 'Percentage' and ranges from 0% to 100% in 20% increments. The x-axis shows semesters: F2-14, S2-15, F2-15, S2-16, F2-17, S2-18, and F2-18. A horizontal red line is drawn at the 80% mark. A blue line with square markers shows the performance, which is consistently at 100% for every semester.</p> <table border="1"> <thead> <tr> <th>Semester</th> <th>Percentage</th> </tr> </thead> <tbody> <tr><td>F2-14</td><td>100%</td></tr> <tr><td>S2-15</td><td>100%</td></tr> <tr><td>F2-15</td><td>100%</td></tr> <tr><td>S2-16</td><td>100%</td></tr> <tr><td>F2-17</td><td>100%</td></tr> <tr><td>S2-18</td><td>100%</td></tr> <tr><td>F2-18</td><td>100%</td></tr> </tbody> </table>	Semester	Percentage	F2-14	100%	S2-15	100%	F2-15	100%	S2-16	100%	F2-17	100%	S2-18	100%	F2-18	100%
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<p>PLO 3: Students will be able to effectively integrate (or synthesize) important facts, concepts, principles, and theories in the field of space systems operations management when developing solutions to multifaceted space systems operations management problems in complex factual situations.</p> <p>- At least 80% of the students score in the "Moderate" or "Good" category on the multiple choice exam.</p>	<p>Multiple choice cumulative exam and case study in Capstone course and a case study which requires responses to an individual scenario for each of the six core course subject matter areas. Summative, internal</p>	<p>The goal has been completely reached over the past seven assessment periods. A total of 45 students completed the PLO3 assessment over the past seven periods with an overall average of 100%.</p>	<p>We are fully accomplishing our PLOs goals. But are still looking for ways to continuously improve.</p>	<p>We currently do not have an external comparison which is necessary in order for us to analyze how well students from our program perform compared to competitor programs.</p> <p>We are also looking for possible gaps in our program where our current PLOs may not be addressing changing dynamics in the discipline. Since our current program assessment focuses on the current PLOs, we are relying on industry experts and research to identify new areas.</p>	 <p>A line graph showing the percentage of students meeting the goal for PLO 3 from Fall 2014 to Fall 2018. The y-axis is labeled 'Percentage' and ranges from 0% to 100% in 20% increments. The x-axis shows semesters: F2-14, S2-15, F2-15, S2-16, F2-17, S2-18, and F2-18. A horizontal red line is drawn at the 80% mark. A blue line with square markers shows the performance, starting at 20% in F2-14, rising to 100% in S2-15, and remaining at 100% for all subsequent semesters.</p> <table border="1"> <thead> <tr> <th>Semester</th> <th>Percentage</th> </tr> </thead> <tbody> <tr><td>F2-14</td><td>20%</td></tr> <tr><td>S2-15</td><td>100%</td></tr> <tr><td>F2-15</td><td>100%</td></tr> <tr><td>S2-16</td><td>100%</td></tr> <tr><td>F2-17</td><td>100%</td></tr> <tr><td>S2-18</td><td>100%</td></tr> <tr><td>F2-18</td><td>100%</td></tr> </tbody> </table>	Semester	Percentage	F2-14	20%	S2-15	100%	F2-15	100%	S2-16	100%	F2-17	100%	S2-18	100%	F2-18	100%
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