

University of Minnesota Crookston
Assessment of Student Learning

5/8/2018

Major: BMM Manufacturing Management

Program Learning Outcome	rubric			Data Collection Frequency	Reporting Timeframe	Rubric results			Future goals and plans
	Does Not Meet Expectations 1	Meets Expectations 2	Exceeds Expectations 3			Does Not Meet Expectations 1	Meets Expectations 2	Exceeds Expectations 3	
Program Learning Outcome 1: Critical Thinking and Problem Solving Skills Outcome 1.1. Solve assigned production and service related problems and resolve issues by building consensus in groups and disseminating the outcomes with result tracking.	Unable to solve production problems and present results	Able to solve production problems and present results	Show outstanding ability to solve production problems and present results	Bi-annual	2018	15%	13%	72%	1. Make Webinar or record videos for such topics to help students understanding the topics that involve the most common production planning problems 2. The goal is to reduce the percentage of students who need improvement
Program Learning Outcome 2: Real life Application Outcome 2.1. Assess the ability of students to implement continuous improvement tools and methodology(PDCA, LEAN, Six Sigma, etc.) for ongoing increase of profitability.	Unable to implement continuous improvement tools in real-life applications	Able to implement continuous improvement tools in real-life applications	Show Excellent ability while implementing continuous improvement tools in real-life applications	Bi-annual	2018	8%	12%	80%	1. Make Webinar or record videos for such topics to help students understanding topics that involve the most common production planning problems 2. The goal is to reduce the percentage of students who need improvement
Program Learning Outcome 3: Communication Skills in Manufacturing Environment Outcome 3.1. Respond to quality assessment reports by taking appropriate action.	Unable to take actions based on quality assessment reports	Able to take actions based on quality assessment reports	Show enhanced ability to respond take actions based on a quality report	Bi-annual	2019				
Program Learning Outcome 4: Communication Skills in Manufacturing Environment Outcome 4.1. Initiate and manage projects to ensure timely completion within the constraints of facilities, equipment and staffing.	Unable to manage a project with a goal of saving costs and improving quality	Able to manage a project with a goal of saving costs and improving quality	Show outstanding ability to manage a project with effective cost saving and noticeable quality improvement	Bi-annual	2019	28%	60%	12%	28% of the class did not meet the expectation which is high percentage. To improve the performance, the future goals are as follows: 1. Provide more handout about the project. 2. Have a mid-semester update to keep students on track. 3. Revise the project description and make sure it is clear.
Program Learning Outcome 5: Critical Thinking and Problem Solving Skills									

Assessment Method & Procedures
 1. Assignment 6 in MGMT3250 is used to evaluate this outcome since it involves the most common production problem such as Master Production Planning and Inventory Control
 2. Students who got B- or more in this assignment are considered as Excellent
 3. Students who got Less than B-, but passed the assignments are considered as acceptable
 3. Students who failed in this assignment need improvements
 5. The sample size is 44 and the course was offered in the fall of 2018

1. Assignments 1-3 and 10-12 of BM3025 are used to evaluate this outcome since they involve the most common Quality Tools including VSM, SIPOC, VOC, 7 Quality Tools, and Kano Model.
 2. Students with average A in these assignments are beyond expectations
 3. Students with average Less than B+ in these assignments, but did not get F meet the expectations
 3. Students who failed in this assignments need improvements
 5. The sample size is 25 and the course was offered in the fall of 2018

1. The course project in BM 3025 is used to evaluate this outcome, since it is implemented in either service or manufacturing company throughout a whole semester.
 2. The project is composed of two parts: course proposal and final report. A presentation is required as well.
 3. Students with average B- or more in both the proposal and final report are beyond expectations.
 4. Students with average Less than C+ in this project, but did not get F meet the project
 5. Students who failed in need improvements
 5. The sample size is 25 and the course was offered in the fall of 2018.

Outcome 5.1. Initiate and manage maintenance scheduling to optimize productivity and reduce process variability.

Program Learning Outcome 6: Real Life Application

Outcome 6.1. Implement appropriate task oriented software and hardware choices to communicate ideas and results clearly.

Does Not Meet Expectations 1	Meets Expectations 2	Exceeds Expectations 3
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Unable to use needed software
Able to use appropriate software when it is needed.
Show outstanding ability when it comes to using software while solving problems

Bi-annual 2018

Does Not Meet Expectations 1	Meets Expectations 2	Exceeds Expectations 3
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8% 16% 76%

1. Assignments 4-6 of BM3025 are used to evaluate this outcome since students need to use software such as Minitab to work on them.
2. Students with Average A in these assignments are beyond expectations
3. Students with average Less than B+ in these assignments , but did not get F meet the expectations
3. Students who failed in this assignments need improvements
5. The sample size is 25 and the course was offered in the fall of 2018

1. Provide more resources on how to use software programs such as Minitab
2. Such resources are examples, handouts and software help

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Major: BMM Quality Management

Assessment Method & Procedures

Program Learning Outcome	Rubric		
	Needs Improvement = 1.0	Acceptable = 2.0	Excellent = 3.0
Program Learning Outcome 1. Outcome 1.1. Initiate quality assessment methodology for assigned products or services, analyze process variability, communicate the results and test protocol with other stakeholders.			
Program Learning Outcome 2. Outcome 2.1 Solve assigned quality related problems and resolve issues, build consensus in groups and disseminate the outcomes with result tracking.	Unable to solve quality related problems	Able to solve quality related problems	Show outstanding capability when solving quality related problems
Program Learning Outcome 3. Outcome 3.1 Review performance of team members and lead them to embrace quality excellence by using persuasive leadership skills.			
Program Learning Outcome 4. Outcome 4.1. Evaluate the quality of products or services relative to external (ISO, State and Federal Regulations) and internal standards (benchmarks, published protocols, specifications); report the outcomes.	Unable to evaluate products or services with respect to internal and external measures	Able to evaluate products or services with respect to internal and external measures	Show outstanding capability when it comes to evaluating product and services with respect to internal and external standards
Program Learning Outcome 5. Outcome 5.1. Integrate continuous improvement models (PDCA, LEAN, Six Sigma, etc.) for ongoing increase of profitability.	Unable to implement continuous improvement tools in real-life applications	Able to implement continuous improvement tools in real-life applications	Able to implement continuous improvement tools in real-life applications perfectly
Program Learning Outcome 6. Outcome 6.1. Implement appropriate task oriented software and hardware choices to communicate ideas and results clearly.	Unable to use needed software	Able to use appropriate software when it is needed.	Show outstanding ability when it comes to using software while solving problems

Data Collection Frequency

Reporting Timeframe

Assessment Method & Procedures

Rubric results		
Needs Improvement =	Acceptable =	Excellent =
1.0	2.0	3.0

Future goals and plans

Data Collection Frequency
Bi-annual

Reporting Timeframe
2018

1. Assignment 1.2 in BM3034 is used to evaluate this outcome since it involves a case study in which different quality tools are used to solve a quality problem.
2. Students with A in this assignment are considered as Excellent
3. Students with Less than A-, but passed the assignments are considered as acceptable
3. Students who failed in this assignments need improvements
5. The sample size is 44 and the course was offered in the fall of 2018

0.00% 93.40% 6.60%

Provide students with more resources on quality tools

Bi-annual

2018

1. Assignments 1-3 and 10-12 of BM3025 are used to evaluate this outcome since they involve the most common Quality Tools including VSM, SIPOC, VOC, 7 Quality Tools, and Kanon Model.
2. Students with Average A in these assignments are beyond expectations
3. Students with average Less than B+ in these assignments, but did not get F meet the expectations
3. Students who failed in this assignments need improvements
5. The sample size is 25 and the course was offered in the fall of 2018

Needs Improvement =	Acceptable =	Excellent =
1.0	2.0	3.0

8% 12% 80%

1. Make Webinar or record videos for such topics to help students understanding topics that involve the most common production planning problems
2. The goal is to reduce the percentage of students who need improvement

Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
1	2	3

8% 16% 76%

1. Assignments 4-6 of BM3025 are used to evaluate this outcome since students need to use software such as Minitab to work on them.
2. Students with Average A in these assignments are beyond expectations
3. Students with average Less than B+ in these assignments, but did not get F meet the expectations
3. Students who failed in this assignments need improvements
5. The sample size is 25 and the course was offered in the fall of 2018

1. Provide more sources on how to use needed software. For example, Minitab software has tutorial about each function of the software. Student may not be aware of the such tutorials. I will make sure that they can access and be able to use the software help.