

STEM Education Service-Learning Project Preparation – Assessment Rubrics of Workshop/Service Proposals

Grade	Descriptions
A+	<p>Excellent (9-11)</p> <p>Overall attractive, well-thought-out, comprehensive plan</p> <p>• Content:</p> <ul style="list-style-type: none"> - required data/information about STEM are <u>clear & complete</u>; - day-to-day lessons <u>tightly match/meet</u> intended learning outcomes (ILOs) (e.g., apply the knowledge and skills of STEM they have acquired to deal with complex issues in the service setting); - covers <u>all</u> knowledge deliverables for [Coding/AI/Mechanical Assemblies workshop]; - <u>well-suited</u> to recipients (age group, background); - <u>detailed</u> breakdown <p>• Lesson plan/design:</p> <ul style="list-style-type: none"> - arrangement/flow of STEM lessons is <u>logical</u>; - STEM lessons/activities & time allocation are <u>feasible</u>; - has <u>variety</u> of activities/strategies to enhance & evaluate STEM learning (e.g., games, hands on activities, exercises, quiz); - <u>creative/optimum use</u> of resources & information technologies (e.g., videos, social media, on-line interactive tools, props). <p><i>Projected workshop is attractive & effective (strong potential to engage learners).</i></p>
A	
A-	
B+	<p>Good (6-8)</p> <p>Overall sensible plan with clear potential to meet objectives</p> <p>• Content:</p> <ul style="list-style-type: none"> - required data/information about STEM are <u>supplied</u>; - day-to-day lessons are <u>aligned</u> with ILOs; - covers <u>essential</u> knowledge deliverables; - <u>sufficiently</u> detailed <p>• Lesson plan/design:</p> <ul style="list-style-type: none"> - arrangement/flow of STEM lessons <u>makes sense</u>; - STEM lessons/activities & time allocation are <u>feasible</u>; - includes <u>some</u> activities/strategies to enhance & evaluate STEM learning; - incorporates <u>some</u> resources & information technologies. <p><i>Projected workshop is effective (potential to teach learners).</i></p>
B	
B-	

Grade	Descriptions
C+	<p>Satisfactory (3-5)</p> <p>Overall, plan more or less meets objectives but could be more detailed/attractive/complete</p> <ul style="list-style-type: none"> • Content: <ul style="list-style-type: none"> - some data/information are about STEM <u>missing or inadequate</u>; - lessons meet <u>most (not all)</u> ILOs; - <u>missing 1 or 2</u> workshop deliverables; - <u>generic or unrealistic</u>: could be more suited to recipients; - <u>general</u> rundown of topics, <u>lacking detail</u> • Lesson plan/design: <ul style="list-style-type: none"> - arrangement/flow of STEM lessons <u>could be more logical</u> (fragmented/disjunct/repetitive in some parts); - STEM lessons/activities & time allocation are <u>not realistic</u>; - <u>lacks</u> activities/strategies to enhance & evaluate STEM learning: heavily relies on <u>one-way</u> teaching; - uses <u>only basic</u> resources & information technologies. <p style="text-align: right;"><i>Projected workshop is somewhat dull.</i></p>
C	
C-	
D+	<p>Pass (1-2)</p> <p>Overall poor/incomplete/ineffective plan</p> <ul style="list-style-type: none"> • Content: <ul style="list-style-type: none"> - <u>incomplete</u> data/information about STEM; - STEM lessons/activities are <u>too simple or too complicated</u>; - <u>too general, incomprehensible, or lacking alignment</u> with ILOs • Lesson plan/design: <ul style="list-style-type: none"> - arrangement/flow of STEM lessons is <u>vague/questionable/fragmented</u>; - STEM lessons/activities & timing allocation are <u>not realistic</u>; - activities & strategies to teach & evaluate STEM learning are <u>missing</u>. <p style="text-align: right;"><i>Projected workshop is dull & ineffective.</i></p>
D	
F	<p>Fail</p> <p>Totally inadequate or no submission</p> <ul style="list-style-type: none"> • Content: <ul style="list-style-type: none"> - <u>incomplete</u> data/information about STEM; - <u>most</u> STEM lessons are <u>not aligned</u> with or irrelevant to ILOs; - <u>missing</u> key deliverables • Lesson plan/design: <ul style="list-style-type: none"> - arrangement/flow of STEM lessons <u>hardly makes senses</u>; - <u>unrealistic or missing</u> time allocation; - activities & strategies to teach & evaluate STEM learning are <u>missing</u>. <p style="text-align: right;"><i>Projected workshop is haphazard.</i></p>