

MicrobeLibrary Curriculum Review Criteria Rubric

Criteria	Acceptable as submitted; no change or simple corrections (1)	Needs modifications or improvements (2)	Fundamental revisions or additions required (3)
Content			
The title expresses the content of the activity.	The activity title clearly and succinctly expresses the content of the activity.	The title does not entirely reflect the activity content.	The title fails to express the content of the activity, poorly describes the activity, suggests content inaccurately, or is overly flashy.
The abstract summarizes the activity in 50-100 words.	The abstract is concise, communicated clearly, and within the word limit.	The abstract may seem vague or too detailed.	The abstract does not clearly summarize the activity. Word limit is exceeded.
The description effectively encapsulates the activity in one sentence (limited to 250 characters).	The description is concise, communicated clearly, and within the word limit. Users will recognize the goal and usefulness of the activity.	The description is vague; the goal is ambiguous.	The description does not reveal the goal or usefulness of the activity. Character limit is exceeded.
The activity identifies and addresses applicable core themes	The activity clearly addresses one or more core content themes.	The activity partially addresses one or more core content themes. Additional core themes are applicable but not cited.	The activity does not address any core content themes. Inappropriate core themes are cited.
The activity identifies and addresses applicable lab skills, cognitive skills, or safety skills.	The activity clearly addresses one or more applicable lab themes.	The activity partially addresses one or more applicable lab themes. Additional lab themes are applicable but not cited.	The activity does not address any lab themes. Inappropriate lab themes are cited.
The level of the activity is appropriate for the indicated audience of undergraduate students.	The activity challenges student to understand and apply core content theme(s) at the undergraduate level.	The activity presents core content themes in appropriate manner but does not challenge undergraduate students. Additional audiences are applicable but not cited.	The activity level is inappropriate for selected audiences.
The activity identifies and describes all microorganisms that are used.	All microorganisms are identified and described; all safety issues using these microorganisms are addressed.	Microorganisms are named but not described; safety information is inadequate or incomplete.	Microorganisms used in the activity are not identified and described; safety information is missing or incorrect.
The activity identifies appropriate science discipline keywords for user searches.	All appropriate science discipline keywords are cited.	Science discipline keywords are cited but additional choices should be included.	Science discipline keywords are not listed; inappropriate choices are cited.
The activity identifies appropriate microbiology keywords for user searches.	All appropriate microbiology keywords are cited.	Microbiology keywords are cited but additional choices	Microbiology keywords are not listed; inappropriate choices are cited.
The activity identifies appropriate pedagogy keywords for user searches.	All appropriate pedagogy keywords are cited.	Pedagogy keywords are cited but additional choices should be included.	Pedagogy keywords are not listed; inappropriate choices are cited.
Process			
Students are engaged actively in learning concepts, investigative techniques, or skills development.	Activity clearly requires hands-on/minds-on involvement of all students.	Activity requires marginal involvement and engagement of students.	Students are not engaged in active learning processes.
The activity is innovative.	Activity presents concepts and meets objectives using new ideas, methods, or devices.	Activity includes some new methods and ideas.	Activity does not include any novel methods or ideas.
The activity involves collaboration or group work (if applicable).	Student-student interactions are essential to activity.	Student-student interactions are present or proposed, but are not essential.	Student-student interactions are not present or appear ancillary.
The activity engages students in thinking beyond knowledge and comprehension such as application, critical thinking, synthesis, analysis, or evaluation (if applicable).	The activity challenges student to apply, analyze, synthesize, and evaluate using higher order cognitive skills.	The activity requires students to understand basic core concepts; it encourages students to apply skills to new situations.	The activity fosters basic understanding but does not involve applications of knowledge to new situations.
The activity reinforces written or verbal communication skills (if applicable).	The activity requires meaningful use of writing, speech, or visual presentation skills.	The activity includes writing or verbal communication components, but they are not central to the activity or contribute minimally.	The activity lacks meaningful applications of writing or verbal communication skills.
The activity reinforces mathematical or computational skills (if applicable).	Activity requires meaningful use of math and computational skills.	The activity includes math components, but they are not central to the activity or offer minimal value.	Activity lacks meaningful applications of math and computational skills.

Instruction			
The time required for activity preparation and implementation appears accurate and reasonable.	Activity preparation times and required class times are stated clearly (number of minutes/hours or class periods).	Activity preparation times and class times are suggested but require clarification.	Preparation times and class times are vague or seem unrealistic.
The learning objectives are clearly stated and represent valuable learning outcomes.	Learning objectives have high educational value.	Learning objectives have moderate value.	Learning objectives have marginal value.
The materials list is clear and complete. Materials are readily available. Sources for materials are provided.	Materials list is clear, complete, and well organized. Sources for materials are provided.	Materials list is essentially complete but details are not clear. Some sources for key items are not listed.	Materials list is incomplete. Items are expensive, difficult to obtain, or pose safety hazards. Sources for items are not listed.
Recipes and storage for media and reagents are provided (if applicable).	Recipes and storage for media and reagents are clear.	Recipes and storage for media and reagents are vague or incomplete.	Recipes and storage for media and reagents are absent.
The instructions and procedures for students are clear and complete.	Instructions are provided in the form of a student handout. Procedures are clear, complete, well organized, and presented at the appropriate level.	Instructions and procedures are essentially complete, but may be unclear or need minor modifications. Instructions are not in the form of a student handout.	Instructions and procedures are incomplete or unclear. Procedures are provided at an inappropriate level. Student handout is clearly needed but not included.
The instructions and procedures for instructors are clear and complete.	Instructions are organized, succinct, and include explanations or clarifications that allow the activity work smoothly.	Instructions and procedures are essentially complete, but may be unclear or need minor modifications.	Instructions and procedures are incomplete or unclear. Specific methods or steps require additional clarifications.
Prerequisite student knowledge and skills are clearly stated.	Prerequisites are clearly stated.	Some prerequisites are listed.	Background requirements for students are lacking and/or unrealistic.
Possible modifications and extensions that broaden the appeal or usefulness of the activity are provided (if applicable).	Specific modifications are suggested that broaden the activity to other audiences, themes, or applications.	Modifications are suggested that broaden the usefulness of the activity, but additional clarifications are needed.	No modification or extensions are listed although the activity clearly would benefit by their inclusion.
Adequate support materials (references, answer keys, appendices, etc) are provided.	Ample support materials and references are provided.	Support materials for faculty could be improved. Answer keys and appendices are vague or incomplete. Some references are improperly cited or missing.	Support materials for faculty are poor or not provided. Answer keys and appendices are needed but missing. References are not listed.
Safety issues if applicable are addressed.	All safety issues (microorganisms, toxicity, flammables, corrosives, combustibles, etc) are clearly addressed	Some safety issues need to be clarified or further described	Safety issues are not addressed or inadequate in their current form.
Evaluation			
The activity as conceived and presented will help students to achieve the stated learning objectives.	The activity clearly supports the learning objectives; the approach is well conceived.	The activity somewhat supports the learning objectives; the approach is acceptable.	The activity does not seem to support the learning objectives; the approach is flawed.
Assessment methods are described to determine whether students have achieved the stated learning objectives.	Assessment methods are described clearly; methods are appropriate and effectively measure the stated learning objectives.	Assessment methods are suggested but do not measure whether students have met the learning objectives.	Suggested assessment is inappropriate for activity; assessment would be applicable for this activity but has not been provided.
The activity is field-tested. Student and instructor responses are available and reflect favorably. Completion of the activity results in a higher degree of comprehension or skill level as stated in the learning objectives.	The activity has been field tested at two or more sites and revised accordingly. It has received excellent student and instructor feedback and is highly effective in meeting the learning objectives.	The activity has been field tested at a single site and revised accordingly. Student and instructor feedback responses are good. Evidence demonstrates marginal effectiveness in meeting the learning objectives.	Evidence from field tests does not demonstrate effectiveness of activity to meet the stated objectives. Field test component is absent.
Student data are included to provide faculty with full sense of outcomes of the activity.	The activity includes useful examples of actual student data and clearly outlined student outcomes.	Suggested student outcomes are included.	Does not include examples of student data.