Cornell Guided Notes

Biotechnology for Health (Biomedical Innovations) | 2027-03-11

Name	Period	Date	Lesson
		2027-03-11	

Lesson focus

Decision matrix

Key words and questions	Prepared details and student notes
Essential question **What is today's target?**	Use a weighted decision matrix to choose among competing prototype design options. Big idea: A decision matrix makes tradeoffs visible and keeps design choices defensible. **My notes, examples, and questions**
Key words **What vocabulary unlocks the lesson?**	- literature review - peer review - decision matrix - validation - metric **My notes, examples, and questions**

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Cornell Notes - Continued

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Must-know ideas **What should I understand by the end?**	- Criteria weights reflect what matters most to users and stakeholders. - A weighted score lets you compare options with different strengths objectively. - Documenting the matrix is a Lab SOP practice: decisions need an auditable rationale. **My notes, examples, and questions**
Process notes **What happens during class?**	- 0-5 min: Warm-up: name two criteria a medical device must meet before you'd use it - 5-20 min: List three design options and define four weighted criteria - 20-45 min: Score each option; compute and double-check weighted totals - 45-60 min: Write justification: winning option and deciding criterion - 60-72 min: Peer check: swap matrices and verify weights sum to 100 - 72-80 min: Exit ticket: one sentence on why the lowest-scoring option was eliminated **My notes, examples, and questions**

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Steps and evidence **What do I do and turn in?**	- List three candidate design options for your prototype. - Define four selection criteria such as cost, safety, feasibility, and effectiveness. - Assign each criterion a weight that sums to 100 percent. - Score each option against each criterion and compute weighted totals. - Write a justification naming the winning option and the criterion that decided it. Evidence: Data table - Weighted decision matrix with three options, four criteria, weights, scores, weighted totals, and a written justification. **My notes, examples, and questions**
Checks for understanding **How do I know I got it?**	- You completed a weighted matrix with at least three options and four criteria. - You justified your choice using the matrix results. **My notes, examples, and questions**

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Lab or safety notes **What must I handle carefully?**	Supplies: - Design notebook - Prototype materials or model - Decision matrix template - Ruler or measuring tool - Stopwatch or timer - Data recording sheet - Calculator **My notes, examples, and questions**

Summary

Today's lesson focused on Decision matrix. The main target was: Use a weighted decision matrix to choose among competing prototype design options. The evidence of learning is Data table: Weighted decision matrix with three options, four criteria, weights, scores, weighted totals, and a written justification.. In my own words, the most important idea from today is:

My summary

My final question or connection