

Scientific Ways of Knowing UAR Plan, 2025-2027

Goal/Outcome:	Students Will Meet the General Education Learning Outcomes for the Scientific Ways of Knowing Component
GELO 1	Apply foundational knowledge and models of a discipline in the physical or natural sciences to analyze and/or predict phenomena.
Assessment Method	Instructor-identified assignment, exam, or project from week 8 or later
Benchmark	75% of students will meet or exceed end-of-course expectations
Data Sources	Whichever is greater: (a) a random 25% selection of artifacts from each course or (b) five artifacts from each course. On campus courses will be sampled in the fall and dual credit, in the following spring.
Relevant Dates	<p>On campus: Data collection FA19; review SP20; report FA20 Data collection FA22; review SP23; report FA23 Data collection FA25; review SP26; report FA26</p> <p>Dual credit: Data collection SP20; review SP20; report FA20 Data collection SP23; review SP23; report FA23 Data collection SP26; review SP26; report FA26</p>
Results	
Analysis	
Work Plan Element	

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GELO 2	Apply scientific reasoning to critically evaluate assertions.
Assessment Method	Instructor-identified assignment, exam, or project from week 8 or later
Benchmark	75% of students will meet or exceed end-of-course expectations
Data Sources	Whichever is greater: (a) a random 25% selection of artifacts from each course or (b) five artifacts from each course. On campus courses will be sampled in the fall and dual credit, in the following spring.
Relevant Dates	<p>On Campus: Data collection FA20; review SP21; report FA21 Data collection FA23; review SP24; report FA24 Data collection FA26; review SP27; report FA27</p> <p>Dual Credit: Data collection SP21; review SP21; report FA21 Data collection SP24; review SP24; report FA24 Data collection SP27; review SP27; report FA27</p>
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Analysis	
Work Plan Element	

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GELO 3	Interpret and communicate scientific information via written, spoken, and/or visual representations.
Assessment Method	Instructor-identified assignment, exam, or project from week 8 or later
Benchmark	75% of students will meet or exceed end-of-course expectations
Data Sources	Whichever is greater: (a) a random 25% selection of artifacts from each course or (b) five artifacts from each course. On campus courses will be sampled in the fall and dual credit, in the following spring.
Relevant Dates	<p>On campus: Data collection FA19; review SP20; report FA20 Data collection FA22; review SP23; report FA23 Data collection FA25; review SP26; report FA26</p> <p>Dual credit: Data collection SP20; review SP20; report FA20 Data collection SP23; review SP23; report FA23 Data collection SP26; review SP26; report FA26</p>
Results	
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Work Plan Element	

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GELO 4	Describe the relevance of specific scientific principles to the human experience.
Assessment Method	Instructor-identified assignment, exam, or project from week 8 or later
Benchmark	75% of students will meet or exceed end-of-course expectations
Data Sources	Whichever is greater: (a) a random 25% selection of artifacts from each course or (b) five artifacts from each course. On campus courses will be sampled in the fall and dual credit, in the following spring.
Relevant Dates	<p>On Campus: Data collection FA20; review SP21; report FA21 Data collection FA23; review SP24; report FA24 Data collection FA26; review SP27; report FA27</p> <p>Dual Credit: Data collection SP21; review SP21; report FA21 Data collection SP24; review SP24; report FA24 Data collection SP27; review SP27; report FA27</p>
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Goal/Outcome:	Students Will Meet the General Education Learning Outcomes for the Scientific Ways of Knowing Component
GELO 5	Test a hypothesis using discipline-specific tools and techniques for observation, data collection, and analysis to form a defensible conclusion.
Assessment Method	Instructor-identified final assignment, exam, or project
Benchmark	75% of students will meet or exceed end-of-course expectations
Data Sources	Whichever is greater: (a) a random 25% selection of artifacts from each course or (b) five artifacts from each course. On campus courses will be sampled in the fall and dual credit, in the following spring.
Relevant Dates	<p>On Campus: Data collection FA21; review SP22; report FA22 Data collection FA24; review SP25; report FA25 Data collection FA27; review SP28; report FA28</p> <p>Dual Credit: Data collection SP22; review SP22; report FA22 Data collection SP25; review SP25; report FA25 Data collection SP28; review SP28; report FA28</p>
Results	
Analysis	
Work Plan Element	