

Biology Inquiry syllabus planning guide

Theme: Writing & Communication				
Learning Goal	Learning Outcome	Measurable/Assessment	Activities	Resources
Read scientific publications	Identify hypothesis, experimental design & controls, interpret results	Point-based assignments: - Article write-ups - Grading rubric to include knowledge gained based on desired learning outcome (content) - In-class group work - Follow-up experimental design based on desired learning outcome Pre/post questionnaire: - Confidence in reading/interpretation skills Pre/post assessment: - Grades obtained per rubric guidelines	- Article write-ups - In-class group work - DDP project	
Write about scientific content and ideas	Writing clearly, concisely, and on topic	Point-based assignments: - Article write-ups - Grading rubric to include knowledge gained based on desired learning outcome (structure/style) Pre/post questionnaire: - Confidence in reading/interpretation skills Pre/post assessment: - Grades obtained per rubric guidelines	- DDP project - Personal statement - Peer review of DDP and/or personal statement drafts	
Theme: Refine Passion & Define Direction				
Learning Goal	Learning Outcome	Measurable/Assessment	Activities	Resources
Identify [an aspect of science] that student is passionate about	Clearly communicate your passion in a personal statement	Point-based assignments: - Personal statement - IDP w/ goals set to attain identified passion - CV/resume - Social media (students' choice) Pre/post questionnaire: - Motivation/inspiration survey (ask Erin) Post assessment of personal statement: - Qual/quant assessment for structure, contain, direction, passion	- Personal statement - IDP	

Theme: Know the PSU Biology Department				
Learning Goal	Learning Outcome	Measurable/Assessment	Activities	Resources
Know what kinds of research are going on in the PSU Biology Department	Recognize faculty and labs, identify their areas of study and/or model organism	Point-based assignments: - Identify a lab that aligns most with student's personal research interests - Write a cover letter to above lab - Group work: Craft a "research map" Pre/post questionnaire: - Motivation/inspiration survey (ask Erin) - Comfort of students to contact faculty/grad students or potential employers or future grad schools/mentors	- Cover letter - Group-work research map project	
Theme: Careers in Science				
Learning Goal	Learning Outcome	Measurable/Assessment	Activities	Resources
Overview and awareness of career options	Identify personally interesting career paths	Pre/post questionnaire: - # and type of careers students can list - Self-identification of career trajectory	- IDP - Interpersonal communication - Meeting etiquette	