

Appendix

EUREKA! and PROPEL learning objectives and activities

Course	Students	Iteration	Semester	Learning Objectives	Exercises
EUREKA!	First Year	First	Fall 2017	Describe the ways that scholarly information is organized and discovered	<ul style="list-style-type: none"> • Live poll and quizzing during lecture • Searching Databases during recitation
				Describe the difference between scholarly and popular resources	<ul style="list-style-type: none"> • Live poll and quizzing during lecture • Mystery Article during recitation
				Describe the peer-review process	<ul style="list-style-type: none"> • Live poll and quizzing during lecture • Q&A with faculty about peer-review during lecture • Mystery Article during recitation
				Construct effective database search strategies using Boolean operators, controlled vocabulary and filters	Searching Databases during recitation
				Identify and access discipline-specific scholarly databases and data repositories	Speed Databasing during recitation
		Second	Fall 2018	Identify scholarly information	<ul style="list-style-type: none"> • Live poll and quizzing during lecture • Information Scavenger Hunt during recitation, Think-Pair-Share
				Identify primary and secondary information sources	Information Scavenger Hunt during recitation
				Describe the peer-review process	Live poll and quizzing during lecture
				Identify peer-reviewed literature	<ul style="list-style-type: none"> • Live poll and quizzing during lecture • Information Scavenger Hunt during recitation
				Explore database structure	Information Scavenger Hunt during recitation
				Identify the leading databases, their features, and special uses	Information Scavenger Hunt during recitation

				Understand basic search technique and strategy	Information Scavenger Hunt during recitation
				Build advanced search strings	Information Scavenger Hunt during recitation
PROPEL	Third Year	First	Spring 2018	Be able to critique and evaluate study design and claims	Role-playing in recitation
				Locate and integrate information from a range of resource types and effectively synthesize ideas gathered from multiple sources	Role-playing in recitation
				Summarize the changes in scientific knowledge over time on a particular topic	Role-playing in recitation
				Recognize the responsibility of having an authoritative scientific voice, including seeking accuracy and reliability, respecting intellectual property, and participating in communities of practice.	<ul style="list-style-type: none"> • Live poll and quizzing during lecture • Role-playing in recitation
				Organize and create bibliographies in Mendeley	<ul style="list-style-type: none"> • Live poll and quizzing during lecture • Mendeley demo in lecture
		Second	Spring 2019	Organize and create bibliographies in Mendeley	<p>As part of a group project, students had to:</p> <ul style="list-style-type: none"> • create a Mendeley group • add files to Mendeley, including a PDF and a website link • create a bibliography