The purpose of this assignment is to give you the opportunity to practice the skills you learned during the Library Research Presentation given by Ms. Denise Brush from Campbell Library. Answer each question in the space provided.

If you need help, try clicking on the Research Guide link on the right-hand side of the Campbell Library webpage, browsing by subject, choosing engineering, and then Freshman Engineering Clinic.

You should begin each of these tasks by going to <http://www.lib.rowan.edu/campbell>

1. Use ProfSearch to determine the following:
   1. What is the call number for *Fluid Mechanics for Chemical Engineers*, 3rd Edition by Noel de Nevers

Note: This is one of the course textbooks for CHE 309, Process Fluid Transport

QC145.2 .D42 2005

* 1. How many hard copies are in the library’s holdings?

1 Copy

1. Click on the Full Text Online button to refine the search. Is there a book similar to *Fluid Mechanics for Chemical Engineers* available in an e-version? If so, what is the title and who is the author? (You’re looking for an undergraduate-level, general fluid mechanics textbook—if you searched with the author’s name in question 1, consider searching without it for this question)

### *Fluid Mechanics For Chemical Engineers* by Ron Darby

1. Return to the main library page and click Find and then click Databases and browse by subject and select Engineering. Use the IEEE resource to determine how many publications Prof. Nidhal Bouaynaya from our ECE department has in that database.
   1. Number of publications:

71

* 1. Of all the publications Dr. Bouaynaya has in the IEEE database, which is the most cited (list the name of the article). Note: you can sort by Most Cited [By Papers].

Theoretical Foundations of Spatially-Variant Mathematical Morphology Part II: Gray-Level Images

* 1. List one of the articles that cited the above article by Dr. Bouaynaya using the reference format given in the Engineering Communication chapter from Pathfinder.

Runhong Huang, Sen Ouyang, Yili Shi, "A Precise Location Method of Power Quality Disturbances Based on Morphological Edge Detection", *Power and Energy Engineering Conference (APPEEC) 2012 Asia-Pacific*, pp. 1-5, 2012.

1. Mechanical Engineering technicians Charles Linderman and Karl Dyer, along with several other people hold a patent issued in 2014. Use Google advanced patent search to determine the number and title of their patent.

Oil Well Control System - US8910715B2

1. Use the Prof Search tab to find resources on tissue engineering.
   1. List the number of “hits” or resources that come up.

3,105,183

* 1. How many of these resources are from peer reviewed publications?

2,132,855

* 1. Limit the peer reviewed publications about tissue engineering to include only those about cancer published between 8/1/16-8/31/16. List the first author, title, and journal name of at least one resource found.

Sears, Nick A.

A Review of Three-Dimensional Printing in Tissue Engineering

1. Use the ASTM Standards and Engineering Digital Library (under Databases) to locate standards related to the air quality in aircraft.
   1. What is the title of the most relevant standard?

ASTM D6399-18 Standard Guide for Selecting Instruments and Methods for Measuring Air Quality in Aircraft Cabins

* 1. How many pages is the standard?

24

1. Explore the Research Guides feature library webpage. Select the Freshman Engineering Clinic guide. How can you find a journal by title according to the guide?

Go to the search tools section of the Campbell Library Home Page, select “Journal Finder,” and enter the complete name of the journal.

1. Conduct a basic search in the Engineering Village (click Find then Databases, then E, then scroll for Engineering Village) for information about a general subject of interest to you, or one assigned by your instructor.
   1. Identify the search term(s) used.

Solar panel

* 1. List at least three resources that you think might be useful to your research: List the author, title, publication information, and year.

*Improving Solar Panel Efficiency by Solar Tracking and Tilt Angle Optimization with Deep Learning*, by Ketan Ramaneti. From *5th International Conference on Smart Grid and Smart Cities.* Published 2021.

*Photo-thermoelectric nanofiber film based on the synergy of conjugated polymer and light traps for the solar-energy harvesting of textile solar panel.* By Xuefei Zhang. From *Solar Energy Materials and Solar Cells, v 232*. Published 2021.

*The dual angle solar harvest (DASH) method: An alternative method for organizing large solar panel arrays that optimizes incident solar energy in conjunction with land use.* By Jennifer Kafka. From *Renewable Energy.* Published 2020.