## **ENGR 321 -Fluid Mechanics**

T	Math Competancy needed to be successful in	Course Where Competancy is Taught	
Topic	course		
1	Algebraic manipulation	Math 113	
2	Area/Volume	Math 221	
3	Continuous Functions	Math 221	
4	Cross Product	Math 223	
5	Differential Equations	Math 327	
6	Differentiation	Math 221	
7	Dot products (inner-product)	Math 223	
8	General concept of logarithm	Math 113	
9	Graphs with more than one function	TRS 92	
10	Integration	Math 221	
11	Interpreting the meaning of functions	Math 113	
12	Laws of logarithms	Math 113	
13	Limits	Math 221	
14	Math of fractions	Math 121	
15	Mathematical Modeling	Math 113	
16	Metric system	NONE	
17	Operations with Functions	Math 113	
18	Powers of ten	TRS 82	
19	Ratios	NONE	
20	Rearranging equations	Math 113	
21	Rules of exponents	Math 113	
22	Scientific notation	TRS 82	
23	Significant Figures	NONE	
24	Slopes/Gradients	Math 113	
25	Solving exponential equations	Math 121	
26	Solving Linear equations	Math 113	
27	Solving logarithmic equations	Math 121	
28	Solving quadratic equations	Math 113	
29	Solving systems of equations (Matrices)	Math 113	
30	Solving trig functions	Math 121	
31	Transforms of Functions	Math 113	
32	Trigonometric ratios	Math 121	
33	Unit Conversion	TRS 92	
34	Vectors	Math 223	

Math outcomes from Department of Mathematics Mission Statement filed with this document, Courses included are TRS 82\*, TRS 92\*, MATH 105\*, MATH 110, MATH 113, MATH 121, MATH 221, MATH 222, MATH 223, MATH 327

<sup>\*</sup> Not reccomended for STEM majors

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