

Version	8 pursuant to UH guidelines		https://wolfr.am/YRyLSk4a		https://wolfr.am/YRyWMC05		https://wolfr.am/YRyJkUj6		https://wolfr.am/YRyJhFSQ						
update	3/1/2022														
Week	Sequence	Segment	Topic	Video content	Name	No.	short URLs	be working]	(minutes)	Exercise Link [Working]	Exercise Answer Link [Working]	Date	preceding year	year	Quiz
1	1	A	Overview	Course Organization, Materials, etc.	Course Organization	1	https://wolfr.am/YRIRBIQ	https://youtu.be/4SzJQrcvm8s	20	https://wolfr.am/YRi7m1Xa	https://wolfr.am/XW7rzXus	#REF!	eR	https://wolfr.am/YRi7m1Xa	
1	1	B	The End Game	sampling of Wolfram topics	Course Overview	2	https://wolfr.am/YRIRJ37q	https://youtu.be/PQwNcAcu8Mc	61	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	eR	https://wolfr.am/YRi7m1Xa	
1	2	A	The Wolfram Language	beginner in Wolfram Language	Language	3	https://wolfr.am/YRIR3Fn	https://youtu.be/IEGrPHLuzA	54	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	Oq	https://wolfr.am/YRi7m1Xa	
1	2	B	The Wolfram Language	notebooks	Working in the Cloud	4	https://wolfr.am/YRIRvW0	https://youtu.be/OM3LON5mzCc	24	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	UOq	https://wolfr.am/YRi7m1Xa	
2	3	A	More on Wolfram Language	Wolfram Language vocabulary	100 Vocabulary Words	5	https://wolfr.am/YRIRBEUD	https://youtu.be/BKZCEZx4z-8	68	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	F	https://wolfr.am/YRi7m1Xa	
2	3	B	Statistics	distribution	Basic Statistics	6	https://wolfr.am/YRIR0IKd	https://youtu.be/hTxxQx51VDI	58	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	E	https://wolfr.am/YRi7m1Xa	
2	4	A	Statistics	most used in this course	Low	7	https://wolfr.am/YRIRK6J1	https://youtu.be/CTDGN3IT8	58	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	Yw	https://wolfr.am/YRi7m1Xa	
2	4	B	Statistics	statistical power	Testing	8	https://wolfr.am/YRIRTX02	https://youtu.be/fmK3o92qQ	32	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	Yw	https://wolfr.am/YRi7m1Xa	
3	5	A	Statistics	statistics	The P-Value	9	https://wolfr.am/YRIRWnNq	https://youtu.be/XUGXyD67OQ8	18	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	s	https://wolfr.am/YRi7m1Xa	
3	5	B	Statistics	of mistakes in classification	Type I and Type II Errors	10	https://wolfr.am/YRIRWRPz	https://youtu.be/knbVox7TBA	30	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	s	https://wolfr.am/YRi7m1Xa	
3	6	A	Statistics	wealth and spectral measures	Lawsuit Valuation	11	https://wolfr.am/YRIR0iet	https://youtu.be/KWYv59Ei5w	31	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	y	https://wolfr.am/YRi7m1Xa	
3	6	B	Statistics	HedgesG and CohenW	Practical Significance	12	https://wolfr.am/YRIRTVmT	https://youtu.be/wM2o4W59Hc	29	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	y	https://wolfr.am/YRi7m1Xa	through class 5
4	7	A	General Math	way, and emulating it when you can	Estimation	13	https://wolfr.am/YRIR0KuP	https://youtu.be/CBLv49QQHx6	39	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	s	https://wolfr.am/YRi7m1Xa	
4	7	B	Statistics	or the bottom of a valley	Optimization	14	https://wolfr.am/YRIRURRY	https://youtu.be/YLtrNpZ2l	50	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	s	https://wolfr.am/YRi7m1Xa	
4	8	A	Statistics	approach to statistics clearly	Bayesian Statistics	15	https://wolfr.am/YRIRDNzn	https://youtu.be/cF7WfZpxQp8	48	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1	https://wolfr.am/YRi7m1Xa	
4	8	B	Statistics	statistical and machine learning	Entropy and Cross Entropy	16	https://wolfr.am/YRIRKOKR	https://youtu.be/zQnp_DEu41U	38	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	J	https://wolfr.am/YRi7m1Xa	
5	9	A	Statistics	Fitting data and predicting behavior	Regression	17	https://wolfr.am/YRIRRLtT	https://youtu.be/knh2MxexdU	70	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	J	https://wolfr.am/YRi7m1Xa	
5	9	B	Statistics	problem in traditional statistics	Regression	18	https://wolfr.am/YRIRNT1n	https://youtu.be/QaqlTCwXyQ0	44	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	J	https://wolfr.am/YRi7m1Xa	
5	10	A	Statistics	used classification algorithm	Regression	19	https://wolfr.am/YRIRJh13	https://youtu.be/SZMj4kxNzA	42	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	2C	https://wolfr.am/YRi7m1Xa	
5	10	B	Statistics	the errors your predictor makes	Regression Residuals	20	https://wolfr.am/YRIRSDMd	https://youtu.be/N2VzVR8stQ	43	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	2C	https://wolfr.am/YRi7m1Xa	
6	11	A	Statistics	data and regression prediction	and Influence	21	https://wolfr.am/YRIRRLVP	https://youtu.be/fcUp48Rqac	20	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	A8w	https://wolfr.am/YRi7m1Xa	
6	11	B	Statistics	for categorical data	Exact Tests	22	https://wolfr.am/YRIRF6GV	https://youtu.be/9l04n_uYRq	34	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	A8w	https://wolfr.am/YRi7m1Xa	through class 10
6	12	A	Statistics	hypothesis testing	P Value Hacking	23	https://wolfr.am/YRIR0tqo	https://youtu.be/NST8G9olOc	45	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	UT	https://wolfr.am/YRi7m1Xa	the "Latitude" song
6	12	B	Visualization	Attractive and informative graphics	Good Visualizations	24	https://wolfr.am/YRIRILfL	https://youtu.be/fUu8ClnqI	44	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	UT	https://wolfr.am/YRi7m1Xa	
7	13	A	Visualizations	prevent others from doing so	Bad Visualizations	25	https://wolfr.am/YRIRCU7X	https://youtu.be/7SIRN8tWvc	26	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	wE	https://wolfr.am/YRi7m1Xa	
7	13	B	Machine Learning	capabilities of machine learning	Learning	26	https://wolfr.am/YRIRMSDC	https://youtu.be/NM-34M_9mCQ	65	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	wE	https://wolfr.am/YRi7m1Xa	
7	14	A	Machine Learning	Bias and variance	Bias and Variance	27	https://wolfr.am/YRIRIa0a	https://youtu.be/pG85sTZA7U	35	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	Hh	https://wolfr.am/YRi7m1Xa	
7	14	B	Machine Learning	statistics; entropy reduction	Confusion Matrices	28	https://wolfr.am/YRIRIa0a	https://youtu.be/NM-34M_9mCQ	71	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	Hh	https://wolfr.am/YRi7m1Xa	
8	15	A	Machine Learning	Trees	Regression Trees	29	https://wolfr.am/YRIRJuaY	https://youtu.be/N8VLm9-ckUo	47	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1y45Gq	https://wolfr.am/YRi7m1Xa	
8	15	B	Machine Learning	Boosting and Stacking	Boosting and Stacking	30	https://wolfr.am/YRIRJ1vW	https://youtu.be/hp4CYDv3A	47	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1y45Gq	https://wolfr.am/YRi7m1Xa	
8	16	A	Machine Learning	Random Forests	Random Forests	31	https://wolfr.am/YRIR0TRe	https://youtu.be/vSEPHZYE50	37	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1y45Gq	https://wolfr.am/YRi7m1Xa	
8	16	B	Machine Learning	Ensembles	Symbolic Regression	32	https://wolfr.am/YRIRUpS4	https://youtu.be/eMcBMW_1lk	53	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1y45Gq	https://wolfr.am/YRi7m1Xa	
9	17	A	Machine Learning	Functions	Nearest Neighbors	33	https://wolfr.am/YRIRPbkl	https://youtu.be/d4Jb59PawU	47	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1y45Gq	https://wolfr.am/YRi7m1Xa	
9	17	B	Machine Learning	Neural networks: the Feed Forward Layering Architecture	Introduction to Neural Networks	34	https://wolfr.am/YRIRMCb8	https://youtu.be/HenQJhac8g	60	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1y45Gq	https://wolfr.am/YRi7m1Xa	through class 15;
9	18	A	Machine Learning	Neural networks: Using them for prediction; error functions	Neural Networks For Prediction	35	https://wolfr.am/YRIR02VU	https://youtu.be/eP6JTGUTX0l	54	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1y45Gq	https://wolfr.am/YRi7m1Xa	
9	18	B	Machine Learning	Neural Networks: for classification: the softmax layer	Neural Networks For Classification	36	https://wolfr.am/YRIRPBKc	https://youtu.be/nUCD-QpL3k	45	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1y45Gq	https://wolfr.am/YRi7m1Xa	
10	19	A	Machine Learning	The idea and limits of back propagation	Training A Neural Network	37	https://wolfr.am/YRIRvkdC	https://youtu.be/bV5WgU5gaRU	60	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1y45Gq	https://wolfr.am/YRi7m1Xa	
10	19	B	Machine Learning	The discrimination problem: Part 1	Machine Learning and Discrimination: The Problem	38	https://wolfr.am/YRIRvkdC	https://youtu.be/bV5WgU5gaRU	60	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1y45Gq	https://wolfr.am/YRi7m1Xa	
10	20	A	Machine Learning	The discrimination problem: Part 2	Machine Learning and Discrimination: Unified versus Group Specific Thresholds	39	https://wolfr.am/YRIRvkdC	https://youtu.be/bV5WgU5gaRU	60	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1y45Gq	https://wolfr.am/YRi7m1Xa	
10	20	B	Machine Learning	Interpretability	Interpretability of Machine Learning Models	40	https://wolfr.am/YRIRLEXK	https://youtu.be/p68va6Cml	54	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1y45Gq	https://wolfr.am/YRi7m1Xa	
11	21	A	Machine Learning	Unsupervised learning: clustering; learn distribution	Unsupervised Learning Basics	41	https://wolfr.am/YRIRXzr	https://youtu.be/01sB2zqOfri	61	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1y45Gq	https://wolfr.am/YRi7m1Xa	Quiz 4: Covers through Class 20; avoid the Wikipedia entry on unsupervised learning (it is awful and incomprehensible).
11	21	B	Machine Learning	Clustering	Clustering	42	https://wolfr.am/YRIRHHKm	https://youtu.be/qN50_Hic6u0	26	https://wolfr.am/YRi7m1Xa	https://wolfr.am/YRi7m1Xa	#REF!	1y45Gq	https://wolfr.am/YRi7m1Xa	
11	22	A	Unsupervised Learning	Autoencoders	Autoencoders	43	https://wolfr.am/YRIR0RLI	https://youtu.be/8PaERTYT0	43						

13	26	A	Causal inference	Causal Inference Notebooks: 5 and 6	Regression and Unknown Confounders; Difference in Differences	https://wolfr.am/ZTBBVhRE ; https://wolfr.am/ZTBExrYR	Next year	under construction	https://wolfr.am/10fcP3S6n	https://wolfr.am/10fcUtlmb	#REF!	1jvmlPe	https://wolfr.am/10nN7y1Fm	
13	26	B	Review	Review of causal inference		under construction	under construction	under construction			#REF!	1jvmlPe	https://wolfr.am/10nN7y1Fm	
14	27	A	Various student projects	TBD							#REF!	1jvmb8c		Quiz 5 covers through Class 26A; Reading: https://consensys.net/blockchain-use-cases/law/ ; https://www.legalbusinessworld.com/post/2019/03/22/opportunities-in-the-blockchain-industry-for-lawyers ;
14	27	B	Various student projects	TBD							#REF!	1jvmb8c		