

ABEN 255. Computer-Aided Analysis and Design.					Tentative Schedule for Fall Semester, 2019.			
T & Th, 9:30 - 10:45 a.m., QBB 114.								
Date*	Day	Day #	Week #	Software & Text	Topics and Reading	Suggested Problems (plus assigned, hand-worked, and/or design problems)	Tests	Homework Given/Due
08/27	T	1	1	General	Introduction; File Management, 1-5; Writing Memos and Letters, 6-11;	p. 10, #2; pp. 58-65, #1-6.		
08/29	Th	2		Excel†	Templates, 12-25; Spreadsheet Basics, 26-67			
09/03	T	3	2	Excel	Dimensions and Units, 68-85; Sequential Calculations and Back	Beam deflection, pipe flow, etc.; p. 82, #1-		
09/05	Th	4		Excel	Solving, 86-103; Budgets, Schedules, and Data Validation, 104-123	5; pp. 99-101, #1-3, 8; pp. 122-123, #1-7.		
09/10	T	5	3	Excel	Graphing and Two-Way Tables, 124-177;	pp. 163-175, #1-7; pp. 435-442, # 4-6, 8-9.		
09/12	Th	6		Excel	Database Concepts, 385-443			
09/17	T	7	4	Excel	Database Concepts (cont'd); Descriptive Statistics, 178-214	pp. 205-211, #1-10; statistics; histogram or	Quiz #1	
09/19	Th	8		Excel		other graph(s).		
09/24	T	9	5	Excel	Linear Regression, 215-262	pp. 253-260; #1-4, 6-10; linear regression:		
09/26	Th	10		Excel		calibration problem(s).		
10/01	T	11	6	Excel	Curve Fitting, 263-314	pp. 307-312, #1-5; curve fitting problem(s).		
10/03	Th	12		Excel			Quiz #2	
10/08	T	13	7	Excel	Systems of Linear Equations, 315-334; Optimization, 335-368;	pp. 330-331, #1-7; p. 362-365, #1-5;		
10/10	Th	14		Excel	Root Finding, 369-384; Macros, 444-463	p. 381, #1-12; p. 460, #1-2.		
10/15	T	15	8	Excel	Unscheduled: Catch-Up and/or Review Session as Needed			
10/17	Th	16		Excel	Exam #1 (May be on Blackboard; Use of Excel Not Allowed)		Exam #1	
10/22	T	17	9	AutoCAD‡	Introduction to AutoCAD	Various drawings; no dimensions.		
10/24	Th	18		AutoCAD	Drawing objects			
10/29	T	19	10	AutoCAD	Output, plotting, scaling, etc.	Various drawings; no dimensions.		
10/31	Th	20		AutoCAD	Modifying objects			
11/05	T	21	11	AutoCAD	Layers and text	Various drawings; floor plan or facilities		
11/07	Th	22		AutoCAD	Dimensioning	mgmt. project; no dimensions.	Quiz #3	
11/12	T	23	12	AutoCAD	Unscheduled: Catch-up, additional topics, etc.	Various drawings; floor plan or facilities		
11/14	Th	24		AutoCAD	Paper space	mgmt. project; w/dimensions.		
11/19	T	25	13	AutoCAD	Paper space, annotative objects	Various drawings; floor plan or facilities		
11/21	Th	26		AutoCAD	Inserting content--blocks, Xrefs	mgmt. project; w/dimensions & layouts.		
11/26	T	27	14	AutoCAD	Projects		Quiz #4	
11/28	Th				Thanksgiving Holiday			
12/03	T	28	15	AutoCAD	Unscheduled: Catch-Up and/or Review Session as Needed			
12/05	Th	29		AutoCAD	Exam #2 (Computer-Based Test)		Exam #2	
12/10	T	30	16		Additional Topics as Time Permits	Team rating.	Dead	
12/12	Th	31			Student Rating of Instruction; Catch-Up Session, Course Review		Week	
12/19	Th	32	17		Comprehensive Final Exam, 3:30 p.m. - 5:30 p.m.§		Final	
*Note: The topics and dates of coverage are subject to change depending on the progress of the course. Students are responsible for changes as announced in class, posted on Blackboard, or distributed via e-mail.								
† Steele, D.D. 2019. <i>Engineering Problems Solving with Excel</i> . Fargo: N. Dak. St. Univ.						Schedule Last Updated:	8/23/2019	
‡ AutoCAD outline, <i>The Hitchhiker's Guide to AutoCAD Basics</i> , etc.								
§ Final exam schedule:					https://www.ndsu.edu/registrar/dates/finals/#c306449	Wed., 09/25/2019, 10 a.m. - 3 p.m., Engineering & Tech Expo., Fargodome.		
NDSU Fall 2019 Calendar:					https://www.ndsu.edu/registrar/dates/2020/#c570510	https://career.ndsu.edu/channels/engineering-tech-expo/		