# 3620 CLASS RULES & Getting Started

During the lecture, all laptops, all cellphones, all IPads, all PDAs, etc. should be turned off and put away – unless I tell you to bring a laptop to class for a special lecture. I do not want you distracted or distracting others while I am talking.

Absolutely no texting is allowed during class.

Bring paper and pencil to take notes on.

We will break every 50 to 90 minutes so that you can catch up on your texting and phone calls, but then come back to class and turn everything back off.

Read through all instructions and follow them carefully.

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- 1. Download from Canvas:
  - A SYLLABUS,
  - B PROBLEM ONE,
  - C TN3270 SOFTWARE,
  - D WinSCP Install Notes

NEXT, GET STARTED WITH 'IBM SYSTEM Z' LOG IN

Work thru PROBLEM ONE, following each 'step' VERY CAREFULLY.

- A. These steps show you how to install TN3270 (our mainframe access).
- B. How to log in with your ID & PW
- C. How to install and use WinSCP (file transfer from PC to MF)
- D. How to run a job on the SYS Z mainframe
- E. How to edit files on the SYS Z mainframe

### ADMINISTRATIVE INFORMATION:

Course Number: BCIS 3620

Course Title: Business Computer Information Systems – Mainframe Concepts

Semester: Fall 2022 Classroom: BLB 270

All PROBLEMS and DATASETS for the problems, ETC. are on CANVAS

### **BCIS 3620 SOFTWARE ONLY RUNS UNDER WINDOWS**

IF YOU HAVE A MAC, INSTALL WINDOWS ON IT, OR IF YOU PREFER, WORK IN THE UNT LABS OR YOU CAN ACCESS ALL SOFTWARE THRU CITRIX (https://myuntlab.cloud.com/Citrix/StoreWeb/#/login).

Instructor: Professor Hardy

Office: BLB 367C → Mon 5:00 to 6:20 or Zoom by appointment

Email: LeRoy.Hardy@unt.edu

Phone: 940.369.8569

# **COURSE OBJECTIVES:**

This course is an introduction to business computer programming and design in a corporate environment. The primary focus is on the information systems function in support of corporate activities. Students will learn business problem solving using PROGRAMMING in a true Mainframe development environment. Upon the successful completion of the course, the student should be able to analyze a business problem, design a solution to the problem, develop a program consistent with the design using IBM Mainframe tools, and implement the solution.

NO TEXTBOOK WILL BE REQUIRED – Download the COBOL Lecture Notes

Each student will be given an account on an IBM System Z Mainframe.

# **COVID Policy statement**

### COVID-19 impact on attendance

While attendance is expected, as outlined above, all of us need to be mindful of the health and safety of everyone in our community, especially given concerns about COVID-19. Please contact me if you are unable to attend class because you are ill or unable to attend class due to a related issue regarding COVID-19. You must communicate with me before being absent as to what may prevent you from coming to class so I may decide to accommodate your request to be excused from class.

If you are experiencing cough, shortness of breath or difficulty breathing, fever, or any other possible symptoms of COVID-19 (https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html), please seek medical attention from the Student Health and Wellness Center (940-565-2333 or askSHWC@unt.edu) or your health care provider. While attendance is an important part of succeeding in this class, your health and those of others in the community are more important.

NEXT, INSTALL THE COBOL PC SOFTWARE

Net Express [nx50] COBOL software for a PC should be run online under Citrix thru the UNT COB LABS.

However, you can attempt to get nx50 to run at home under WINDOWS by following the instructions below

Download nx50 from Canvas to your c:\ drive or a flash drive, and click that zip file giving an 'nx50' folder

NEXT: cut that 'nx50' folder and paste it to the root of c:\ giving c:\nx50

#### NEXT:

- Open a command-line prompt [the black DOS screen]
   Then Type CD\ giving you C:\>
- 2. Run the NX installation file with the following parameters:

C:\>nx50\SETUP\NXP3250020077.exe /V"CHECKPREREQLIST="

In the custom setup list [the tree diagram] only install:

"Net express support for Windows and Cross platform"

BE CERTAIN THAT THERE IS A LARGE RED X
BESIDE THE OTHER FEATURES

# **OFFICIAL UNT SYLLABUS STATEMENTS**

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to, cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in various academic penalties or sanctions ranging from admonition to expulsion from the University.

ADA Accommodation Statement. UNT makes reasonable academic accommodations for students with disabilities. Students seeking accommodation must register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to the faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time; however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Students must obtain a new letter of accommodation for every semester and meet with each faculty member before implementation in each class.

<u>Emergency Notification & Procedures</u>. UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence).

Acceptable Student Behavior. Student behavior that interferes with an instructor's ability to conduct a class or other students' learning opportunity is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom. The instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classrooms, labs, discussion groups, field trips, etc.

By **Sept 12** you are to have run the following 3 example programs on the PC: [see next page for instructions]. They are located in the EXAMPLES folders you downloaded.

- [1] READ-WRITE-ADD;
- [2] HEAD-LINECNT;
- [3] REPORT DATE-COMPUTE; and

YOU MUST HAVE A SEPARATE FOLDER FOR EACH PROGRAM which is how I gave them to you. All 3 files [see below] for each program you run will be together in a folder. Print off ONE COPY of:

- [a] The program, [the .cbl file is printed from net express File/Print]
- [b] Its input data, [the .dat file is printed from notepad]
- [c] Its output report [which you get when you run the program on the PC under NET EXPRESS and is the .doc file which you print with Word]

Bring the a, b, & c parts to class for EACH of the 3 example programs.

You will take lecture notes in class on the 9 printouts mentioned above [3 programs, 3 input, and 3 output]

### IN ADDITION TO THE ABOVE PRINTOUTS

EMAIL A **COPY OF ONLY THE OUTPUT** FROM EACH OF THE 3 EXAMPLE PROGRAMS **TO ME** on or before Sept 12.

# Instructions for running NET EXPRESS using UNT's CITRIX or using your PC

- 1. Open the READ-WRITE-ADD folder's readcbl.cbl program in net express
- 2. Click the red checkmark icon, Should show no errors
- 3. Click the black footprint icon
- 4. Browse to the matching readcbl.int file [IT WILL BE IN THE SAME FOLDER AS THE .cbl FILE YOU ARE RUNNING] and open it, then click OK.
- 5. Note that the perform 200-open is highlighted
- 6. Click the black running man icon, and you should get a stop run message.
- 7. Go to your folder and note your output file, which ends with .doc
- 8. That's it!!!!!!!
- 9. Do the same for all 3 of your cbl programs

### **Class Schedule**

Class Schedule					
THIS IS A CRITICAL FULL 3-HOUR LECTURE – DO NOT MISS THIS CLASS					
<b>Aug</b> 29	Assign Mainframe PROBLEMS One and Two Every 3620 student must complete the IBM ZXplore Fundamentals and Concepts during the semester. Those who already have their Advanced Badge must do the Contest.  Lecture: Introduction to IBM System Z Lecture: on Example: READ-WRITE-ADD				
Sept 5	– Labor Day				
Sept 12	Lecture: on IBM System Z and PROBLEM Three - how to write a COBOL program from scratch	Prob One Due Monday (9/12) [Z] [NOT Accepted After Tuesday 9/13] 3 Examples Due Monday (9/12) ITDS Ethical Behavior Due (9/12)			
	Bring your PC to class for this lecture	, ,			
19	Lecture: PROBLEM Three & PROBLEM Four – Changing signs	Prob Two Due Monday (9/19) [Z] [NOT Accepted After Tuesday 9/20]  Prob Three Due Thursday (9/22) [PC] [from scratch] [NOT Accepted After Friday 9/23]			
26	Lecture: Q & A on PROBLEM Four Lecture: PROBLEM Five – Basic Rpt	Prob Four Due Thursday (9/29) [Z] [chg sign] [NOT Accepted After Friday 9/30]			
<b>Oct</b> 3	Lecture: PROBLEM Five Q & A Review for Exam 1	Prob Five Due Wednesday (10/05) [Z] [NOT Accepted After Thur 10/06]			
	10/7 - 10/14 System 2	down			
10	WEB SESSION A – No class this day Take a practice test for EXAM ONE Also continue work on PROBLEM Six				
Oct 17 – EXAM ONE (Thru Problem Five Only)					
24	Lecture: PROBLEM Six – Col Hdgs	ZXplore Fundamentals 1 & 2 Due Sun, Oct 23 by 4:45pm			
31	Lecture: Q & A on PROBLEM Six Lecture: PROBLEM Seven – JCL				
Nov 7	Lecture: Q and A on PROBLEM Seven Lecture: TAKE-HOME FINAL – Copy/Call	Prob Six Due Thursday (11/10) [Z] [NOT Accepted After Friday 11/11]			
14	Lecture: Q and A on TAKE-HOME FINAL Lecture: SORT command & TABLES/ARRAYS Review for EXAM TWO	Prob Seven Due Thursday (11/24) [Z] [NOT Accepted After Friday 11/25]			
21	Tentative - TRIP TO IBM IN DAL	LAS – 6:00 TO 9:00			

	OR Lecture on advanced topics to be handed out
	WEB SESSION B - No class this week
28	Read about PACK/UNPACK in DATA FORMATS in CLASS NOTES Read about COPY/CALL in CLASS NOTES Read about NUMBER SYSTEMS in CLASS NOTES Work on PROBLEM seven

Dec 5 – EXAM TWO (Problems Six thru Take-Home Final)

ZXplore Due – Sun 12/4 by 4:45

Take-Home Final – Tue Due 12/7

# **ASSIGNMENT DUE DATES SORTED BY DATE**

THE 3 EXAMPLES & PROB One DUE 9/12

Гwо	DUE 9/19
Three [from scratch]	DUE 9/22
our [chg sign]	DUE 9/29
Five [1st part]	DUE 10/05
	DUE 10/23 @ 4:45 pm
Six [2nd part]	DUE 11/10
Seven	DUE 11/24
HOME FINAL	DUE Sun, 12/4 4:45 pm DUE Wed, 12/7
	Three [from scratch]  Four [chg sign]  Five [1st part]  Six [2nd part]

The deadline for getting credit for 3620 thru ZXplore is Sunday, Dec 4 at 4:45 pm.

I will ONLY check your work when you have finished a Level or on December 4 when the contest IS OVER as far as UNT is concerned.

The first two ZXplore Fundamentals are DUE BY OCTOBER 23<sup>rd</sup> at 4:45 pm. The remaining Fundamentals, Concepts, and Advanced are due by Dec 4 at 4:45 pm.

The first two Fundamentals are easy and must be completed to receive ANY credit. Either 0 or 15 pts.

Concepts details and scoring will be provided after IBM publishes the contest.

Advanced details and scoring will be provided after IBM publishes the contest.

IBM reports the progress on all 3 Levels to me. All work on Fundamentals, Concepts, and Advanced Levels must be done with NO help from anyone - labs, tutors, friends, professors, etc.

NOTE: You may continue to work on the contest until it is over, but only to receive recognition from IBM for your efforts and extra credit in 3690. No work completed after Dec 4 will count toward your grade in BCIS 3620.

HOMEWORK ASSIGNMENTS MUST BE DOWNLOADED FROM CANVAS

# Please turn your work in on time.

### Point Distribution for Problems

PROBLEM ONE	15	SYS Z [MF]
PROBLEM TWO	20	SYS Z [MF]
PROBLEM THREE	10	PC [Email me]
PROBLEM FOUR	10	PC & SYS Z
PROBLEM FIVE	10	PC & SYS Z
PROBLEM SIX	15	PC & SYS Z
PROBLEM SEVEN	10	JCL/utilities
TAKE HOME FINAL	10	_PC ONLY
TOTAL	100	

TOTAL

Desk check your problems for completeness and accuracy!

All PROBLEMS and DATASETS for the problems, ETC. Can be downloaded from Canvas

Examples will be used extensively in the lecture. Students MUST compile, execute, and print out the results of all Review Examples, AND BRING TO LECTURE!

IF YOU WORK WITH A STUDY PARTNER, IT MUST BE OVER CONCEPTS [NOT CODE]. YOU CAN NOT WORK AS A TEAM.

I CONSIDER AND WILL TREAT STUDENTS WHO SHARE CODE AS CHEATERS and MAY AWARD THEM A GRADE OF F FOR THE COURSE

I do not help with assignments 24 hours before the deadline for their submission.

The reason I do this is to STRONGLY ENCOURAGE students to complete their assignments before the deadline.

Companies fire programmers who get their work finished at the last minute. In essence, IN THE REAL WORLD, you will be FIRED if your work is not completed EARLY.

### USING NET EXPRESS COBOL ON Citrix TO DEBUG PROGRAMS

Net Express can be run on Citrix by going to <a href="https://myuntlab.cloud.com">https://myuntlab.cloud.com</a>. Net Express will be one of the options you can choose if you do not install it on your PC. Students can save a considerable amount of time by learning and using the <a href="https://step.not.org/step.not.org/">step and add to list and <a href="https://step.not.org/">breakpoint</a> functions of the animator for program debugging.

The Animator provides a complete development environment you can use to create, edit, analyze, and optimize your source code. You can edit your program, test and correct syntax and logic errors, animate the program, and navigate its logic.

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# NO MAKEUP EXAMS WILL BE GIVEN DURING THE SEMESTER.

### Grading System

ZXplore Fundamentals is 15 points ZXplore Concepts up to 50 points

ZXplore Advanced all bonus points

EXAM ONE 235 points in-class exam EXAM TWO 200 points in-class exam TAKE HOME FINAL 10 points take-home

HOMEWORK 1-7 90 points

TOTAL 600 points

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Please take care of personal business before an exam starts.

NO electronic devices are allowed or visible, including smartwatches and calculators. Your phone must be placed on silent and to not vibrate, then placed face down on the desk. Any additional phones used during the exam will be considered cheating, you will receive a zero on that exam, and you will be reported to the Dean of Students. No digging through backpacks during exams, so have out what you need. Caps must be turned backward during the exam, so I can see your eyes. Bring mechanical or 2 pencils with erasers.

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### YOU WILL NOT BE ALLOWED TO LEAVE THE ROOM DURING THE EXAM.

If for any reason, you leave THE ROOM, we will grade only what you have done to that point. You cannot come back and finish the exam.

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Again, please take care of personal business before an exam starts