Week 15 (Lab Slides – Last Class) BAN 5753

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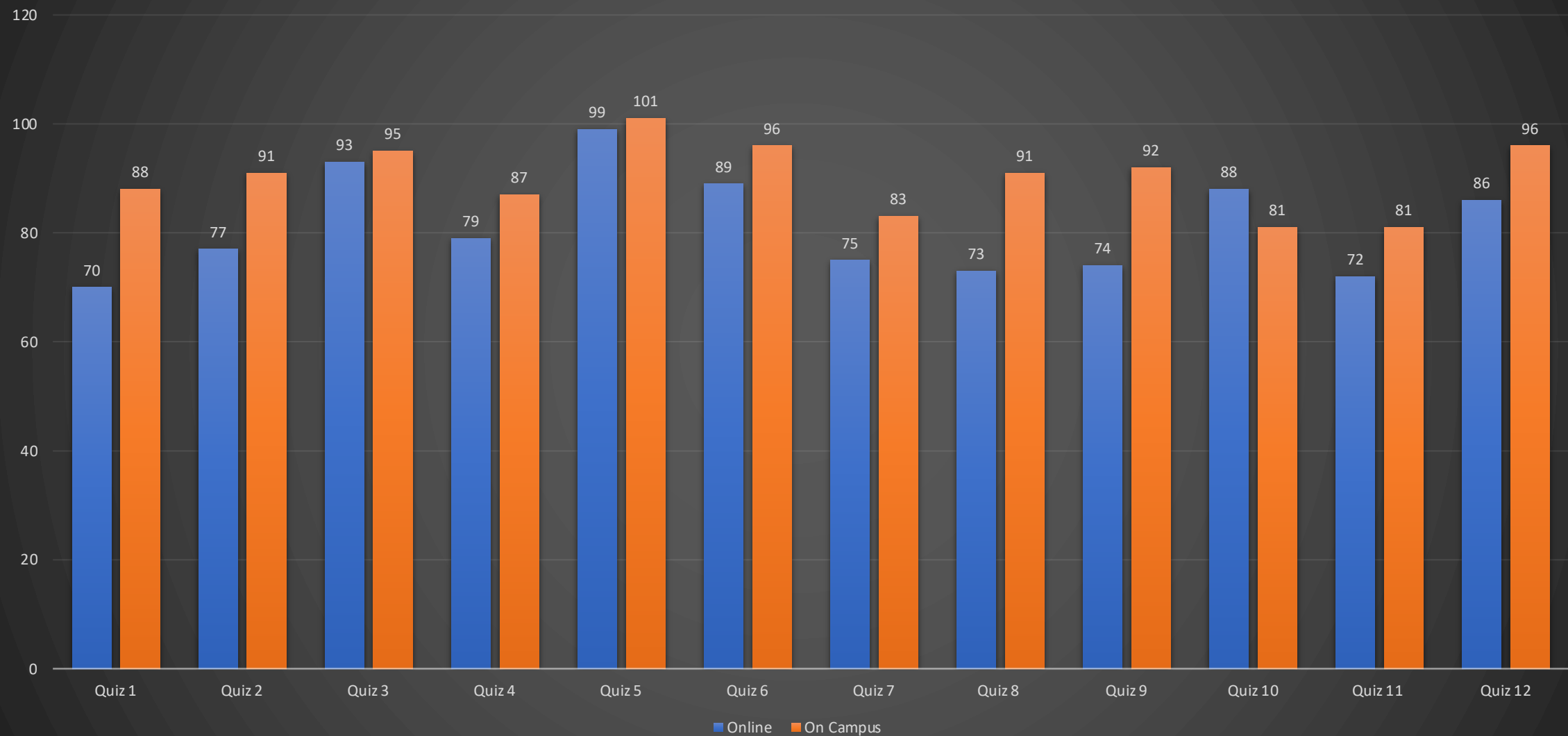
Common Items for OL and Non-OL(OC) Students

Outline for Today

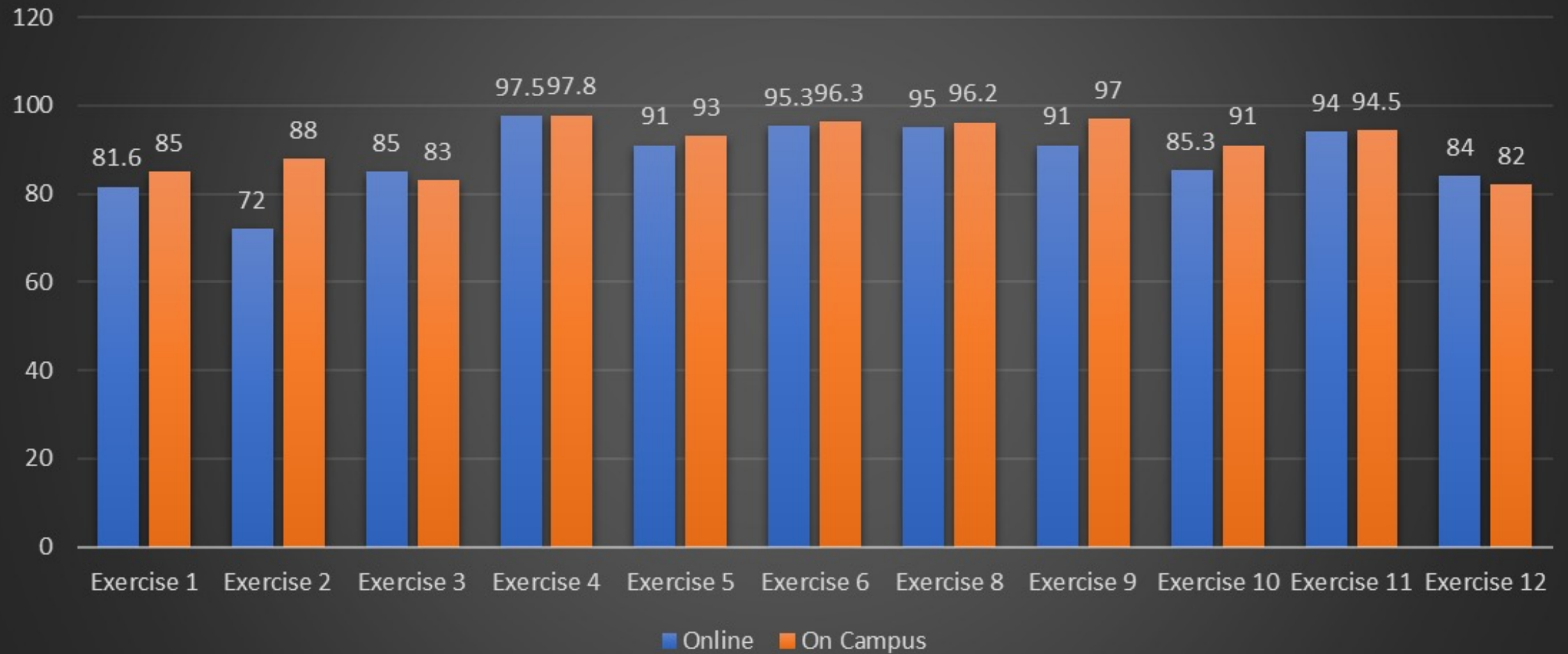- General Announcements

- Discussion of last week's quiz mistakes

- Group project, Final exam logistics, etc.

Quiz Grades

	Quiz 1	Quiz 2	Quiz 3	Quiz 4	Quiz 5	Quiz 6	Quiz 7	Quiz 8	Quiz 9	Quiz 10	Quiz 11	Quiz 12
Online	70	77	93	79	99	89	75	73	74	88	72	86
On Campus	88	91	95	87	101	96	83	91	92	81	81	96

Summary Grades

	Online	On Campus
Reading Summary 1	88	89
Reading Summary 2	86	87
Reading Summary 3	91	93
Reading Summary 4	89	91
Reading Summary 5	90	91
Reading Summary 6	92	92.6
Reading Summary 7	91.33	91
Reading Summary 8	92.7	94.6
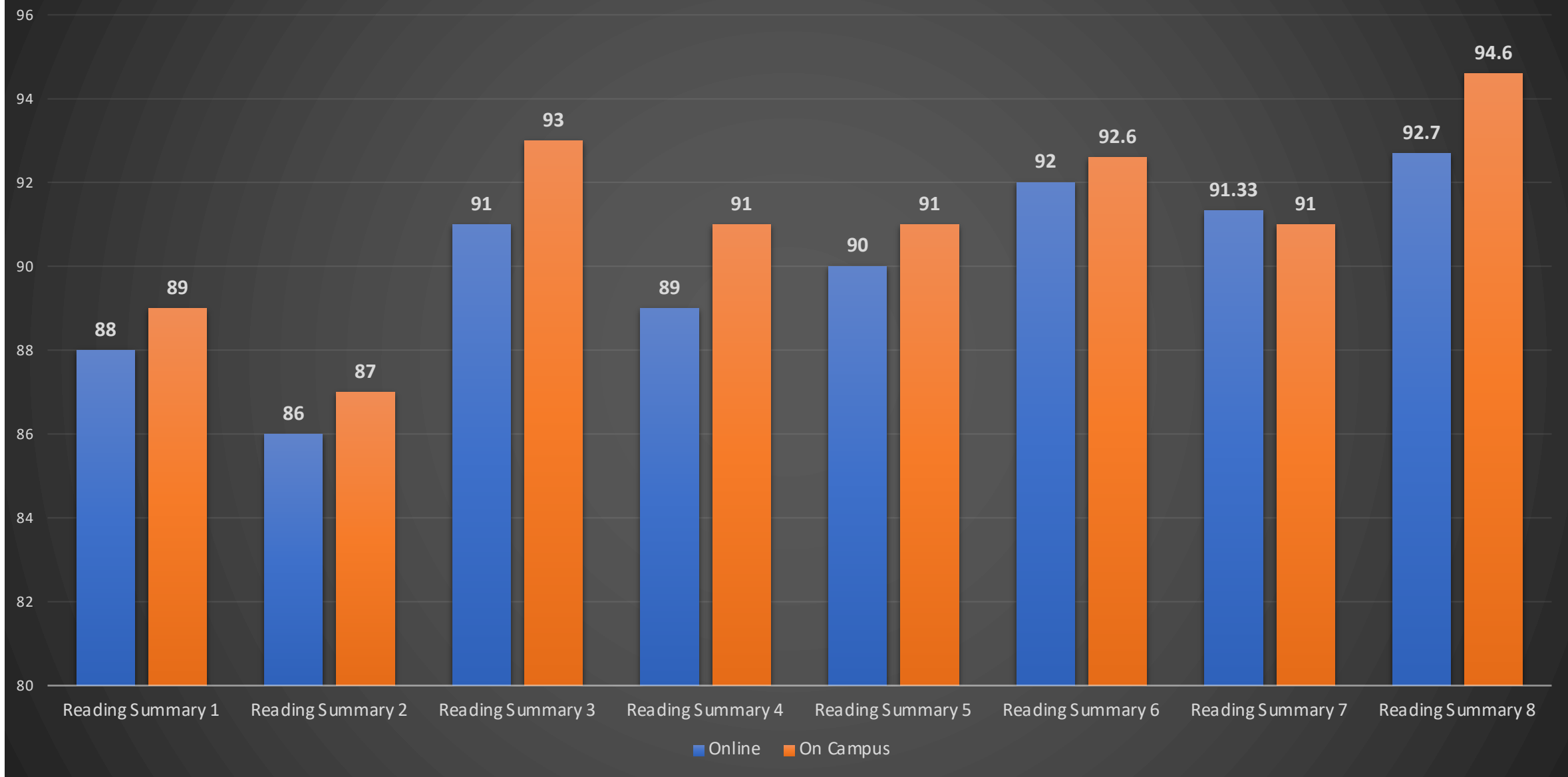
Q & A of Topics from Last week, Clarification about Exercise , Preview of Week

12	6-Nov	Group mini-project 2 (combination of learnings from *previous 4 Spark modules*). Guest faculty: Anvesh Reddy and Ramcharan Kakarla	Discussion of prior week's topics, discussion of any papers assigned in last week, clarification about exercise/mini projects	• No quiz or, paper • Mini-project due by Nov.16
13	13-Nov	Variable reduction and variable selection, PCA, Variable Clustering	Discussion of prior week's topics, discussion of any papers assigned in last week, clarification about exercise/mini projects	• Paper summary by Nov 20 • Quiz by Nov 20 • Exercise by Nov 20
14	20-Nov	Thanksgiving Break	Thanksgiving Break	• Nothing due – Yippee!
15	27-Nov	SVM, Gradient Boosting and Random Forest Models.	Discussion of prior week's topics, discussion of any papers assigned in last week, clarification about exercise/mini projects	• Paper summary by Dec 4 • Quiz by Dec 4 • Exercise by Dec 7
16	4-Dec	Advanced Time Series Models Part 1 and Part 2, Class summary, review of final exam	Discussion of prior week's topics, discussion of any papers assigned in last week, clarification about exercise/mini projects	• Paper summary by Dec 11 • Quiz by Dec 11 • Exercise by Dec 11
17	11-Dec	**Final exam week (details to be announced)** to be held on campus on **Monday night from 8PM to 950PM for OC section** and via online for OL section		**Final Exam**

A Suggestion to Improve your Interview Ability During Christmas Break

- You should have received an email from Interview Query (check Clutter/SPAM folder)
- Attend Onboarding (2 PM CDT, Wednesday, 12/7)
- Use the Interview Query platform access
  - Customize to different jobs (Data analysts, Data scientists, Data engineers, …)
  - Customize to companies
  - Practice different types of questions
    - Coding
    - Analysis
    - Case

Course Grade Calculation

- I will drop 1 each of your worst exercise, quiz, and reading summary.
- In addition, the last week's exercise/quiz due on Dec. 11 are *optional* – do only if you want to improve your scores
- Comprehensive final is also *optional*
  - Turn in your project report (only 1 submission per group) by midnight Sunday, Dec. 11 and I will have these graded by Noon Thursday and let you know your score.
  - Then, you can decide if you want to take the final exam on Dec. 12, Monday, 8-950PM in this classroom for **On-campus** students
  - **Online** students take finals online (work with DL office, spearsonline@okstate.edu , Phone: 405-744-4048) – must be taken via arrangements made with them
    - If an online student wants to take the final in person here with on campus students, you must let me know and have prior permission

Special Opportunities for MS BAnDS Students

- BASA Christmas get-together, Tuesday, 430-630 PM 12/6 @Garage

- Block your calendar on Mondays, 430-530 PM (*if* you want to attend)
  - Talks by alums on current analytics tools/topics and presentation by companies looking to hire interns or FT placements

- Mark your calendar now:
  - SAS Analytics Day on campus (Thursday May 11, from 830AM-300 PM)
  - BASA graduation Mixer (Thursday May 11 evening, from 600-830 PM)
  - BAnDS graduation lunch with graduating students and families (Friday, May 12, 12-2PM)
  - Graduation (hooding by SSB in the afternoon) and commencement in the evening of Friday, May 12

- Come cheer your classmates (**Zach and Weston**) being hooded in McKnight center @3PM Sharp on Friday, Dec. 16

Assistantship Situation in Spring 2023

- Priority will be given to 4+1 students in **their 2nd year** and 1st year students

- Second year *4th semester students are not eligible* for departmental assistantships.

  - However, some exceptions are made for those on funded GRA, special situations funded by online classes or, outside departments.

- Decision of assistantships will likely be made early January

  - Decision is based *primarily* on your cumulative GPA and *secondarily* on your non-grade-based performance through the last semester.

  - Everyone is automatically considered unless I know you are on an assistantship from a different department/school

Assistantship Situation in Spring 2023

- Do not approach business school professors randomly asking for assistantships!

  - But check hireosugrad.com web site

  - You can ask a professor if they are teaching any online undergrad class and need a TA for their DL classes

  - If the professor says yes, connect him/her with me and I will take it from here

Anonymous Course Evaluation (SSI) Survey

- Online section and On campus section : Lecture and Lab (takes 5-10 minutes)- must complete by 12/8

- I get results from these evaluations in January and use it for improving course content for next year - so, please comment

- Each student in each section will receive an additional **5 points** added to their Individual Exercise scores only if **95%** of class completes survey in each section for **both the Lecture and Lab Sessions**

Reminders: Admission for Fall 2023 Started: I Need Your Help

- Promotion our program to good/qualified prospects in a **customized** way
  - We are doing general marketing promotion in places such as Yocket, Quora and so on
- We have several marketing collaterals that we can share with you (one page PDF brochure, FB group for 2023, Instagram, Linked In group)
  - Anything you need just ask Kalbe/Suraj
- **Reminder**: if you recommend a person, that person gets an interview regardless of their credentials
  - So, use this power carefully
  - All I need is an email to me with applicant name and CWID after he/she has applied

Group Project and Final Exam

Suggested Group Project Report Template (start working on it now)

- Cover Sheet (Project Name, Team #, Team Member Names, CWID)
- Table of Contents
- Body Headers
  - Executive Summary
  - Business Understanding
  - Data Understanding
  - Data Preparation
  - Modeling
  - Evaluation/Deployment/Implications
  - Future Scope
  - Assumptions/Limitations
  - Appendix (Code)

Revised Project Groups

Zoom Breakout Room #	Group Name	Team Members	Project/Final Exam	Report Submitted
1	9 Spears	Hayden, Chhavi, Anuj, Kumar Yash	5G Challenge	YES
2	Lorem Ipsum	Kalbe, Rupom, Sarik **(3 members)**	Humana-Mays	YES
3	Data Rangers	Srinivas Pramodh, Bharathraj,Cade Phelan, Tharun	5G Challenge	YES
4	John Doe	Anand, Ayush, Shalika, Srishti	Humana-Mays	YES
5	Team-orange	Kaiser, Suraj, Palash, Gandhali	Humana-Mays	YES
6	GoPokes	Srinivas, Deepak Sai, Heidi, Vishal	Humana-Mays	YES
7	DataPirates	Sarthak, Nathan Hawkins, Preston Lewis, Hadley	Humana-Mays	YES
8	Patterns	Noreen, Prathamesh, Tejaswi Maruthi, Saswata	Geo AI	**NO**
9	Team 13	Bhawuk Luthra, Vincent Rodriguez **(2 members)**	Humana-Mays	**NO**
10	Problem Solvers	Rafae, Badhan Deb, Jarrett Hollie, Weston	Humana-Mays	YES

Revised Project Groups

Breakout Room #	Group Name	Team Members	Project/Final Exam	Report Submitted
11	The Data Set	Neeraj, Moises, Zach, Pranjali	Humana-Mays	YES
12	Artemis	Tanushree, Amartya, Bhakti, Mihir	Humana-Mays	YES
13	Hawks	Raja Bobba, Amani, Scott, Meghana	5G Challenge	YES
14	Ex Machina	Nitika, Sreeshma, Ashok **(3 members)**	Humana-Mays	YES
15	DKNZ	Divine Bennett, Zachary Vann, Kailey **(3 members)**	Humana-Mays	YES
16	Lamda	Gowtham, Naveen, Srujana, Kodjo	5G Challenge	YES
17	Data Ducks	Joel Anderson, Brittany, Daniel Marchese, Raunak	Humana-Mays	YES
18	BAnDS Special Forces	Pankaj, Kalpesh, Raja Mohanty **(3 members)**	Humana-Mays	YES
19	Data Cowboys	Chris Brady, Ally, Shaun McDaniel, Destry Smith	Humana-Mays	YES
20	BAN 5753	Akansha, Karanveer, Sucharitha, Tim Walsh	5G Challenge	YES

Revised Project Groups

Breakout Room #	Group Name	Team Members	Project/Final Exam	Report Submitted
21	Tortoise	Becka, Sirisha Dhavala, Sushma, Sreejesh Sreedhar	Final Exam	
22		Sanjam Patwalia	Final Exam	

Final Exam (1 hour 50 Minutes)

- **60 Points**: 40 multiple choice type questions worth 1 point each and 10 very short (max 2 lines) per answer questions worth 2 points each
  - Some may involve *simple* calculations *(not inverting a matrix)*
  - Involves questions from all topics covered in classes (TS: 30 points, DE: 8 points, rest of the topics: 22 points)
- **40 Points**: 3 essay questions (answer any 2): worth 20 points each
  - Not from (Matrix related or , GCP or, Spark)
  - The *exact verbiage of the essay question* is on the next slide
- What are you allowed in the exam?
  - Pencil/pen, blank scratch paper (write your name on it), scientific calculator (but no web access). And, "no phone"
  - One standard size page (with your name) of handwritten or typed notes (both sides) as memory aid.
    - This note along with all scratch paper must be turned into Proctor. *All scratch paper and note must have student names* on them.

Verbiage of Essay Question

- Think of a business problem that is appropriate to be solved via application of **ABC technique**. First explain the business problem briefly (give me some ideas about the variables involved, how they will be measured, how data are collected, handled, cleaned etc.). Then, in the context of this business problem, provide a comprehensive discussion of the **technique**.

- <u>At the minimum</u>, your answer should cover following issues (1-2 lines for each bullet point):
  - What the technique will do for your business analytics problem
  - Data requirements for both target and input variables.
  - Data structure required for doing the analysis
  - Any special sampling issues that need to be handled
  - Some idea about mechanics of the technique (**how does it work?)**
  - Explanation of any special terms/topics used in the context of this analysis
  - Practical issues (how to interpret what we get from the computer output, what metric to look at and what one needs to be concerned about) **in using and interpreting results** from this technique.

Thank You and from My Family Wish you Happy Holidays