Week 16 Lab Slides BAN 5733
Fall 2021

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Agenda

- Common topics for OL and non-OL students
- Special topics for OL students only
- Topics for non-OL students (*optional* for OL students)

Schedule and Due Dates

No new material for Week 16

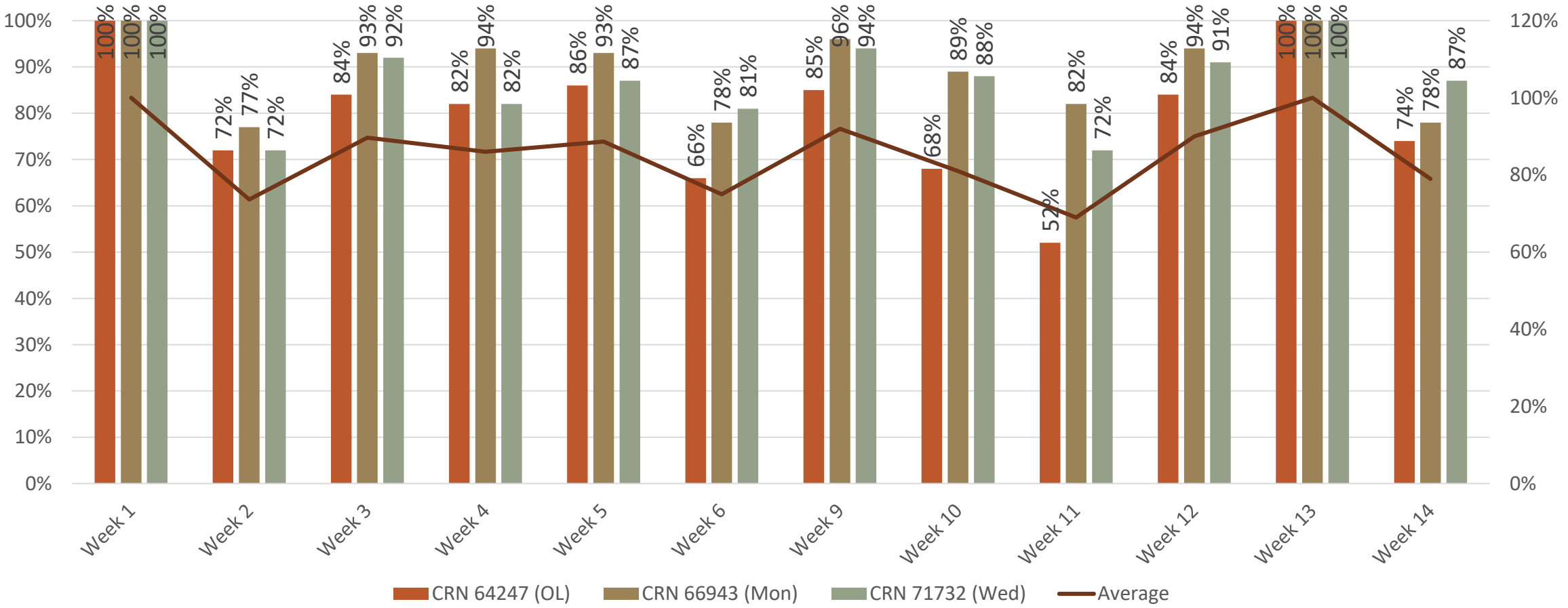
Last visualization makeover

Lab Schedule for BAN 5733

~~Week~~	~~Date~~	~~Lab Work~~
~~2~~	~~8/23/2021~~	~~Visualization Makeover 1 - JMP~~
~~3~~	~~8/30/2021~~	~~Mini-Case 1 - JMP~~
~~4~~	~~9/6/2021~~	~~Visualization Makeover 2 – JMP 64247/66943 – OL 71732 – in class~~
~~5~~	~~9/13/2021~~	~~Mini-Case 2 – Tableau~~
~~6~~	~~9/20/2021~~	~~Big Case 1 Presentations~~
~~7~~	~~9/27/2021~~	~~Visualization Makeover 3 – SAS Visual Analytics~~
~~8~~	~~10/4/2021~~	~~Midterm Exam~~
~~9~~	~~10/11/2021~~	~~Case Competition – 10/15/21~~

Week	Date	Lab Work
~~10~~	~~10/18/2021~~	~~ANOVA in R~~
~~11~~	~~10/25/2021~~	~~ANOVA in Python~~
~~12~~	~~11/1/2021~~	~~Decision Tree in Python~~
~~13~~	~~11/8/2021~~	~~Neural Network in R or Python~~
14	11/15/2021	RFM Analysis in Python
15	11/22/2021	No Lab Class - Fall Break
16	11/29/2021	Review for exam; Visualization Makeover 4
17	12/7/2021-12/8/2021	Final Exam

Quiz Grades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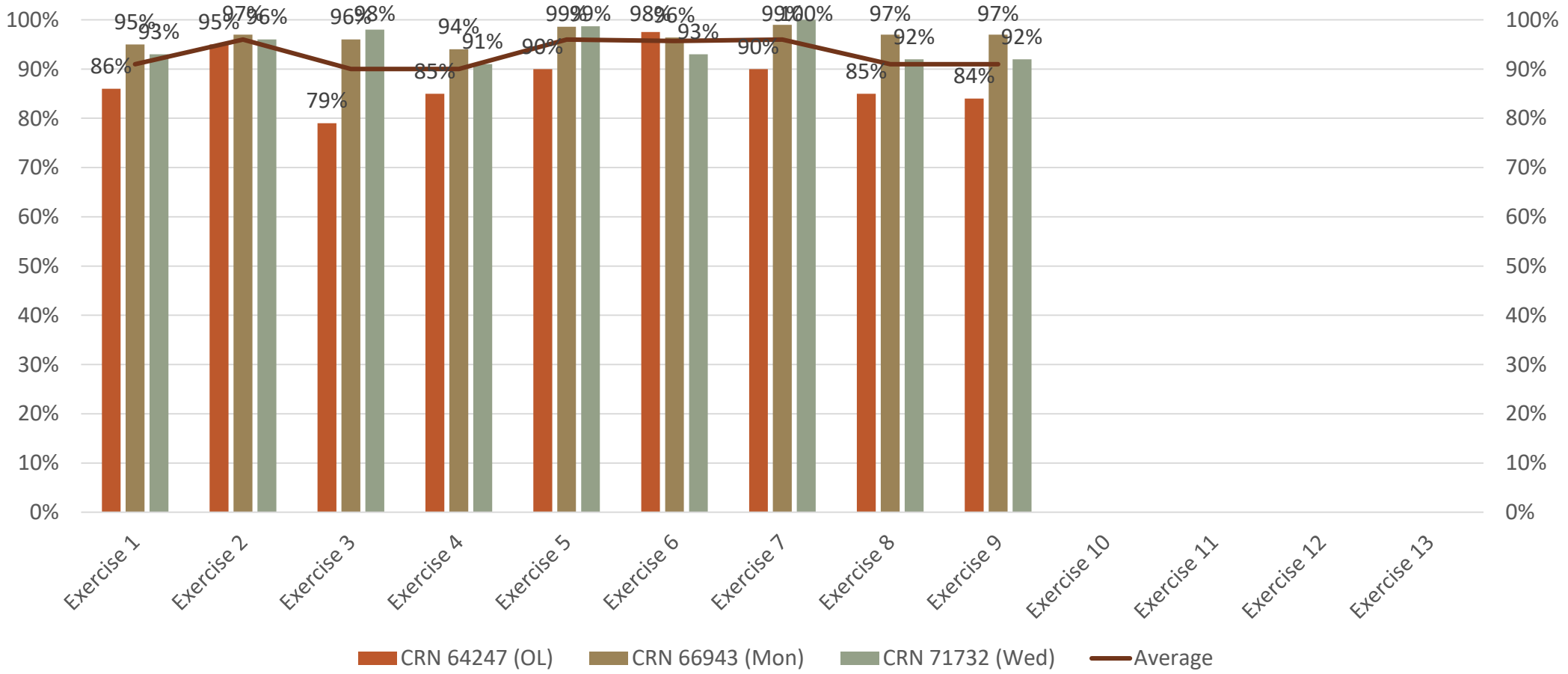
84% 94% 91%
100% 100% 100%
74% 78% 87%
Week 1
Week 2
Week 3
Week 4
Week 5
Week 6
Week 9
Week 10
Week 11
Week 12
Week 13
Week 14
CRN 64247 (OL)
CRN 66943 (Mon)
CRN 71732 (Wed)
Average

Exercise Grades



Questions and Comments?

Week 1: Sampling, Population, Confidence Intervals

Week 2: Random Variables, Inferential Stats, Hypothesis Testing, Errors

Week 3: T-Tests and Chi-Square

Week4: Simple and Multiple Regression

Week 5: Visualization and Dashboarding in JMP and Tableau

Week 6: Power BI

Week 7: Visual Analytics

Week 9: Logistic Regression

Week 10: ANOVA

Week 11: Predictive Modeling & Decision Trees

Week 12: Neural Network

Week 13: Segmentation & RFM Analysis

Week 14: Text Analysis

Week 16: Time Series & Forecasting

Statistical Tests

Notes:
1. We will add as we go
2. IV = Independent Variable
3. DV = Dependent Variable

Type of Test	Statistical Test
1 Continuous Variable	
Comparing 1 group to a population (known variance)	One-sample z-test
Comparing 1 group to a mean	One-sample t-test
2 or More Continuous Variables	
Examining linear relationship between 2 variables	Pearson Correlation or Simple Regression
Examining linear relationship between 1 DV and 2 or more IV	Multiple Regression
1 Binary DV	
1 Binary DV and 1 or more IVs	Logistic Regression

Type of Test	Statistical Test
1 Continuous Var. and 2 or more Categorical Vars. (Grouping)	
Comparing 2 different groups	Two-sample t-test
Comparing the same group on 2 variables or times	Paired t-test
Comparing 1 or more cat IV with 3 or more levels to 1 continuous DV	ANOVA
2 or More Categorical Variables	
Comparing 2 categorical vars.	Chi-square test

Final Exam Information

You DO NOT need a proctor or testing center to take the exam

Open Dates

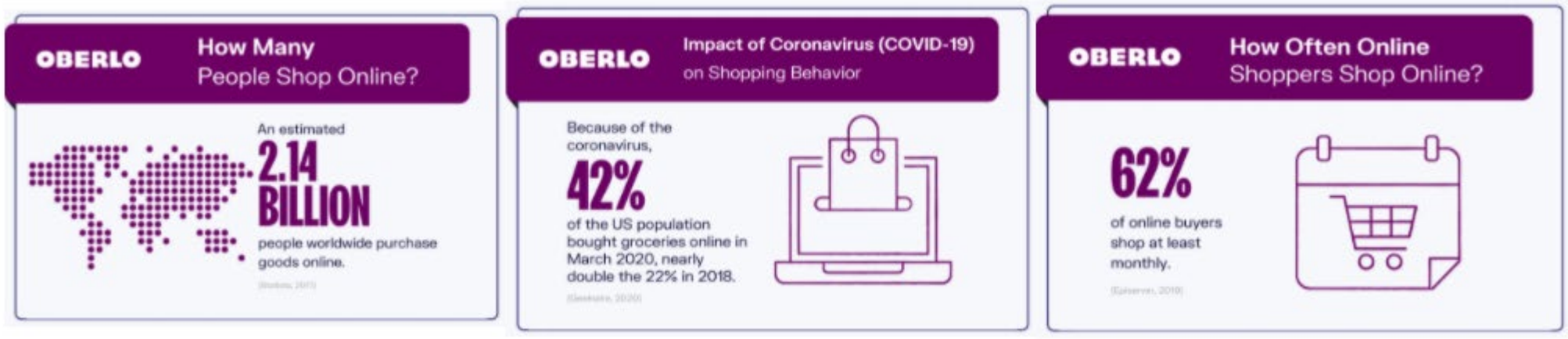
- CRN 64247 - Your final exams will open up at 8:00 am on Dec 7th - close Dec 8th
- CRN 66943 – 12/8 - 8:00 am to 9:50 am
- CRN 71732 – 12/8 – 10:00 am to 11:50 am

Final Exam Information

- Each student has his/her own word document with information for his/her specific test
- Use Lockdown Browser
- It will be multiple choice, short answer, and open ended questions
- You will need to analyze data provided in the exam (but not external data) and answer questions as part of the exam
- It will cover material from the entire semester
- You will need to know definitions, formulas, how to conduct different analyses, and how to interpret output.
- See review sheet for material

Visualization Makeover

Consumer Expenditure Survey – Online vs In-Person Shopping



Resources

JMP - https://www.jmp.com/en_us/learning-library.html

Statistics - https://www.khanacademy.org/math/statistics-probability

Python – Datacamp.org - loaded in General Information

- Python 1 – Introduction to Python
- Python 2 – Data Scientist with Python
- Python 3 – Data Engineer with Python

R – Datacamp.org- loaded in General Information

- R 1 – Introduction to R
- R 2 – Data Scientist with R
- R 3 – Machine Learning Scientist with R

SQL - Datacamp.org