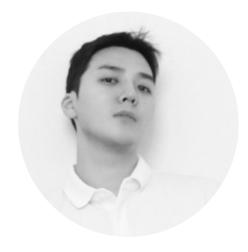


Our Team: ic23019



Kyungho Daniel Yu

MS Business Analytics in
Robert. H Smith Business School
at University of Maryland, College Park



Jaehyun Joey Lee

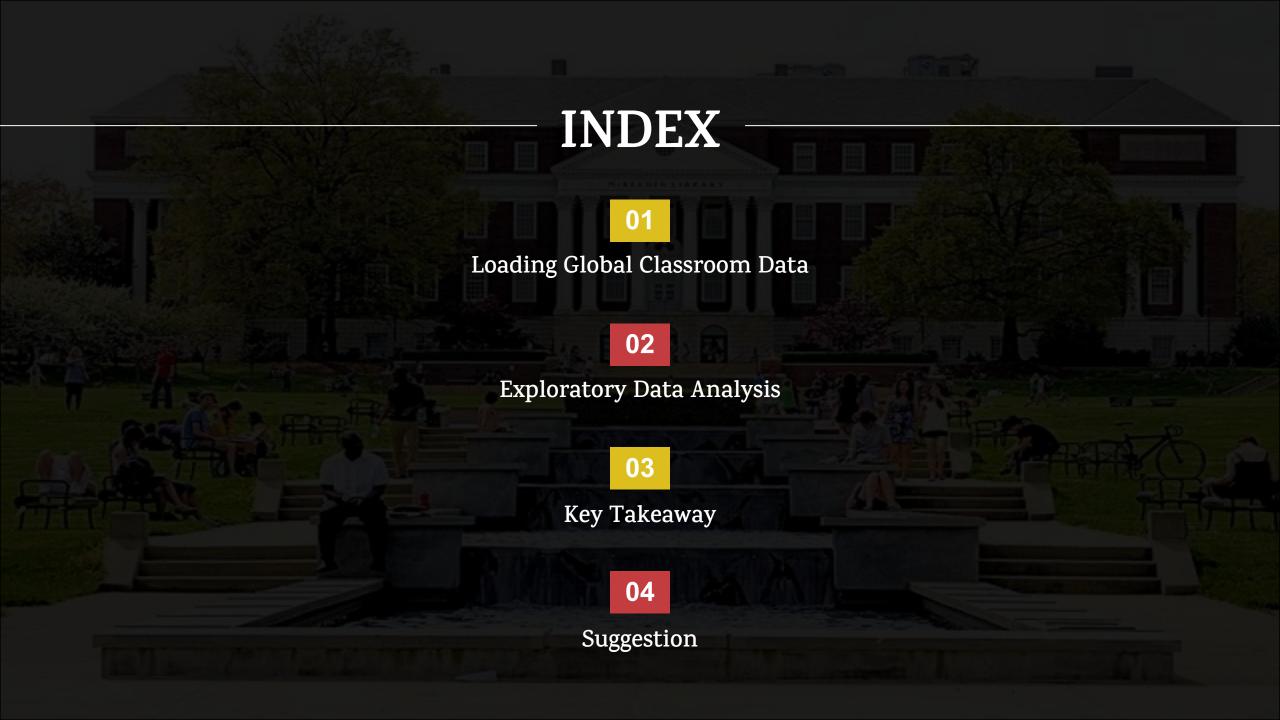
MS Business Analytics in
Robert. H Smith Business School
at University of Maryland, College Park



Eojin Ellie Kim

MS Information Systems in
Robert. H Smith Business School
at University of Maryland, College Park





Loading Global Classroom Data



Loading Data

```
import pandas as pd

df = pd.read_excel('Data_OIA.xlsx')
    df.head(3)
```

₽	Year	Term	Course	Section	Cross listing 1	Cross listing 2	Cross listing 3	Gender	Age	Student Status	Major	College	Race	Ethnicity	Citizenship	Residency
	0 2020.0	Fall	ANSC101	0101	NaN	NaN	NaN	Female	NaN	Undergraduate	ANIMAL SCI	AGNR	Asian	Hispanic No	NaN	NaN
	1 2020.0	Fall	ANSC101	0101	NaN	NaN	NaN	Female	NaN	Undergraduate	ANIMAL SCI	AGNR	Asian	Hispanic No	NaN	NaN
	2 2020.0	Fall	ANSC101	0101	NaN	NaN	NaN	Female	NaN	Undergraduate	ANIMAL SCI	AGNR	Asian	Hispanic No	NaN	NaN



Finding Missing Data and Manipulating

df.isnull().sum()	
Year	0
Term	0
Course	0
Section	0
Cross listing 1	1049
Cross listing 2	1113
Cross listing 3	1154
Gender	0
Age	76
Student Status	0
Major	0
College	0
Race	0
Ethnicity	0
Citizenship	141
Residency	76
dtype: int64	

df ica...11/\ c...../\



```
[5] df.isnull().sum()
    ID
    Academic_Year
    Year
    Term
    Term_Year
    Course
    Sections
    Gender
    Student Status
    Major
    College
    Race
    Ethnicity
    Residency
                       76
    dtype: int64
```



Exploratory Data Analysis (EDA)



Global Classroom Diversity Analytics Dashboard Gender Student Status Female Graduate Undergraduate Male Proportion of GC Students by Races Top 6 Majors of GC Attending Students Number of studetns by residency type Major Ethnicity 16.53% Asian Residency Hispanic No Hispanic Yes **BIO ENGR** Military сомм 43.58% 1.77% Non-resident CRIM-JUSTICE 77 White Black or African American ENGR-MECH 51 648 Resident GOVT & POLIT 70 Resident except for admissions **GVPT INTLREL** 86 **USM Military NonResident** 20 60 80 40 23.81% USM Nonresident Tuition 4.31% Hispanic Exempt Number of Students Two or More Number of Students by Term Each Term and Year \$ 400-200-141 2021 T1 Winter 2021 T2 Spring 2021 T3 Summer 2021 T4 Fall 2022 T1 Winter 2022 T2 Spring 2022 T3 Summer Spring Summer Winter

STUDENTS BY RACE & GENDER



SELECT ORGANIZATION:	All Undergraduates						
College All	College: All Department(s): All Major(s): All						
Department All	Gender	Fall 2020	Fall 2021	Fall 2022			
	Female	14,828	15,223	14,940			
Major All	Male	16,047	15,699	15,413			
· Me	Grand Total	30,875	30,922	30,353			
SELECT TERMS:		Fall 2020	Fall 2021	Fall 2022			
Fall Terms	Current American Indian or	32	37	33			
2020 to 2022	Federal Asian:U.S.	5,890	6,271	6,772			
	Reporting Categories Black or African Am	3,700	3,636	3,833			
SELECT STUDENTS:	Foreign	1,203	1,101	1,117			
	Hispanic:U.S.	3,045	3,142	3,131			
All Undergraduates	Native Hawaiian or	22	19	16			
	Two or More:U.S.	1,438	1,438	1,456			
	Unknown:U.S.	1,158	1,359	1,367			
	White:U.S.	14,387	13,919	12,628			
	Grand Total	30,875	30,922	30,353			

Data source: University of Maryland

Key Takeaways

Why & How



Objectives of Global Classroom

01

devise steps to provide

"Global Learning for
all" to every UMD
student

02

Communicate and engage with faculty interested in participating in GC as well as institutional authorities



Objectives of Global Classroom

Class Expansion

devise steps to provide

"Global Learning for
all" to every UMD
student

engage with faculty
interested in participating
in GC as well as
institutional authorities



O1 WHY
: Why "Class Expansion" is IMPORTANT to achieve GCI's Objectives?

HOW HOW

: How GCI can achieve "Class Expansion"?



	Term_Year	Number of Courses Opened	Number of Students who took CG
1	Fall 2020	17	76
2	Fall 2021	12	40
3	Winter 2021	9	64
4	Winter 2022	6	45
5	Spring 2021	20	459
6	Spring 2022	15	336
7	Summer 2021	5	58
8	Summer 2022	9	83

	Term_Year	Number of Courses Opened	Number of Students who took CG
1	Fall 2020	17	76
2	Fall 2021	12	40
3	Winter 2021	9	64
4	Winter 2022	6	45
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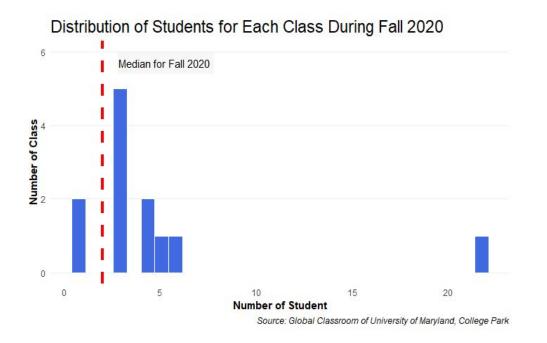
How Effectively?

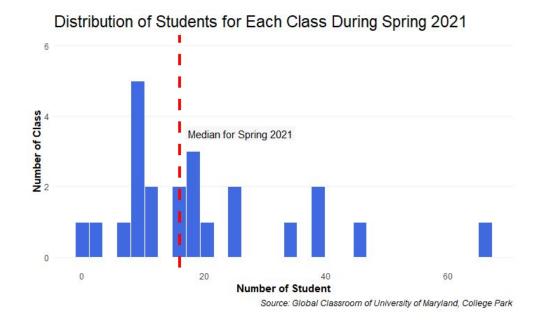
Seasonality!



Semester	# of Student / course	
Fall	4.1	X
Spring	22.7	
Summer	7.3	— x 3
Winter	10.1	>x 2



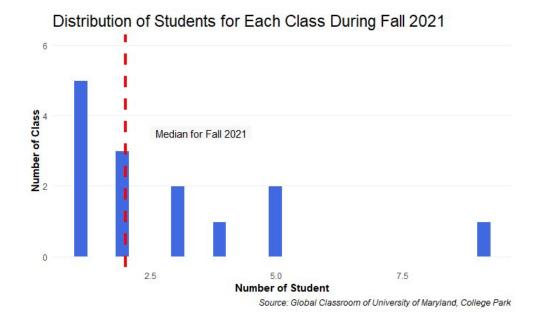




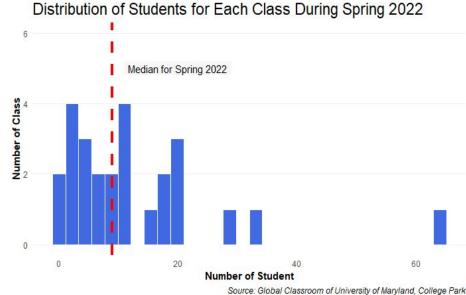
Median in Fall 2020: 2

Median in Spring 2021: 16









Median in Fall 2021: 2



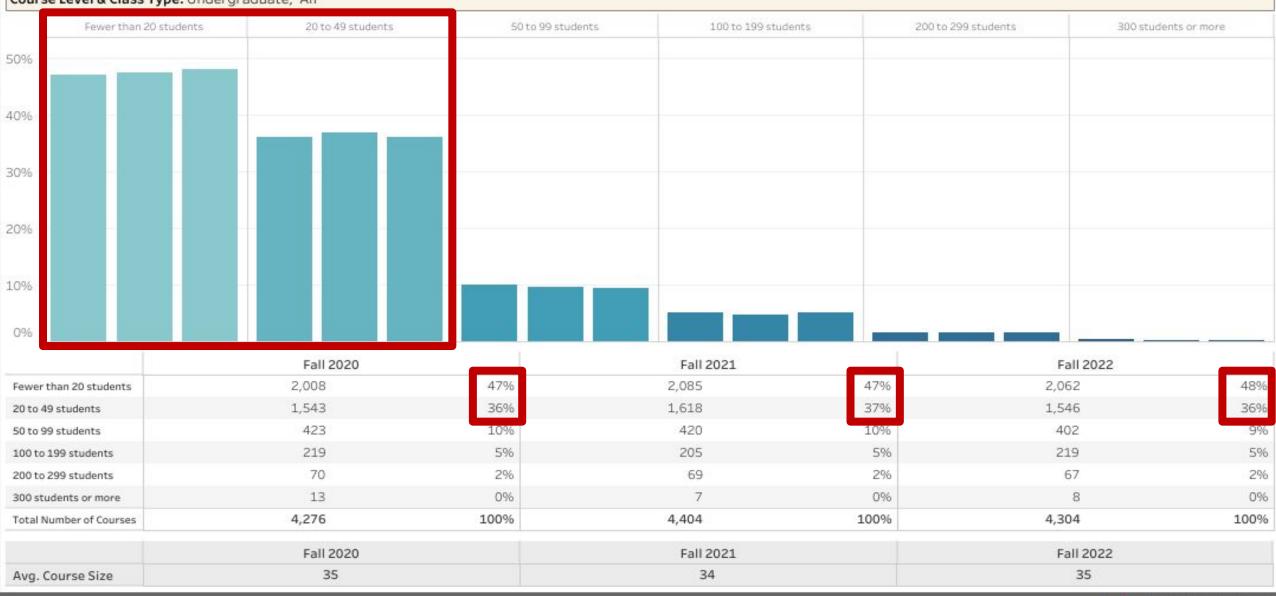


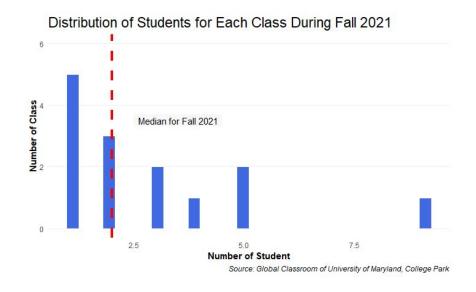
Class Size Percentages & Counts

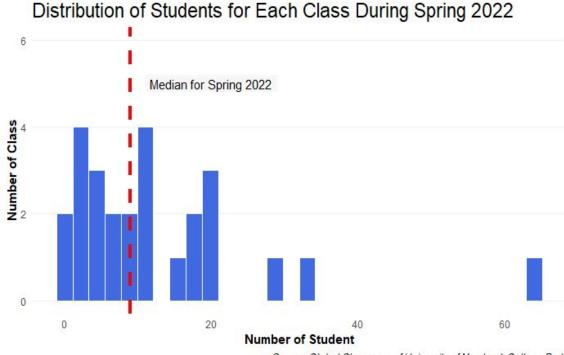
College: All

Department: All

Course Level & Class Type: Undergraduate; All



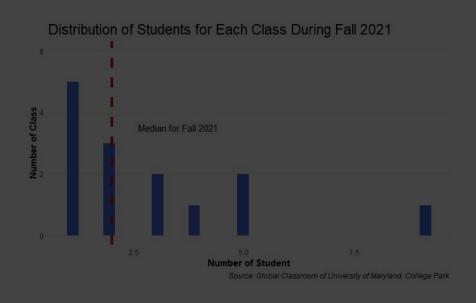


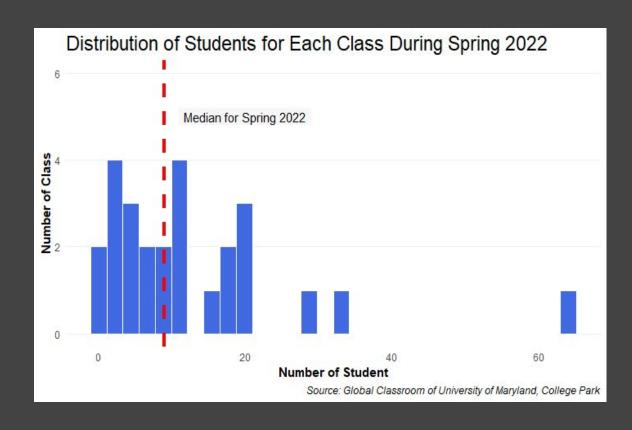


Source: Global Classroom of University of Maryland, College Park

Performance..?







"Promotion Opportunity"



Suggestion



Expand

Gen Ed

Spring



GLOBALCLASSROOMS

Engage globally from wherever you are

We appreciate your questions