

Sem: SP 2020 **Class Day/Time:** TuTh 11:10AM – 12:30PM (3702)
TuTh 2:20PM – 3:40PM (4223)

Room: Gerlach Hall 305 (3702)
Schoenbaum Hall 305 (4223)

Instructor: Dr. Dong Soo Kim

E-mail: kim.5042@osu.edu

Office Hours: Wednesday, 10:00AM – 12:00PM
(or by appointment)

Location: Fisher Hall 558

Course Description:

This course introduces several multivariate marketing models and statistical techniques – Factor analysis, Cluster analysis and Multi-dimensional scaling – widely used in practice to develop STP (Segmentation, Targeting, and Positioning) strategies.





Pre-Requirements: BUSML 4202 Marketing Research

Course Format: In-class Lecture + Laboratory

Required Materials: Main course materials (lecture and lab notes) will be available on the course website.

Supplemental Text: “Marketing Models: Multivariate Statistics and Marketing Analytics,” 4e
ISBN(13): 978-1539926108 **Author(s):** Dawn Iacobucci **Year:** 2016
Publisher: CreateSpace Independent Publishing Platform

Evaluation Criteria:

Graded Components	% of Total	Type
Lab Assignments	30%	O 
Online Quizzes	20%	N 
Final Exam	30%	N 
Attendance & Participation	20%	O 

(See remaining pages for Details/Due dates)

Requirements for each form of graded component.

Failing to follow these will represent academic misconduct. See below.

Independent Work [N ↑]: Strictly non-collaborative, original individual work. You may discuss this assignment with your instructor only. Discussions with other individuals, either in person or electronically, are strictly prohibited.

Collaboration Required [C #]: An explicit expectation for collaboration among students either in class or outside of class (i.e. group work).

Collaboration Optional [O #]: Students are permitted, but not required, to discuss the assignment or ideas with each other. However, all submitted work must be one's original and individual creation.

Academic Conduct:

If a student is suspected of, or reported to have committed, academic misconduct in this course, I am obligated by University Rules to report my suspicions to COAM. If you have questions about the above policy or what constitutes academic misconduct in this course, please contact me. See OSU Prohibited Conduct – [Section 3335-23-04\(A\)](#)

**University Policies,
Services and Resources**
(go.osu.edu/UPolicies)



**Fisher Undergraduate
Handbook and QuickLinks**
(www.bsbalinks.com)



**Fisher Navigator
Resource Portal**
(www.nav-1.com)



Course Design in Depth

Extended Course Description:

Marketing models to support decision-making in marketing basically build upon understanding and predicting consumers' choices affected by various variables, such as prices, product features, advertisements and satisfactions. A challenge is that these variables are all related to each other: the effect of one variable (e.g., price) on sales is usually moderated by other variables (e.g., advertisements). Marketing models thus have to be able to deal with this "multivariate" nature of marketing data. This course consists of five separate topics that offer conceptual foundations and technical details of using multivariate marketing models and statistical techniques – Factor analysis, Cluster analysis and Multi-dimensional scaling – in practice, focusing on the development of STP (Segmentation, Targeting, and Positioning) strategies.

Learning Goals and Objectives:

Each lecture will be followed by a lab session where students are asked to actually implement an analysis with real-world data in SPSS (learning-by-doing). Through the lecture and lab sessions, students will learn

- (i) what kind of decision-making problems each model is used for,
 - (ii) which variables are required for implementing the model,
 - (iii) technical details of the model, and
 - (iv) how to make decisions based on the results from the model.
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Graded Component Details

Lab Assignments: (30% = 6% X 5 lab sessions)

There will be five lab sessions in this course. You will learn to use Excel and SPSS to conduct data analysis covered in class. Lab procedures and datasets will be uploaded on the course website. After each lab, you will submit your answers and lab files online via the website. Each lab is basically designed as an individual assignment, so that each student must submit her/his own original answers. The due date of each assignment is given in the course schedule. Late submissions will be accepted but there will be a 10% penalty per day after the due date.

Online Quizzes: (20% = 10% X 2 quizzes)

There will be two online quizzes. The dates for quizzes are given in the course schedule. Questions will come from the course materials, classroom discussion, and other supplemental materials provided in class. Each quiz will contain about 10 multiple-choice questions. You will need a calculator.

Final Exam: (30%)

There will be an exam on the last class day. It will be basically a closed-book exam; however, you can use a one-page cheat sheet written by yourselves (hand-writing is strongly recommended). The exam will include all contents from the course materials, classroom discussion, and other supplemental materials provided in class. FYI, a set of example questions will be offered before the exam. The exam will contain about 30 multiple-choice questions. You will need a calculator.

Class attendance and Participation: (20%)

Regular attendance is expected because you will be tested on the material covered in class. Your attendance will be noted during the class time.

Also, participation is a requirement for this course and the "Packback Questions" platform will be used for online discussion about class topics. "Packback Questions" is an online curiosity community where you can be fearlessly curious and ask BIG questions about how what we're studying relates to life and the real world. For a brief introduction to Packback Questions and why we are using it in class, watch this video: <https://vimeo.com/packback/Welcome-to-Packback-Questions>. My goals for using Packback are for you to

- ... help yourselves develop writing skills necessary for any career path,
- ... reinforce the imperative skill of justifying thoughts and claims with credible evidence and then citing the evidence,
- ... enhance critical thinking sought out by employers, and
- ... deepen your understanding of the course content by gaining diverse insights and perspectives from your peers.

Your participation on Packback will count towards 10% of your final grade. In order to receive your points per week, you must post 1 question and 2 answers per week relevant to our class subject matter per week. Before you start posting, be sure to read the [Community Guidelines](#) found in the tutorial on Packback. If you post doesn't follow the Packback Community Guidelines, there is a chance it will be removed and you won't receive points for that post. There will be a Sunday 11:59PM deadline for submissions in your community each week. Please see the additional resource below to register on Packback.

Grading Scale

Letter	A	A-	B+	B	B-	C+	C	C-	D+	D	E
(Points)	(4.0)	(3.7)	(3.3)	(3.0)	(2.7)	(2.3)	(2.0)	(1.7)	(1.3)	(1.0)	(0.0)
Range	100% - 93%	90% - 87%	83% - 80%	77% - 73%	70% - 67%	60% - 57%	50% - 47%	43% - 40%	37% - 33%	30% - 27%	20% - 0%

* Note: Above percentages are % of overall points earned.

Additional Policies and Course Resources

Testing Policy:

Missed quizzes and exams can only be made-up in extreme cases (e.g., death of family member, personal hospitalization, etc.) with proper documentation (e.g., a physician's note, ER paperwork, obituary, etc.). Each decision of potentially allowing a make-up exam is made by the instructor on a case-by-case basis. Additionally, you must contact the instructor (kim.5042@osu.edu) as soon as you know of a potential problem or conflict with an exam date. Alternative methods (e.g., oral exam, essay) of testing can be used for make-up exams. If you are experiencing an extreme situation or emergency, please attempt to notify the instructor (kim.5042@osu.edu) ASAP.

Attendance / Participation Expectations:

You are responsible for your own success. This means that it is your responsibility to attend, participate and absorb this class. I count on your responsibility; therefore, you may miss up to two classes for any reason (no need to present or even invent excuses). If you miss more than two times, there will be a proportional deduction from your class attendance and participation score unless you can present evidence of a valid excuse.

In addition, a part of your grade will be determined by your contribution to this class. Along with actively participating in class discussions, it will not hurt you to be "a professional" in class. For instance, come to class on time and do not engage in side conversations during class. Inappropriate behavior, such as being rude or disruptive, may result in a lower grade for the class participation component.

Disenrollment Policy:

Any student who fails to attend without giving prior notification to the instructor will be disenrolled after the third instructional day of the term, the first Friday of the term, or the second scheduled class meeting of the course, whichever occurs first. When the department elects to use this procedure, the instructor, the department chair or other appropriate administrative officer shall notify the student's enrollment unit. The enrollment unit will notify the student and take appropriate action to remove the student from the course.

Technology Policy:

There will be lab sessions where we will use technology together, and even in lecture, you are welcome to use a laptop or tablet as long as it contributes to your learning. However, all students are expected to actively listen to one another in order to participate in classroom activities. If you are unable to contribute to the discussion or are otherwise distracted by your computer, cell phone, or tablet, I, as the instructor of this course, will ask that you refrain from using it in class.

Course-specific Copyright Policy:

Material provided by the instructor may not be re-posted anywhere without the explicit permission of instructors. See University Copyright Policy.

Laptops and Software:

This course requires students to use two applications: Microsoft Excel and IBM SPSS Statistics. We will use those apps together during the lab sessions. So, all students should make arrangements to bring a SPSS-ready laptop to class. If you have your own laptop, I strongly recommend you to install the apps on it (please see below for the installations) and bring it to class. If not (or SPSS does not work on your laptop), no worries: a cart of 30 university-owned laptops will be arranged and you may use one of them.

- Excel
It is highly recommended to use the latest version of Excel to avoid confusion in lab sessions. All OSU students are now eligible for free Microsoft Office 365 ProPlus including the latest version of Excel. Full instructions for downloading and installation can be found at <https://ocio.osu.edu/kb04733>.
- SPSS
All OSU students are eligible for IBM SPSS Statistics for use on personally- or OSU-owned machine. Windows, Mac OS X, and Linux versions are currently available. To get SPSS on your personally-owned computer, you must go to the OCIO Self Service website (<https://osuitsm.service-now.com/selfservice/>) and follow the instructions below:
 - 1) Click "Sign in to your account" button and select "Log In" to log in the service.

- 2) Click "Order Services" on the menu bar and then select "Software Services."
- 3) Select "Site Licensed Software Request."
- 4) Provide your name, number, email and phone number, and click "Next."
- 5) Select "SPSS Statistics" (If you cannot find it, please scroll down to the bottom of the list).
- 6) Select the version of the software: any version is okay, but the latest one is recommended. Please make sure whether your OS is 32-bit or 64-bit, if you are using Windows.
- 7) Provide your license type (note: you need only one quantity), and click "Next."
- 8) Select "Personally Owned" and click "Next."
- 9) If you are asked to consent to the terms of the license agreement, check "I Agree" (with the license terms) and click "Next."
- 10) Review and place your order.
- 11) You will receive an email message from the IT Service Desk with a link to download software. Please keep your License Code in the email. You will need it during the installation.
- 12) Click the link to download software. It may take about 10 – 30 minutes.
- 13) Install the software and enjoy it.

If you have any issues, or any further questions about the software, please visit <https://ocio.osu.edu/help> or contact the IT Service Desk by email at 8help@osu.edu or by calling 614-688-HELP (4357). Walk-in assistance is also available at the BuckeyeBar, 60A Thompson Library and Tech Hub (near Tuttle Garage). Service hours are available on the website (<https://ocio.osu.edu/help/locations>).

How to Register on Packback and Additional Instructions:

You will receive a welcome email from holla@packback.co prompting you to finish registration and payment. Packback has already created an account for you with your school email, all you need to do is reset your password. This email may be directed to spam or filtered out, so make sure you do a thorough scan of your inbox if you can't find the email. The additional instructions to use Packback are below:


- It takes 24 hours for the Packback team to moderate a post and send a coaching email. If by any reason your post is moderated because it does NOT meet the Community Guidelines, you will need to edit and re-publish your post to receive credit for the week. This is why it is important that you complete your Packback questions and responses far before the deadline in case your post is moderated.
- If you search your inbox and still can't find the welcome email, or if you are new to the course, you may manually register by following the instructions below:
 - 1) Navigate to <https://Packback.co/questions> and click "Register as a new student".
Note: If you already have an account on Packback you can login with your credentials.
 - 2) Make sure to register with your SCHOOL email address and real first name and last name.
 - 3) Enter our class community's access code into the "Join a new Community" module on your dashboard. Please note, the following Community Lookup Key is only for locating the community; it is NOT a coupon code or access code.
Our Community Lookup Key: **e234d563-28f0-4a74-80c3-a89b832710c2**
 - 4) Follow the instructions on your screen to finish your registration.
- If you have ANY questions or concerns regarding Packback throughout the semester, please contact the customer support team at holla@packback.co.

Tentative Course Schedule


The schedule is subject to change if necessary.

Week Theme	Date	Topics in Detail	Readings	Graded Components	Type*	Present Format	Assess. Format
Week 1 Marketing models	Jan. 7 (T)	Welcome & course overview	Ch. 1			InClass	
	Jan. 9 (Th)	<u>Prologue</u> Introduction of marketing models					
Week 2 Understanding data variations	Jan. 14 (T)	<u>Lecture 1</u> Data, variations, and statistical hypothesis testing	Ch. 8	Lab assignment #1 (due: Jan. 20 M.)		InClass	File via Carmen
	Jan. 16 (Th)	<u>Lab 1</u> Statistical hypothesis testing in SPSS					
Week 3 Factor analysis	Jan. 21 (T)	<u>Lecture 2</u> Factor analysis	Ch. 4	Lab assignment #2 (due: Jan. 27 M.)		InClass	File via Carmen
	Jan. 23 (Th)	<u>Lab 2</u> Factor analysis for customer satisfaction survey in SPSS					
Week 4 Cluster analysis	Jan. 28 (T)	<u>Lecture 3</u> Hierarchical clustering	Ch. 2	Online quiz #1 (due: Jan. 30 Th.)		InClass	Quiz via Carmen
	Jan. 30 (Th)	<u>Lab 3</u> Hierarchical clustering for product features in SPSS		Lab assignment #3 (due: Feb. 3 M.)			Text via Carmen
Week 5 Segmentation	Feb. 4 (T)	<u>Lecture 4</u> k-Means clustering	Ch. 2	Lab assignment #4 (due: Feb. 10 M.)		InClass	File via Carmen
	Feb. 6 (Th)	<u>Lab 4</u> k-Means clustering for segmentation in SPSS					
Week 6 Multi-dimensional scaling (MDS)	Feb. 11 (T)	<u>Lecture 5</u> Multi-dimensional scaling (MDS)	Ch. 6	Online quiz #2 (due: Feb. 13 Th.)		InClass	Quiz via Carmen
	Feb. 13 (Th)	<u>Lab 5</u> MDS for product positioning in SPSS		Lab assignment #5 (due: Feb. 17 M.)			File via Carmen
Week 7 Final exam	Feb. 18 (T)	Office hours for Q&A (no regular class)				InClass	Scantron
	Feb. 20 (Th)	Final exam					

*Graded Component Types:

N  *Independent Work: Strictly non-collaborative, original individual work. Discussions with instructor only.*

O  *Optional-Collaboration: Original individual work/submissions; Students are permitted to discuss among themselves.*

C  *Collaboration-Required: An explicit expectation for collaboration among students.*