

VISUAL MARKETING
MKTG 2390/7390, Spring 2024
The Wharton School, University of Pennsylvania

COURSE SYLLABUS

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Overview

As consumers, we are constantly exposed to advertisements and experience visual messages from product packages in stores, retail displays, and products already owned. In essence, visual marketing collateral is omnipresent and is an essential part of corporate visual identity, strategy, branding, and communication. Some of this decision-making is determined by the creative graphic designers and merchandisers, but advertising, go-to-market strategy, and general marketing decision-making can also be significantly enhanced by knowledge of how visual information and its presentation context can be optimized. This course will emphasize how to measure, interpret, and optimize visual marketing to deliver desirable and advantageous messages and experiences.

Goals:

Using lectures, discussions, exercises and a group project, this course will help students understand the underlying processes that influence our visual perception and visual cognition. Students will learn about the theoretical processes and models that influence, attention and visual fluency. They will also be exposed to eye-tracking instruments that help measure eye movement. Finally, we will explore how visual stimuli can influence consumer memory, persuasion, and choice. We will examine practical applications in marketing, advertising, packaging, retail, and design contexts.

Evaluation and Grading:

Class Participation:

10%

- *Regular attendance and/or review of the class session recording.* If you will miss a class with a presentation or an in-class exercise, you should inform us both in advance via e-mail, or, in the case of emergency, as soon as possible afterward. Students are responsible for making up work and actively contributing through the Canvas discussion board for any classes

missed during an absence. It may not be possible to make up presentation or group work, unless an alternative plan is worked out specifically and this may still adversely impact your participation grade.

- *Contributions to discussions in the classroom.* Students' class contributions will be judged on the basis of the quality of commentary offered, and its role in facilitating the process of collective learning in the classroom. High-quality classroom contribution requires students to:
 - state clear assumptions
 - support inferences with evidence
 - draw logical conclusions
 - communicate clearly, concisely, and specifically

Further, effective contributors help others learn by fitting in with the discussion, adding new insights, synthesizing multiple points of view, redirecting a discussion that has hit an impasse, clarifying ambiguities, provoking constructive debate, or encouraging in-class discovery. The benefits of listening cannot be overstated. Class participants share in these responsibilities for learning by avoiding disruptions and distractions, resisting the temptation to elaborate or repeat unnecessarily, respecting others, and speaking with honesty and candor, thus guaranteeing a valuable learning experience for all.

- *Posting on Canvas Class Discussion Board:* Feel free to post articles on the Canvas Discussion board that apply to what we have covered in class or provide updates on examples discussed. Strongly relevant course materials and offering thoughtful comments will count toward the class participation grade.

Late Submission of Assignments:

Late submissions are penalized except in case of serious emergency or if a prior arrangement is made. Unexcused late assignments are penalized one grade step, and a full grade if more than five days late. No assignments will be accepted for grading if more than one week late; a zero will be recorded and the assignment need not be turned in.

One Individual Out of Class Exercise (due 2/21/2024)

20%

Students will visit a retail mall outside of class. In 1-2 pages double-spaced, address the following:

- (1) Using class concepts, describe your perspective on a consumer's shopping journey to the store
- (2) Specifically discuss how one aspect of visual search is optimized in this context
- (3) Specifically discuss a visual marketing challenge that is not optimal, and how it might be improved using class concepts
- (4) Provide 1 photo (and no more than 1) for each of the above three discussion points that illustrate and support your discussions as addendums (not counted in the 1-2 page maximum).

Two In-Class Team Activities and Write-Ups

20% (total)

Written Visual Analysis & Peer Feedback (2/7/2024 & 2/8/2024): 10%

The team will be assigned a static advertisement to analyze during class. During class, your team will write an analysis as directed on the course Canvas site and in class and provide constructive feedback to 3 peer analyses as instructed during class, with the final written analysis submitted by 11:59PM 2/7/2024 and peer feedback due by 11:59PM 2/8/2024. Your team analysis should specifically discuss how this example illustrates the following concepts:

- a. Use of visual stimuli to get attention: (e.g., salience, location, movement, color, shape position)
- b. Use of visual stimuli to affect fluency (ease of processing)
- c. Use of semiotic codes and their impact on the advertisement's strategy
- d. Use of visual stimuli to affect interpretation (what is the marketing take-away?)

Designing Retail A/B Experiments (4/10/2024) 10%

At the end of class, hand in a one-page description of an experiment testing one aspect of your visual strategy for your project. It could be an A/B experiment to test a message, visuals, personalization, social media messaging, a call-to-action cues, elements on a package or in-store or website factors. What do you think will happen as a result of the test you are proposing and why? Define your DV and hypothesize how much change you expect as a result of your manipulation.

One Group Analysis Exercise: (data given after class 3/20/2024, analysis due: 3/27/2024) 20%

Your group will be given some eye tracking data output and will be asked to provide a relevant marketing insight and analysis for each different dataset provided. The full instructions for this exercise will be provided alongside the dataset on 3/20/2024.

Final Team Project and Presentation: 30%

- Final Recorded Narrated Slide Presentation (Submitted by 5/1/2024 at 11:59PM)
- All students must watch and score 3 assigned peer final presentations (Submitted by 5/4/2024 by 5pm)

Project Options: (see fuller descriptions at the end of the syllabus)

(1) **Hershey's Project:** Project Description to come.

(2) **Mars Project:** Project Description to come.

(3) **Grocery store Project (cpg):** Design a term project for a grocery cpg product that has a marketing problem objective that can be solved through visual marketing. Groups will need to formulate a visual solution (e.g., a package design, advertisement, retail display, commercial, website) that will solve the problem. Rationale for the solution should be

based on concepts discussed in class. An experiment (either an A/B testing or a controlled experiment that can establish causality) should be designed to test the hypotheses used in the presented solution.

- (4) **Your choice:** You have the option of developing a project on your own for a company of your choice. You will need to formulate a visual solution (e.g., a package design, advertisement, retail display, commercial, website) that will solve the problem. Rationale for the solution should be based on concepts discussed in class. An experiment (either an A/B testing or a controlled experiment that can establish causality) should be designed to test the hypotheses used in the presented solution. Part of the grade here will be the formulation of the project scope, and justification for why you chose this firm

Please see the “Schedule of Class Meetings” in this syllabus for the class meetings, session descriptions, and readings.

Readings:

There are a number of readings, including primary research articles and popular media, which will be distributed through Canvas or included in a course pack through Study.net. *These readings will inform our discussion but are optional (unless otherwise noted).*

Course Schedule (1/17/24-4/17/24)

Lecture Date	Topics and ASSIGNMENTS DUE	Recommended Readings	Class Session Title
Wednesday, January 17	<ul style="list-style-type: none"> • What is visual marketing? • Marketing D-M • Visual Search Challenges and developing tools • Using Visual Information 		Introduction: What is Visual Marketing? (BK & ZJ)
Monday January 22	<ul style="list-style-type: none"> • Shopping revolution: how retailing is changing • Customer perspective vs. product perspective • Principle of customer value 		Shopping Journey (BK)

Lecture Date	Topics and ASSIGNMENTS DUE	Recommended Readings	Class Session Title
	<ul style="list-style-type: none"> • Principle of differential advantage • Different types of retail experiences 		
Wednesday January 24	<ul style="list-style-type: none"> • Customer Journey • Touchpoints • Understanding customer journey Top-down/Bottom Up 		Visual Choice and the Shopping Experience (BK)
Monday January 29	<ul style="list-style-type: none"> • Stimulus-based: Attention perceptual fluency, examples from physical stores, search patterns in store, changes in search, consideration sets, choice architecture, pricing strategies • Impacts on store design 	Chandon, Hutchinson, Bradlow, Young (2009), Does in-store marketing work? Effects of the number and position of shelf facings on brand attention and evaluation at the point of purchase.	Visual Choice and the Shopping Experience (BK)
Wednesday January 31	<ul style="list-style-type: none"> • Top down vs Bottom up processing • Gestalt theory & principles • Visual elements 		Visual Communication (ZJ)
Monday February 5			RETAIL PROJECT In-Class Retail Project Overview and Guest Speaker: Kurt Ivey, Head of Marketing, Macerich
Wednesday, February 7	Visual Analysis Project Day*		In Class Project Day: Visual Analysis Projects (ZJ)

Lecture Date	Topics and ASSIGNMENTS DUE	Recommended Readings	Class Session Title
	<p>Written visual analysis due by 11:59PM on Canvas (as instructed in class); Peer constructive feedback due by the end of the day on 2/8/24 on Canvas (as instructed in class)</p>		
<p>Monday February 12</p>	<ul style="list-style-type: none"> • Saliency • Search • Limitations • Attentional impacts on marketing 	<p>Itti & Koch (2001), Computational modelling of visual attention;</p> <p>Pieters & Wedel (2007), Goal control of attention to advertising;</p> <p>Henderson & Hayes (2017), Meaning-based guidance of attention in scenes as revealed by meaning maps</p>	<p>Visual Perception and Attention (ZJ)</p>
<p>Wednesday, February 14</p>	<ul style="list-style-type: none"> • Biological constraints and optimizations • Why does the biology matter for marketing? • Center of gaze • Representing visual space coordinates • Advantages and disadvantages of visual center and periphery • Eye movements and how we use them 	<p>Higgins, Leininger, & Rayner (2014), Eye movements when viewing advertisements</p>	<p>Biology of Vision and Consumer Viewing (ZJ)</p>
<p>Monday February 19</p>	<ul style="list-style-type: none"> • Choice set • Maximizing perceived variety • Visual images vs text 	<p>Huffman & Kahn (1998), Variety for Sale: Mass Customization or Mass Confusion?;</p> <p>Kahn & Wansink (2004), The Influence of Assortment Structure on Perceived</p>	<p>Visual Assortment (BK)</p>

Lecture Date	Topics and ASSIGNMENTS DUE	Recommended Readings	Class Session Title
		<p>Variety and Consumption Quantiles;</p> <p>Morales et al. (2005), Perceptions of Assortment Variety: The Effects of Congruency Between Consumers' Internal and Retailers' External Organization;</p> <p>Miller & Kahn (2005), Shades of Meaning: The Effects of Color and Flavor Names on Consumer Choice;</p> <p>Townsend & Kahn (2014), The "Visual Preference Heuristic:" The Influence of Visual versus Verbal Depiction on Assortment Processing, Perceived Variety, and Choice Overload;</p> <p>Kahn, Weingarten & Townsend (2013), Assortment Variety: Too Much of a Good Thing?;</p> <p>Kahn et al. (2016), A "Wide" Variety: The Effects of Horizontal vs. Vertical Product Display on Assortment Processing, Perceived Variety, and Choice.</p>	
<p>Wednesday February 21</p>	<p>*Retail experiences write up due by 11:59PM</p>		<p>Final Project Overview and Guest Speaker: Ryan Riess, Marketing Director, The Hershey Company</p>
<p>Monday February 26</p>	<ul style="list-style-type: none"> • Visuals to Build Brand (Positive vs. Negative Imagery) 	<p>"The Emotion of Form and Touchpoints to Create it: from <i>Built to Love: Creating Products that Captivate</i></p>	<p>Emotions (BK)</p>

Lecture Date	Topics and ASSIGNMENTS DUE	Recommended Readings	Class Session Title
	<ul style="list-style-type: none"> Narrowing vs Broadening Social Images 	<i>Customers,</i> Boatwright & Cagan	
Wednesday February 28	<p>No class session (due to MBA Core Exams)</p> <p>Undergrads will meet with the Professors</p>		
Spring Break: 3/2-3/10			
Monday, March 11	<ul style="list-style-type: none"> Visual associative learning and memory What makes an image memorable? Predicting memorability 	<p>DiCarlo, Zoccolan & Rust (2012), How does the brain solve visual object recognition?;</p> <p>Albright (2012), On the Perception of Probable Things: Neural Substrates of Associative Memory, Imagery, and Perception</p> <p>Isola et al. (2014); What makes a photograph memorable?</p>	Image Memorability (ZJ)
Wednesday March 13* <i>*No formal class session will be held on 3/13, but students are required to take part in a 30-minute virtual "lab" session sometime between (3/12-3/15), scheduled through the course Canvas site.</i>	<ul style="list-style-type: none"> Experiential Learning in the Lab Analysis methods and tools for eye tracking data Interpretation and Insights 	<p>Students to watch instructional video about data analysis – <i>Asynchronously</i></p>	Lab: Eye tracking, GSR, and Facial Action Coding (ZJ)
Monday March 18	<ul style="list-style-type: none"> Choice and Reaction Time 	Shimojo et al. (2003), Gaze bias both reflects and influences preferences;	Modeling Visual Choice (ZJ)

Lecture Date	Topics and ASSIGNMENTS DUE	Recommended Readings	Class Session Title
	<ul style="list-style-type: none"> Measuring and Calculating Value Gaze Cascade and drift diffusion models and their impact on consumer visual choice 	<p>Krajbich, Lu, Camerer & Rangel (2012), The attentional drift-diffusion model extends to simple purchasing decisions.</p>	
<p>Wednesday March 20</p> <p>Data provided for eye tracking analysis after class on 3/20, analysis due on 3/27</p>			<p>Guest Speaker: Sorin Patilinet, Mars Consumer Insights</p>
<p>Monday March 25</p>	<ul style="list-style-type: none"> Color in Packaging Pantone colors; style and fashion Corporate color Shape in packaging JND and grabbing attention Beauty of boundaries Neatness & disarray Campbell's Case Study 	<p>New York Times (2018), How Pantone Picked 'Living Coral' as the 2019 'Color of the Year' by Wendy MacNaughton</p> <p>Deng & Kahn (2009), Is your product on the right side? The "location effect" on perceived product heaviness and package evaluations;</p> <p>Kahn & Deng (2009), Effects of Visual Weight Perceptions of Product Locations on Packaging;</p> <p>Sevilla & Kahn (2014), The effect of product shape completeness on size perceptions, preference and consumption;</p> <p>Folkes & Matta (2004), The effect of package shape on consumers' judgments of product volume: attention as a mental contaminant;</p> <p>Krider, Raghubir & Krishna (2001), Pizzas: pi or square? Psychophysical biases in area comparisons;</p>	<p>Packaging & Perceptions (BK)</p>

Lecture Date	Topics and ASSIGNMENTS DUE	Recommended Readings	Class Session Title
		Veryzer & Hutchinson (1998), The influence of unity and prototypicality on aesthetic responses to new product design.	
Wednesday, March 27	Eye Tracking Analysis Due by 11:59PM		GUEST SPEAKERS: Sara Leitner (WG'18), Sr. Brand Manager, Mountain Dew, PepsiCo & Rob Salit, Sr. Director of Design, PepsiCo
Monday, April 1	<ul style="list-style-type: none"> Biases Impressions & Stereotypes Endorser effects 	Ritchie, Palermo, & Rhodes (2017), Forming impressions of facial attractiveness is mandatory; Oh, Buck & Todorov (2019), Revealing Hidden Gender Biases in Competence Impressions of Faces; Ballew & Todorov (2007), Predicting political elections from rapid and unreflective face judgments	Faces and Endorsers (ZJ)
Wednesday April 3	<ul style="list-style-type: none"> Horizontal & Vertical Brand Extensions Category Brand Extensions 	Marketing Luxury Branding Below the Radar, HBR; Young et al. (2010), Signaling Status with Luxury Goods: The Role of Brand Prominence	Branding (BK)
Monday, April 8			GUEST SPEAKER: TBD
Wednesday April 10	*A/B Experiment assignment due by 11:59PM		In-Class Project Day: Designing Retail A/B Experiments (BK)
Monday April 15			GUEST SPEAKERS: Emily Vaca, Founder/CEO La Vaca Designhouse & Creator of Minnidip

Lecture Date	Topics and ASSIGNMENTS DUE	Recommended Readings	Class Session Title
			and David Vaca, Director of Operations and Co-Founder, Minnidip & Course Review (ZJ/BK)
Wednesday, April 17			Course Review (ZJ/BK)
Monday, April 22 Monday, April 29	No formal class; Final Project Work		Final Project Work Days and Office Hours with Professors
Wednesday, April 24 May 1	No formal class; Final Project Work Final Recorded Narrated Decks due 05/01/24 by 11:59PM; Peer Ratings on assigned presentations due 05/04/24 by 5PM		Final Project Work Days and Office Hours with Professors

Academic Integrity

Please re-familiarize yourself with the students' guide to Academic Integrity at Penn (<http://www.upenn.edu/academicintegrity/index.html>) and the Code of Academic Integrity: (http://www.upenn.edu/academicintegrity/ai_codeofacademicintegrity.html).

You may and are encouraged to discuss class topics with other students in the class. However, your individual and group assignments, responses, and contributions to class are to be your own original work and must truthfully represent the time and effort you apply.

Consult with the instructors if you have any questions about academic integrity expectations for this class. If you are unsure whether your work constitutes a violation of the Code of Academic Integrity, it is your responsibility to clarify any ambiguities.

Policies

Accommodations: The University of Pennsylvania provides reasonable accommodations to students with disabilities who have self-identified and been approved by the office of [Student Disabilities Services](#) (SDS). If you have not yet contacted SDS, and would like to request accommodations or have questions, you can make an appointment by calling SDS 215-573-9235. The office is located in the [Weingarten Learning Resources Center](#) at Stouffer Commons 3702 Spruce Street, Suite 300. All services are confidential.

Policy on Use of Generative AI Tools

The use of Generative AI tools, such as ChatGPT, GPT, DALL-E, Stable Diffusion, Midjourney, Copilot, data AI tools, Gamma, etc.) is permitted in this course for students who wish to use them. However, you should note that all large language models still have a tendency to make up incorrect facts and fake citations; code generation and data analytic models can and do produce inaccurate outputs; and image generation models can occasionally come up with highly offensive, biased, or otherwise incorrect products. You will be responsible for any inaccurate, biased, offensive, or otherwise unethical content you submit regardless of whether it originally comes from you or an AI program. It is vital to fact-check all of the AI outputs. Assume it is wrong unless you cross-check the claims with reliable sources. You will be responsible for any errors or omissions. **Importantly, if you use an AI program, its contribution must be acknowledged in the assignment; you will be penalized for using an AI program without acknowledgement. Please include a paragraph at the end of any assignment that uses AI explaining what you used the AI for and what prompts you used to get the results. Failure to do so is in violation of the academic integrity policies.**

Be thoughtful about when these tools are useful. Don't use them if it isn't appropriate for the case or circumstance.

FINAL PROJECT DETAILS:

Grocery/CPG Project/Hershey's:

In thinking through your ideas for this project, remember the following strategic considerations when designing a solution for a cpg company that distributes through the grocery channel.

(1) The consumer is not their customer:

Customer: The buyers – who purchase the product at scale and intend to re-sell to deliver their own value proposition and satisfy their own goals (e.g., the retailers like Walmart, Whole Foods, Shoprite, etc.)

Shopper: Their customer's marketing target – the one who decides to purchase the product from their customer at shelf or online. Thus, to deliver value to their customer they have to persuade the shoppers to buy

Consumer: The end target of the marketing. This is the end-user who enjoys the product and thus the marketing proposition has to speak to this user.

(2) Brand's role in the category:

From the retailer's point of view, they are concerned with sales from the overall product category. The brand is concerned with its share of the category. There are various ways a brand can bring value to themselves and to the category. For example, the brand can deliver value by being the future of the category and by driving true category growth through **incrementality**. Their marketing tries to bring in:

More users: They try to bring in shoppers who haven't been purchasing in the category (or back to) the category

More usage: They try to inspire more usage occasions

More value: Their goal is to justify a higher price for the assortment they bring to their categories.

(3) Their category's role in the store:

Basket driver: Their customers (the retailers) care about more than just the money they make off the brand, they care about who the brand attracts, and what else that shopper will purchase on their trip to the store.

Did you know? Most retailers sell turkey at a loss on Thanksgiving – and lots of it. If they can get you to buy the turkey, what else might you purchase?

Rationale for the solution should be based on concepts discussed in class. An experiment (either an A/B testing or a controlled experiment that can establish causality) should be designed to test the hypotheses used in the presented solution.

Projects that you can consider in this domain include:

1. **Design an In-store Display or Experience**

Think about how a mature or new cpg brand can come to life with one or two strong grocery partners (think ShopRite for example) in a powerful, exciting way for retailers and shoppers? What are the key elements to be successful and drive awareness, engagement, education, talk-ability, consideration, and, of course, purchase A deliverable could perhaps be a brief to a design agency.

2. **Create in-store Visual Cues to drive consumers to the brand/product category**

Design in-store visual messaging that would drive consumers from popular spots within the retail store to push shoppers towards the location of your brand. For example, one brand tossed around the idea of putting stickers on avocados in produce that would cue shoppers towards their avocado oil products that were on a shelf in a different part of the store.

3. **Design a visual branding strategy.**

Re-design a branding strategy for your brand that works in advertising, social media and in-store. Here the ideas should be based on visual principles but should leverage the different aspects of the media channels to create synergy. In-store messaging should

reinforce social media or advertising themes. If you are designing for a big company, like P&G or Unilever, think about how their in-store branding for individual products can work together to create an overall bigger category impact.

4. **New Brand Packaging Design:**

Design a brand “refresh’ for your product that will connect the consumer through product, pack, shelf placement, social, website, advertisements etc. to land the refresh and increase awareness (and certainly not lose any of their loyal consumers along the way).

Final Project Deliverable will be a narrated and recorded slide deck and presentation that is NO LONGER THAN 10 MINUTES.

Students will also watch and score 3 assigned presentations other than their own by 5pm May 4th, 2024. Students who do not watch and score their peers will have their own final project grades lowered. The peer scores will contribute to the final project grade, alongside the professors.

Final Project Grading Criteria: (30 points)

- (1) good use of class concepts (6 points)
- (2) creativity (6 points)
- (3) managerial implications/practicality of suggestions (6 points)
- (4) quality of experiment (6 points)
- (5) presentation style (6 points)