CONSUMER NEUROSCIENCE
MKTG-GB.2146.30
Spring 2015 New York University – Stern School of Business

Professor Manuel Garcia-Garcia          Monday, 6:00pm-9:00pm
Location: TBD

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Office Hours: Mondays, 4:00-6:00, and by appointment

Course Goals

Consumer Neurosciences

Most purchase decisions are not conscious. Behavior, learning, memory, sensation, attention, cognition, perception, emotions and brain activity are concepts that have acquired a new dimension in business and specifically in the context of consumer research. This dimension is the main axis of Consumer Neuroscience.

The analysis of consumer behavior is increasingly gaining importance from the emotional standpoint and it affects any marketing tool that we intend to use: the advertising and communication, point of sale, image and brand positioning or any other stimulus we present to our potential consumers or buyers.

Consumer Neuroscience is an important step in the analysis and understanding of consumer behavior through the rigorous application of the knowledge and techniques of neurosciences, and appears as a new fundamental tool for the present and future of consumer research.

The goals of this class are to acquire knowledge of:

1. Basic brain anatomy and functionality. Techniques used to register human brain activity and its application to different tools in consumer research.
2. Neural networks of cognitive processes, such as perception, attention, learning and memory, and especially emotion and its meaning in consumer research.
3. Economic decision making and related neural systems.
4. How scientific discoveries can guide models of consumer research, and how to apply modern neuroscience to understand consumer behavior.
5. Current applications of neuroscience to consumer research through actual consumer neurosciences companies and cases.
6. The impact of neuroscience measures in advertising.
And learn to apply this knowledge:

1. To solve business and consumer research questions.
2. To apply information obtained from brain activity to understand consumer behavior.
3. To apply neuroscience to optimize advertising.
4. To use neuroscience to understand digital trends.
5. To analyze some actual results of different cases in which brain activity was used to answer consumer research and business questions.
6. To discuss the limitations of consumer neuroscience and delineate which type of questions can be answered and through which techniques.
7. To discuss potential skepticisms about the ethics of applying neuroscience techniques to answer business and marketing questions.

**Course Outline**

**Session 1: [February 9th]**

*History of neuroscience and how it shaped decision making theories and consumer research.*

*Techniques for registering human brain activity.*

We will describe the history of neuroscience and how it helped shape popular understanding of decision making and its impact on consumer research and advertising.

We will also dig into the different techniques used in human neuroscience today to monitor brain activity, including PET, MEG, fMRI, EEG and biometric measures, and their advantages and disadvantages for different tools in consumer research.

**Guest Lecturer: Julia Trabulsi, Manager of Production Support Nielsen:**

Showcase of eye tracking and EEG systems.

**Essay:** List three business questions that can be answered with: biometric indicators, fMRI, EEG?
**Session 2: [February 23rd]**

*Basic brain anatomy and related cognitive processes. Relevance of that information in consumer research.*

Neural basis of basic cognitive processes will be discussed, such as attention, perception, learning and memory, with special emphasis on emotion. We will discuss how this neural networks shape persuasion and human decision-making and the relevance of these processes as tools for consumer research.

Presentation of some research pieces in the field.

*Essay:* List some business questions (2-3) that can be answered by analyzing three of these cognitive processes: attention, memory activation, emotional processing, language, theory of mind.

**Case 1 Nielsen Neuro**

**Session 3: [March 2nd]**

*Guest Lecturer: Blake Burrus, SVP Nielsen Neuro North America*

*Predicting consumers’ behavior.*

We will discuss different studies that aim at predicting human behavior from their brain activity, with especial emphasis in those that use human neuroscience to predict consumer behavior, such as purchases, audience measurement, etc...

Presentation of some research pieces in the field.

*Essay:* What implications will consumer neuroscience have in current models of consumer research?

**Case 2 Univision**
Session 4: [March 9th]

**Guest Lecturer: Roberto Ruiz, SVP Strategic Insights Univision Communication Inc.**

**Defining, Applying and Validating Consumer Neuroscience.**

We will discuss the definition of Consumer Neuroscience and describe its main applications currently in the market, using different techniques of cognitive neurosciences to solve business and marketing.

We will also discuss academic and corporative in-market performance validations of different techniques.

**Implications: Neuroscience and human behavior in digital platforms.**

Presentation of some research pieces in the field.

**Essay: Which limitations and ethical problems you see to the application of neuroscience to business and consumer research?**

**Case 3 Innerscope**

Session 5: [March 23rd]

**Guest Lecturers: Carl Marci, MD, Chairman and Chief Science Officer at Innerscope**

**Implications: New definitions of success, gain in efficiency and effectiveness and science and art in the same team.**

Description of current and future implications of the use of consumer neuroscience in market research. We will discuss how consumer neuroscience shapes the present and future of market research. Other actual cases will be presented and discussed.

Presentation of some research pieces in the field.
Session 6: [March 26th]

Limitations and neuro-ethics.

Description and discussion of current popular skepticism to the use of neuroscientific techniques on the fields of business and market research. We will also discuss the limitations of the field and which type of questions cannot be answered through consumer neurosciences.

Team projects presentations.

Team project

February 9th: Teams are formed
February 23rd: Cases will be delivered
March 30th: Final presentation of team projects

Course Resources

Required Course Packet

(available through the NYU Classes)

Cases

The cases to be discussed with the guest speakers will be provided through NYU Classes. The team project cases will be provided once the teams are formed via e-mail.

Readings

These articles will be found at NYUClasses.

Literature will be listed closer to the course.

Other Articles & Exercises

Additional exercises, journal articles, and recent news from the popular business press will be provided throughout the semester. The journal articles will provide you with a deeper insight into selected topics and methods of consumer neuroscience. The business news articles are used to illustrate the conceptual
framework with current real-world marketing problems as well as the popular thoughts and perception of the field. The articles will be posted on the class website.

**Course Website**

http://newclasses.nyu.edu
This website has many useful things on it, including continuously updated information on assignments, readings, course schedule, etc. Please check regularly.

**Class Notes**

The PowerPoint slides for each class will be available for downloading from the website. Note, however, that these slides only present an outline of the class discussion. You will still need to take additional notes to fully capture the material discussed in class.

**Student Evaluation**

Your evaluation will be based on one final exam, 3 case study preparations, 4 short-essays, a group project, and your class participation, including presentation of studies in the field:

*Group Project 40%*

A part of your course grade will be determined by a team project that will be presented and publicly discussed at the end of the course. The objective of this team project is to apply neuroscience techniques to answer a business question or diagnose some marketing material.

*Short essays preparations and discussion 20%*

You will be asked to prepare 4 short essays for class discussion. To make sure that you have read and thought about the cases in advance, I will ask everyone to upload them on NYU Classes by 10 pm the day before we discuss the case in class.

*Studies preparations and discussion 20%*

You will be able to present an academic or corporative study in group. You should encourage discussion in the class and link the learning of the study to its implications in the industry.

*Class Participation and attendance 20%*

I expect that you all realize the importance of attending the classes. It will give you the opportunity to actively participate in class discussions about the application and interpretation of science in business. It will also increase your understanding of the assigned readings, and of the many issues that are not covered in the readings. What matters more is the quantity and, especially, the quality of your contributions to class discussions.
Class Policy

✓ Be prepared: Make sure that you have carefully read the assigned cases and articles.
✓ Attend all classes: I expect everyone to attend all classes. Aside from being an essential part of the learning experience, regular attendance is an obvious prerequisite for contributing to class discussions and receiving a grade for class participation. Please also note that you are responsible for knowing any changes or assignments announced in class.
✓ Arrive on time: Late-comers disturb the class.
✓ Respect assignment deadlines: Late assignments will not be accepted without a prior agreement.
✓ Be honest: Cheating and plagiarism will result in a grade of “F” for the assignment/test for all parties involved.

All students are expected to follow the Stern Code of Conduct:
http://www.stern.nyu.edu/uc/codeofconduct