

# **Course Introduction and Syllabus**

## **Zhejiang University**

**Course code: 20192870**

**Course title: Consumer Neuroscience**

**Credit: 2**

**Teaching hour per week: 4**

**Target students: Undergraduate students**

**Prerequisites: Consumer Behavior**

### **I. Course Introduction**

Consumer neuroscience is a multidisciplinary course combining marketing, psychological and neurological disciplines to understand the cognitive mechanisms underlying behaviors of consumers. This course mainly consists of three sections: 1) brief introduction to human brain and cognitive neuroscience, and also the main techniques for research on consumer neuroscience, including eye track, facial recognition, functional magnetic resonance imaging (fMRI), Electroencephalogram (EEG), and functional near-infrared spectroscopy (fNIRS); 2) neural mechanisms of internal and external factors affecting consumer behaviors according to the five-stage shopping model, such as memory, attention, cognitive load, affection/emotion, self-concept and social relationship, expectation, and experience; and 3) practical applications in marketing and the academic findings.

### **II. Teaching Objectives**

#### **i. Learning Objectives**

This course will provide students with basic knowledge of human brain, the most popular methods in the emerging field of consumer neuroscience and the newest findings on brain mechanisms underlying consumer behavior. Through learning, students are expected to have an overview of current and future uses of cognitive neuroscience in business, can design experiment to solve concrete research question using appropriate brain-imaging technique, and learn to discuss marketing topics and phenomena from different perspectives.

## **ii. Measurable Learning Outcomes**

1. Have a good command of basic structural and functional concepts of human brain.
2. Clearly understand basic principle and technical features of each brain-imaging technique, knowing how to select concrete methods for different research questions.
3. Have a good command of main neural mechanisms underlying consumer decision and behavior.
4. Get to know future trend and practical needs of consumer neuroscience in business.

## **III. Course Requirements**

### **i. Teaching Methods and Requirements**

**Teaching Methods:** A) Lecture for basic knowledge, summary, question/answer etc. B) Reading and reporting for classical and up-to-date cases and articles. C) Discussion for ideas to solve daily issues in marketing. D) Final close-book examination.

**Requirements:** Students need to have an open-mind for new things, have passion to know deeper mechanisms underlying our human behavior and have basic knowledge of marketing and consumer behavior.

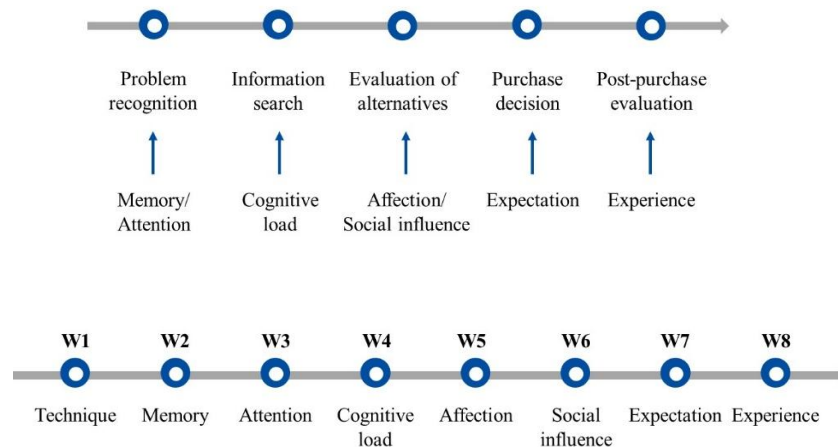
### **ii. Course Evaluation and Grading**

This course will adopt the close-book examination system, and final scores will consist of four parts: final exam score (30%), class attendance (10%), class presentation (15%), assignments (30%) and final report (15%).

## **IV. Teaching Schedule**

The course is designed as the following logic and schedule:

### Five-stage purchasing model:



Totally, this course contains eight topics (one topic per week). Each week has two lectures, discussing basic knowledge and industrial applications, respectively. Accordingly, the assignments have also two types. After the first lecture, students are expected to search topic-related cases and prepare a presentation for the second lecture; then after the second lecture, students should summarize the impressed items about the topic and ask questions pointing to the next week.

#### **Week1. Introduction to Consumer Neuroscience (4 hours)**

- 1) What is neuromarketing and consumer neuroscience?
- 2) Why consumer neuroscience is important?
  - a) Cognitive bias of human brain;
  - b) Subsequent limitations of traditional behavioral methodologies;
  - c) Merits of consumer neuroscience.
- 3) Popular techniques in the field of consumer neuroscience.
- 4) Cutting-edge academic findings.

#### **Week 2. Memory (4 hours)**

- 1) Why memory is important?
- 2) How many types of memory we have?
- 3) What are the cognitive mechanisms underlying memory?
- 4) Three secrets about memory.
- 5) How to improve ability of memory?
- 6) Cases about memory in marketing and sensory marketing.

#### **Week 3. Attention (4 hours)**

- 1) Why attention is important?
  - a) Discussion about ear of information explosion.
  - b) Cases about multi-channel network and internet celebrity economy.
- 2) How many types of attention we have?

- 3) What are the cognitive mechanisms underlying attention?
- 4) Ways to attract attention and three warnings.
- 5) How to measure attention?
- 6) Cases about attention in marketing.

#### **Week 4. Cognitive load (4 hours)**

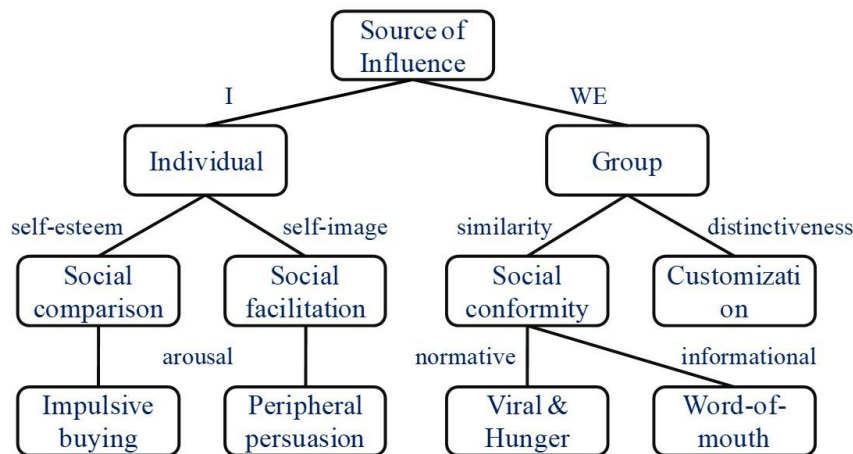
- 1) What is cognitive load and why it is important?
  - a) Discussion about limitation of cognitive resource.
  - b) Discussion about sense of control.
- 2) How many types of cognitive load we have?
- 3) How to reduce cognitive load based on theories of memory and attention?
- 4) How to measure cognitive load?
- 5) Cases about cognitive load in marketing and disadvantages of data in E-commerce.

#### **Week 5. Affection/Emotion (4 hours)**

- 1) Definitions of affection and emotion and its difference.
- 2) Why affection/emotion is important?
  - a) Discussion about experience marketing.
  - b) Discussion about customer loyalty.
  - c) Discussion about rationality and emotion.
- 3) Basic and complex emotions.
- 4) How affection/emotion affect consumer behavior?
  - a) Social emotion and prosocial behavior.
  - b) Role of empathy and mirror neuron system.
  - c) Role of body sensation.
- 5) How to measure emotion?
- 6) Cases about affection/emotion in marketing.

#### **Week 6. Social influence (4 hours)**

- 1) Why social influence is important?
  - a) Discussion about audience effect.
  - b) Discussion about self-concept.
  - c) Discussion about Maslow's theory of needs.
- 2) How social conformity affects consumer behavior and its mechanism?
  - a) Discussion about word-of-mouth.
  - b) Discussion about key opinion leader.
- 3) How distinctiveness affects consumer behavior and its mechanism?
  - a) Discussion about hunger marketing.
  - b) Discussion about DIY and individualized marketing.
- 4) How to persuade consumers?



### Week 7. Expectation (4 hours)

- 1) What is expectation and why it is important?
- 2) Dilemma of expectation in marketing.
  - a) Discussion about relations between expectation and consumer value.
  - b) Discussion about relations between expectation and consumer satisfaction.
- 3) How to solve the puzzle of expectation?
  - a) Discussion about cognitive function of adaptation.
  - b) Discussion about innovation.
  - c) Factors influencing expectation.
- 4) Academic findings about consumer expectation.

### Week 8. Experience (4 hours)

- 1) What is experience and why it is important?
- 2) Factors influencing experience.
  - a) Discussion about embodied cognition.
  - b) Discussion about sensory experience.
- 3) How to improve experience?
  - a) Ways via sensory marketing.
  - b) Ways via theories of self-concept.
- 4) Cases discussion about IKEA model.
- 5) How to measure consumer experience via brain-imaging technique?

## V. References and Recommended Readings

1. (book) "Introduction to Neuromarketing & Consumer Neuroscience";
2. (book) "Neuromarketing for Dummies"
3. (articles) Special issue on Consumer Neuroscience in Journal of Marketing Research (Volume 52, Number 4, August 2015)